

INITIAL STUDY and ENVIRONMENTAL CHECKLIST

FOR

**WESCOTT TENTATIVE SUBDIVISION, GENERAL PLAN
AMENDMENT, DEVELOPMENT AGREEMENT, AND REZONE**

May 2024

**Lead Agency:
City of Colusa**



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I. PROJECT SUMMARY

Date: May 2024

Project Title: Wescott Ranch Subdivision – Tentative Subdivision Map, Development Agreement, General Plan Amendment and Rezone.

Lead Agency: City of Colusa

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Location: The project site, approximately 88.77 acres, is located on the east side of Wescott Road, south of Birchwood Place and west of Sunrise Boulevard within the City of Colusa, California at the properties identified as Assessor’s Parcel Numbers (APNs): 017-130-107 and 017-030-050 (portion of). Currently the site does not have an address.

Coastal Zone: No

Affected Parcel(s): APNs 017-130-107 and 017-030-050 (portion of)

Existing Land Use Designations and Zoning

City of Colusa General Plan Land Use Designations: Low Density Residential (LDR)

City of Colusa Zoning Designation: R1 Single Family Residential District

Proposed General Plan Designations and Zoning

City of Colusa General Plan Land Use Designations:

Retain 46.54 acres as Low Density Residential (LDR)

Change 16.27 acres to Medium Density Residential (MDR)

Change 7.45 acres to High Density Residential (HDR)

Change 1.17 acres to Commercial Professional (CP)

Change 3.31 acres to Open Space (OS)

Change 14.03 acres to Park Recreation (P)

City of Colusa Zoning:

Apply a -PD Planned Development overlay to the 46.54 acres of R-1 Single Family Residential
Rezone 16.27 acres to R-2 Two Family Residential with a -PD Planned Development overlay
Rezone 7.45 acres to R-3 Neighborhood Apartment District with a -PD Planned Development overlay
Rezone 1.17 acres to Commercial Professional District with a PD Planned Development overlay
Rezone 3.31 acres to Parks/Recreation/Open Space
Rezone 14.03 acres to Parks/Recreation/Open Space

Anticipated Permits and Approvals:

- 1) City of Colusa approval of:
 - a. Tentative Map Subdivision
 - b. Development Agreement
 - c. General Plan Amendment
 - d. Rezone

CEQA Requirement:

The proposed project is subject to the requirements of the California Environmental Quality Act (CEQA). The Lead Agency is the City of Colusa. The Initial Study (IS) has been prepared to identify and assess the anticipated environmental impacts of the Wescott Subdivision (Project or Proposed Project). The purpose of the IS is to provide a basis for determining whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration (ND) or a Mitigated Negative Declaration (MND). This document has been prepared to satisfy CEQA (Pub. Res. Code, Section 21000 et seq.) and State CEQA Guidelines (14 CCR 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before acting on those Projects. CEQA also encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts (CEQA Section 20180(c)(2) and State CEQA Guidelines Section 15070(b)(2)).

II. PROJECT DESCRIPTION

Colusa Industrial Properties (Applicant) is proposing a General Plan Amendment and Rezone for properties identified as Assessor’s Parcel Numbers (APNs): 017-130-107 and 017-030-050 (portion of), located west of Wescott Road, south of Birchwood Place and west of Sunrise Boulevard within the City of Colusa (City), California. Collectively the two parcels represent the project site (Site). In addition, the Applicant is proposing a Tentative Subdivision for the project parcels, in which the Site is proposed to be subdivided into a series of individual lots and land uses (described in detail below).

Tentative Map Subdivision

The Applicant is proposing to subdivide the property into one hundred and seventy (170) single-family residential lots, fifty-two (52) two family residential lots, one (1) 7.45-acre neighborhood apartment parcel lot, one (1) 14.03-acre Open Space parcel, one (1) 3.51-acre Park parcel, and one (1) 1.17-acre Commercial parcel (known as “Wescott Subdivision”). The table below identifies the zoning districts, permitted density, total acreage, allowed parcel sizes, and density of the proposed subdivision (Figure 3).

Zoning District	Permitted Density	Total Acres	Parcel Size Range (Total)	Density/Unit Potential
R-1 Single Family Residential	3-8 units per acre	46.54	6,534 sq.ft to 16,988 sq.ft. (170)	3.6/170
R-2 Two Family Residential	8-12 units per acre	16.27	8,712 sq.ft. to 21,780 sq.ft (52)	3.2/ 130 to 195
R-3 Neighborhood Apartment	12-20 units per acre	7.45	7.45	89 to 149
CM Commercial	None	1.17	1.17	None
OS Open Space	None	3.31	3.31	None
PR Park Recreation	None	14.03	14.03	None

Further, a -PD Planned Development overlay is being applied to the R-1, R-2, R-3 and CP zoned parcels.

The anticipated layout of the proposed subdivision analyzed in this Initial Study comprises the layout provided on the Tentative Subdivision Map prepared by North Valley Engineering and Survey, dated October 2023, (see **Figure 3**). Access to the Project Site will be from Kittyhawk Drive and Sunrise Boulevard from the east, which will extend through the subdivision and connect to Wescott Boulevard, which runs along the western boundary of the entire project boundary. Two new additional streets, Streets “G” and “I”, will connect to Wescott Boulevard. Street “I” will connect through the entire length of the boundary and be stubbed out for future connection to a vacant 13-acre parcel. Internally, Streets “A”, “C”, “F”, “H”, “J,” and “K” connect to one another or connect to Kittyhawk Drive and Sunrise Boulevard. Streets “B”, “D” and “L” are cul-de-sacs within the subdivision.

General Plan Amendment

Currently the General Plan designation for the entire project boundary is Low Density Residential (LDR). According to the City of Colusa General Plan (2007), this land use category is designed to provide for areas of single-family residential and accessory residential uses, including accessory dwelling units. Density for

the LDR designation falls within the range of 3 to 8 dwelling units per acre, although the General Plan does note that a lower density may be allowed.

The Applicant is requesting a General Plan Amendment (GPA) for approximately 42.23 acres of the site (approximately half). The GPA proposes a mix of land use categories including:

Change 16.27 acres from LDR to Medium Density Residential (MDR). Per the General Plan, this land use designation is intended for a variety of housing product types, including detached townhouse, duplexes and triplex. This designation emphasizes residential development that promotes home ownership of affordable housing. Factors for consideration of development in this designation include density, scale, mass, buffer and provisions of open space. The density for MDR falls within a range of 8 to 12 dwelling units per acre, although the General Plan does note that a lower density may be allowed.

Change 7.45 acres of LDR to High Density Residential (HDR). This land use designation provides for apartments, condominiums and townhomes that can provide affordable housing for a range of income levels. The density falls within a range of 12 to 20 units per acre, although the General Plan does note that lower density is acceptable.

Change 1.17 acres of LDR to Commercial General (CG). The General Plan notes that that this land use designation provides for, but is not limited to, uses such as retail sales, automobile services, and professional offices. The General Plan further notes that this designation should be placed within or contiguous to developed areas that are served by the circulation network and are situated in close proximity to areas where future residential growth is expected.

Change a total of 17.34 acres of LDR to Parks/Recreation/Open Space (P/OS). The General Plan notes that this land use designation is suitable for park development, bike paths, greenbelts, nature preserves and uses which provide indoor and outdoor recreation opportunities. This designation applies to open space lands, which include lands not suited for development due to environmental conditions or location attributes, and to lands intended to remain in the undeveloped natural state.

Rezone

Currently, the entire project site is zoned R-1 Single Family Residential. Based on review of the Colusa Municipal Code, including Appendix A – Zoning, Article 5 – R-1 Single Family Residence District, a variety of permitted land uses are allowed in this zoning district, including single family dwelling, residential day cares (small), parks, schools, playgrounds, transitional housing, and gardening to name a few.

The Applicant is requesting to rezone the entire 88.77 acres, including the following:

Apply a -PD Planned Development overlay to the 42.23 acres of R-1 Single Family Residential zoning district. Appendix A – Zoning, Article 15 – the -PD Planned Development overlay permits variations to

development standards to be approved by the Planning Commission, including reduction in lot sizes, setbacks, lot coverage percentages, etc.

Change 16.27 acres of R-1 Single Family Residential to R-2 Two Family Residential with a -PD Planned Development. Appendix A – Zoning, Article 6 - R-2 Two Family Residence District governs the development standards within this zoning district. It permits the same land uses as the R-1 zone, but also permits development of duplexes. With the addition of the -PD Planned Development, variations to standards are permitted as approved by the Planning Commission.

Change 7.45 acres of R-1 Single Family Residential to R-3 Neighborhood Apartment District with a -PD Planned Development. Appendix A – Zoning, Article 7- R-3 Neighborhood Apartment District governs the development standards within this zoning district. It permits the same land uses as listed in the R-1 and R-2 zones, but also allows multi-family apartment buildings. With the addition of the -PD overlay, variations to standards are permitted as approved by the Planning Commission.

Change 1.17 acres of R-1 Single Family Residential to Commercial General District with a -PD Planned Development. Appendix A – Zoning, Article 10 – CG General Commercial District. This zone is applied to properties where general commercial facilities are necessary for public service and convenience, it also permits CN – Commercial Neighborhood land uses.

Change a total of 17.34 acres of R-1 Single Family Residential to O-S Open Space District. Appendix A – Zoning, Article 17 – O-S Open Space District governs development within this zoning district. This zone is applied to properties to be preserved in a natural state and/or provide open space buffer areas for land uses restricted to recreational, conservation or light agricultural types, and including accessory or public uses.

Subdivision Improvements

The roadway improvements proposed include a new roadway network that connects both the existing roadways from the existing subdivisions to the east and north (see **Figure 3**). Kittyhawk, which runs east-west, will be extended from the east, and connect to Wescott Road. Kittyhawk will have a width of 56-feet, with 4-foot connecting sidewalks on each side of the street. Kittyhawk will connect to Brentwood Road, which extends from the existing single-family subdivision from the north. Brentwood Road is proposed to be 44-foot wide with 4-foot attached sidewalks on each side. Sunrise Boulevard will also extend from the existing subdivision to the east and carry through the project and connect to Westcott Road to the west. Sunrise Boulevard is proposed for a 60-foot width with 4-foot-wide connected sidewalks. All new internal streets (“A”, “B”, “C”, “D”, “E”, “F”, “G”, “H”, “I”, “J”, “K”, and “L”) are proposed for 36-foot width, with 4-foot connected sidewalks on each side. Street “G” will also connect to Wescott Road to the west, thereby providing for 3 different connection points from Wescott Road to the interior of the Project Site. Street “R” and “D” are proposed to terminate into cul-de-sacs. Half the public right-of-way along Wescott Road will be improved with new improvements, consisting of half the vehicle travel lane (38 feet) receiving new asphalt, and a new 4-foot sidewalk along the Project frontage. As discussed above, a portion of the Project involves 14-acre open space area, that runs in an east-west manner, from Wescott Road through the site and

connecting to an existing open space area in Sunrise Landing to the east. Within this area, a new Class I bicycle path is proposed to go from Wescott through the site and connect to the east.

All internal utilities, such as water, power, sewer, cable, phone lines will be placed underground. It is anticipated that transformer boxes and backflow prevention devices will be placed above ground in accordance with PG&E and water provider standards and regulations.

III. PROJECT SETTING AND LOCATION

As described above, the Site comprises two (2) Assessor's parcels, including:

- APN: 017-130-107, comprising of approximately 1.98 acres; and
- APN: 017-030-050 (portion of), comprising 88.97 acres.

The Wescott Subdivision properties comprise a total of 90.95 acres and has no existing structures. Both parcels are planted with seasonal row crops, such as tomatoes. The site itself is essentially flat, with little to no grade, at an elevation of 78 feet.

The site is bordered by Wescott Road to the west. Just beyond Wescott Road are a mix of residential and agricultural uses, with a typical residential neighborhood to the north (Walnut Tree, Ashley and Hartley Drive), a small open field used for row crops. To the south is a small animal keeping operation on a large lot and an area that used to be a gym with outdoor tennis courts, which is now utilized as a dog grooming business. The southern border of the site contains an abandoned railroad right of way and beyond that, additional farming lands. To the east is Sunrise Landing, a subdivision project of 180 single family homes which is currently being built out in various phases on 52 acres. Directly to the north is an established single family subdivision neighborhood. Both neighborhoods to the north and east have an existing street pattern that stubs out to the project site.

IV. ENVIRONMENTAL EFFECTS

An environmental checklist follows this section and addresses all potential adverse effects resulting from the Proposed Project. Impacts related to the project, are reduce to less than significant with the inclusion of Mitigation Measures.

FIGURE 1 – LOCATION MAP

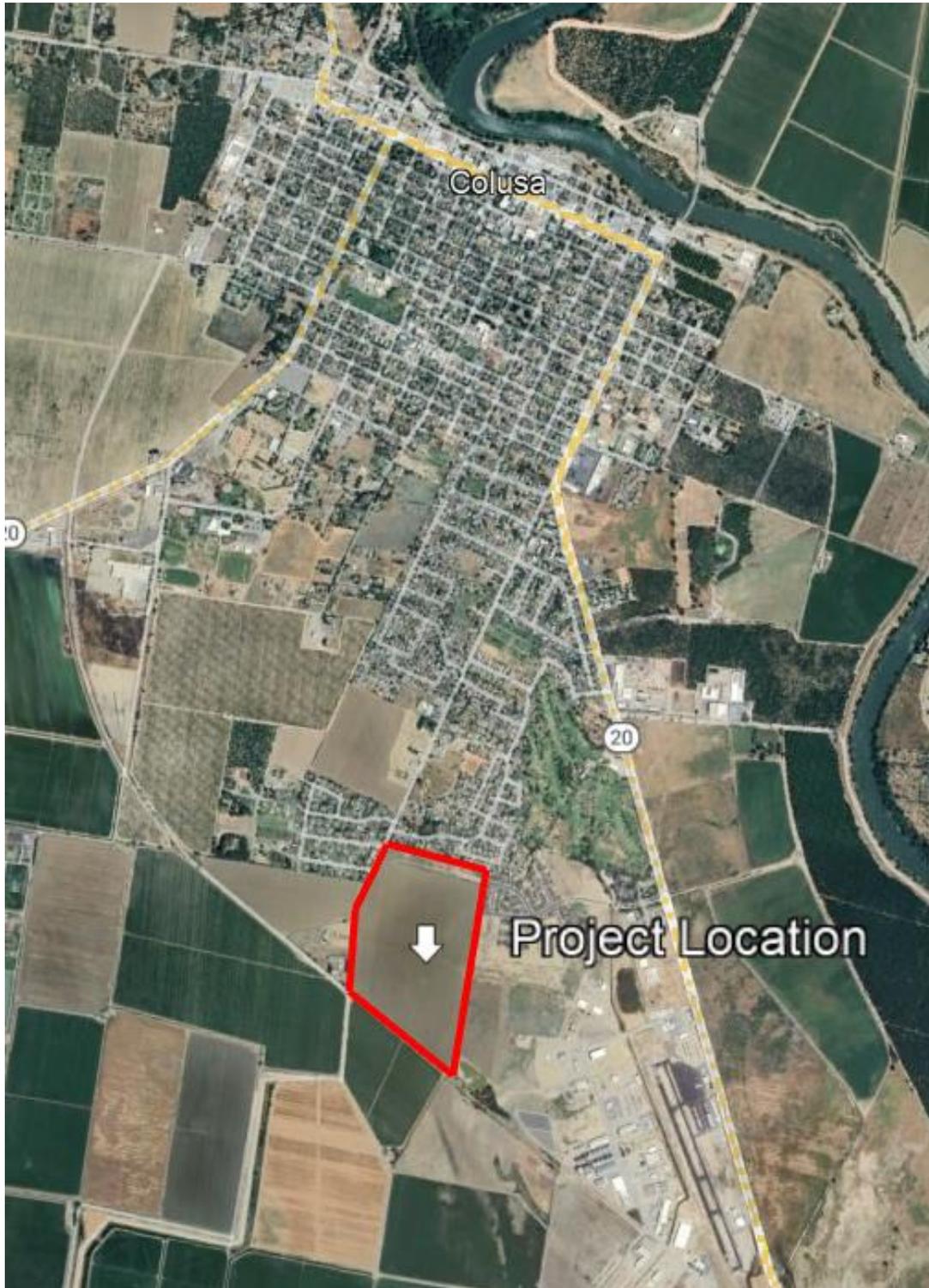
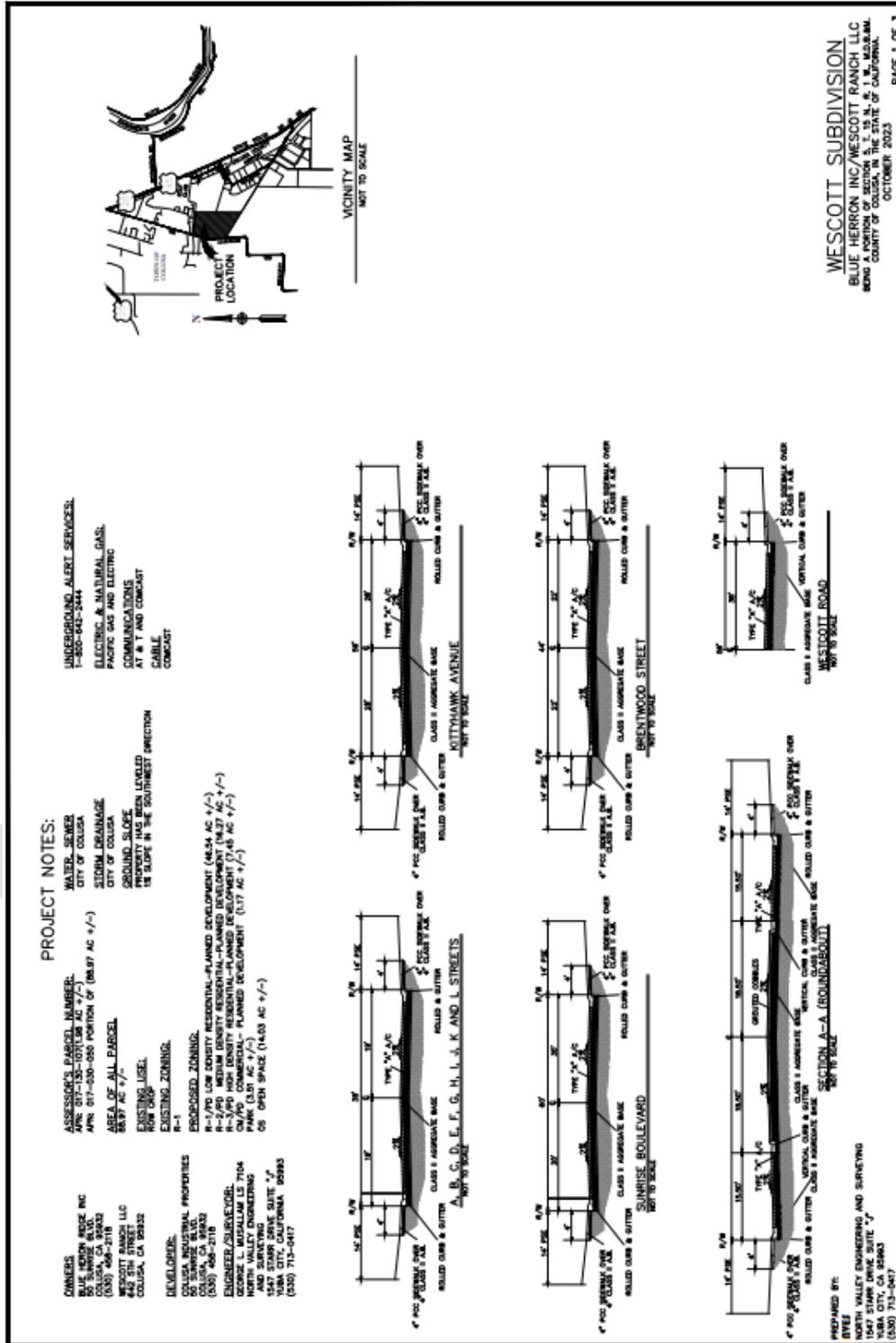


FIGURE 2 – AREIAL PHOTOGRAPH



FIGURE 3 – WESCOTT TENTATIVE SUBDIVISION MAP





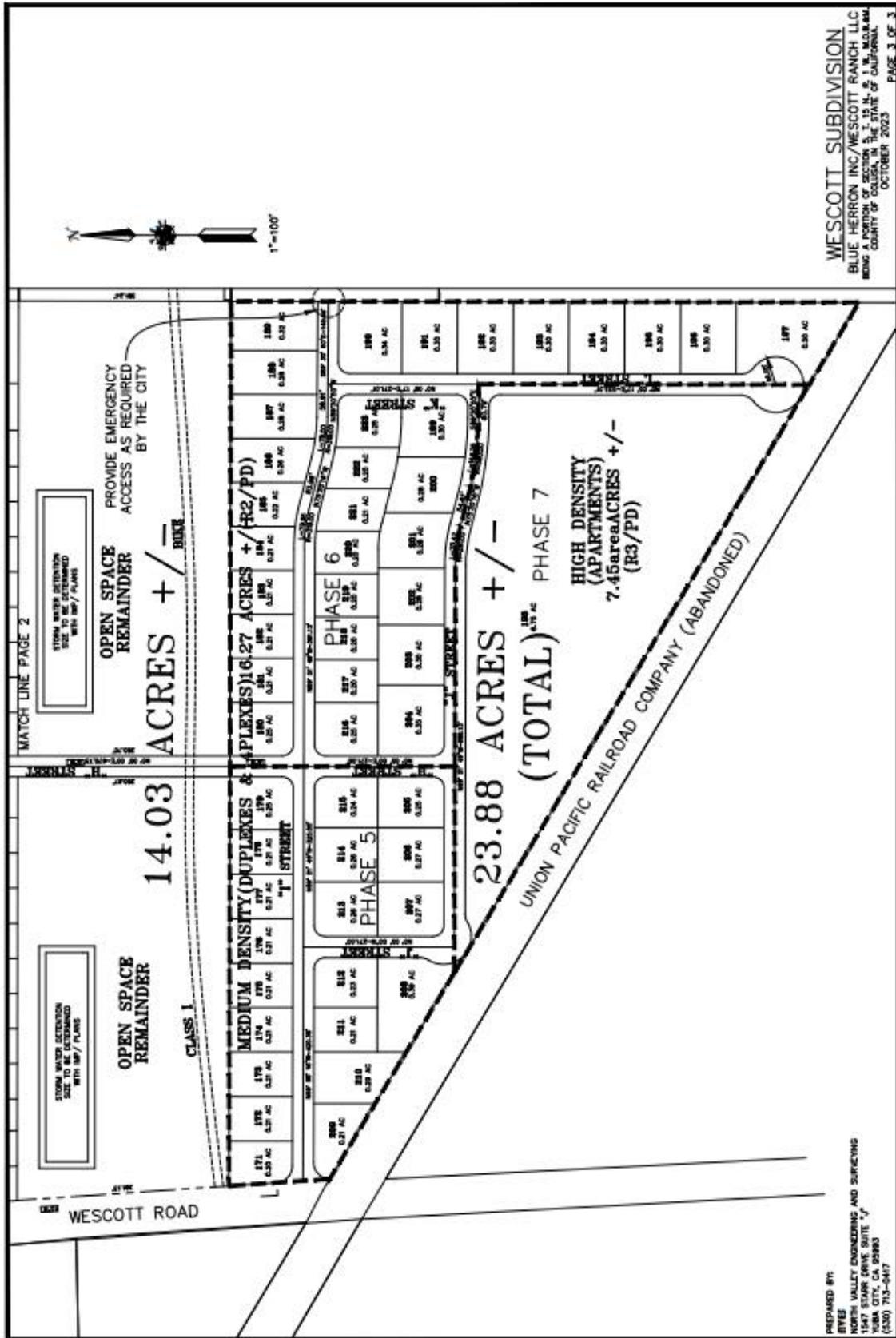


FIGURE 4 – EXISTING GENERAL PLAN AND ZONE PLAT

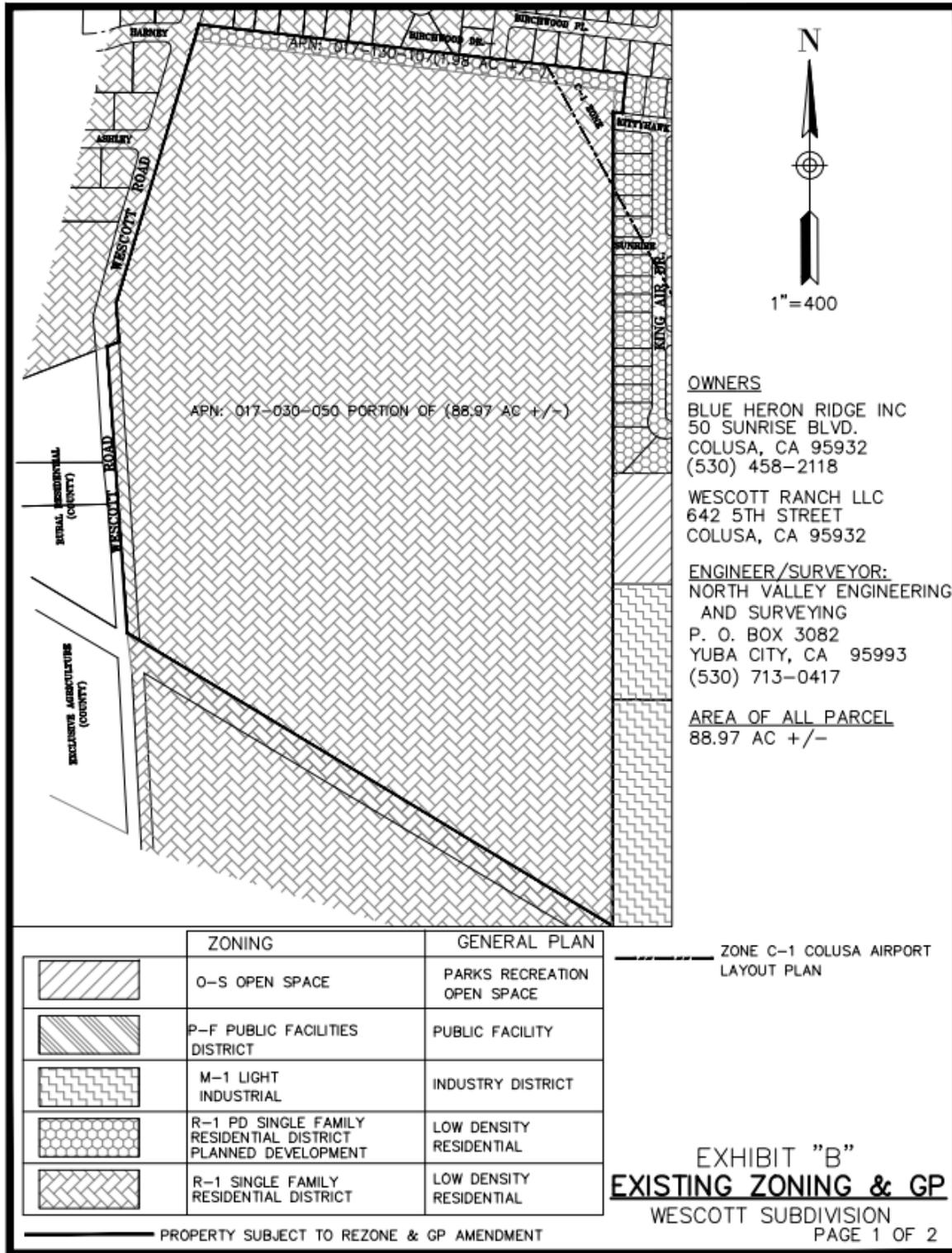
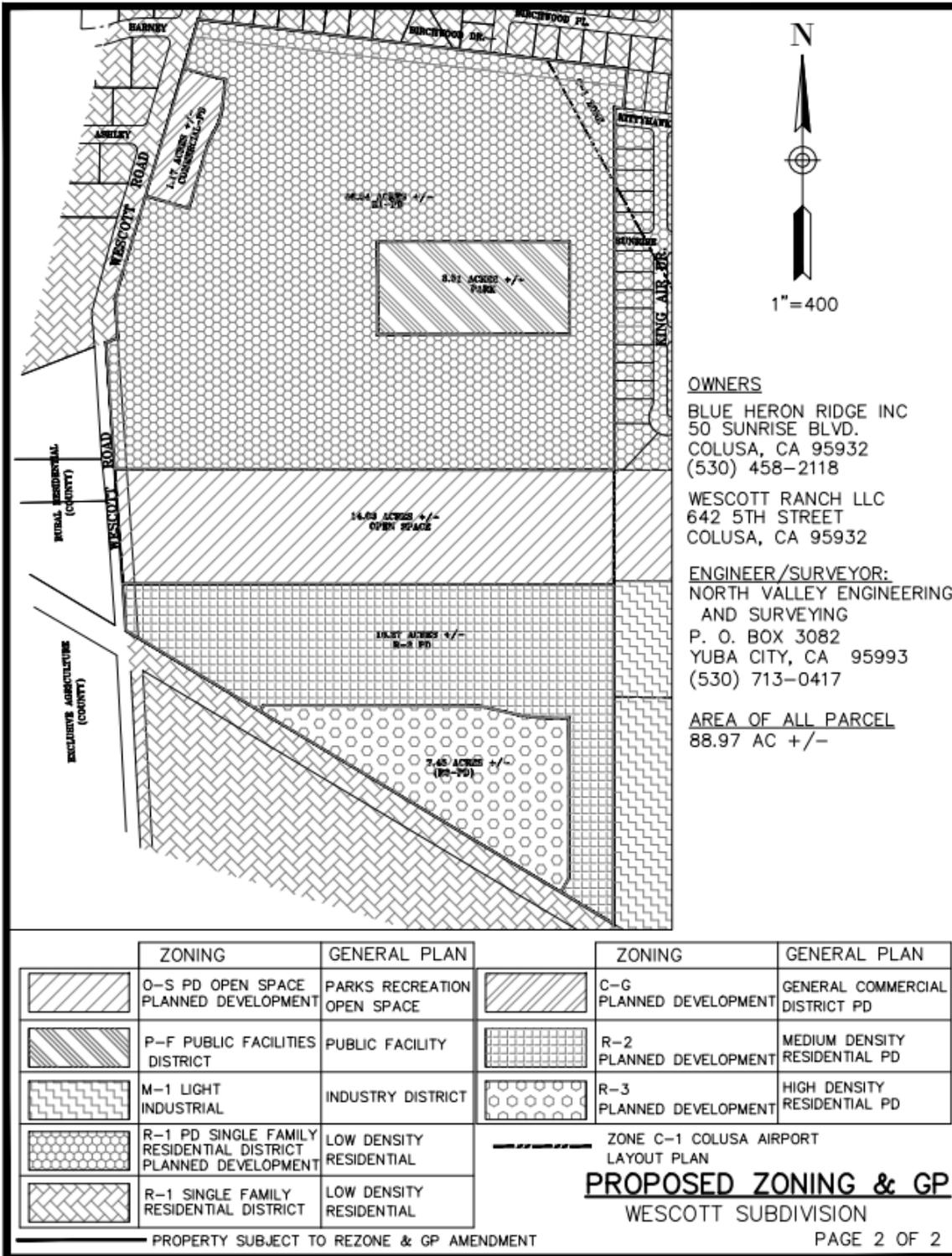


FIGURE 5 – PROPOSED GENERAL PLAN AND ZONING PLAT



V. 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”** or **“Potentially Significant Unless Mitigation Incorporated”** as indicated by the checklists on the following pages.

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

An explanation for all checklist responses is included, and all answers take into account the whole action involved and the following types of impacts: off-site and on-site; cumulative and project-level; indirect and direct; and construction and operational. The explanation of each issue identifies (a) the threshold of significance, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance. All mitigation measures required for the project are provided in the Mitigation and Monitoring Reporting Program (MMRP), enclosed as **Appendix 1**.

In the checklist the following definitions are used:

“Potentially Significant Impact” means there is substantial evidence that an effect may be significant.

“Potentially Significant Unless Mitigation Incorporated” means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.

“Less Than Significant Impact” means that the effect is less than significant and no mitigation is necessary to reduce the impact to a lesser level.

“No Impact” means that the effect does not apply to the proposed project, or clearly will not impact nor be impacted by the proposed project.

DETERMINATION: (To be completed by the Lead Agency on the basis of this initial evaluation)

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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

Date

Jesse Cain, City Manager

1. AESTHETICS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Affect lands preserved under a scenic easement or contract.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In non-urbanized 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: The project site is in the southeast quadrant of a small, to mid-sized city in the Sacramento Valley within an active agricultural region. Some scenic views are available from the site that include the Coast Range to the west, Sutter Buttes, and on clear days the Cascade and Sierra Nevada mountains and foothills to the east and northeast. No state scenic highways pass through the vicinity. The Sacramento River is 0.97 of a mile to the northeast. East and north of site are established low density residential uses. West of the site contains low density residential, a small farming operation and a commercial use, while the southern boundary abuts an abandoned railroad right of way and farmlands past that.

Visual Character of the Project Site

The topography of the site is flat, with elevations ranging from approximately 50 to 60 feet above mean sea level. The project site is currently undeveloped land, previously in agricultural production, which has also been routinely mowed and tilled for weed abatement purposes. Vegetation across the site are native and non-native grasses periodically managed.

Thresholds of Significance: The project would have a significant effect on aesthetics if it would have a substantial adverse effect on a scenic vista; substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway; substantially degrade the existing visual character or quality of public views of the site and its surroundings (if the project is in a non-urbanized area) or conflict with applicable zoning and other regulations governing scenic quality (if

the project is in an urbanized area); or create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

DISCUSSION

1.a: The Proposed Project is not located within an area mapped or designated as a scenic vista. Although the Site is visible from surrounding roadways and properties, and the Site would be changing from mostly undeveloped to a developed condition, the portion of the Site planned to be subdivided and developed with single-family and multi-family residences is slated for development and designated for residential use under both the County and City’s General Plans, and would be consistent with surrounding residential development, located immediately north and east of the Site. The buildout of the Site would require adherence to the Colusa Municipal Code, which regulates the height of structure and lighting intended to promote orderly development. Therefore, a less than significant impact would occur.

1.b: The Site is not located within or adjacent to a scenic highway corridor and does not contain scenic resources, such as trees of scenic value, rock outcroppings, or historic buildings. There are no State designated or eligible scenic highways within the vicinity of the Site. Per the California Department of Transportation (Caltrans) State Scenic Highway Program (2020), there are no designated or “eligible” state scenic highways within or in close proximity to the City of Colusa. The nearest highway to the Site (State Highway 20) is located approximately 2,425 feet east of the Site and is not a designated or eligible State scenic highway. As such, there is a less than significant impact on scenic resources.

1.c: There are no known scenic preserves or easements in the vicinity of the Project Site or associated with the Site, therefore there will be no impact on this resource.

1.d: The Project would not substantially degrade the existing visual character or quality of public views of the Site and its surroundings, nor conflict with applicable zoning and other regulations governing scenic quality. The General Plan anticipated development within the Site as residential in character, which would be consistent with the surrounding area which includes residential structures to the north, west, east and industrial/commercial development to the southeast.

Public views of the Site are currently experienced from surrounding roadways, including Wescott Road to the west and Kittyhawk Drive and Sunrise Boulevard to the east of the Site. To the north is Country Club Drive, Birchwood Place and Brentwood Drive, which are public roads located within a single-family residential development. As noted above, the project would adhere to the City’s Municipal Code requirements and are intended to minimize visual and other impacts to the surrounding properties. Therefore, a less than significant impact would occur.

1.e.: Temporary light and glare impacts may occur during development of site improvements and structures and are not regulated by City Code. However, construction hours are limited by City Code from 7:00 a.m. to 7:00 p.m. on weekdays and 8:00 a.m. to 7:00 p.m. on weekends (City Code Section 11A-3), which should minimize related temporary glare off-site and minimize adverse-affects to nighttime views during nighttime hours.

The specific development lighting needs would vary according to the type and intensity of each individual land use. Potential sources of light include external building lights on front porch or face of the garage on single family homes, parking lot lighting withing multi-family development or street and trail lighting. This type of lighting is typical for urban/suburban developments in that lighting would be utilized to provide attractive, safe, and secure nighttime environments for the Project. Parking lot related lighting associated with the high-density zoning district will be in compliance with City codes, which requires lighting to be minimal of one-half feet candle illumination for every point in the parking lot and that such lighting shall be arranged to reflect the light away from adjoining premises and streets (Article 29 - Off Street Parking Requirements – Section 29-04: Minimum parking specifications).

The City’s General Plan discusses applying lighting in a manner that will enhance the aesthetic character of the community (Goal CCD-9), and that although lighting is important to illuminate the built environment, over-lighting should be avoided (Policy CCD-9.4). With the introduction of Mitigation Measure AESH-1, below, the introduction of new sources of light and glare will minimally contribute to nighttime light pollution and results in minimal impacts to nighttime views in the area and new lighting will be Less Than Significant with Mitigation Measure.

MITIGATION MEASURE

AESH-1:

To minimize over lighting and to provide for a quality-built environment, outdoor lighting placed on structures, within parking lots, along trails or within the public right of way, shall be dark sky compliant, directed downward and contain cut offs to minimize excessive source of light and glare. Future building plan submittals shall indicate and provide details on the type of lighting, location, height, size and intensity.

2. AGRICULTURE AND FORESTRY RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: The Draft Master Environmental Impact Report (DMEIR) prepared for the City of Colusa General Plan Update in 2007 evaluated potential land use impacts associated with build-out of the General Plan Update. Analysis for the DMEIR was based on a review of planning documents including the General Plan, Zoning Ordinance, a field review of the City and surrounding areas, and consultation with responsible agencies.

The DMEIR agricultural analysis utilized information from various sources including the California Department of Conservation Farmland Conversion Report 1998-2000, the California Department of Conservation Important Farmland Map of Colusa County, the Soil Survey of Colusa County prepared by the NRCS in 2002, and the Summary of County Agricultural Commissioners' Reports, 2003-2004 by the National Agricultural Statistics Service. Based on this information, the analysis assessed the potential value of agricultural lands in the proposed Planning Area and utilized the proposed Land Use Diagram to determine potential impacts.

The California Department of Conservation (DOC) manages the Farmland Mapping and Monitoring Program (FMMP), which identifies and maps significant farmland. Farmland is classified using a system of five categories including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. The classification of farmland as Prime Farmland,

Unique Farmland, and Farmland of Statewide Importance is based on the suitability of soils for agricultural production, as determined by a soil survey conducted by the Natural Resources Conservation Service (NRCS).

No properties within the City of Colusa Planning Area are designated by the General Plan as Agricultural. Although some Prime Farmland exists in the City, the DMEIR identified that any conversion of prime agricultural land would be significant and unavoidable and a Statement of Overriding Considerations was made as part of the General Plan EIR certification (Impact 6.2). The Site boundaries are designated Prime Farmland by the DOC and are currently not in routine production.

According to the DMEIR, there are no properties in the City subject to a Williamson Act contract, that contain forest or timber resources, or zoned for forestland protection or timber production.

Thresholds of Significance: The project would have a significant effect on agriculture and forestry resources if it would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (hereafter “farmland”), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses; conflict with existing zoning for agricultural use or a Williamson Act contract; conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)); Result in the loss of forest land or conversion of forest land to non-forest use; or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forestland to non-forest use.

DISCUSSION

2.a: The Site boundaries are designated Prime Farmland by the California Department of Conservation Division of Land Resource Protection (Colusa County Important Farmland 2018) and are currently not in production.

The City of Colusa analyzed the potential impacts associated with development of important farmlands that have been designated for non-agricultural uses in the DMEIR prepared for the 2007 General Plan. Specifically, the City’s DMEIR notes that by implementing the General Plan, “development of the project site into residential, open space and educational uses would remove this area from potential agricultural production and results in the permanent loss of 442 acres of prime or locally important farmland to urban development. This is considered a significant impact” (page 5.1-10).

The City found this impact to be significant and unavoidable (Impact 5.1.1). As such, environmental findings and a Statement of Overriding Considerations was adopted by the City of Colusa City Council as part of the certification of the EIR. As the impacts associated with the conversion of important farmland of the subject Site were previously assessed, the Proposed Project would be consistent with development anticipated in the City’s General Plan and would further be consistent with surrounding residential

development, and a Statement of Overriding Considerations was adopted for identified significant and unavoidable impacts, therefore, a Less Than Significant Impact would occur.

2.b: Pursuant to the *California Williamson Act Enrollment Finder* interactive website managed by the California Department of Conservation and as well as the General Plan, the Project Site and its surroundings are not enrolled or a part of a Williamson Act contract. No Impact.

2.c: The Site is neither designated nor zoned as forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production [as defined by Government Code section 51104(g)] or timberland, but rather designated and zoned for residential use. No impact would occur.

2.d: The proposed project would not result in result in the loss of forest land or conversion of forest land to non-forest use as the site. The Site is void of forest resources, not designated as a forest resources zone or land by the City. As further discussed above in 2.c above, the site has no timberland production, but is rather designated and zoned for residential land uses. No impact would occur.

2.e: The Project boundaries are designated Prime Farmland by the California Department of Conservation Division of Land Resource Protection (Colusa County Important Farmland 2018) and are seasonally in production.

The City of Colusa analyzed the potential impacts associated with development of important farmlands that have been designated for non-agricultural uses in the respected DMEIR prepared for the 2007 General Plan. Specifically, the City's DMEIR notes that by implementing the General Plan, "development of the project site into residential, open space and educational uses would remove this area from potential agricultural production and results in the permanent loss of 442 acres of prime or locally important farmland to urban development. This is considered a significant impact" (page 5.1-10).

The City determined the impacts to be significant and unavoidable (Impact 5.1.1). As such, environmental findings and a Statement of Overriding Considerations were adopted by the City of Colusa City Council. As the impacts associated with the conversion of important farmland at the subject Site were previously assessed, the Proposed project would be consistent with development anticipated in the City's General Plan and would further be consistent with surrounding residential development, and a Statement of Overriding Considerations was adopted for identified significant and unavoidable impacts, therefore, a Less Than Significant Impact would occur.

MITIGATION MEASURES

No mitigation required.

3. AIR QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the Colusa County portion of the Northern Sacramento Valley Air Basin (NSVAB), which encompasses the Project site. An Air Quality Analysis was completed for the subject project with excerpts provided below.

Northern Sacramento Valley Air Basin

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. Corning lies in the NSVAB, which includes Sutter, Yuba, Colusa, Butte, Glenn, Tehama, and Shasta counties. The NSVAB is bounded on the north and west by the Coastal Mountain Range and on the east by the southern end of the Cascade Mountain Range and the northern end of the Sierra Nevada. These mountain ranges reach heights in excess of 6,000 feet above mean sea level, with individual peaks rising much higher. The mountains form a substantial physical barrier to locally created pollution as well as to pollution transported northward on prevailing winds from the Sacramento metropolitan area (Sacramento Valley Air Quality Engineering and Enforcement Professionals [SVAQEEP] 2015).

The environmental conditions of Colusa County are conducive to potentially adverse air quality conditions. The basin area traps pollutants between two mountain ranges to the east and the west. The U.S. Environmental Protection Agency (USEPA) and CARB designate air basins or portions of air basins and counties as being in “attainment” or “nonattainment” for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The determination of whether an area meets the State and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly,

because the State and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the State standards of the same pollutant. The region is designated as a nonattainment area for the State standard for PM10 (CARB 2018).

Local Regulatory Framework

The Colusa County Air Pollution Control District (CCAPCD) is the agency primarily responsible for ensuring that National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are not exceeded and that air quality conditions are maintained in the Colusa County portion of the Northern Sacramento Valley Air Basin (NSVAB). The CCAPCD adopts and enforces control on stationary sources of air pollutants through its permit and inspection program. The district also regulates agricultural burning. Other responsibilities include monitoring air quality, preparing clean air plans, and responding to citizen complaints concerning air quality. The CCAPCD develops regulations to improve air quality and protect the health and welfare of Colusa County residents and their environments. The CCAPCD has a list of rules of regulations of activities association with the project:

- **Rule 200 (Nuisance)** – This rule prohibits the discharge from any non-vehicular source such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.
- **Rule 201 (Visible Emissions)** - As provided by Section 41701 of the California Health and Safety Code, a person shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminants for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated as No. 2 on the Ringelmann Chart as published by the U.S. Bureau of Mines.
- **Rule 230 (Architectural Coatings)** – This rule requires manufacturers, distributors, and users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings by placing limits on the VOC content of various coating categories.
- **Rule 231 (Cutback and Emulsified Asphalt)** – The purpose of this Rule is to limit emissions of volatile organic compounds (VOCs) from the use of cutback and emulsified asphalt in paving, construction, or maintenance of parking lots, driveways, streets, and highways. This rule prohibits the use or application for paving, construction or maintenance of parking lots, driveways, streets, or highways any rapid or medium cure cutback asphalt or slow cure cutback asphalt containing more than 0.5 percent by volume of VOCs which evaporate at 260°C (500°F) or less. This rule also prohibits any emulsified asphalt material containing more than 3.0 percent by volume of VOCs which evaporate at 260°C (500°F) or less.
- **Rule 252 (Stationary Internal Combustion Engines)** – To limit emissions of NO_x and CO from stationary internal combustion engines any gaseous, diesel, or any other liquid-fueled stationary internal combustion engine within Colusa County shall not be operated in a manner that results in emissions exceeding limits established by the CCAPCD.
- **Rule 430 (New Source Review)** – The CCAPCD has established pre-construction review requirements for new and modified stationary sources of air pollution in order to analyze air quality

impacts and insure that the operation of such sources does not interfere with the attainment or maintenance of ambient air quality standards. This rule applies to all new and modified stationary sources which are subject to CCAPCD permit requirements and, after construction, emit or may emit any affected pollutants. Rule 430 provides for no net increase in emissions, pursuant to Section 40918 of the California Health & Safety Code (HSC), from new or modified stationary sources which emit, or have the potential to emit, 25 tons per year or more of any non-attainment pollutant or its precursors.

- **Rule 431 (Emission Reduction Credits and Banking)** – This rule provides a mechanism for permitted and non-permitted emission sources to deposit, transfer, and use Emission Reduction Credits (ERCs) as offsets as allowed by applicable laws and regulations. All uses of emission reductions that are required under the CCAPCD’s Rule 430 shall be processed in accordance with this Rule. The provisions of this rule apply to the deposit, transfer, and use of ERCs from stationary sources and open biomass burning sources of air pollution emissions.

Neither the City of Colusa nor the CCAPCD have established air pollution thresholds under CEQA for the assessment of air quality impacts. However, CCAPCD staff has recommended that CEQA documents use CCAPCD Rule 430, New Source Review, Best Available Control Technology thresholds as CEQA significant thresholds for criteria pollutants emissions. The thresholds of significance are summarized in the **Table 1** below:

Table 1 - Significant Thresholds	
Air Pollutant	Average Daily Emissions (pounds per day)
ROG	25
NOx	25
SOx	80
PM10	80
CO	500

DISCUSSION

III.a, and III.b. ECORP Consulting, Inc. prepared an Air Quality & Greenhouse Gas Emissions Assessment (Assessment) for the Project (see **Appendix 3**). The Assessment noted that emissions associated with Project construction would be temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., tractors, forklifts, pavers), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving and coating activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of

dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation.

Table 2 - Unmitigated Construction-Related Criteria Air Pollutants					
Construction Year	Pollutant (pounds per day)				
	ROG	NOX	SOX	PM10	CO
Calendar Year One	15.16	72.08	0.12	42.88	68.17
Calendar Year Two	25.55	48.91	0.10	11.87	56.12
Calendar Year Three	27.09	64.01	0.14	22.46	81.30
Calendar Year Four	21.41	45.50	0.10	22.05	55.32
Calendar Year Five	16.18	29.70	0.07	8.66	44.67
Calendar Year Six	11.27	25.35	0.06	8.63	38.58
Calendar Year Seven	16.30	37.70	0.07	21.69	48.68
Calendar Year Eight	9.90	14.77	0.03	1.20	25.93
Potentially Significant Impact Threshold	25	25	80	80	500
Exceed Threshold?	Yes	Yes	No	No	No

As shown in the **Table - 2 Unmitigated Construction-Related Criteria Air Pollutants** (above), criteria air pollutant emissions generated during Project construction would result in significant concentrations of ROG and NOx emissions for multiple years of construction. Therefore, Mitigation Measure AIR-1 is required in order to reduce ROG and NOx emissions to levels below the significance thresholds.

Mitigation Measure AIR-1 would mandate the use of Tier 4 Certified engines for the Project offroad construction equipment used during Project construction. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the USEPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis-Con, and Yanmar). On August 27, 1998, the USEPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 horsepower and increasingly more stringent Tier 2, Tier 3, and Tier 4 standards for all equipment with phase-in schedules from 2000 to 2015. As a result, all off-road, diesel-fueled construction equipment manufactured from 2006 to 2015 has been manufactured to Tier 3 standards. The Tier 3 standards can reduce NOx emissions by as much as 64 percent and PM emissions by as much as 39 percent. On May 11, 2004, the USEPA signed the final rule introducing Tier 4 emission standards, which are currently phased-in over the period of 2008-2015. The Tier 4 standards require that NOx emissions be further reduced by about 90 percent. This, as a result, decreases ROG emissions as well. All off-road, diesel-fueled construction equipment manufactured in 2015 or later have been manufactured to Tier 4 standards.

With incorporation of Mitigation Measure AIR-1, noted below, the construction related daily pollutants would be generated at levels below the potentially significant threshold, as indicated in **Table 3 – Mitigated Construction-Related Criteria Air Pollutant Emissions** noted below.

Construction Year	Pollutant (pounds per day)				
	ROG	NOX	SOX	PM10	CO
Calendar Year One	10.48	10.39	0.12	39.88	73.35
Calendar Year Two	22.46	12.09	0.10	9.94	63.38
Calendar Year Three	21.80	16.32	0.14	20.60	94.16
Calendar Year Four	18.40	11.44	0.10	20.39	64.91
Calendar Year Five	13.89	11.44	0.07	20.39	64.91
Calendar Year Six	13.89	12.17	0.06	7.74	48.48
Calendar Year Seven	14.30	12.59	0.07	20.49	50.57
Calendar Year Eight	8.86	5.98	0.03	0.90	28.33
Potentially Significant Impact Threshold	25	25	80	80	500
Exceed Threshold?	No	No	No	No	No

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM10, PM2.5, CO, and SO2 as well as O3 precursors such as ROG and NOX. Project-generated increases in emissions would be predominantly associated with motor vehicle use from the proposed residences. As previously described, operational air pollutant emissions were specified based on the site dimensions and lot acreage identified in Project Site plans and the average daily vehicle trips generated by the Project identified in the Traffic Impact Study prepared by Headway Transportations (2023). Long-term operational emissions attributable to the Project are identified in **Table 4 - Unmitigated Construction-Related Criteria Air Pollutants** (below).

Construction Year	Pollutant (pounds per day)				
	ROG	NOX	SOX	PM10	CO
Mobile	14.13	13.41	0.37	35.92	141.36
Area	433.67	8.47	0.95	72.36	543.23
Energy	0.12	2.16	0.01	0.17	1.08
Total	447.92	24.04	1.33	108.45	685.67
Potentially Significant Impact Threshold	25	25	80	80	500
Exceed Threshold?	Yes	No	No	Yes	Yes

As shown in **Table 4 - Unmitigated Construction-Related Criteria Air Pollutants**, daily emissions associated with Project operations would exceed the significance threshold for ROG, PM10 and CO.

Therefore, Mitigation Measure AIR-2 below, is required in order to reduce ROG, PM10 and CO emissions to levels below the significance thresholds. Implementation of this measures would prohibit the installation of wood stoves and fireplaces, which now results in operational emissions as indicted in **Table 5 – Mitigated Construction Related Criteria Air Pollutants**.

Table 5 – Mitigated Construction-Related Criteria Air Pollutants					
Construction Year	Pollutant (pounds per day)				
	ROG	NOX	SOX	PM10	CO
Mobile	14.13	13.41	0.37	35.92	141.36
Area	8.37	0.16	0.00	0.01	18.05
Energy	0.12	2.16	0.01	0.17	1.08
Total	22.62	15.73	0.38	36.10	160.49
Potentially Significant Impact Threshold	25	25	80	80	500
Exceed Threshold?	No	No	No	No	No

III.c) Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the Project Site are residences located adjacent to the northern Project Site boundary.

Construction- Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of DPM, ROG, NOx, CO, and PM10 from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The Colusa County portion of the NSVAB is listed as an attainment area for the state standard for PM10 (CARB 2022a). Thus, PM10 levels in the Colusa County portion of the NSVAB are at unhealthy levels during certain periods. However, as shown in Table 3, the Project would not exceed the significance thresholds for any criteria air pollutant emissions, including PM10 with implementation of mitigation measure AIR-1.

The health effects associated with O3 are generally associated with reduced lung function. The Project’s construction activities, with the implementation of AIR-1, would not result in O3 precursor emissions (ROG or NOx) in excess of the significance thresholds. Thus, the Project is not anticipated to substantially contribute to regional O3 concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood’s ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO

emissions in excess of the significance threshold. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM10 and PM2.5) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. PM10 exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM and PM10 contains PM2.5 as a subset. As with O3 and NOx, the Project would not generate emissions of PM10 or PM2.5 that would exceed the significance thresholds with implementation of mitigation measure AIR-1. Accordingly, the Project's PM10 and PM2.5 emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, Project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants with implementation of mitigation measure AIR-1 and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. The Project would not have a high carcinogenic or non-carcinogenic risk during operation.

III.d) Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may

use the word “strong” to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses as being associated with odors.

MITIGATION MEASURES

AIR-1: Prior to the certificate of construction-related permits for the Wescott Road Subdivision Project, the Project Applicant shall demonstrate to the satisfaction of the City of Colusa Planning Division that the following measure will be implemented during Project construction:

All offroad equipment of greater than 50 horsepower used in Project construction shall be CARB Tier 4 Certified, as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations.

AIR-2: Prior to the issuance of individual building permits, the Colusa County Planning Division shall confirm that the Project prohibits the installation, construction, or use of wood stoves and fireplaces in all proposed residential units within the Project Site. Hearths will be limited to natural gas-fueled fireplaces.

4. BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting: The City of Colusa is located on a generally flat, agricultural plain. The Sacramento River forms the natural northern border of the City. The 63-acre Colusa-Sacramento River State Recreation Area (SRA) is located just north of the City’s boundaries. The 4,507-acre Colusa National Wildlife Refuge is located 1.62 miles from the project site. Common wildlife in the SRA and Refuge includes deer, raccoons, opossums, foxes, skunks and muskrats. Birds observed in the area include ring-necked pheasants, California quail, mallard ducks, Canada geese, western meadowlarks, northern flickers and ospreys. Vegetation in the area includes cottonwood, willow, fig trees and wild grape, among many other trees, shrubs, and plants along the river.

Thresholds of Significance: The project would have a significant effect on biological resources if it would 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 Wildlife or U.S. Fish and Wildlife Service; have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; 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; 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; conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

DISCUSSION

4.a: Chapter 8 of the General Plan EIR - Biological Resources, Figure 4.8-1 notes that the project area is irrigated row and field crops, which according to the City of Colusa General Plan “generally provides low breeding habitat for wildlife species due to the high level and frequency of disturbance; however, it provides cover and foraging habitat for many species.” Chapter 6 (Parks, Recreation, and Resource Conservation) of the City of Colusa General Plan goes on to note that “the urbanized areas both in and outside of the City limits are generally less likely to contain significant wildlife resources or habitat, and the California Department of Fish has indicated there are no endangered animal species within the City of Colusa”. This is also supported by DMEIR Figure 4.8-2 – Recorded Occurrences of Special Status Species within 5 Miles of the City. This figure clearly illustrates that any special status species occur significantly away from City limits or along the Sacramento River. Therefore, impacts associated with habitat modification are considered less than significant.

4.b: A Biological Resource Assessment (BRA), completed by Gallaway Enterprises in March 2022 found that the site has no suitable habitat for special-status botanical species. Specifically, the BRA states “[t]he land within the BSA is regularly disturbed by agricultural practices, including tilling and disking. Due to the regular disturbance and maintenance of the land within and adjacent to the BSA, the lack of suitably wet habitat, the lack of alkaline soils, and the lack of native vegetation, there is no potential for any special-status botanical species to occur within the BSA”. Further, the site is void of any riparian habitat and is as noted above (4.a) and that the General Plan states that the site “generally provides low breeding habitat for wildlife species due to the high level and frequency of disturbance; however, it provides cover and foraging habitat for many species.” Chapter 6 (Parks, Recreation, and Resource Conservation) of the City of Colusa General Plan goes on to note that “the urbanized areas both in and outside of the City limits are generally less likely to contain significant wildlife resources or habitat, and the California Department of Fish has indicated there are no endangered animal species within the City of Colusa”. This is also supported by EIR Figure 4.8-2 – Recorded Occurrences of Special Status Species within 5 Miles of the City. This figure clearly illustrates that any special status species occur significantly away from City limits or along the Sacramento River. Therefore, there will be no effect on botanical species and no avoidance and

minimization measures are proposed which supports the conclusion that there will be less than a significant impact upon riparian habitat modifications.

4.c) Pursuant to the *U.S. Fish and Wildlife Service's (USFWS) National Wetland Mapper*, the Site is void of any known, mapped or previously identified creeks/streams or wetlands. This conclusion is further supported by the BRA completed by Gallaway Enterprises in March 2022, which states “the project does not contain any vernal pools or wetland features that could provide habitat for vernal pool tadpole shrimp or other federally listed crustaceans.” The BRA also notes that:

There is an irrigation ditch that consists of an approximately 3-foot shallow cut and low berms as embankments, located along the eastern boundary of the BSA. The irrigation ditch is inundated by an artificial flow regime that is dictated by the agricultural practices conducted within the Wescott subdivision of the BSA and runs straight from north to south, outflowing to the southeast of the BSA. Vegetation within the ditch indicates that this ditch receives ephemeral water flows. Review of aerial photographs of the site indicate that the ditch is dry during summer months and does not appear to be connected to a perennial water source.

Because the Site is over an acre in size, the project would be subject to the Construction General Permit Order 2009-0009-DWQ, which requires preparation of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of standard Best Management Practices (BMPs). Such BMPs may include installation of straw bales, fiber rolls, and/or silt fencing structures, limiting ground disturbance to the minimum necessary, and stabilizing disturbed soil areas as soon as feasible after construction is completed, which would aid in assuring the minimization of erosion and avoiding runoff. In addition, drainage improvements proposed under the project would include curb, gutter, and sidewalk, as well as storm drain inlets and drainage storage, catch basins and filtration systems, which would further minimize potential impacts. A less than significant impact would occur.

4.d: As discussed above, the site is void of trees, native habitat that supports resident wildlife and the overall the proposed project would not impact the movement of any native resident or migratory fish (See 4.c); however, there is the potential for native resident wildlife species in the vicinity of the Site to be impacted during earth moving activities, and project construction and operation, including bird species protected under the Endangered Species Act, Migratory Bird Treaty Act of 1918 (MBTA), the Bald and Golden Eagle Protection Act of 1940, or other regulations. As discussed in the BRA, in order to reduce and minimize impacts to birds and bats, as well as migratory birds and raptors, Mitigation Measures BIO-1 and BIO-2 (provided below) have been identified to reduce or eliminate any potential Project-associated impacts to special-status wildlife species. With incorporation of Mitigation Measures BIO-1 and BIO-2 there will be a less than significant impact.

4.e: The City of Colusa does not have any policies and regulations pertaining to the protection on private property, including tree removal and preservation regulations. The site itself does not contain trees. Therefore, there will be a less than significant impact upon tree resources.

4.f: The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, as there are no such plans applicable to the Site or adopted for the City. No impact would occur.

MITIGATION MEASURES

BIO-1: The developer shall implement the following measures to minimize potential impacts on biological resources, including special status bat and bird species:

Western Red Bat

Mature trees shall be removed and/or fallen between September 16 – March 15 outside of the bat maternity season. Trees should be removed at dusk to minimize impacts to roosting bats.

If tree removal cannot be performed outside of the maternity season, a qualified biologist shall conduct a preconstruction survey of suitable roosting habitat within 7 days prior to construction activities.

Swainson's Hawk

A protocol-level nesting raptor survey shall be conducted within 7 days prior to the initiation of Project activities to determine the presence or absence of active SWHA nests within the BSA or within 500 feet of the Project boundary, where feasible. If an active SWHA nest is found, no work should occur within 250 feet of the active nest and CDFW shall be consulted.

BIO-2: The developer shall implement the following measure to minimize potential impacts on migratory birds and raptors:

Migratory Birds and Raptors

To avoid impacts to avian species protected under the Migratory Bird Treaty Act and the CFGC the following are avoidance and minimization measures for migratory birds and raptors:

Project activities including site grubbing and vegetation removal shall be initiated outside of the bird nesting season (February 1 – August 31).

If Project activities cannot be initiated outside of the bird nesting season then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 250 feet of the BSA, where accessible, within 7 days prior to the start of Project activities.
- If an active nest (i.e., containing egg(s) or young) is observed within the BSA or in an area adjacent to the BSA where impacts could occur, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist based on the species, nest type and tolerance to disturbance. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails as determined by a qualified biologist. Nests shall be monitored by a qualified biologist once per week and a report submitted to the CEQA lead agency weekly.

5. CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: As provided in the Chapter 4.9 Historic and Cultural Resources of the City of Colusa General Plan Draft Master Environmental Impact Report, (see Reference Document List), the project is located within Wintun Indian territory which occupied the southwest portion of the Sacramento Valley, from the lower hills of the eastern North Coast Ranges to the Sacramento River, and from Princeton south to San Pablo and Suisun Bays. A number of Wintun villages had been identified along the Sacramento River near the City of Colusa (Kroeber 1925, 1932). Euro-American contact with Native American groups living in the Central Valley of California began during the last half of the eighteenth century. At this time, the attention of Spanish missionaries shifted away from the coast, and its dwindling Native American population, to the conversion and missionization of central valley interior populations.

The City of Colusa is located at the site of the former Native American village of Koru. Koru was the governing seat for the Korusi tribelet of Southern Wintun. In 1843, General John Bidwell and a small party of men (from the Chico Rancheria approximately 50 miles northeast of Colusa) traveled south along the Sacramento River through Korusi territory on their way to Sutter’s Fort in Sacramento. Bidwell estimated the population of the village of Koru to be at least 1,000. He also noted 17 large villages west of Colusa along a stream that connected to the Sacramento River and estimated that not less than 15,000-20,000 Native Americans occupied the area within ten miles of Koru (Green, 1880; Rogers, 1891). Beginning in the late 19th century, Colusa County and the City of Colusa became agricultural centers for the production of wheat, and by 1876, Colusa County produced 143,000 tons of wheat for export. In 1911-12, rice was introduced into the valley and eventually replaced wheat as the major agricultural crop in Colusa County. Rice required more water than other crops, which fostered the development of irrigation projects such as the Glenn-Colusa Irrigation Canal. Consequently, both rice and water have been major factors in the growth of both Colusa County and the City of Colusa.

Thresholds of Significance: The project would have a significant effect on cultural resources if it would cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5; cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; or disturb any human remains, including those interred outside of formal cemeteries.

DISCUSSION:

5.a: The City General Plan notes that the City has a minimum of 244 buildings that are considered locally significant or eligible for inclusion on the National Register of Historic Places and/or the California Register of Historic Resources, none of which occur on or near the Project site, as the majority of these structures are within the downtown area of Colusa, approximately 1.5 miles to the north. The General Plan notes that as of 2002, there are a total of 15 properties recognized as historically significant by the City of Colusa Heritage Preservation Committee (Table 4.9-1). These structures are also located in the core of the City and are limited to the areas of Fifth Street, Sixth Street, 10th Street, Webster Street, Main Street, Market Street, Oak Street and Jay Street and consist of known physical improvements such as the Colusa Court House, Grammer School, Carnegie Library, I.O.O.F building, Chinatown, etc.

Currently, the site is routinely disrupted through agricultural practices and production. This includes tilling, harvesting, and utilization of heavy equipment on site. Any subsurface cultural resources within the routine area of agricultural activities have more than likely been destroyed or compromised. With that said, when construction activities begin, the Site will be disrupted again, at deeper depths, which could lead to a potential to potential impacts to unidentified or unrecorded historical resources or an accidental discovery of a historical or archaeological resources. In the event a resource is discovered during construction related activities, mitigation measure CULT-1, CULT-2 and CULT-3 provided below would mitigate the impact to less than significant.

5.b: On October 17, 2023, Element Land Solutions contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and the contact information for the representatives of the Native American tribes associated with the project area.

On November 20, 2023 a response was received from the NAHC, which noted that a SLF search was conducted through the Native American Heritage Commission and the results were negative. Included with the letter was a Native American contact list of tribes who may have knowledge of cultural resources in the Project area. A total of six (6) tribal contacts are included on the contact list. On November 30, 2023, individual letters were then mailed to each tribal contact, which gave a brief project description, a location of the Site and a copy of the proposed tentative subdivision map superimposed upon an aerial photograph. The letters requested that individual tribes contact the City in the event they wished to discuss the Project further. On December 15, 2023 the Yocha Dehe Wintun Nation asked that they continue to receive updates on the project (Appendix E), but did not request formal consultation or additional information on the project.

The General Plan EIR also notes that a search of the University of California Museum of Paleontology collections database did not identify any evidence of significant paleontological resources in the Planning Area, which also includes the City limits and its Sphere of Influence.

Any prehistoric sites or historic structures which might have once existed in the Project area are likely to have been previously disturbed through prior agricultural activities, bulldozing, and episodes of development and demolition, including ditch excavation, grading for single family home pads, agricultural plantings and grazing of the site.

Although no resources are known to existing within the Site, and out of an abundance of caution, there could be a potential, during construction related activities, of a Native American and/or historic-period resources discovery since subsurface historical resources may exist on the project site and could be impacted during ground disturbance activities. Therefore with the inclusion of mitigation measures CULT-1, CULT-2, and CULT-3 listed below impacts would be considered less than significant.

5.c: As noted above in Cultural Resource section 5.a and 5.b, although no historical, pre-historic, archaeological resources are known to exist at the Site, there is a potential that subsurface cultural resources exist, including human remains, and that may be disturbed during ground-disturbing construction activities. To reduce the potential impact to less than significant, mitigation measure CULT-1 and CULT-2 would apply.

MITIGATION MEASURES

CULT-1: A note shall be placed on all grading and construction plans which informs the construction contractor that if any bones, pottery fragments or other potential cultural resources are encountered during construction, all work shall cease within the area of the find pending an examination of the site and materials by a professional archaeologist. If during ground disturbing activities, any bones, pottery fragments or other potential cultural resources are encountered, the developer or their supervising contractor shall cease all work within the area of the find and notify Planning staff at (530) 458-4740. A professional archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and who is familiar with the archaeological record of Colusa County, shall be retained by the applicant to evaluate the significance of the find.

Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the City of Colusa Staff, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by City Staff to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and plans to ensure contractor knowledge and responsibility for proper implementation.

CULT-2: If archaeological resources are encountered during construction, work shall be temporarily halted in the vicinity of the discovered materials and a qualified archaeologist and the City of Colusa shall notify all the local tribe on the consultation list maintained by the State of California Native American Heritage Commission, to provide local tribes the opportunity to monitor evaluation of the site. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes, has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect cultural resources. [Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected

rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.]

CULT-3: Any identified cultural resources shall be recorded on DPR 523 historic resource recordation forms by a qualified archaeologist, available online from the Office of Historic Preservation’s website: http://ohp.parks.ca.gov/default.asp?page_id=1069.

6. ENERGY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: Energy consumption is analyzed in this Initial Study due to the potential direct and indirect environmental impacts associated with the Project. Such impacts include the depletion of nonrenewable resources (oil, natural gas, coal, etc.) during both the construction and long-term operational phases. The Pacific Gas and Electric Company (PG&E) provides electricity and natural gas to the Project area. PG&E provides natural gas and electricity to most of the northern two-thirds of California, from Bakersfield and Barstow to near the Oregon, Nevada, and Arizona State Line. It provides 5.2 million people with electricity and natural gas across 70,000 square miles.

Thresholds of Significance: The project would have a significant effect on energy if it would result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation.

DISCUSSION

On October 7, 2015, Governor Edmund G. Brown, Jr. signed into law Senate Bill (SB) 350, known as the Clean Energy and Pollution Reduction Act of 2015 (De León, Chapter 547, Statutes of 2015), which sets ambitious annual targets for energy efficiency and renewable electricity aimed at reducing greenhouse gas (GHG) emissions. According to the Final Commission Report of the California Energy Commission (CEC), dated October 2017, SB 350 requires the CEC to establish annual energy efficiency targets that will achieve a cumulative doubling of statewide energy efficiency savings and demand reductions in electricity and natural gas final end uses by January 1, 2030. This mandate is one of the primary measures to help the State achieve its long-term climate goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The proposed SB 350 doubling target for electricity increases from 7,286 gigawatt hours (GWh) in 2015

up to 82,870 GWh in 2029. For natural gas, the proposed SB 350 doubling target increases from 42 million therms (thm) in 2015 up to 1,174 MM in 2029 (CEC, 2017).

The project would be responsible for an incremental increase in the consumption of energy resources during site grading and construction due to on-site construction equipment and materials processing. All project construction equipment would be required to comply with the California Air Resources Control Board (CARB) emissions requirements for construction equipment, which includes measures to reduce fuel-consumption, such as imposing limits on idling and requiring of replacement of older engines.

The project involves the construction of a 170-parcel single family residential subdivision, 53 parcels dedicated to medium residential density, a 7.45-acre site designated at high density residential, as well as 1.17 acres for commercial uses, 3.51 acres for a park and an additional 14.03 for open space. The Project would also include the installation of new infrastructure, such as internal roads, water, wastewater, and electrical systems. Future development of single-family dwellings would be serviced by Pacific Gas and Electric Company (PG&E) for electrical and gas services. The project would result in increased energy demand in the area due to the operation of new homes and infrastructure, which would also result in increased greenhouse gas emissions (discussed in Section VIII (Greenhouse Gas Emissions), further below). However, all new single-family residences would also contain solar collectors, which would minimize each residence's energy demand. Construction of the proposed project would be subject to Part 6 (California Energy Code) of Title 24 of the California Code of Regulations, which contains energy conservation standards applicable to residential and non-residential buildings throughout California. The Building Energy Efficiency Standards are designed to ensure new and existing buildings achieve energy efficiency by reducing wasteful, uneconomic, inefficient, or unnecessary consumption of energy and enhance outdoor and indoor environmental quality.

6.a: Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use project.

During both construction and operation of the project, consumption of energy resources would be required for the movement of equipment and materials during construction, as well as for operation of the newly constructed residences (e.g., heating and cooling, cooking, lighting, etc.). However, during the project construction activities would have a nominal effect on local and regional energy supplies, especially over the long-term. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and require recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction. For these reasons, it is expected that construction fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

When structures are produced, they would be subject to Part 6 (California Energy Code) and Part 11 (California Green Building Standards Code (commonly known as "CalGreen") of Title 24 of the California

Code of Regulations, which contains energy conservation standards applicable to residential and non-residential buildings throughout California to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality. For residential development of the type proposed, these standards require that each home include a solar photovoltaic system to strive to ensure that each unit has net zero energy demand. For non-residential buildings, the standards require that they be solar ready. For both residential and non-residential development, the standards address a range of energy efficiency requirements for multiple building features including, but not limited to: building envelope, mechanical systems, lighting, electrical power distribution, heating and cooling, etc.

The proposed project would consume energy, but it would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy or wasteful use of energy resources, nor would the proposed project conflict with or obstruct a State or local plan for renewable energy or energy efficiency. The projected energy demand would not be excessive relative to total countywide demand or relative to other land use projects and would not inherently be a source of wasteful energy demand. For these reasons, related impacts are considered to be less than significant.

6.-b: The City of Colusa has not adopted a local plan for renewable energy or energy efficiency. However, several goals, policies, and actions were adopted with the City's 2007 General Plan Update that encourage and require energy efficiency in new development. The DMEIR adopted in conjunction with the General Plan Update provides that "[t]he City can and does require energy efficient design in building construction within the City. This requirement and the General Plan policies and implementing actions listed previously can effectively reduce GHG emissions from building operations (energy use)." The Project will be required to comply with the most recent existing local and state standards at the commencement of construction, including the installation of solar panels and use of solar electricity on the single-family homes. As discussed under Item 6.a (above), the energy and fuel consumption related to this Project would be minimal. For these reasons, this impact would be less than significant.

MITIGATION MEASURES

No mitigation required.

7. GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Geomorphic Setting

The Project Site is located within the Great Valley Geomorphic Province (i.e., Central Valley), which is primarily described as a relatively flat alluvial plain, about 50 miles wide and 400 miles long, with thick sequences of sedimentary deposits of Jurassic through Holocene age (about 160 million years ago). The Sacramento Valley occupies the northern one-third of the Central Valley and Colusa and the Site are along the central axis of the valley. Major geomorphic units of the Central Valley include dissected uplands, low alluvial plains and fans, river flood plains and channels, and overflow lands and lake bottoms. Topography within the General Plan area generally falls to the south and west, toward the Colusa Drain and away from

the Sacramento River. Elevations range from approximately 60 feet above mean sea level in the northernmost portions of the General Plan area to approximately 45 feet above mean sea level in the southernmost portions. The overall gradients are typically very flat, and usually about 0.1 percent or less.

The geological history of the Colusa area includes a mixture of ancient marine and alluvial deposits. About 300 million years ago, a vast sea occupied the valley and upland areas of Colusa County. Up to 155 million years ago, periods of volcanic activity and uplifting were followed by periods of uplifting and folding, which formed the Coast Range to the west. These periods ended about three to four million years ago, when the sediments of the Tehama Formation were deposited from coastal range streams onto the valley floor (City of Colusa DMEIR July 2007,).

Site Geology

According to the California Geological Survey (CGS, 1960), the Project site is underlain by what is termed Fan and Basin deposits, stratified deposits of gravel, sand, silt, clay, or other debris, moved by streams from higher to lower ground (USGS 2018a).

Site Soils

According to Figure 4.6-1 – City of Colusa - Soils of the EIR are indicated as three different types:

Colusa Series: Colusa Series soils are derived from mixed river sediments, which contain a predominance of micaceous granite material. Colusa subsoil structure has no definition, but includes distinct horizontal characteristics. Variations in this series include deep subsoil, which may be stratified and underlain at various depths by a moderately dense clay substratum that resembles Marvin Series soil material. Alkali content varies in amount and consists of sodium carbonate alkali. Topography found with these soils is flat with many shallow drainage channels. Drainage is poor, but the annual water table is high.

Sycamore Series: The Sycamore Series is composed of a group of alluvial soils formed from transported materials that are dominantly granite in character. This series also contains some basic and sedimentary alluvium. Surface textures range from fine sandy loam to clay loams. Most of the loams have been inherited from ground water reaching the lower profile during the rainy season. Parent materials are generally non-calcareous, but the subsoils are calcareous. The topography of these soils is generally flat, with gently sloping flood plain relief. The soil type is generally well drained with little to no erosion.

Marvin Series: The Marvin Series consists of soil derived from transported alluvium of mixed origin with a predominance of granite material. These soils occupy the older and imperfectly drained portions of the flood plain and/or occur near the flat basin area of a river channel. The subsoils are moderately compacted with accumulations of lime. Surface and subsoil drainage tend to be poor.

The expansion and contraction of these soils can cause damage to building foundations, streets and other infrastructure. Proper engineering and construction techniques can eliminate expansive soil problems (City of Colusa DMEIR, July 2007).

Regional Seismicity and Fault Zones

In California, special definitions for active faults were devised to implement the Alquist-Priolo Earthquake Fault Zoning Act of 1972, which regulates development and construction in order to avoid the hazard of surface fault rupture. The State Mining and Geology Board established policies and criteria in accordance with the act. The Board defined an active fault as one which has had surface displacement within Holocene time (about the last 11,000 years). A potentially active fault was considered to be any fault that showed evidence of surface displacement during Quaternary time (last 1.6 million years). Because of the large number of potentially active faults in California, the State Geologist adopted additional definitions and criteria to limit zoning to only those faults with a relatively high potential for surface rupture. Thus, the term “sufficiently active” was defined as a fault for which there was evidence of Holocene surface displacement. This term was used in conjunction with the term “well-defined,” which relates to the ability to locate a Holocene fault as a surface or near-surface feature (CGS 2010).

Per the Safety Element of the Colusa General Plan, there are no known active faults within Colusa County. However, the possibility of an earthquake affecting the City of Colusa cannot be ruled out. Colusa County is vulnerable to moderate ground shaking from earthquakes centered outside of the County. Four minor quakes on an unknown fault in the coastal foothills to the west occurred in 1985. Earthquakes of a maximum magnitude of 5.7 on the Richter scale could occur at the nearest known fault at the Sutter Buttes. This could cause ground shaking in Colusa County up to an intensity of VI to VII, as measured by the Modified Mercalli Scale. The effects of earthquakes of this magnitude on structures are described as minor to moderate, especially in un-reinforced masonry chimneys and architectural ornaments. Still, the best geologic evidence indicates that Colusa would experience only low-intensity shaking from faults outside the County

Paleontological Resources

Paleontology is defined as a science dealing with the life of past geological periods as known from fossil remains. Paleontological resources include fossil remains, as well as fossil localities and formations, which have produced fossil material in other nearby areas. This resource can be an important educational resource, and are classified as non-renewable scientific resources. Paleontological resources are protected by California Public Resources Code Section 5097.5. Pursuant to the DMEIR a search of the University of California Museum of Paleontology (UCMP) collections database did not identify any evidence of significant paleontological resources in the proposed Planning Area for the City (page 4.9-4).

Thresholds of Significance: The project would have a significant effect on geology and soils if it would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: 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, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides; result in substantial soil erosion or the loss of topsoil; 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; 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; 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; or directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

DISCUSSION

7.a.i: The Site is not located within an earthquake fault zone designated by the Chief of the California Geological Survey (CGS) pursuant to the Alquist-Priolo Act (California Department of Conservation 2022). Further, per the General Plan EIR, there are no identified active faults within the City or in Colusa County. Faults from outside the County may generate earthquakes of sufficient strength to be felt in the City and possibly cause some damage. These faults include the Cleveland Hill Fault in Butte County, and the San Andreas, Hayward and other faults in the San Francisco Bay Area. The future structures within the Site will be required to be built to current California Building Code (CBC) standards, which ensure new structures are adequately designed and built to withstand shaking in areas of high earthquake hazards. Therefore, impacts associated with earthquake fault zones are considered less than significant.

7.a.ii: As noted above, there are no mapped faults or Alquist-Priolo special studies zones traversing the Site. However, since the Site is situated within a seismically active region and given the proximity of known active faults to the Site, the Site will likely experience low to medium intensity ground shaking during the economic life span of any development on the Site.

Any development to occur on-site, including development of the residential subdivision, multifamily and commercial space, would be required to comply with the Colusa General Plan (2007) Colusa Municipal Code, and the most recent requirements of the California Building Code (CBC), which includes design criteria for seismic loading and other geologic hazards, including design criteria for geologically induced loading that governs sizing of structural members and provide calculation methods to assist in the design process. Thus, while shaking impacts would be potentially damaging, they would also tend to be reduced in their structural effects due to CBC criteria that recognize this potential. The CBC includes provisions for buildings to structurally survive an earthquake without collapsing and includes measures such as anchoring to the foundation and structural frame design. The proposed General Plan Update (Policy SAF-1.1, Action SAF -1.1.a and Action SAF-.1.1.b) specifically requires that all new buildings in the City be built under the seismic requirements of the CBC and that damage to new structures from seismic conditions be prevented to the maximum extent feasible. Therefore, a less than significant impact would occur.

7.a.iii: Since the Site is not located within a mapped Alquist-Priolo special studies zone, the potential for surface rupture on the Site from an active fault, within the design life of the future residential development at the Site, is considered low.

Due to Colusa's inland location, the City is not at risk for tsunamis or seiches; however, earthquakes can liquefaction within the City, and the Site is mapped within an area with a generally moderate to highly expansive soils. Proper excavation and site preparation, as well as adherence to the latest requirements of the Colusa 2030 General Plan, Colusa Municipal Code, and CBC, would reduce potential seismic and geological risks, including seismic related ground failure. A less than significant impact would occur.

7.a.iv: As noted above, landslide potential is influenced by a number of factors, including geology, water influences, and topography. Landslides have the potential to occur in the foothill portions of the community; however, the Site is not located in or near the foothill portions of the community. Required conformance with the latest requirements of the Colusa 2030 General Plan, Colusa Municipal Code, and CBC, would reduce potential seismic and geological risks, including potential impacts associated with landslides. A less than significant impact would occur.

7.b: Onsite development would require excavation and groundbreaking activities. All development activities, would be subject to local and State regulations regarding environmental protections, including the General Construction Activity Stormwater Permit (Construction General Permit Order 2009-0009-DWQ, also known as the CGP). The CGP requires operators of such construction sites to implement stormwater controls and develop a Stormwater Pollution Prevention Plan (SWPPP) identifying specific Best Management Practices (BMPs) to minimize the amount of sediment and other pollutants associated with construction sites from being discharged in stormwater runoff. These BMPs may include erosion control measures such as limiting construction during the rainy season, limiting ground disturbance to the minimum necessary, and stabilizing disturbed soil areas as soon as feasible after construction is completed, and sediment control measures such as straw bales, fiber rolls, and/or silt fencing structures to reduce the potential for sedimentation of stormwater. Low Impact Development (LID), adopted in 2005 by the State Water Resource Control Board, contains provisions and requirements that ensure development of the site will reduce impervious surface, increase infiltration, improve water quality by reducing runoff from developed sites, and reduce costly infrastructure. LID practices include; bioretention facilities or rain gardens, grass swales and channels, vegetated rooftops, rain barrels, cisterns, vegetated filter strips, and permeable pavements. Through the implementation of BMPs described above, compliance with LID and development provision in the Colusa Municipal Code, requirements by the Colusa County Air Pollution Control District and the CGP, the project would not result in substantial soil erosion or the loss of topsoil. A less than significant impact would occur.

7.c: As discussed in above (Section VII.iii), the Site is not located within a mapped Alquist-Priolo special studies zone, the potential for surface rupture on the Site from an active fault, within the design life of the future residential development at the Site, is considered low. The project site would be located in an area with a generally moderate chance for liquefaction to occur. The Site is not located in or near the foothill portions of the community. With adherence to the latest requirements of the Colusa 2030 General Plan, Colusa Municipal Code, and CBC, potential seismic and geological risks would be minimized, and a less than significant impact would occur.

7.d: Expansive soils generally comprise cohesive, fine-grained clay soils and represent a significant structural hazard to buildings founded on them, especially where seasonal fluctuations in soil moisture occur at the foundation-bearing depth. Per Figure 4.6-1 of the General Plan the Site is mapped within the Mavin, Colusa, and Sycamore soil series, which are considered low to moderate expansive soils, with low to well drainage. As previously noted, the City has adopted the current version of the California Building Code. The California Building Code includes common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil related impacts. In addition, for subdivision projects requiring a final map, the Subdivision Map Act requires a preliminary soils report.

Which may include site specific engineering recommendations for construction related activities. With adherence to the above, potential impacts would be less than significant.

7.e: The project will be served by community water and sanitary sewer systems. Any existing wells and septic systems would be abandoned in accordance with Colusa County Environmental Health requirements, and the proposed project would be developed with and supported by community utility services. As a result, a less than significant impact would occur.

7.f: There are no known paleontological resources or unique geologic features on the subject Site and ground disturbance has already occurred on portions of the Site. Additionally, the Site is not listed within an area identified as containing paleontological resources as discussed above. However, as the project would require ground-disturbing construction activities, including grading and excavation, there is potential for the inadvertent discovery of paleontological resources. With the incorporation of Mitigation Measure GEO-1, below, which contains specific requirements in the event any fossils or fossil-bearing deposits are encountered during project development, a less than significant impact would occur.

MITIGATION MEASURES

GEO-1: In the event that fossils or fossil-bearing deposits are discovered during anticipated future residential construction on-site, the contractor shall notify a qualified paleontologist to examine the discovery and excavations within 50 feet of the find shall be temporarily halted or diverted. The area of discovery shall be protected to ensure that fossils are not removed, handled, altered, or damaged until the Site is properly evaluated and further action is determined. The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards (Society of Vertebrate Paleontology 1995), evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the project proponent determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project based on the qualities that make the resource important. The plan shall be submitted to the City Council for review and approval prior to implementation.

8. GREENHOUSE GAS EMISSIONS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions (GHG), either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: GHGs are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps more than 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e). Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Regulatory Setting

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

In 2006, California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlined measures to meet the 2020

GHG reduction goals. California exceeded the target of reducing GHG emissions to 1990 levels by the year 2017.

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2022 Scoping Plan Update, outlines strategies and actions to reduce greenhouse gas emissions in California. The plan focuses on achieving the state's goal of reaching carbon neutrality by 2045 and reducing greenhouse gas emissions to 40 percent below 1990 levels by 2030. The plan includes a range of strategies across various sectors, including transportation, industry, energy, and agriculture. Some of the key strategies include transitioning to zero-emission vehicles, expanding renewable energy sources, promoting sustainable land use practices, implementing a low-carbon fuel standard, and reducing emissions from buildings. Additionally, the plan addresses equity and environmental justice by prioritizing investments in communities most impacted by pollution and climate change. The plan also aims to promote economic growth and job creation through the transition to a low-carbon economy.

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030.

In 2018, SB 100 was signed codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2022 California Building Codes include provisions related to energy efficiency to reduce energy consumption and greenhouse gas emissions from buildings. Some of the key energy efficiency components of the codes are:

1. Energy Performance Requirements: The codes specify minimum energy performance standards for the building envelope, lighting, heating and cooling systems, and other components.
2. Lighting Efficiency: The codes require that lighting systems meet minimum efficiency standards, such as the use of energy-efficient light bulbs and fixtures.
3. Heating, Ventilation, and Air Conditioning (HVAC) Systems: The codes establish requirements for HVAC systems, including the use of high-efficiency equipment, duct sealing, and controls.
4. Building Envelope: The codes include provisions for insulation, air sealing, glazing, and other building envelope components to reduce energy loss and improve indoor comfort.

5. Renewable Energy: The codes encourage the use of renewable energy systems, such as photovoltaic panels and wind turbines, to reduce dependence on non-renewable energy sources.

6. Commissioning: The codes require the commissioning of building energy systems to ensure that they are installed and operate correctly and efficiently.

Overall, the energy efficiency provisions of the 2022 California Building Codes aim to reduce the energy consumption of buildings, lower energy costs for building owners and occupants, and reduce the environmental impact of the built environment. The 2022 Building Energy Efficiency Standards improve upon the 2019 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The exact amount by which the 2022 Building Codes are more efficient compared to the 2019 Building Codes would depend on the specific provisions that have been updated and the specific building being considered. However, in general, the 2022 Building Codes have been updated to include increased requirements for energy efficiency, such as higher insulation and air sealing standards, which are intended to result in more efficient buildings. The 2022 standards are a major step toward meeting Zero Net Energy.

Thresholds of Significance: The project would have a significant effect on greenhouse gas emissions if it would 1) generate greenhouse gas emissions (GHG), either directly or indirectly, that may have a significant impact on the environment; or 2) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The CEQA Guidelines Appendix G thresholds for GHGs do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's greenhouse gas emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. 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 GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that “[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence” (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA’s requirements for cumulative impact analysis (see CEQA Guidelines Section 15130(f)). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

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 would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions.” Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project’s GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Neither the City of Colusa nor the CCAPCD promulgate GHG emission thresholds or have adopted plans intended to reduce GHG emissions. Therefore, the Project will be assessed for consistency with the 2022 Scoping Plan.

Methodology

Where GHG emission quantification was required, emissions were modeled using CalEEMod, version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated emissions were calculated using a combination of CalEEMod model defaults for

Colusa County and information provided by the Project proponent such as Project construction phasing. Operational emissions were calculated based on the site dimensions and lot acreage identified in Project Site plans and the average daily vehicle trips generated by the Project identified in the Traffic Impact Study prepared by Headway Transportations (2023).

DISCUSSION

VIII.a-b:

Project Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Site, and off-road construction equipment (e.g., dozers, loaders, excavators). **Table 1** illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 1 – Construction Related Greenhouse Gas Emissions	
Emissions Source	CO2e Emissions (Metric Tons/Year)
Calendar Year One	397
Calendar Year Two	1,092
Calendar Year Three	584
Calendar Year Four	572
Calendar Year Five	508
Calendar Year Six	395
Calendar Year Seven	487
Calendar Year Eight	219
Total Construction Emissions	4,252
Notes: Building construction, paving and painting are assumed to occur simultaneously. Construction phasing provided by the Project proponent. Construction GHG emissions account for the implementation of mitigation measure Air-1.	

As shown in the above Table, Project construction would result in the generation of approximately 4,254 metric tons of CO2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease.

Project Operations

Operations of the Project would result in an increase in GHG emissions primarily associated with mobile sources. Long-term operations GHG emissions attributed to the Project are identified in **Table 2** below.

Table 2 – Operational Related Greenhouse Gas Emissions	
Emissions Source	CO2e Emissions (Metric Tons/Year)

Mobile	5,859
Area	4
Energy	736
Water	36
Waste	78
Refrigeration	0
Total	6,713
Notes: Emission projections predominately based on CalEEMod model defaults for Colusa County, site acreage and building dimensions provided by the Project Site Plans, and average daily vehicle trips provided by Headway Transportations (2023). Operational GHG emissions account for the implementation of mitigation measure Air-2.	

As noted above, operations of the Project would result in 6,713 metric tons of CO₂e annually. Both the City of Colusa and the County Air District do not have established thresholds of significant. The analysis of the above, as further discussed below, have been in compliance with and consistent with CEQA Guidelines Section 15064.4(b)(2), which considers whether the project complies with applicable plans, policies and regulations by comparing the Project to the Scoping Plan. In this instance, the Scoping Plan is being used as the threshold.

CARB’s 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high global warming potential; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines Section 15183.5.

Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would achieve 100 percent clean electricity by 2045; achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy zero-emission vehicles (ZEV) buses and trucks. Additional transportation policies include the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Clean Off-Road Fleet Recognition Program, and Amendments to the

In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new residential developments. These efficiency improvements correspond to reductions in secondary GHG emissions. For example, in California, most of the electricity that powers homes are derived from natural gas combustion. Therefore, energy saving measures, such as Title 24, reduce GHG emissions from the power generation facilities by reducing load demand.

The 2022 Scoping Plan Appendix D provides local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. The 2022 Scoping Plan Appendix D focuses on Residential and Mixed-Use Projects.

The 2022 Scoping Plan Appendix D lists potential actions that support the state's climate goals. However, the 2022 Scoping Plan notes that the applicability and performance of the actions may vary across the regions. The document is organized into two categories (A) examples of plan-level GHG reduction actions that could be implemented by local governments and (B) examples of on-site project design features, mitigation measures, that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

The Project would include a number of the 2022 Scoping Plan standard conditions and mitigation measures for construction and operation. For example, the 2022 Scoping Plan's construction actions include enforcing idling time restrictions on construction vehicles and requiring construction vehicles to operate highest tier engines commercially available.

The Project would include a majority of the feasible operational mitigation measures listed in the 2022 Scoping Plan Appendix D as design features. Some of the recommended operational measures would include creating on-site safety improvements for bikes and pedestrians, requiring solar panels, and energy conserving appliances.

As identified in **Table 3** below, the Project would be consistent with all applicable plan goals and applicable regulatory programs designed to reduce GHG emissions generated by land use projects. The Project would be subject to compliance with all building codes in effect at the time of construction, which include energy conservation measures mandated by California Building Standards Code Title 24 – Energy Efficiency Standards. Because Title 24 standards require energy conservation features in new construction (e.g., high-efficiency lighting, high-efficiency HVAC systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures), they indirectly regulate and reduce GHG emissions. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle.

As shown in **Table 3**, approximately 98 percent of the Project's emissions are from energy and mobile sources, which would be further reduced by the 2022 Scoping Plan actions described above. The City has no control over vehicle emissions (approximately 87 percent of the Project's total emissions). However, these emissions would decline in the future due to statewide measures, as well as cleaner technology and fleet turnover. Several of the state's plans and policies would contribute to a reduction in the Project's mobile source emissions, including the following:

- CARB’s Advanced Clean Truck Regulation: Adopted in June 2020, CARB’s Advanced Clean Truck Regulation requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.
- Executive Order N-79-20: This Executive Order establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, to be zero-emission by 2035 and all medium and heavy-duty vehicles to be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment “requiring increasing volumes” of new ZEVs “towards the target of 100 percent.”
- CARB’s Mobile Source Strategy: CARB’s Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California’s targets by increasing the adoption of ZEV buses and trucks.
- CARB’s Sustainable Freight Action Plan: The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project Site and may include existing trucks or new trucks that are part of the Statewide goods movement sector.
- CARB’s Emissions Reduction Plan for Ports and Goods Movement: CARB’s Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.

While these measures are not directly applicable to the Project, any activity associated with goods movement would be required to comply with these measures as adopted. The Project would not obstruct or interfere with efforts to increase ZEVs or state efforts to improve system efficiency. Compliance with applicable state standards (e.g., continuation of the Cap-and-Trade regulation; CARB’s Mobile Source Strategy, Sustainable Freight Action Plan, and Advanced Clean Truck Regulation; Executive Order N-79-20; SB 100/renewable electricity portfolio improvements that require 60 percent renewable electricity by 2030 and 100 percent renewable by 2045, etc.) would ensure consistency with state and regional GHG reduction planning efforts, including the 2022 Scoping Plan. It is also noted that the Project would not convert any or decrease the state’s urban forest carbon stock, which is an area of emphasis in the 2022 Scoping Plan.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that Project operations would benefit from applicable measures enacted to meet state

GHG reduction goals. The Project would not impede the state’s progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Table 3-4 below shows the Projects consistency with the 2022 Scoping Plan.

Table 3 – Project Consistency with Applicable Scoping Plan Measures			
Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Transportation	California Cap-and Trade Program Linked to Western Climate initiative	Regulations for the California Ca; and GHG Emissions and Market Based Compliance Mechanism October 20, 2015 (CCR 95800)	Consistent. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects’ electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and combustion of other fossil fuels not directly covered at large sources in the Program’s first compliance period. The Proposed Project would not conflict with implementation of the Cap-and-Trade program and would indirectly be consistent with regard to the use of electricity and fuel.
	California Light-Duty Vehicle GHG Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor	Consistent. This measure applies to all new vehicles starting with model year 2012. The Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in

	Vehicles Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles	California. Passenger vehicles, model year 2012 and later, associated with Project construction and operation would be required to comply with the Pavley emissions standards.
	2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards	Consistent. The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with Project construction and operations would be required to comply with LEV III standards.
Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve GHG Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	Consistent. This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. It is assumed that any motor vehicles associated with Project construction and operations would be consistent with the measure and utilize low carbon transportation fuels.
Goods Movement	Goods Movement Action Plan January 2007	Not Applicable. The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer GHG Regulation	Consistent. This measure applies to medium- and heavy-duty vehicles that operate in the state. The Project would not conflict with implementation of this measure. Medium- and heavy-duty vehicles associated with Project construction would be required to comply with this regulation
High Speed Rail	Funded under SB 862	Not Applicable. This is a Statewide measure that cannot be implemented by a project applicant or Lead Agency

Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulations	Consistent. The Project would not conflict with implementation of this measure, as it would be subject to compliance with the latest energy efficiency standards.
		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Buildings	
		Title 24 Par 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	Consistent. The Project would obtain electricity from the Pacific Gas & Electric Company (PG&E). PG&E delivers approximately 40 percent of the electricity that they provide from renewable resources. PG&E also offers a program to customers to purchase up to 100 percent of their electricity from either solar or regional renewable energy sources. Therefore, the utility would provide power to the Project that would be is comprised of a greater percentage of renewable sources.
Millon Solar Roof Program	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)		
Millon Solar Roofs Program	Tax Incentive Program	Consistent. This measure is to increase solar use throughout California, which is being done by various electricity providers and existing solar programs. The program provides incentives that are in place at the time of construction.	
Water	Water	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would comply with the CALGreen Code, which require a 20 percent reduction in indoor water use.
		SBX 7 -7 The Water	

		Conservation Act of 2009	
		Model Water Efficient Landscape Ordinance	
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standard	Consistent. The state is required to increase use of green building practices. The Project would implement required green building strategies through existing regulations that require the Project to comply with various CALGreen Code standards.
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	Not Applicable. The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 metric tons of CO ₂ e of combustion and process emissions, all facilities belonging to certain industries, and all electric power entities to submit an annual GHG emissions data report directly to CARB. The Project is not considered a “facility” and the majority of these emissions are from mobile sources. Therefore, this regulation would not apply
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would not conflict with implementation of these measures. The Project is required to achieve the recycling mandates via compliance with the CALGreen Code.
		AB 341 Statewide 75 Percent Division Goal	
Forest	Sustainable Forest	Cap-and-Trade Offset Projects	Not Applicable. The Project is in an area designated for urban uses. No forested lands exist on the site.
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program 95380	Consistent. The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage systems. The Project would not conflict with

			the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap-and-Trade Offset Projects for Livestock and Rice Cultivation	Not Applicable. No grazing, feedlot, or other agricultural activities that generate manure occur currently on site or are proposed by the Project.

In conclusion, the Project does not conflict with the applicable plans and regulatory programs that are discussed above. Therefore, a less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

DRAFT

9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined by the California Health and Safety Code, Section 25501 as follows:

“Hazardous material” means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

A hazardous material is defined in Title 22, Section 662601.10, of the California Code of Regulations as follows:

A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

The release of hazardous materials into the environment could potentially contaminate soils, surface water, and groundwater supplies. The transport, storage and disposal of hazardous material, and the cleanup (remediation) of hazardous sites are regulated by a number of federal, state, and local agencies, including the U.S. Environmental Protection Agency (EPA), California Environmental Protection Agency (CalEPA), and the California Department of Toxic Substances Control. Large cases of hazardous materials contamination or violations are referred to the Central Valley Regional Water Quality Control Board (RWQCB) and the California Department of Toxic Substances Control (DTSC). It is not uncommon for other agencies to become involved when issues of hazardous materials arise, such as the federal and state Occupational Safety and Health Administrations. According to the City of Colusa General Plan Draft Master Environmental Impact Report (DMEIR, page 4.11-2), the Colusa County Sheriff's Office, along with the City of Colusa Fire Department, is the primary responder to any hazardous materials incidents.

Under Government Code Section 65962.5, both the DTSC and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites.

Thresholds of Significance: The project would have a significant effect on hazards and hazardous materials if it were to 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; emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; 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 create a significant hazard to the public or the environment; result in a safety hazard or excessive noise for people residing or working in the project area if located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport; or impair the implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan; or expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

DISCUSSION

9.a-b: During the construction phase, small quantities of hazardous materials common to equipment maintenance and operation, such as gasoline, diesel fuel, hydraulic fluids, oils, and lubricants may be required. Once constructed, the project would be anticipated to utilize household and commercial cleaning supplies, in addition to fuels, lubricants, solvents, pesticides, and fertilizers during routine maintenance. Although, the types and quantities of materials to be used are not expected to pose a significant risk to the public and/or environment and would be managed in accordance with federal, State, and local regulations, in order to assure hazardous materials are not released into the environment, leaks, drips, and spills of hydraulic fluid, oil, or fuel from construction equipment shall be promptly cleaned, per Mitigation Measure HAZ-1, below.

Further, because the site requires earth related activities (grading, trenching etc.) there exists a possibility of unintended discovery of soil staining, odors of respected hazardous materials that are not visible or known at this time. To assure that no hazardous materials are discovered, Mitigation Measure HAZ-2, below will reduce risk associated with discovery. With mitigation incorporated, a less than significant impact would occur.

9.c: The nearest school is Colusa High School, approximately 0.77 miles to the northwest of the Site. Three additional schools, Our Lady of Lourdes Parish School, James M. Burchfield Elementary School, and George T. Egling Middle School are located approximately 1.1, 1.2 and 1.45 miles north of the Site. It is not anticipated that hazardous materials to be transported to and utilized on-site would be used or stored at the Site in any quantity or application that could impact any schools in the area. Nor is it anticipated that such materials would be transported near these schools as they are located on local collector streets surrounded by residential districts or are placed in a manner that transportation near them will be remote. Therefore, a less than significant impact would occur.

9.d: A records search was conducted using the State Water Resources Control Board's (SWRCB) GeoTracker database (2024) and California Department of Toxic Substances Control's (DTSC) EnviroStor database (2024), in which no listed hazardous materials sites were identified on-site or within 1,000 feet of the project Site. Since the proposed project Site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, no impact would occur.

9.e: The Site is located approximately 0.4 miles west of the Colusa County Airport, a public-use airport. Except for approximately 1.097- acre of the northeastern corner of the Site which is in the C1 Zone (Outer Approach/Departure Zone), the balance of the Site is in the C3 Zone (Secondary Traffic Pattern) of the Colusa County Airport Land Use Compatibility Plan (Map 3A, September 2014). Pursuant to Table 3A, single-family, townhouse, multi-family residential, apartments, condominiums are considered "Normally Compatible" which means "that normal examples of the use are presumed to comply with the noise, safety,

airspace protection, and overflight criteria" (ALUCP Policy 3.2.2.a.1) and therefore, there are no intensity, density restrictions or open space requirements.

With the one portion of the Site within the C1 Zone (Outer Approach/Departure Zone), which is proposed to contain a total of 6 single family lots that are partially or totally within the zone (lots 1, 2, 3, 4, 67 and 68) and public roads, the ALUCP notes that "Single-Family Residential: Individual dwellings" are considered "Conditional" in Table 3A. Pursuant to the ALUCP, "conditional" means "that the proposal and use is compatible if the indicated usage, Intensity, Density, open land and other listed conditions are met." In this case, the C1 Zone (Outer Approach/Departure Zone) requires 1 dwelling unit per 5 acres (average density) or 4 dwelling units per single acre. In this instance, the 6 lots that are both fully and partially within the zone would create a density of 5.4 units per acre. However, as noted only 3 of the lots are fully within this zone (lots 1, 2 and 3) while portions of the other lots (lots 4, 67 and 68) have approximately 60% down to 20% of the lots within this zone. If the density was to take into account a more accurate equation and take into account the percentage lots that straddle both the C1 and C3 zones (approximately 4 units), the overall density for the 1.097 acres is reduced down to approximately 3.66 units per acre, below the ALUCP threshold.

It should also be noted that the subdivision to the east, Sunrise Landing, contains 180 single family homes on approximately 52 acres of residentially zoned lands, equating to 3.46 units per acre which exceeds the 1 unit per 10-acre requirement of the C1 Zone. Further, abutting the project to the north is the D Zone, which does not have any density, intensity or open space requirements and is considered "Normally Compatible" within that zone. However, when analyzing the map located within the ALUCP, this portion of the D Zone is actually closer to the proximity of the runway of the airport.

To assure that the project is in conformance with the ALUCP, Mitigation Measure HAZ-3 and HAZ-4 below will reduce hazard or excessive noise for people residing and working within the project area to levels less than significant.

Besides the residential land uses, the Project is proposing three other land uses within its boundaries. They are 1.13 acres of commercial along the western boundary, fronting Westcott Road; a 14.03-acre open space area that runs in an east-west manner from the western boundary to the eastern boundary, and a 3.51-acre park within the single-family portion of the Site. In terms of the commercial area, the ALUCP notes that a range of land uses that could be accommodated within the City's zoning district as well as the ALUCP. Each of these land uses in the Plan (Page 3-35, Table 3A) are listed as both "conditional" and "normally compatible", with restrictions on them depending on the specific land use. When reviewing both the Open Space and the Park area of the Site in comparison to the ALUCP, the Plan notes that both Outdoor uses and Parks are generally "conditional", so long as intensity restrictions are met. In this case, the intensity of the C3 Zone permits up to 800 individuals on each acre. Although specific land uses in all three of these non-residential land uses are currently not fully defined or planned, Mitigation Measure HAZ-5 will ensure that any future improvements within these zones meet the intent and conditions present in the ALUCP.

9.f: As described in Safety Element of the General Plan, the City has a Comprehensive Emergency Management Plan, which provides direction for responding to disaster occurrences in Colusa. This Plan facilitates accomplishing the underlying goal of the Safety Element, which is to protect the life, property, and environment of community residents, businesses, employees, and visitors. It also serves as a key component in implementing the City's policies that address emergency response.

The Plan defines the primary and support roles of City agencies and departments in after incident damage assessment and reporting requirements. In addition, the Plan provides for the operation of police, fire, and health services, as well as transportation alternatives in the event of a multi-hazard emergency. City evacuation procedures are described and are submitted to the State Office of Emergency Services (OES) for approval.

Likely reasons for a potential emergency evacuation of the City of Colusa include a hazardous materials spill from vehicles transporting these materials along SR 20 and SR 20/45 or flooding resulting from levee overtopping or failure. Potential evacuation routes include SR 20 (east and west), SR 20/45 (north), Lurline Avenue (west), Wescott Road (south), and Bridge Street (north).

Due to the relatively low number of vehicles currently required to completely evacuate the City and the City's grid street system, an organized evacuation using all available routes could be accomplished in a short period of time.

The proposed project would not have a significant impact on the adopted Emergency Response Plans, as the portion of the Site planned to be subdivided and developed with single-family and multi-family residences is slated for development and designated for residential use under both the City's General Plans. Additionally, the proposed development would be designed to current standards with suitable road widths and turn radii to accommodate emergency vehicles, and would not impede access to the identified emergency access routes. The design of the subdivision allows for emergency personal and residence within the Site to leave the area in a variety of ways, with multiple connections internally to the site and externally with new roads connecting to existing ones in 5 different locations. Construction of new structures within the Site will also be subject to current California Building Code requirements, which include fire suppression within homes and building standards to withstand ground shaking to name just a few. Further, upon review of specific improvement plans, the City of Colusa Fire Department and Police Department will provide input and comments on the desired improvements, including the location of fire hydrants, distance from structures, and lighting which all aid in minimizing risk. Therefore, a less than significant impact would occur.

9.g: The undeveloped Site is located in close proximity and adjacent to existing development to the north, east and west with agricultural lands to the south-southwest. The City of Colusa, surrounded by agricultural fields, is in an area of low potential for wildfires. Cultivated and irrigated fields have a low incidence of fire unless these fields are burned as part of agricultural operations. Due to air quality concerns, burning of the nearby agricultural fields has all but stopped and are now routinely flooded with water to remove biomass and recharge the aquifer.

Pursuant to the General Plan, the riparian area adjacent to the Sacramento River is a potential source of wildland fires (0.98 miles from the Site), started by either natural or human causes. This hazard would be greatest during the summer and early autumn. Lack of rain lowers river levels, and low humidity and high temperatures cause some vegetation to lose moisture. Given its proximity to the Sacramento River, the riparian area is unlikely to go completely dry, except during times of severe drought. Most of the riparian area is separated from the City by the levee in the downtown area. However, it is possible that fires in the riparian area would jump over the levee and threaten adjacent buildings. In summary, the potential fire hazard to Colusa from adjacent open space and agricultural areas is not considered significant. Fires started in buildings and other structures in the City are considered a more significant threat than wildfire.

The Site is mapped as located in designated a Local Responsibility Area (LRA) by the Office of the State Fire Marshal and is not considered to be in a Fire Hazard Severity Zone. There is a Less Than Significant impact to expose people or structures to a significant risk of loss, injury or death involving wildland fires.

Because of the reasons outlined above, impacts associated with wildfire are considered less than significant.

MITIGATION MEASURES

HAZ-1: Leaks, drips, and spills of hydraulic fluid, oil, or fuel from construction equipment shall be promptly cleaned up to prevent environmental contamination, including contamination of waterways. All workers shall be properly trained in the prevention and clean-up of spills of contaminants. Protective measures shall include the following:

1. No discharge of pollutants from vehicle and equipment cleaning shall be allowed into any drainage ditches or watercourses.
2. Spill containment kits shall be properly maintained and located within the vicinity of all operations and fueling of equipment.

HAZ-2: If soil staining, odors of respected hazardous materials are encountered during construction activities, work shall cease in the area approximately 100 feet around the discovered site until a qualified firm conducts an environmental site assessment. The assessment shall identify the potential contaminated area and shall recommend measures to reduce or eliminate potential adverse impacts. The contractor shall implement all mitigation measures prior to resumption of work in the 100 foot area.

HAZ-3: Prior to issuance of a grading permit, the developer or their successor shall submit development plans to the Colusa County Airport Land Use Commission staff to determine whether a consistency determination is required by the Colusa County Airport Land Use Compatibility Plan.

HAZ-4: In conjunction with recordation of each Subsequent Final Map, an avigation and noise easement consistent with Appendix “E” of the Airport Land Use Compatibility Plan, shall be recorded on all parcels that lie partially or wholly within C1 and C3 Compatibility Zones as defined in the Colusa County Land Use Compatibility Plan. The easement should at a minimum note the proximity of the Colusa County Airport and that complaints against airport operations are waved, that during planting season the airport

experiences an increase in air traffic related to crop dusting activities, that the airport has the right to continue operations as necessary, that residence may experiences noise, vibrations and other effects related to aircraft and that no structure or plant material may exceed height limitation as defined by the Colusa County Land Use Compatibility Plan.

HAZ-5: Prior to physical development within the Commercial, Open Space and Park zoning districts (not grading, earthwork, underground or road improvement), the developer, or their successor, shall submit such plans to the Colusa County Airport Land Use Commission staff to determine whether a consistency determination is required by the Colusa County Airport Land Use Compatibility Plan.

10. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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:	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Environmental Setting:

Regional Hydrology

The Sacramento River forms a natural boundary for the City of Colusa. The River originates in the mountains of Siskiyou County and flows generally in a north-south direction until it empties into Suisun Bay. Other streams in the vicinity of Colusa include Lurline Creek, Freshwater Creek, and Salt Creek. These creeks flow west to east from the foothills toward Colusa, but are redirected south by the Colusa canal located three miles west of the City.

Surface Water

The City of Colusa is located in the greater Sacramento River hydrologic region which includes all or large portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa counties, and small areas of Alpine and Amador counties (DWR 2006). The City of Colusa and the Project site are located within the Sacramento-Stone Corral Watershed and draws water from the Colusa Sub-basin (DMEIR July, 2007).

Groundwater

Within the City limits, the City of Colusa administers a domestic water delivery system, operated by the Public Works Department which currently extracts groundwater from five wells at various locations throughout the northern part of the City. Each of the City’s wells are drilled to a uniform depth of 150 feet, extracting groundwater from the alluvial formation of the Colusa groundwater sub-basin. The Alluvial aquifer system is the uppermost groundwater bearing unit, reaching from ground surface to a maximum depth of about 200 feet. Many domestic wells draw water from this aquifer system.

Project Site Hydrology and Onsite Drainage

The Federal Emergency Management Agency (FEMA) has mapped the flood hazard zones for the City of Colusa and most of the surrounding vicinity. The 100-year floodplain designation (Zone X) indicates the probable maximum extent of flooding during a storm with a one percent probability of occurrence in any given year. The 100-year flood is the standard generally used in flood hazard planning.

Periods of flooding can cause significant circulation problems and has resulted in some property damage in flood-prone areas. Flooding events cause inconveniences and potential safety hazards to motorists traveling through the flooded streets and property owners attempting to access parked cars. Minor flooding events can appear as quickly as one hour after significant rainstorms. While flooding may occur as quickly as one hour after the initiation of a storm event, generally the flooded areas drain within two or three hours after the end of the storm event.

Thresholds of Significance: The project would have a significant effect on hydrology and water quality if it would violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin; 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 result in substantial erosion or siltation on- or off-site, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, 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 impede or redirect flows; in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

DISCUSSION

10.a: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. The proposed on-site subdivision would be constructed in accordance with the most recent standards set by all regulatory agencies, including but not limited to the City and State and local water quality control boards [State Water Resources Control Board (SWRCB) and Central Valley Regional Water Quality Control Board (SVRWQCB)].

Additionally, the project would be subject to the State Water Resource Control Board's Low Impact Development which was adopted in January 2005. Low Impact Development (LID) is a practice that benefits water supply and contributes to water quality protection. Unlike traditional storm water management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility, LID takes a different approach by using site design and storm water management to maintain the site's pre-development runoff rates and volumes. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall. LID has been a proven approach in other parts of the country and is seen in California as an alternative to conventional storm water management.

Construction projects that would disturb more than one acre of land, such as the proposed project, would be subject to the requirements of General Construction Activity Stormwater Permit (Construction General Permit Order 2009-0009-DWQ, also known as the CGP), which requires operators of such construction sites to implement stormwater controls and develop a Stormwater Pollution Prevention Plan (SWPPP) identifying specific BMPs to be implemented to minimize the amount of sediment and other pollutants associated with construction sites from being discharged in stormwater runoff. Such BMPs may include, for example, straw bales, fiber rolls, and/or silt fencing structures to assure the minimization of erosion resulting from construction and to avoid runoff into sensitive habitat areas (including the unnamed tributary and downstream watercourses), limit ground disturbance to the minimum necessary, and stabilize disturbed soil areas as soon as feasible after construction is completed. With adherence to the above standards and regulations, there will be a less than significant impact on water quality.

10.b: The project is not anticipated to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. The DMEIR notes that implementation of the General Plan could result in a substantial increase in population and the number of housing units which is a significant and unavoidable impact. However, with that said, the General Plan contains measures that calls for new development to implement action (Action PRC-9.4a, Policy MFS7-2 and MFS7-3) items to reduce and minimize the need for water resources upon landscaping, and that plant material should be drought-tolerant plant species and that irrigation systems should be efficient, both in public, private, open spaces and common areas and parks. The General Plan discusses that such policies would assist the City in maintaining its groundwater supply. Therefore, with implementation of Mitigation Measures HYDR-1 and HYDR-2 the impact upon water resources would be considered less than significant.

10.c.i: The proposed project side does not contain a stream or natural water feature. With development, the existing drainage patterns of the Site would be altered through the addition of newly proposed impervious surfaces, the project would not result in substantial erosion or siltation on- or off-site, as the project would be subject to the Statewide Construction General Permit (CGP), which requires the preparation and implementation of a SWPPP that specifies erosion and sediment control construction and post-construction BMPs to reduce or eliminate construction-related and operational impacts on receiving water quality. Such BMPs may include straw bales, fiber rolls, and/or silt fencing structures to assure the minimization of erosion resulting from construction and to avoid runoff into sensitive habitat areas, limit ground disturbance to the minimum necessary, and stabilize disturbed soil areas as soon as feasible after construction is completed. The General Plan does note that new development would increase stormwater runoff could increase rates downstream of the City (Impact 4.12.3.1), when compared to existing conditions. Therefore, to minimize any potential for offsite impacts, Mitigation Measure HYDR-3 will reduce impacts to less than significant.

10.c.ii: The proposed project would not be expected to increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. As previously discussed, (10.c.ii), the proposed project would increase the amount of impervious surface on-site, as the Site is currently undeveloped. The proposed project includes future single-family homes, duplex lots and areas dedicated to commercial and multi-family development. These improvements will include new frontages, roadways, curbs, gutter and sidewalks which will direct stormwater to a designed drainage system. The project also contains open space and parkland areas, which would accommodate the retention, detention, and release of stormwater on site. While also aiding in the recharge and infiltration of the water. In addition, the project developer would be required to prepare a SWPPP and implement standard BMPs such as straw bales, fiber rolls, and/or silt fencing structures to assure the minimization of erosion resulting from construction and to avoid runoff into sensitive habitat areas, limit ground disturbance to the minimum necessary, and stabilize disturbed soil areas as soon as feasible after construction is completed. In addition to standard requirements and regulations, the implementation of mitigation measure HYDR-3 the project would have a less than significant impact on the rate of surface water runoff.

10.c.iii: The proposed project would not be anticipated to 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. As previously discussed, storm drainage management within the City and the urban area is provided by a system of developed and undeveloped collection systems operated and maintained by the City. Pursuant to the 2009 Drainage Master Plan for the City, the City is broken down into three district drainage areas: Eastern Corridor, Central Drainage Corridor and Western Drainage Corridor. All future development will comply with the City's 2009 Drain Master Plan and would include storm drain drop inlets as necessary along the proposed streets. In addition, construction projects that would disturb more than one acre of land, such as the proposed project, would be subject to the requirements of General Construction Activity Stormwater Permit (Construction General Permit Order 2009-0009-DWQ, also known as the CGP), which requires operators of such construction sites to implement stormwater controls and develop a Stormwater Pollution Prevention Plan (SWPPP) identifying specific BMPs to be implemented to minimize the amount of sediment and other pollutants associated with construction sites from being discharged in stormwater runoff. Such BMPs may include, for example, straw bales, fiber rolls, and/or silt fencing structures to assure the minimization of erosion resulting from construction and to avoid runoff into sensitive habitat areas (including the unnamed tributary and downstream watercourses), limit ground disturbance to the minimum necessary, and stabilize disturbed soil areas as soon as feasible after construction is completed. Therefore, a less than significant impact would occur.

10.c.iv: Based upon the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel Nos. 06011C0565G and 06011C0550G, effective March 27, 2024, shows the Site is located within an area known as Without Base Flood Elevation (BFE) or Zone A. Zone A are areas subject to a 1%-percent annual chance flood and a 26% chance of flooding over the life of a 30-year mortgage. FEMA notes that detailed analysis is not performed for such area and therefore no depths or base flood elevations are shown within these zones on the maps. As part of the future build out of the site, the developer will be required to conform to existing building and development specifications including providing plans noting that the project will be at a minimum 1-foot above BFE, therefore, implementation of the Proposed Project will have a less than significant related to impeding or redirecting flood flows.

10.d: The project Site is located inland, outside of the coastal zone, and therefore not within a tsunami inundation zone. The City is located adjacent to the Sacramento River and its levee system that runs along the western bank. The levee adjacent to the city plays a major role in protecting the City from flooding by the Sacramento River. Localized flooding does occur within the City, primarily to the east side, away from the Site. North of the City, approximately 1.4 miles, is an overflow system that, when the banks of the Sacramento river are met, the excess water is diverted to fields and crop lands to the northeast of the city. As a result, the potential for inundation at the Site is considered low and a less than significant impact would occur.

10.e: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. As stated above, the Project will be required to comply with water quality protection requirements of the NPDES Construction General Permit BMPs for construction

and post-construction related control of the Proposed Project site runoff and sediment transport. The Project will also be subject to the Waste Water Plan measures would eliminate the potential for conflicts with the water quality control plan. As such, the Project would have a less than significant impact in this area.

MITIGATION MEASURES

HYDR-1: Prior to issuance of a final occupancy permit for structures within the project, the applicant shall ensure that landscaping installed for all residential and commercial areas are installed pursuant to AB 1881 water usage requirements (the Water Conservation in Landscaping Act of 2006) and will be drought tolerant and on drip irrigation systems with timers. Plant material shall be low or very low in areas that are not dedicated for active play or turf such as within parks.

HYDR-2: Prior to landscape improvements within the public right of way, park area and open space, the applicant or their successor shall submit a landscape plan to the City of Colusa. The landscape plan shall utilize drought tolerant plant species, drip irrigation systems for individual plants and trees when appropriate, low flow water systems for sod or active play areas.

HYDR-3: Prior to issuance of a grading permit, the applicant, or their successor, shall submit a Stormwater Pollution Prevention Plan which addresses the projects’ stormwater drainage system, and any storm water detention or retention facilities (on- or off-site) if necessary, to prevent flooding due to runoff or where existing storm drainage facilities are unable to accommodate increased storm water drainage. This Storm Water Plan will be developed consistent with State requirements and to the satisfaction of the City of Colusa.

11. LAND USE AND PLANNING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: The entire Site is currently designated as Low Density Residential on the General Plan Land Use Diagram and R-1 Low Density Residential on the Zoning map. The Site is currently within City limits and can be served with city utilities. The proposal includes a General Plan Amendment and Rezone as described below. The changes would support the proposed Tentative Subdivision Map, increased density, and allow additional land uses, which are not allowed by the existing land use designations and

zoning districts. The Project Description provides an overview of the proposed General Plan Amendment and Rezone. Below is a summary.

General Plan Amendment

The Project proposes the following General Plan land use designation amendments:

1. Change 16.27 acres from LDR to Medium Density Residential (MDR). Per the General Plan, this land use designation is intended for a variety of housing product types, including detached townhouse, duplexes and triplex. This designation emphasizes residential development that promotes home ownership of affordable housing. Factors for consideration of development in this designation include density, scale, mass, buffer and provisions of open space. The density for MDR falls within a range of 8 to 12 dwelling units per acre, although the General Plan does note that a lower density may be allowed.
2. Change 7.45 acres of LDR to High Density Residential (HDR). This land use designation provides for apartments, condominiums and townhomes that can provide affordable housing for a range of income levels. The density falls within a range of 12 to 20 units per acre, although the General Plan does note that lower density is acceptable.
3. Change 1.17 acres of LDR to Commercial Professional (CP). The General Plan notes that that this land use designation provides for, but is not limited to, uses such as retail sales, automobile services, and professional offices. The General Plan further notes that this designation should be placed within or contiguous to developed areas that are served by the circulation network and are situated in close proximity to areas where future residential growth is expected.
4. Change a total of 17.34 acres of LDR to Parks/Recreation/Open Space (P/OS). The General Plan notes that this land use designation is suitable for park development, bike paths, greenbelts, nature preserves and uses which provide indoor and outdoor recreation opportunities. This designation applies to open space lands, which include lands not suited for development due to environmental conditions or location attributes, and to lands intended to remain in the undeveloped natural state.

Rezone

The Project proposes the following rezones:

1. Apply a -PD Planned Development overlay to the 42.23 acres of R-1 Single Family Residential zoning district. Appendix A – Zoning, Article 15 – the -PD Planned Development overlay permits variations to development standards to be approved by the Planning Commission, including reduction in lot sizes, setbacks, lot coverage percentages, etc.
2. Change 16.27 acres of R-1 Single Family Residential to R-2 Two Family Residential with a -PD Planned Development. Appendix A – Zoning, Article 6 - R-2 Two Family Residence District governs the development standards within this zoning district. It permits the same land uses as the R-1 zone, but also permits development of duplexes. With the addition of the -PD Planned Development, variations to standards are permitted as approved by the Planning Commission.
3. Change 7.45 acres of R-1 Single Family Residential to R-3 Neighborhood Apartment District with a -PD Planned Development. Appendix A – Zoning, Article 7- R-3 Neighborhood Apartment District governs the development standards within this zoning district. It permits the same land

uses as listed in the R-1 and R-2 zones, but also allows multi-family apartment buildings. With the addition of the -PD overlay, variations to standards are permitted as approved by the Planning Commission.

4. Change 1.17 acres of R-1 Single Family Residential to Commercial Professional District with a -PD Planned Development. Appendix A – Zoning, Article 10 – CP General Commercial District. Change a total of 17.34 acres of R-1 Single Family Residential to O-S Open Space District. Appendix A – Zoning, Article 17 – O-S Open Space District governs development within this zoning district. This zone is applied to properties to be preserved in a natural state and/or provide open space buffer areas for land uses restricted to recreational, conservation or light agricultural types, and including accessory or public uses.

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on land use and planning if it would physically divide an established community or 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.

DISCUSSION

11.a: The Site is within City limits with existing improvements to the north and east, which are both single family developments. The Site is noted as an urban growth area within the 2007 General Plan and was anticipated to be developed for residential land uses. The Site is self-contained and does not physically divide an established community, with existing development to the north and east. The introduction of a mix of different land uses provides an opportunity for the site to be more self-sufficient in capturing pedestrian and vehicle movement when built out. This results in impacts that would be equal to those described in the General Plan for buildout of the City. Therefore, there will be no impact on the division of an established community.

11.b: The Site is surrounded by City limits to the north, south and east. Along the western border of the project is Wescott Road, which is within County jurisdiction, but within the City's Sphere of Influence. On the other side of Wescott Road, there are various land uses. Traditional single-family homes along at the north, an approximate 30-acre field/agricultural land, and a large estate lot with small animal keeping and a commercial operation that consist of dog grooming and pet resort across the street from the Project Site at the southern end. At the southwest tip of the Project Site, catty-corner, across Wescott are additional small agricultural fields.

As of January 1, 2009, legislation requires that as part of the real estate transaction, land sellers and agents must disclose whether the property is located within one mile of farmland. In this instance, being that Colusa is within the heart of the northern portion of the Central Valley, it is considered a farming community, and the local economy is agriculturally based. Therefore, it is not uncommon to be notified of proximity of farmlands when real estate transactions are occurring in the community. With that said, General Plan notes (Policies LU-4.1, LU-4.2 and 4.3) that development occurs near agricultural related lands and that setbacks could occur, anywhere from 200 to 500 feet as appropriate, or less with consultation with the Agricultural Commissioner (depending on crop type and herbicide/pesticide

application), providing new homeowners notification within their deeds of the County’s right-to-farm ordinance. The General Plan also discusses use of a combination of a residential buffer, masonry fencing, and tree plantings at the urban edge to mitigate agricultural impacts of noise, dust, trespass, and pesticide/herbicide overspray (LU-4.3).

In this instance, the right of way (ROW) for Westcott Road is approximately 45 feet, with the applicant proposing to add an additional 14 feet (ROW half section), plus an additional 14 feet for a public service easement (PSE) for a sidewalk and utilities. This would result in a setback of approximately 73 feet. With the addition of a Mitigation Measures TRAF-2 under Transportation, which calls for a Class II bicycle path along Wescott, (typically 4 to 5-feet in width), the setback would be approximately 78 feet.

The General Plan (Policy LU-2.1a), notes that setbacks shall be reviewed on a case-by-case basis to ensure buffers are maintained, while also balancing design, development and providing flexibility. Therefore, with the introduction of Mitigation Measure LAND-1 and LAND-2 below, setbacks from agricultural land uses would be less than significant.

The Project proposes to amend the Low Density land use designation on 42.23 acres, and introduce Medium Density, High Density, Parks, Commercial and Open Space areas. The proposed changes are supported by the General Plan as the amendments would provide a strong diversified economic base with a balance between jobs and housing for all incomes (Policy LU-6.1, Goal LU-8), and further future development would include a mix of land uses to encourage and accommodate a range of incomes and transportation needs (Policy LU-8.2). The project also provides for not only homeownership opportunities, but also for rental opportunities at a wide mix of densities (Goal HSG -1, Policy HSDG 1.1, 1.2, 1.4, 1.5)

For additional discussion pertaining to the Colusa County Airport Land Use Plan, See section 9. Hazards and Hazardous Materials discussed above.

MITIGATION MEASURES

LAND-1: Prior to issuance of a grading permit, the applicant or their successor shall consult with the County Agricultural Commissioner an appropriate agricultural setback and treatments along the western boundary of the project when abutting proposed residential lots. To satisfy an appropriate buffer, the treatment can include physical setback/distance, increased masonry fence height long Westcott Road, and vegetative plantings. The setback distance will be determined by the Agricultural Commissioner.

LAND-2: In conjunction with recordation of each Subsequent Final Map, a right to farm covenant as provided by the County of Colusa, shall be recorded on all parcels that are within the project boundaries. The covenant should at a minimum note the proximity of agricultural zones and uses, that complaints against agricultural operations are waved, that during planting and harvest season there may be an increase in smells, odors, vibration, dust, noises and other agricultural related activities.

12. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting: The state-mandated Surface Mining and Reclamation Act of 1975 (SMARA) requires the identification and classification of mineral resources in areas within the State subject to urban development or other irreversible land uses that could otherwise prevent the extraction of mineral resources. These designations categorize land as Mineral Resource Zones (MRZ-1 through MRZ-4). The City of Colusa, DMEIR provides that “neither the City’s existing General Plan nor the County’s General Plan identifies any mineral resources in the proposed Planning Area, including the project site”, or the State through its Mineral Resource Zone designation program. The proposed (City of Colusa) Planning Area contains no mining operations. Based on this information, the proposed General Plan and identified subsequent projects would have no impact on mineral resources.”

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on mineral resources if it would 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 or 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.

DISCUSSION

12.a: The Project Site is not located in an area of known rock, aggregate, sand, or other mineral resource deposits of local, regional, or State residents. There are no known mineral resources of significance on the Site that would be made unavailable by the proposed project. Furthermore, the parcel is not utilized for Surface Mining and Reclamation Act (SMARA) activities, nor are any such sites located in the vicinity of the Site (CGS, 2016 and 2022). There are no known natural occurring asbestos in the area. Further, neither the City of Colusa General Plan, or the DMEIR adopted for the City, identifies any mineral resources in the Planning Area. Therefore, no impact would occur to mineral resources.

12.b: The proposed Project area does not contain mineral resources that are of value locally, to the region, or to residents. Additionally, the proposed Project area is not identified as a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, the proposed Project would not interfere with materials extraction or otherwise cause a short-term or long-term decrease in the availability of mineral resources. neither the City of Colusa General Plan, or the

DMEIR adopted with the Plan, identifies any mineral resources in the Planning Area. Therefore, no impact would occur to mineral resources.

MITIGATION MEASURES

No mitigation required.

13. NOISE. Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting:

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in Leq) and the average daily noise levels (in Ldn/CNEL).

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks, and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Mobile transportation sources, such as highways, and hard and flat surfaces, such as concrete or asphalt, have an attenuation rate of 3.0 dBA per doubling of distance. Soft surfaces, such as uneven or vegetated terrain, have an attenuation rate of about 4.5 dBA per doubling of distance from the source. Noise generated by stationary sources typically attenuates at a rate of approximately 6.0 to 7.5 dBA per doubling of distance from the source (USEPA 1971).

Sound levels can be reduced by placing barriers between the noise source and the receiver. In general, barriers contribute to decreasing noise levels only when the structure breaks the “line of sight” between the source and the receiver. Buildings, concrete walls, and berms can all act as effective noise barriers. Wooden fences or broad areas of dense foliage can also reduce noise, but are less effective than solid barriers.

Vibration

Ground vibration can be measured several ways to quantify the amplitude of vibration produced. This can be through peak particle velocity or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively. Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual’s sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

Noise-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The nearest sensitive noise receptors to the Project site are residences located approximately 60 feet west of the development site.

The Noise Element of the City of Colusa General Plan outlines goals, policies, and implementing actions to protect Colusa residents from excessive noise levels that are annoying to the senses and detrimental to public health. The element establishes acceptable noise level standards for land uses affected by both mobile and stationary noise sources, including temporary noise related to construction. Noise and land use compatibility criteria are designed to provide an acceptable community noise environment and to minimize noise-related complaints from residents. The compatibility criteria should be used in conjunction with future noise exposure levels in order to identify projects or activities that may require special treatment to minimize noise exposure.

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on noise if it would result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or generation of excessive groundborne vibration or groundborne noise levels; or expose people residing or working in the project area to excessive noise levels (for a project located within the vicinity of a private airstrip or an airport or an airport land use plan, or where such as plan has not been adopted, within two miles of a public airport or public use airport).

DISCUSSION

13.a: Excessive and chronic exposure to elevated noise levels can result in auditory and nonauditory effects in humans. Auditory effects of noise on people are those relating to temporary or permanent hearing loss induced by noise. Nonauditory effects of exposure to elevated noise levels are those relating to behavioral and physiological effects. The nonauditory behavioral effects of noise on humans are associated primarily with the subjective effects of annoyance, nuisance, and dissatisfaction, which lead to interference with such activities as communications, sleep, and learning.

The degree to which noise results in annoyance and interference with activities is highly subjective and may be influenced by non-acoustic factors. The number and effect of these non-acoustic environmental and physical factors vary, depending on the individual characteristics of the noise environment, including sensitivity, level of activity, location, time of day, and length of exposure. One key aspect to the prediction of human response to new noise environments is the individual level of adaptation to an existing noise environment. The greater the noise level change caused by a new noise source relative to an individual's customary environment, the less tolerant of the new noise source the individual will be. With regard to human perception of increases in sound levels expressed in decibels (dB), a 1 dB change generally is not perceivable, excluding controlled conditions and pure tones. Outside controlled laboratory conditions, the average human ear barely perceives a change of 3 dB. A 5 dB change generally fosters a noticeable change in human response, and an increase of 10 dB is subjectively heard as a doubling of loudness.

As provided in the Noise Element (Chapter 7, Page 7-9) of the City of Colusa 2007 General Plan, the City has established noise compatibility standards for different land uses for both exterior and interior locations, as provided below:

**TABLE 7.3
NOISE STANDARDS FOR NEW USES AFFECTED BY TRAFFIC AND AIRPORT NOISE**

New Land Use	Outdoor Activity Area - L_{dn}	Interior - L_{dn}/Peak Hour L_{eq}¹	Notes
All residential	60-65	45	2, 3, 4, 8
Transient lodging	65	45	5
Hospitals and nursing homes	60	45	6
Theaters and auditoriums	---	35	
Churches, meeting halls, schools, and libraries	60	40	
Office buildings	65	45	7
Commercial buildings	65	50	7
Playgrounds and parks	70	---	
Industry	65	50	7

Notes:

1. For traffic noise in the City of Colusa, L_{dn} and peak-hour L_{eq} values are estimated to be approximately similar. Interior noise level standards are applied in noise-sensitive areas of the various land uses, with windows and doors in the closed positions.
2. Outdoor activity areas for single-family residential uses are defined as back yards. For large parcels or residences with no clearly defined outdoor activity area, the standard shall be applicable within a 100-foot radius of the residence.
3. For multi-family residential uses, the exterior noise level standard shall be applied at the common outdoor recreation area, such as at pools, play areas, or tennis courts. Where such areas are not provided in multi-family residential uses, the standards shall be applied at individual patios and balconies of the development.
4. Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} or less using a practical application of the best available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} may be allowed—provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.
5. Outdoor activity areas of transient lodging facilities include swimming pool and picnic areas.
6. Hospitals are often noise-generating uses. The exterior noise level standards for hospitals are applicable only at clearly identified areas designated for outdoor relaxation by either hospital staff or patients.
7. Only the exterior spaces of these uses designated for employee or customer relaxation are considered sensitive.

Development within the boundaries of the site would subject residences to the exterior and interior noise limits identified in **Table 7-3** above, and the allowable interior noise levels for habitable rooms, pursuant to Subsection 1207.4, Allowable Interior Noise Levels, of Section 1207, Sound Transmission, of Chapter 12, Interior Environment, of the latest California Building Code (CBC). Per Table N-1, new residential units should not be subject to traffic or airport exterior noise levels of 65 dB CNEL or greater and interior noise levels of 45 dB CNEL or greater, as measured with exterior windows and doors closed.

Due to the project's close proximity to the nearby Colusa County Airport (0.49 nearest point of project site to end of northern runway), it is anticipated that elevated noise levels may exist at the Project Site. As noted in the Noise Element of the City's General Plan EIR, the Airport is used for a variety of activities, including crop dusting, travel, and cargo. Noise levels associated with airport operations identified in the General Plan, are 55, 60 and 65 dBA noise contours (Figure 7.1 of the General Plan). Further, a portion of the Site is mapped within the 45 dBA noise contour associated with the Colusa Industrial Park, which is development land that is located on the western wide of the Colusa County Airport runway. However, it should be noted that the EIR for the Colusa Industrial Park (SCH No. 2006052113) does state that the actual

noise environment within the Park is that of a quite rural area, and industrial operations within the park can be heard at various times and are mostly associated with airport operations and high airport activity.

A 2005 study by Bollard & Brennan, Incl. Consultants in Acoustics and Noise Control Engineering, notes that flight activities from crop dusters leaving the airport from the north (Runway 31) fly west over the Site. This additional flight path is noted in the Airport Land Uses Plan but is noted in the City's General Plan under the Noise Element (Figure 7.1). This additional flight path produces noise contours over a portion of the project site, ranging from 65 dB to 55 dB. Typically, local, state and federal guidelines typically use 65 dB as the criteria for significance with respect to aircraft noise exposure and residential land uses.

In this case, the existing flight patterns of crop dusters from the airport are equal to or below the threshold. To reduce potential impacts associated with airport noise on future residences in the Project area, the Project has been purposely designed so that the proposed 14.4-acre Open Space corridor is lined up with the flight patterns used by crop dusters, thereby removing residential units from the 65 dB noise contour associated with planes that are approaching or departing the runway. To further minimize aircraft impacts to less than significant, the incorporation of HAZ-4, (listed above in Section 9. Hazards and Hazardous Materials) requires the recordation of an aviation easement placed on all new residence's titles, noting the overflight zone and noise associated with airport operations.

As discussed above in Section 9 – Hazards and Hazardous Materials, the majority of the project site is within the Airport Compatibility Zone C3, which is one of the furthest zones from the airport. The Noise Element of the Colusa County Airport Land Use Compatibility Plan (ALUCP) adopts Compatibility Guidelines for Noise related to airport operations. These guidelines indicate that single-family and multi-family dwellings are compatible with aircraft noise exposure of 55 dB or less at the community noise equivalent level (CNEL) which is a daily measurement of noise exposure for a community. Table 3A of the ALUCP notes that both single-family and multi-family residential are “normally compatible” in the C3 zone, with no restrictions on density or open space and no restrictions an ALUCP Policy 3.3.1(3), which states “Within Compatibility Zones C3, D, the density of new residential is not limited.” Open space, commercial and park land have intensity restrictions placed upon them, which have been addressed by a previous mitigation measure (HAZ 4 and HAZ-5) ensuring conformance with the ALCUP.

There are no existing or proposed uses on-site that would result in excessive ground borne vibration or ground borne noise levels. The initial preparation and grading of the Site would require the use of heavy equipment, which would cause temporary ground borne vibration and/or ground borne noise. However, these impacts are associated with construction and would be temporary in nature. No ground borne vibration or ground borne noise would be anticipated during operation of the proposed project, as the project is residential in nature. Additionally, due to the location of the Colusa County Airport, which is approximately 0.49 miles to the east, existing law requires full disclosure to new residences of the proximity of airport. Regarding ground borne vibrations, a less than significant impact would occur.

The proposed residential development itself would not be expected to generate noise in excess of what is common for similar suburban uses once site preparation and construction are complete. The activities and

associated construction equipment would be anticipated to cause temporary increases in noise; however, these impacts would only be associated with construction and would be temporary in nature. Sensitive receptors located nearest the Site include single-family residential neighborhoods located immediately east, north of the site, as well as an additional single-family residential home to the west, across Wescott Road (approximately seventy feet away). In order to reduce potential impacts to these sensitive receptors during construction, best management noise reduction techniques and practices, that include locating noise-generating equipment away from noise-sensitive receptors and designating a noise disturbance coordinator, would be incorporated, as required under Mitigation Measures NOISE-1 and NOISE-2. Implementation of Mitigation Measure NOISE-1 and NOISE-2 would reduce any potential construction-related impacts to a less-than-significant level.

Incorporation of HAZ-4, (listed above in Section 9. Hazards and Hazardous Materials) requiring the recordation of an easement, noting the overflight zone and noise associated with airport operations would also mitigate noise related impacts to less than significant.

13.c: As previously discussed, the Site is located approximately 0.49 miles to the west of the Colusa County Airport, a public airport. As discussed above in both 13.a and Section 9 – Hazards and Hazardous Material, three mitigation measures (HAZ-3, HAZ-4 and HAZ-5) will reduce this impact to less than significant.

MITIGATION MEASURES

NOISE-1: The following measures are required in order to reduce potential construction-related impacts to a less-than-significant level:

- The construction contractor shall ensure that all internal combustion-engine-driven equipment is equipped with mufflers that are in good operating condition and appropriate for the equipment.
- The construction contractor shall ensure that “quiet” models of air compressors and other stationary construction equipment are utilized where such technology exists.
- The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the Site during all project construction.
- The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Site.
- The construction contractor shall prohibit unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes).
- The construction contractor shall designate a noise disturbance coordinator who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (starting too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem. The construction contractor shall conspicuously post a telephone number for the disturbance coordinator at the construction site.

NOISE-2: Construction related activities shall be limited to hours as stipulated in Chapter 11A Noise Regulations of the City of Colusa Municipal Code. A Note shall be placed on all improvement plans, including grading, construction and landscaping noting adherence to the Municipal Code is required.

14. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on population and housing if it would induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure); or displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

DISCUSSION

14.a: In the 2007 General Plan update, the Land Use Chapter (Section 2) depicted the project area as an Urban Reserve (Figure 2.3). The Urban Reserve designation “identifies areas outside of the urban service area in the unincorporated County area, but within the Sphere of Influence (SOI) of the City, in which future development and extension of municipal services are contemplated but not imminent. By identifying land within the SOI suitable for future development.” Since the adoption of the General Plan, the Site was subsequently annexed to the City.

Since adoption of the General Plan, several significantly sized residential zoned properties have been rezoned to other non-residential land use designations. Specifically, eighty-four acres of residential zoned property at the end of East Clay Street, which was approved in 2015 to develop up to 257-single family lots and approximately a 110-unit apartment building. That map is now expired. In 2019, the City removed the residential designation and reclassified the properties as Industrial. Most recently, the City also designated an additional fourteen acres from residential to both open space and industrial land use designations, thereby removing an additional 18-units from the residential holding capacity of the City (total net loss of 385 units).

The Project is proposing that the existing single-family zoning of the entire 88-acre site, be changed, so that approximately 46.54-acres remain as single family, while other portions of the site become medium density residential (16.27 acres), high density residential (7.45 acres), commercial (1.17 acres), park (3.51 acres) and open space (14.03 acres). These proposed changes would promote more compatible development the nearby airport operations (as discussed above in Section 9 – Hazards and Hazardous Materials and in Section 13 - Noise), as well as provide opportunities for a wide range of housing types and products at a variety of income ranges. The proposed mix of residential land uses has the potential to provide an additional 445 units on the Project Site.

According to the Housing Element Update 2022-2028 (adopted in 2022), the City had a population of 6,175 persons in 2020 and is projected to increase to 6,624 by the year 2028 (see **Table 9.3-1** below).

Table 9.3-1. City of Colusa Population Change by Decade (1990-2020)

Year	Population	Change	% Change over Period	% Average Annual Growth Rate
1990	4,934	+859	+21.10	+1.90
2000	5,402	+468	+9.50	+0.90
2010	5,971	+569	+10.50	+1.05
2020	6175	+204	+3.40	+0.34

Source(s): DOF E-4 Population Estimates for Cities, Counties and State.

Table 9.3-3. City of Colusa Population Projections (2019-2028 Planning Period)

Year	Population	Change Annual Growth Rate
2020	6,196	N/A
2025	6,406	210
2028	6,624	218

Source(s): Price Consulting Services.

In 2016, 180 households (8.6%) were living in crowded conditions. The majority of these households, were living in over-crowded conditions with 1.01 to 1.50 person per room. The level of overcrowding is somewhat higher among rental occupied households at 8.9% compared to 8.6% for owner-occupied households, for a total average of 8.3 for all housing types. This is lower than the County average of 12.5% of households experiencing overcrowded conditions.

The DMEIR discussed growth as part of implementation of the General Plan, and notes implementation of the General Plan would have a build out capacity of an additional 9,386 total housing units. Based on current household size of approximately 2.85 person per household, the City would have an estimated

holding capacity of approximately 26,750 people, of which 73.8 percent of the total housing units would take place in low-density residential, estate residential or urban reserve areas. Of the 5 urban reserves areas identified in the General Plan, only one has been annexed to the City - the Project Site.

Other urban reserve areas are not directly contiguous to City limits, are under multiple ownership, have significant infrastructure needs or are environmental challenges areas, which makes their annexation and development unlikely and or limited at this time.

The Project Site has existing subdivision improvements that are stubbed from the north and east and parts of the west. Development of the Site was anticipated and planned. The Site was anticipated to generate population growth that was considered under the General Plan, which is within the City's Sphere of Influence (SOI) and slated for development under the City's General Plan.

The Project design acknowledges existing development within the area, specifically the airport and introduces 14.03 acres of open space, 3.51 acres of park land and 1.17 acres of commercial space, reducing density as discussed in the General Plan, but while also introducing density with the incorporation of 16.27 acres of medium density and 7.45 acres of high density. Ultimately, bringing a project back that is in compliance with the development anticipation in analysis of the General Plan.

The DMEIR notes that implementation of the Plan (Impact 6.3), in addition to existing, proposed, approved, and reasonably foreseeable development in the area, would result in a cumulative increase in population and housing growth in the County and associated environmental impacts. This is a significant and unavoidable impact which the General Plan has already considered.

Extension of infrastructure for community water and wastewater services is proposed by the Project, as well as development of additional internal roadways. Further, development of the Site for residential use was anticipated by the City's General Plan recognizing that services exist at the boundaries of the site. Since the proposed Project would not induce substantial population growth, a less than significant impact would occur.

14.b: The Project Site is currently vacant and void of any housing structures. The site abuts existing residential land uses to the north and east, which have improvements stubbed to this site. The Project would not displace a substantial number of people or housing, necessitating the construction of replacement housing elsewhere. Therefore, a less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

15. PUBLIC SERVICES. Would the project 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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

As provided in the Municipal Services and Facilities Element of the General Plan, the City of Colusa Police Department provides police protection services within the City limits. The City of Colusa Fire Department provides firefighting services within the incorporated area of the City of Colusa. Currently, the City provides solid waste disposal services to City residents and businesses. Waste is collected and transported in compliance with County and State regulations governing solid waste disposal to the Ostrom Road Landfill in Yuba County. The Colusa Unified School District serves the residents of the City of Colusa and surrounding unincorporated residential areas, providing education services for children in grades K-12. The District operates five schools: Burchfield Primary School, Egling Middle School, Colusa High School, Colusa Alternative Home School, and Colusa Alternative High School. Our Lady of Lourdes, a private school, provides K-8 education for Colusa residents, as well. The Colusa County Library operates one of its seven branches in the City of Colusa, located at 738 Market Street. The 10,000 square foot library, which began service in 1928, is in a building shared with the Colusa Unified School District offices.

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on public services if it would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or result in the 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 (a) fire protection, (b) police protection, (c) schools, (d) parks, or (e) other public facilities.

DISCUSSION

15.a: The Site is served by the City of Colusa Fire Department, which serves the City of Colusa and responds to emergencies in the City as well as surrounding unincorporated area. Additionally, the Site is not located within a high or very high fire hazard severity zone as designated by the State.

As noted on the City's website, the Colusa Fire Department was established in 1873 and serves a population of approximately 6,175 people and an area of approximately 3.5 square miles. Pursuant to the General Plan MDEIR, The Fire Department participates in a countywide mutual aid program with six other fire protection agencies in Colusa County. One being the Sacramento River Fire District, which has a station within City limits. Colusa Fire Department career staff consists of 7 paid positions, including 3 firefighters, 2 Fire Apparatus Engineers, 1 Captain and 1 Fire Chief (Colusa Fire Department Comment Letter, Dated January 24, 2024). In addition to paid staff, the Colusa Fire Department has a supporting roster of 15 volunteers. The volunteer staff consists of a Division Chief, four captains, four Driver/Operators, and Firefighters. Of the entire staff, 12 personnel are trained as Emergency Medical Technicians (EMT) and all other personnel are trained as First Responders. Shift personnel work 24-hour rotating shifts year-round.

The Fire Department has one fire station in the City of Colusa located at 750 Market Street. Firefighting equipment consists of four engine pumpers (three with a capacity of more than 1,250 gallons per minute (gpm) and one with a capacity of 1,000 gpm), one ladder truck with a 1,500-gpm capacity and 500-gallon water tank, and one grass rig with a 300-gpm capacity and 500-gallon tank. One reserve ambulance is housed for emergency back-up only and is rarely dispatched.

According to the Fire Chief, the Fire Department can provide an average 5 to 6 minute response time to anywhere within the current service area. Access problems are slight throughout the City of Colusa, as most of the City's streets are in a grid pattern that facilitates emergency vehicle movement. Traffic is the sole issue the Fire Department considers when answering a service call (Randall Dunn, Colusa Fire Department, pers. comm., Page 4.11-2 of the 2007 General Plan).

The 2021 Municipal Service Review (MSR) notes that overall, fire protection services in the City of Colusa are able to provide existing service levels with a combination of career and volunteer personnel. However, there are service challenges including a lack of financing for full-time, paid staffing and that there is reliance of volunteer firefighter service for delivery. The MSR further states that the number of volunteers has declined significantly in the last decade.

Prior to the 2021 MSR, the City of Colusa set up a Community Finance District (CFD). CFDs are a special tax district, under State Law, that funds public improvements and on-going services within a defined area. Parks, streets, sewer improvements and public safety services are some of the public improvements and services that may be financed by a CFD. In this instance, CFD No. 2-2020 was created to authorize the levy of a special tax to fund the operation and maintenance of providing operations and maintenance of public improvements related to infrastructure and public safety, including, but not limited to: Storm Drainage, Detention Basins, Surface Street Improvements (i.e., curbs, gutters, sidewalks and asphalt paving), Street Lighting, Water, and Sewer Infrastructure. The first project annexed to this district was Sunrise Landing, in 2016, a project directly abutting the Project Site to the east.

To support on-going paid staffing services and equipment for the Fire Department and to reduce the impact to less than significant, the project will implement mitigation measure PUBLIC-1, requiring the Project area to annex to the existing CFD to ensure and include a Fire Department assessment.

15.b: The Colusa Police Department provides police protection services 24-hour per day to residents of the City. Additionally, the Police Department extends its services to areas beyond the City limits on an as-need basis, through a mutual aid agreement with the Colusa County Sheriff's Department as required by the Office of Emergency Services. Currently the Department operates one police station, located at 260 Sixth Street. Recently, the City closed escrow on property for the future construction of a new police station. The Department has an authorized strength of 11 (up from 9 in the General Plan) sworn offers, including the Chief of Police, one lieutenant, two sergeants and five officers (Police Department Letter, dated January 24, 2024). There is one personnel position consisting of a non-sworn secretary. The Police Department currently utilizes seven vehicles to patrol the City and responds to calls for services. The Police Department noted a Project Site response time between 2 to 3 minutes.

The Colusa County Sheriff's Department provides police protection services to the unincorporated areas of Colusa County, including those areas outside the Colusa city limits. The Sheriff's Department is located on and operates a single dispatch facility at 929 Bridge Street in the City of Colusa. The Sheriff's Department currently employs 60 staff, of which thirty positions are divided between correctional staff, animal control staff, the Office of Emergency Services, administration and support staff. The thirty additional employees are sworn officers that maintain a person per officer ratio of approximately 660 to 1. The Colusa County Jail, located at 929 Bridge Street in the City of Colusa, houses both County and City of Colusa inmates. The facility has the ability to hold State and federally incarcerated inmates. The jail has a 96-person capacity.

The California Highway Patrol (CHP), a State agency, provides traffic regulation enforcement, emergency accident management, and service and assistance on State roadways and other major roadways. The CHP has an office in the City of Williams, which is approximately 9.8 miles to the west of the City along Highway 20.

As the project entails the development of additional single-family and multi-family residences on-site, the project would incrementally increase the need for police protection services at the Site, as the project builds out over several years. As previously discussed in Section 14 (Population and Housing), above, development of the Site for residential use is consistent with the City of Colusa General Plan. The Project would be subject to the City's Police Protection Building and Equipment Fee as denoted on the City of Colusa Master Fee Schedule, which would be used to pay for new or expanded police protection facilities or equipment, which would improve the ability of the Department to provide services.

Regardless, because the Police Department operates with minimal budget and staff, and has mutual aid agreements with surrounding communities, the inclusion of Mitigation Measure PUBLIC-1 will reduce impacts associated with police services to less than significant.

15.c: As previously described, the Project Site is in the vicinity of several schools, including Lee Kindergarten Readiness (preschool, located approximately 760 feet southwest of the Site), and Emma Wilson Elementary School, and Colusa High School, located approximately 1.4, 2, and 3 miles southeast of the Site, respectively. As discussed in Section XIV (Population and Housing), 225 additional residents beyond those noted in the General Plan are anticipated on-site after full build-out. Based on information provided by the U.S. Census Bureau (2022), persons under the age of 18 years (or school-age) represent 19.2% of the City of Colusa's population. As a result, it is expected that of the new residents anticipated on-site, approximately 43 persons would be under 18 years of age, with approximately 2 persons of each individual age between 0 to 18. The Colusa Unified School District also collects fees, with a new 2022 Developer Fee Justification Study being adopted, which results in a new rate of \$4.79 per square feet for residential projects and increase of \$0.71 from the previous 2020 study. As a result, it is anticipated that any new students within the proposed project could be adequately accommodated by existing schools within the vicinity of the Site and a less than significant impact would occur.

15.d: Several parks and recreational facilities are located within 3 miles of the Site, as described in further detail in Section XVI (Recreation), below. The Project itself is proposing both a 3.51-acre public park and an additional 14.03 acres of open space, therefore the local population from the project site will have assessable access to new passive and active recreational opportunities within the boundaries of the Site. With the new improvements, in conjunction with the variety of parks in the City and surrounding community, there will be a less than significant impact on parks.

15.e: The proposed project would not have a significant impact on other public facilities, as the portion of the Site planned to be subdivided and developed with residences is slated for development and designated for residential use under both the County and City's General Plans. While population is expected to increase as a result of the proposed project, the population increase would not constitute unplanned growth that would otherwise significantly increase the usage of other public facilities, such as regional hospitals or libraries, or significantly increase the population of the City of Colusa to the extent that new or physically altered public facilities would be required. A less than significant impact would occur.

MITIGATION MEASURES

PUBLIC-1: Prior to recordation of the final map, or a phase within the final map, the applicant or their successor shall annex the boundaries of the Wescott Subdivision to Community Facilities Improvement District 2-2020 or create a new Community Facilities District to serve the project boundary. The District shall include fair funding for costs associated but not limited to, (i) Police and Fire Protection, (ii) maintenance of open space and parks, including trails, improvements, services to include but not limited to, irrigation and vegetation control; (iii) maintenance of roads and roadways, with services to include but not be limited to, regularly scheduled street sweeping, repair of public streets, striping of streets; (iv) storm protection services, including, but not limited to, the operation and maintenance of storm drainage systems; (v) landscaping in public areas and in the public right of way along public streets, including, but not limited to, irrigation, tree trimming and vegetation maintenance and control; and (vi) any other public services

authorized to be funded under Section 53313 of the California Government Code that are not already funded by another community facilities district on the property within the CFD.

16. RECREATION. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

As noted in the Parks, Recreation, and Resource Conservation Element of the City of Colusa General Plan, the City maintains approximately 17 acres of parks and open space that are administered by the City’s Public Works Department, Recreation Division. This represents a ratio of approximately 2.8 acres of combined park land and open space per 1,000 residents (6,175 residence as of 2020). While State standards recommend that at least three to five acres per 1,000 residents be devoted to recreational purposes, the City is adjacent to thousands of acres of open space and recreational opportunities provided by the Colusa-Sacramento River State Recreation Area and nearby Colusa National Wildlife Refuge which provide riverfront and open space lands for both active and passive recreational uses, in addition to an array of recreational opportunities offered residents by City- owned and maintained neighborhood parks. These recreational facilities and resources ensure that the public interest (i.e., convenience, health, welfare and safety) is met.

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on recreation if it would 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 or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

DISCUSSION

16.a and 16.b: Colusa boasts an abundance of “green areas” through a combination of City parks and regional open space for its residents. The adjacent Colusa-Sacramento River State Recreation Area and nearby Colusa National Wildlife Refuge provide a riverfront and open space lands for both active and passive recreational uses. An array of recreational opportunities is also offered residents by City-owned and maintained neighborhood parks.

The Site is located in the vicinity of the following neighborhood parks and recreational facilities and opportunities:

Table 1 – City of Colusa Parks and Recreation Areas

Name	Location	Description
Colusa Levee Scenic Park	1.82 miles to the north. 10th and Levee St. adjacent to Sacramento River Recreation Area	2.19 acres: built upon River levee; grass, trees, paved walking, jogging, biking trail, picnic tables, BBQ pits
Memorial Park	1.80 miles to the north. 10th and Market Streets	2.35 acres: shady, tree-filled; children's play area with swings and slide, rock-climbing wall, picnic tables, restroom, available electricity
A.B. Davison Park	1.57 miles to the north. 10th Street between Webster and Parkhill Streets	1.02 acres: grassy, tree-filled; paved walking paths throughout
Municipal Swimming Pool	1.56 miles to the north. 9th Street between Webster and Parkhill Streets.	One 8ft. deep pool, one 3ft. deep pool, one wading pool – open during summer only
Will S. Green Park	1.55 miles to the north. 8th Street between Webster and Parkhill Street.	2.88 acres: barbeque facilities, picnic tables, horseshoe pit, children's play area with swings, slide, jungle gym, and glider swings for tots. 2.35 acres: two lighted tennis courts and children's play area, lots of shade trees, restrooms, group picnic area
Sankey/Elmwood Park	1.43 miles to the north, Between Webster and Parkhill and 3rd and 4 th Street.	0.58 acres: kindergarten playground with slide, swings, drinking fountain, picnic tables, BBQ pit, restrooms, tennis courts, volleyball area, electricity available
C.D. Semple Park	0.98 miles to the north. Corner of 3rd and Larson Lane.	1.2 acres: open grass area for play, picnic tables, BBQ facilities, playground
Lewis Tennant Ballfield Complex	1 mile to the north. Colusa Ave. across from Colusa High School.	4.0 acres: site of Colusa Softball Assn. games and tournaments; 2 softball fields, restrooms, concession, picnic tables 0.33 acres: tot lot play area scaled to toddlers; sand surface
King-Vale Park	0.78 miles to the north along 3rd Street.	0.3 acre: sand surface, children's tot lot with swings, slide, merry go round
Leland L. Taylor Memorial Park	0.10 miles to the north along Country Club Drive.	1.0 acre: open grass area for play, picnic tables

Table 2 – Non-City Recreational Resources

Name	Location	Description
Colusa-Sacramento River State Recreation Area	2 miles to the north. East of Highway 45, along the western banks of the Sacramento River	This park, part of the California State Parks system, is located just outside the City limits to the northwest, along the Sacramento River. This 67-acre facility includes picnic tables, barbeque stoves, a boat launch ramp, campsites, beach areas, and restroom facilities. Various recreational activities take place at the State Recreation Area: hiking, fishing, boating and bicycling.
Colusa Bypass Wildlife Area	3.22 miles to the north east. East of Sacramento River, south of Laux Road	The approximately 1,200-acre Colusa Bypass Wildlife Area is mostly grasslands. Several rows of willows and cottonwood trees line the eastern edge of the property. This area plays a role in local flood management when excess water is diverted into the area from the Sacramento River during high flows in the winter.
Colusa County Fairgrounds	0.96 miles to the northeast. Along Highway 20	The Fairgrounds include exhibition halls, a grandstand, an entertainment building, and other facilities. The Colusa County Fair is held at this site every June, and the Farm Equipment Show is held every February. However, the Fairgrounds are also used year-round for exhibits, weddings, shows, banquets, dances and general entertainment.
Colusa Golf and Country Club	0.34 miles to the northeast. Along Highway 20	The Colusa Golf Course is located at the southeastern entryway to the City along SR 20/45, northwest of the Colusa County Airport. The golf course is a semi-private facility that has nine holes. It is one of only two golf courses in Colusa County.
Colusa National Wildlife Refuge	1.86 miles to the northwest. Along Highway 20	The refuge consists of 5,077 acres consisting primarily of wetlands, with some grasslands and riparian habitats.

The Project involves a General Plan Amendment and Rezone and proposes to incorporate 3.51 acres of Park area and 14.03 acres of Open Space (17.54 total acres). In addition, typically development associated in high density zoning districts accommodate additional amenities for their tenants, including a play structures, pool, hot tub, dog run, work out center and community building. With a total of 7.45 acres of land dedicated to this multi-family residential development, it is assumed that there will be incorporation of recreational amenities. As noted above in the Environmental Setting of this section, the General Plan lists approximately 17 acres of park lands within the City. The Project involves the creation of an additional 17 acres of parks and open space, essentially doubling the number of acres dedicated to public recreation, both active and passive.

As discussed above in Population and Housing (Section 14), buildout of the site could accommodate approximately 445 additional units. With a household size of 2.75 (Table 9.37- Total Household and Household Size, Housing Element) the site could potentially accommodate a population of 1223 individuals. With the addition of 3.51 acres of park and another 14.03 acres of open space, the project will following State recommendations of five acres of park land for every 1,000 individuals.

MITIGATION MEASURES

No mitigation required.

17. TRANSPORTATION. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The City of Colusa requested a Traffic Impact Study for the project which was prepared and completed by Headway Transportation in December 2023. Headway Transportation conducted a traffic impact analysis for the subject project and analyzed the base line conditions, project conditions, baseline plus the project conditions, future year conditions and future year plus project conditions. (see **Appendix 3**, Headway Transportation Traffic Impact Analysis, December 22, 2023). The Headway analysis concluded the following:

- Based on build-out assumptions for the proposed project, which consists of approximately 169 single family detached housing units, 156 single family attached housing units, 120 multi family units, 12,750 square feet of retail space, and 3.51 acres of park land, the project is anticipated to generate approximately 3,923 Daily, 271 AM peak hour, and 363 PM peak hour trips to the external roadway network.
- Under Exiting, Baseline, Baseline Plus Project, Future Year and Future Year Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.

- The project would have a less-than-significant impact on public transit.
- The project should construct sidewalks and Class II bicycle lanes along the project frontage on Wescott Road to maintain consistency and avoid creating gaps in the City's bicycle and pedestrian network.
- The project will construct sidewalks internal to the site in accordance with City standards.
- The project site includes two cul-de-sacs in the northern portion of the project. The project should include bicycle/pedestrian connections between the southern ends of the cul-de-sacs and Sunrise Boulevard to provide better connectivity to the park and other destinations.
- The project site plan includes a Class I bikeway (part of a proposed bikeway included in the City of Colusa Bikeway Master Plan) through the site.
- The project would have a less-than-significant impact on alternative transportation modes.
- The project would have a less-than-significant impact on Vehicle Miles Traveled (VMT).
- The project would have a less-than-significant impact related to safety and design features.
- The project would have a less-than-significant impact related to emergency access.
- No significant impacts related to transportation have been identified.

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on transportation if it would conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b); substantially increase hazards due to a geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or (c) result in inadequate emergency access.

Locally, the threshold of significance is noted in the 2007 General Plan, Chapter 4 – Circulation, which provides the following policy for City roadways and intersections:

Policy CIR – 1.1: The City shall ensure the maintenance of acceptable Levels of Services (LOS) of City streets and intersections when considering new development within Colusa.

Implementing Action CIR-1.1.a: Streets and Roadways Master Plan

The City will prepare, adopt, and periodically update a Streets and Roadways Master Plan that establishes LOS C as the minimum acceptable LOS for City streets and intersections, except in the downtown area on SR 20/45 and SR 20 (Market, Bridge, 10th, and Main Streets), where LOS D is established as the minimum acceptable LOS, consistent with Caltrans LOS standards for state highways through urban areas. If conditions of LOS D or worse are already present, future proposed projects may not cause roadway volumes to increase by five percent or more and will be accompanied by other mitigation measures intended to reduce trip generation.

Regionally and locally, the 2018 Colusa County Regional Transportation Plan (RTP) Update states:

Colusa County has experienced relatively slow growth (less than 2% per year) in population and employment over the past two decades and is forecast to continue this trend through 2042. Based on this trend and the guidelines established in the California Transportation Commission's 2010 RTP Guidelines, the County is not required to run a network travel demand model to determine VMT. The guidelines cite the lack of road congestion and the fact that emission changes from higher MPG vehicles will continue to help the County comply with future emission caps established by the California Air Resources Board as part of AB 32. The County does monitor VMT levels through Caltrans VMT and Mileage Reports. In 1990, VMT per capita was approximately 21,800 annually in the county. In 2007, this number increased to 22,300 annually. In 2010, the per capita VMT was calculated to be 21,821, which was almost at 1990 levels. The County will continue to monitor population and employment and VMT growth to remain consistent with the RTP and the County's General Plan policies.

DISCUSSION

17.a: The proposed project would not conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths. It is expected that construction of the project would result in a slight increase in traffic to and from the Site, as construction workers arrive and leave the Site at the beginning and end of the day, in addition to minor interruption of traffic on surrounding roadways (State Route – 20, Wescott Road, Cynthia Drive, Country Club Drive, Sunrise Boulevard) when heavy equipment necessary for project construction is brought to and removed from the Site. However, once construction is complete, the construction workers and equipment will no longer be required at the Site. Upon build-out of the Site, traffic trips would be associated with residents and visitors traveling to and from the Site.

Daily traffic trips anticipated under the project are provided in Table 13 - Anticipated Project-Related Traffic Trips (below), which are based upon each different land use (single family, single family - attached housing, multi-family, commercial, parks) and is expected to generate approximately 3,923 daily, 271 AM peak hour and 363 PM peak hour trips to the external roadway network.

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law, initiating an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA, with the goal to better measure the actual transportation-related environmental impacts of a given project. Traditionally, transportation impacts had been evaluated by using Level of Service (LOS) analysis. As of July 1, 2020, lead agencies are required to analyze the transportation impacts of new projects using vehicle miles traveled (VMT), instead of LOS. According to the *SB 743 Frequently Asked Questions* provided by the Governor's Office of Planning and Research (OPR), VMT measures how much actual automobile travel (i.e., additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto the roads, the project may cause a significant transportation impact. VMT analysis is intended to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of a multimodal transportation system, and providing clean, efficient access to destinations (OPR, 2020). As of the date of this Initial Study, the City of Colusa has not adopted VMT thresholds of significance.

While the County Transportation Commission and Transit Agency Governing Boards, which involved members from the City of Colusa, adopted the 2018 Colusa County Regional Transportation Plan (RTP) have noted that due to the relative slow growth (less than 2% per year) in population and employment over the past two decades and is forecast to continue this trend through 2042. Based on this trend and the guidelines established in the California Transportation Commission's 2010 RTP Guidelines, the County is not required to run a network travel demand model to determine VMT. The guidelines cite the lack of road congestion and the fact that emission changes from higher MPG vehicles will continue to help the County comply with future emission caps established by the California Air Resources Board. Based on the RTP guidelines and the County/City policy regarding VMT, the project would have a less than significant impact on Vehicle Miles Traveled.

The Site is located in close proximity to both State Route 20 (located approximately 0.48 east of the Site) and Westcott Road (western boundary), which is designated a Collector Street in the General Plan Circulation Element. A Collector Street provides links between local streets and arterial streets and should be designed to carry over 3,000 average daily trips (ADT). Under the project, three (3) new streets will be constructed connecting to Westcott Road, three (3) new streets will be connected to the Sunrise Landing subdivision to the east, as well as one (1) new road connecting to the stubbed-out Brentwood Road to the north.

Internally, new roads will predominantly run east to west manner, connecting the project to existing network system established to the east. Additional roads are planned to run in a north-south manner to allow vehicle and pedestrian connectivity throughout. Three (3) cul-de-sacs are proposed, with Street "B" and Street "D" on the northern side of the project, and Street "L" at the southern end of the site. Pursuant to the Headway Traffic Study, a Mitigation Measure (TRAF-1) is included to allow pedestrian connectivity at the end of Street "B" and Street "D" to allow residence walkable access to the 3.51-acre park that is located just to the south.

Currently, Westcott Road is designated as a Class II bicycle facility within the City of Colusa Bikeway Master Plan, with improvements ending just north of the site. Those improvements are currently no longer delineated and lack signage. However, the Traffic Study noted that the project should, in addition to the sidewalk being proposed along Westcott, include a Class II bicycle lanes along the project frontage on Westcott Road to maintain consistency and avoid creating gaps in the bicycle and pedestrian network (TRAF-2). With the incorporation of a Mitigation Measure, requiring a Class II bicycle lane along Westcott Road, there will be a less than significant impact upon bicycle facilities for the project.

Transit service is available within Colusa and is provided by Colusa County Transit Agency (CCTA) which is provided by Colusa County. The system provides bus service Monday through Friday 7:30 am to 5:00 pm. The transit system operates a "dial a ride" system on all four of its routes, which all originate in Colusa. Bus services are provided regularly from Colusa to Williams, Arbuckle, and Grimes. Buses go to Maxwell and Princeton twice a week and to Stonyford about three times a month. Ridership is at its max during summer months with an average of 4,500 users per month.

Headway - Table 13. Anticipated Project-Related Traffic Trips

Land Use (ITE CODE)	Size	Trips				
		Daily	AM	AM in/out	PM	PM in/out
Single Family Detached Housing (210)	169 du	1,954	118	30 / 80	159	100 / 59
Single Family Attached Housing (215)	156 du	1,123	75	19 / 56	89	53 / 36
Multifamily Housing (220)	120 du	809	48	12 / 36	61	38 / 23
Public Park (411)	3.51 acres	3	0	0 / 0	0	0 / 0
Trip retail (<40K) (822)	12.75 ksf	694	30	18 / 012	84	42 / 42
Total Trips		4,223	271	79 / 192	393	233 / 160
<i>Internal Capture</i>		<i>300</i>	<i>0</i>	<i>0 / 0</i>	<i>30</i>	<i>15 / 15</i>
Net New Trips		3,923	271	79/192	363	218 / 145

17.b: CEQA Guidelines Section 15064.3, subdivision (b) indicates that land use projects would have a significant impact if the project results in vehicle miles traveled (VMT) exceeding an applicable threshold of significance, but that projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant impact. In this case, the Colusa County Transit Authority operates a “dial a ride” service, which is “door to door”, meaning that when a passenger needs service, the CCTA will pick that passenger up from their location and bring them directly to their destination.

CEQA Guidelines Section 15064.3 further notes that if existing models or methods are not available to estimate a project’s expected VMTs, a lead agency may analyze the project’s expected VMT qualitatively. As of the date of this Initial Study, the City of Colusa have not yet established thresholds with regard to VMT impact significance consistent with CEQA Guidelines Section 15064.3 (b). While the County, in association with the city of Colusa, through the 2018 Colusa County Regional Transportation Plan (RTP) Update notes that

“Colusa County has experienced relatively slow growth (less than 2% per year) in population and employment over the past two decades and is forecast to continue this trend through 2042. Based on this trend and the guidelines established in the California Transportation Commission’s 2010 RTP Guidelines, the County is not required to run a network travel demand model to determine VMT. The guidelines cite the lack of road congestion and the fact that emission changes from higher MPG vehicles will continue to help the County comply with future emission caps established by the California Air Resources Board.”

The project itself is located within City limits, with a variety of vehicle travel routes to the north, east and west, connecting future residence to the existing roadway network thereby permitting traffic to have a direct route to employment, commerce, goods and services. Further, Colusa itself is relatively small in size, essentially 2 miles wide by 2.5 miles long, which allows for a significant number of trips to be captured within its existing border. Therefore, the project is presumed to have a less than significant impact.

17.c: The proposed project would not be anticipated to substantially increase hazards due to design features or incompatible uses. The project would be required to comply with all standards, including, but not limited to, site access, roadway width, and turning radii. As previously discussed, the proposed project includes both roadway and frontage improvements, with both connectivity to the existing roadway network and interior roadways proposed, connecting the proposed development in multiple access points to the east, west and north. All proposed roads would be designed to provide sufficient width and turning radii consistent with Colusa Municipal Code Chapter. Furthermore, with the exemption of the commercial area along Wescott Road, the entire project is residential or open space/park lands in nature, which are typically compatible land uses with one another. A less than significant impact would occur.

17.d: As discussed above, the project will be served with three (3) access points from the east, three (3) to the west and an additional vehicle access point from the north. Future builds out of the commercial and high density areas, are currently unknown, but when they are proposed, those details will have to be noted to ensure that emergency personal and equipment can adequately service the sites. Further, both the Colusa Fire Department and Colusa Police Department have stated that they can adequately serve the project site (Appendix 4, Colusa Fire Department and Colusa Police Department letters) As such, a less than significant impact would occur.

MITIGATION MEASURES

TRAF-1: Improvement plans shall be modified to illustrate a pedestrian connectivity of at least 10-foot width, containing a paved surface of 5 feet, at the terminus of Street “B” and Street “D” to allow internal pedestrian and bicycle connectivity at the end of each cul-de-sac with the balance of the project.

TRAF-2: Improvement plans shall be modified to illustrate a Class II bicycle connectivity along the Wescott Road frontage, connecting existing bicycle improvements to the north and terminating at the southern end of the property. The Class II bicycle path may be improved in phases in correlation with the phase of the tentative subdivision map.

18. TRIBAL CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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 cultural value to a California Native American tribe, and that is:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 Public Resources Code §5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: The project area is within Patwin ethnographic territory. Patwin are the southernmost members of a group of Native American cultures (i.e., Wintu, Nomlaki, and Patwin) that share a related set of languages. The Native American members of the Colusa Rancheria identify themselves as the Cachil Dehe Band of Wintun Indians. Consequently, Wintun will be used as an alternative to Patwin in this discussion. Wintun occupied the southwest portion of the Sacramento Valley, from the lower hills of the eastern North Coast Ranges to the Sacramento River, and from Princeton south to San Pablo and Suisun Bays. A number of Wintun villages had been identified along the Sacramento River near the City of Colusa (Kroeber 1925, 1932). (City of Colusa General Plan DMEIR, July 2007).

Thresholds of Significance: The project would have a significant effect on Tribal Cultural Resources if it would cause a substantial adverse change in the significance of a cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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 cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Places or in a local register of historical resources as

defined in Public Resources Code §5020.1(k), or 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 Public Resources Code §5024.1.

DISCUSSION

18.a.i: and 18.a.ii: On October 17, 2023, Element Land Solutions (ELS), on behalf of the Applicant and City of Colusa (City), contacted the Native American Heritage Commission (NAHC) to request a Sacred Lands File (SLF) search and the contact information for the representatives of the Native American tribes associated with the project area.

On November 20, 2023, a response was received from the NAHC, which indicated that the results of the Sacred Lands File (SLF) search were negative. Included with the letter was a Native American contact list of tribes who may have knowledge of cultural resources in the Project area. A total of six (6) tribal contacts are included on the contact list:

- Cachil Dehe Band of Wintun Indians of the Colusa Indian Community
- Cortina Rancheria - Kletsel Dehe Band of Wintun Indians
- Estom Yumeka Maidu Tribe of the Enterprise Rancheria
- Grindstone Rancheria of Wintun-Wailaki
- Paskenta Band of Nomlaki Indians
- Yocha Dehe Wintun Nation

On November 21, 2023 individual letters to the tribes noted above, were mailed out to notify them of the Project. Under AB 52 and SB 18, Native American Tribes typically have 30 days to respond and request further project information and formal consultation. On December 23, 2023, a response was received from the Yocha Dehe Wintun Nation requesting that they continue to receive updates on the Project (Appendix 5, Yocha Dehe, Cultural Resources Letter, Dated December 15, 2023), however, they did not request formal consultation. Accordingly, the requirements of AB 52 and SB 18 have been met for the Project.

Due to the earth moving equipment and ground disturbances, a potential impact remains for undiscovered resources, therefore to reduce impacts to levels of less than significant, Mitigation Measure CULT-1 as noted in Section 5, Cultural Resources will ensure that the Project would have a less than significant impact upon Tribal Resources.

MITIGATION MEASURES

No mitigation required.

19. UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting: As provided in the Municipal Services and Facilities Element of the General Plan, the City of Colusa Public Works Department is responsible for maintenance on public parks, streets, sidewalks, storm drains, streetlights, traffic signals, trees, water and sewer services, garbage, and public landscaping areas. The City of Colusa Police Department provides police protection services within the City limits. The City of Colusa Fire Department provides firefighting services within the incorporated area of the City of Colusa. Currently, the City provides solid waste disposal services to City residents and businesses. Waste is collected and transported in compliance with County and State regulations governing solid waste disposal to the Ostrom Road Landfill in Yuba County. The Colusa Unified School District serves the residents of the City of Colusa and surrounding unincorporated residential areas, providing education services for children in grades K-12. The District operates five schools: Burchfield Primary School, Egling Middle School, Colusa High School, Colusa Alternative Home School, and Colusa Alternative High School. Our Lady of Lourdes, a private school, provides K-8 education for Colusa residents, as well. The Colusa County Library operates one of its seven branches in the City of Colusa, located at 738 Market Street. The 10,000 square foot library, which began service in 1928, is in a building shared with the Colusa Unified School District offices.

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on utilities and service systems if it would require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects; not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years; result in a determination by the wastewater treatment provider, which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; 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; or not comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

DISCUSSION

Water Service

The City of Colusa operates a domestic water delivery system through their Public Works Department. The City has five groundwater wells, with a total capacity of 7.78 million gallons per day (MGD). Water storage is contained in two elevated storage tanks, each with a capacity of 250,000 gallons. The City also provides water to outside its limits: the Walnut Ranch development, the Lurline Avenue area, the area east of Bridge Street, and restrooms at Moon Bend Road. The City receives its municipal water from deep wells that tap aquifers within underground geological formations. The City of Colusa is within the Colusa Subbasin of the Sacramento Valley Groundwater Basin. The Colusa Subbasin aquifer system comprises continental deposits of late Tertiary to Quaternary age. A review of hydrographs of spring-spring groundwater levels indicated a slight decline in levels associated with 1976-77 and 1987-94 droughts, followed by recovery to pre-drought conditions. Generally, groundwater levels have an average seasonal fluctuation of approximately five feet for normal and dry years. Overall, there appears to be no increasing or decreasing trends in groundwater levels as noted in the Master EIR for the General Plan (Page 4.12-1).

Within the City limits, the City of Colusa administers a domestic water delivery system, operated by the Public Works Department. All water used by the City comes from five wells. The depth of these wells exceeds 200 feet below ground surface, and each well is encased with a deep-water sanitary seal for a minimum of 50 feet to prevent infiltration. In 2006, the annual total for all five wells was approximately 545.8 million gallons (Shaw, E., pers. comm., 2007). The wells pump between 1,000 and 1,330 gallons per minute (gpm) with one 225-kW diesel generator. The average dry weather pumping is between approximately 1.5 and 2.0 million gallons per day (mgd), with a peak of 3.0 mgd.

Water lines in the older sections of the City vary in size from 4 to 8 inches in diameter. In a few cases, water lines may have a smaller diameter than 4 inches. Much of the newer lines in the developing southern section of the City are 8-inch, 10-inch and 12-inch ductile iron pipe. A standard residential connection is 3/8-inch or 3/4-inch. The City meters all water connections.

Wastewater Service

The City of Colusa WPCP provides treatment to the City's wastewater and discharges effluent to the Sacramento River. The WPCP is a regional-serving, gravity fed facility located southwest of the City. In addition, the facility is a secondary treatment facility with a current treatment capacity of 12 million gallons per day (mgd). The WPCP utilizes alternative power, including a photovoltaic solar array installation which provides approximately 35 percent of the facilities total power demand. A significant portion of the facilities power is also provided by the WCPS's cogeneration facility. According to the City of Colusa Sanitary Sewer Master Plan Update (SSMP) (2017), the collection system consists of sewer mains, trunk sewers, lift stations, and flow diversions that collect and convey wastewater to the City's WPCP, which is located west of the City on Colusa River Road. The City's existing sanitary sewer collection is comprised of roughly 266 miles of gravity collection system pipes up to 66-inches in diameter.

The WPCP has an average dry weather (ADW) (low) flow of approximately 6.9 mgd and an average peak wet weather flow (PWWF) wet weather (high) flow of approximately 20.5 mgd. Future improvements to the sanitary sewer collection systems identified in the City's SSMP are projected to increase the ADW from 6.9 mgd to 13.9 mgd and increase the PWWF from 20.5 mgd to 35.3 mgd. Improvements to the existing system will provide sufficient capacity to mitigate existing issues in the City and to convey increased flows resulting from future growth. Future development will require the construction to serve new users. All improvements to the existing sanitary sewer system collection are anticipated to be completed in 2030.

Storm Drainage System

The City of Colusa is located in the lower Sacramento River Valley and is bordered on the north and east by the Sacramento River itself. The Sacramento River flows in a south/southeasterly direction through the Sacramento River Valley.

To the west of the City is a drainage feature called the Colusa Basin, served by the Colusa Drain. The Colusa Basin drains approximately 230,000 acres along the west side of the Sacramento River, extending as far north as the City of Willows and as far south as the City of Woodland. The main channel for the Colusa Drain is an excavated earthen channel. Within Colusa County, the channel depth is approximately 10-15 feet below the original ground elevation, and the average top width of the excavated section is approximately 100 feet. The channel has levees on both sides for the most part, and levee height varies to a maximum of approximately six feet. There are additional levees along tributary drains that connect to the Colusa Drain. The Colusa Drain discharges into the Sacramento River at Knights Landing, northeast of the City of Woodland.

Topography within the General Plan area generally falls to the south and west, toward the Colusa Drain and away from the Sacramento River. Elevations range from approximately 60 feet above mean sea level in the northernmost portions of the General Plan area to approximately 45 feet above mean sea level in the southernmost portions. The overall gradients are typically very flat, and usually about 0.1 percent or less.

Hot, dry summers and moderately cool, wet winters characterize the climate of the City of Colusa. Average annual rainfall in Colusa is approximately 16.34 inches.

Solid Waste Service

The Recology Butte Colusa Counties provides solid waste collection service within the City limits to residential, commercial and industrial customers. Residential services include the pickup of one 90-gallon yard waste container early in the week, and one 30-, 60- or 90-gallon household waste container later in the week. The owner or occupants of all residential properties shall subscribe to no less than the minimum service. Recology will also collect excess yard refuse and loose clippings deposited in alleys and streets for a charge, as well as other materials that otherwise may not be placed in the containers. Trailer bins with a capacity of six cubic yards may be rented from the Recology.

Commercial and industrial bin rates vary according to the bin size, with a minimum of two cubic yards and a maximum of eight cubic yards. Commercial establishments are charged a minimum rate, regardless of amount of solid waste disposed. All restrictions placed on residential users regarding type of containers used and the type of materials to be collected also apply to commercial and industrial users.

Recology delivers all solid waste to the Ostrom Road Landfill near Beale Air Force Base in Yuba County. According to information from the California Integrated Waste Management Board, the Ostrom Road Landfill (58-AA-0011) has a maximum permitted capacity of 43,467,231 cubic yards. Per CalRecycle.ca.gov, the landfill had a remaining capacity of 39,22,000 cubic yards, with a maximum permitted throughput of 3,000 tons of solid waste per day. The estimated closure date for the landfill is December 31, 2066.

Electric Power and Natural Gas

The Pacific Gas and Electric Company (PG&E) provides electrical and natural gas service to the City of Colusa and the proposed Planning Area. A private utility, PG&E has a service area that covers most of northern and central California. PG&E generates electric power from many sources, including hydroelectric powerhouses, a nuclear power plant (Diablo Canyon) and a few small fossil-fired power plants. PG&E also purchases power from independent power producers; generation sources from these producers can range from large fossil power plants to smaller renewable and cogeneration plants. After the power is produced or bought, it goes into PG&E's electric transmission and distribution systems to get to the homes and businesses of PG&E's customers.

Infrastructure to deliver electricity and natural gas is currently in place. PG&E generally can provide these services to newer developments on request.

19.a: As part of the Project, the existing on-site wells would be abandoned in accordance with Colusa County Environmental Health requirements, and community utility services would be extended to the Site. To the north and east are existing utility related improvements which are stubbed out to the Project. Additional infrastructure, to some degree, is located to the west in Wescott Road. The Project itself will install traditional infrastructure improvements related to the proposed end user and demand, which are typical for urban type development. The Project itself does not trigger the need for upgrading or relocating existing infrastructure related improvements. While both on- and off-site improvements would be required

for the Project, the respective utility providers and installers would be required to implement applicable BMPs to reduce the potential for impacts, including but not limited to erosion during construction, to occur. As such, a less than significant impact would occur.

19.b: The City of Colusa retained California Engineering Company to perform a Water Supply Verification pursuant to Assembly Bill 610, which was concluded that the City expects that available supplies of water to be sufficient to meet projected demands in all hydrologic conditions, including a five-year drought period, and considering the impacts of climate change. The project site is located within the existing service area of city water and is surrounded by existing development that is currently connected to existing city water lines. No additional improvements are needed to water lines or facilities to serve the proposed Project. Standard connection fees would address any incremental impacts of the proposed project. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable during normal, dry and multiple dry years, and a less than significant impact would occur.

19.d: Solid waste collection service would continue to be provided by Recology, which provide weekly curbside residential and commercial garbage and recycling collection within the City of Colusa. Solid waste is anticipated as a result of project implementation; however, the project does not include any components that would generate excessive waste and the existing landfills have sufficient permitted capacity to accommodate the project's solid waste disposal needs. Recology has also implemented Recyclable Materials and Organic Waste diversion from the landfill of 32% by January 2021, and 35% by 2024. Recology will also develop a specific annual Waste Diversion and Sustainability Work Plan, which includes steps to increase diversion and outreach for waste reduction. Recology is contracted to provide resources to support waste diversion and sustainability programs. A less than significant impact would occur.

19.e: This proposed project conforms to all applicable management and reduction statutes and regulations related to solid waste disposal. The development would comply with the adopted policies related to solid waste, and would comply with all applicable federal, state, and local statutes and regulations pertaining to disposal of solid waste, including recycling. Therefore, the proposed project would have a less than significant impact on solid waste regulations.

MITIGATION MEASURES

No mitigation required.

20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage challenges?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting: As provided in the Safety Element of the General Plan, the City of Colusa, including the project site, is surrounded by agricultural fields, and is in an area of low potential for wildfires. The Project site is not in an area designated by the California Department of Forestry and Fire Protection (2007) as a Fire Hazard Severity Zone. Furthermore, no Very High Fire Hazard Severity Zones are located nearby. Finally, the location of the Project site makes it readily accessible by emergency personnel and vehicles in the event of a wildland fire. For these reasons, wildfire is not considered a significant risk for the Proposed Project.

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on wildfire if it would impair an adopted emergency response plan or emergency evacuation plan; 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; 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; or expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage challenges.

DISCUSSION

20.a: The City’s Comprehensive Emergency Management Plan provides direction for responding to disastrous occurrences in Colusa. The Plan facilitates accomplishing the underlying goal of the Safety Element, which is to protect the life, property, and environment of community residents, businesses,

employees, and visitors. It also serves as a key component in implementing the City's policies that address emergency response.

The Plan defines the primary and support roles of City agencies and departments in after incident damage assessment and reporting requirements. In addition, the plan provides for the operation of police, fire, and health services, as well as transportation alternatives in the event of a multi-hazard emergency. City evacuation procedures are described and are submitted to the State Office of Emergency Services (OES) for approval.

The General Plan notes that likely reasons for a potential emergency evacuation of the City of Colusa include a hazardous materials spill from vehicles transporting these materials along SR 20 and SR 20/45 or flooding resulting from levee overtopping or failure. Potential evacuation routes include SR 20 (east and west), SR 20/45 (north), Lurline Avenue (west), Wescott Road (south), and Bridge Street (north). Due to the relatively low number of vehicles currently required to completely evacuate the City and the City's grid street system, an organized evacuation using all available routes could be accomplished in a short period of time.

In this case, the design of the Project allows for vehicle connectivity in multiple directions throughout the project and connecting to existing roadway patterns to the north, east and west. Thereby resulting in a variety of routes for individuals to utilize in the event of an emergency. Therefore, the impact related to an emergency evacuation is considered less than significant.

20.b: Under the proposed Project, it is not anticipated that wildfire risks would be exacerbated due to slope, prevailing winds, and other factors, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire because the Site is essentially flat, is a significant distance away from areas of high wildfire risk, such as the lands located along the levee system north of the site.

Furthermore, potential impacts due to prevailing winds or other factors would be limited as construction would be required to meet or exceed the standards prescribed in the California Building Code (CBC) to ensure fire hazards and risk is minimized. Through compliance with existing standards and policies, potential impacts would be limited. A less than significant impact would occur.

20.c: The proposed Project would result in the development of single-family and multifamily development and acreage dedicated to open space, parks and commercial uses. To facilitate these land uses there is an internal roadway network and landscaping, and the Project would require the installation or maintenance of infrastructure, such as roads, power lines, and other utilities. The project will be sufficiently served by water utilities, as described in Section XIX (Utilities and Service Systems), above, and is within the service boundaries of the Colusa Fire Department. Project design has accounted for proper road width and turn radius needs for emergency vehicles, as required by the California Fire Code and Colusa Municipal Code. Given the size of the project and the proposed use, the proposed project will not trigger the need for any installation of fire-related utilities (e.g., emergency water supplies), fire roads, fire breaks, or other facilities

that would exacerbate fire risk or emergency response needs or cause temporary or ongoing impacts to the environment. Furthermore, all contractors would implement standard Best Management Practices (BMPs) and take proper precautions to ensure fire risk is minimized during installation and maintenance of associated infrastructure. A less than significant impact would occur.

20.d: The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage challenges, as the area of development is relatively flat in nature and is not significantly developed. Additionally, there is no evidence on-site of recent wildfires at the Site or in the immediate vicinity. No impact would occur.

MITIGATION MEASURES

No mitigation required.

DRAFT

21. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THRESHOLDS OF SIGNIFICANCE: The project would have a significant effect on mandatory findings of significance if it would 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; 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.); or have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

DISCUSSION

Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed project has been analyzed and it has been determined that it would not:

- Substantially degrade environmental quality;
- Substantially reduce fish or wildlife habitat;
- Cause a fish or wildlife population to fall below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Reduce the numbers or range of a rare, threatened, or endangered species;

- Eliminate important examples of the major periods of California history or pre-history;
- Achieve short term goals to the disadvantage of long term goals;
- Have environmental effects that will directly or indirectly cause substantial adverse effects on human beings; or
- Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects.

Potential environmental impacts from construction and operation of the proposed project have been analyzed in this document and mitigation measures have been included in the document to ensure impacts would be held to a less-than-significant level.

21.a) The project does not 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. The Site does not provide habitat for any fish species, nor does the Site support any notable plant or animal communities. This Initial Study proposes Mitigation Measures that are best practices to ensure biological resources, including special status birds, are adequately protected,

Additionally, there are no important examples of California pre-history located on-site. While the Site contains existing development, none are known to be eligible for listing on the California Register of Historical Resources (CRHR). However, there is the potential for unrecorded archaeological and Native American resources and/or human remains to be located on-site. CEQA Guidelines §§15064.5(d) and (f) and PRC §5097.98 provide proper protocol in the event of inadvertent discovery of archaeological or paleontological resources, or human remains on-site during project construction, and required compliance with these protocols provided in this initial study which would ensure impacts would be less than significant.

21.b) No cumulative impacts have been identified as a result of the proposed project. The analysis included in this Initial Study found that all potential impacts associated with the project could be reduced to a less-than-significant level with Mitigation Measures incorporated. As such, individual impacts from the project would not significantly contribute to cumulative impacts in the area. A less than significant impact would occur.

21.c) The proposed project would not generate any potential direct or indirect environmental effect that would have a substantial adverse impact on human beings including, but not limited to, exposure to geologic hazards, air quality, water quality, traffic hazards, noise, and fire hazards. With mitigation incorporated, all potential impacts associated with construction and operation of the project would be reduced to a less-than-significant level.

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DRAFT

INTRODUCTION

As part of the CEQA environmental review procedures, Section 21081.6 requires a public agency to adopt a monitoring and reporting program to ensure efficacy and enforceability of any mitigation measures applied to the proposed project. The lead agency must adopt an MMRP for mitigation measures incorporated into the project or proposed as conditions of approval. The MMRP must be designed to ensure compliance during project implementation. As stated in Section 21081.6 (a) (1):

The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required to be incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.

MITIGATION MONITORING AND REPORTING PROGRAM

The MMRP, as outlined in the following table, describes mitigation timing, monitoring responsibilities, and compliance verification responsibility for all mitigation measures identified in Initial Study.

The City of Colusa will be the primary agency, but not the only agency responsible for implementing the mitigation measures. In some cases, the City or other public agencies will implement measures. In other cases, the project applicant will be responsible for implementation of measures and the City's role is exclusively to monitor the implementation of the measures. In those cases, the project applicant may choose to require the construction contractor to implement specific mitigation measures prior to and/or during construction. The City will continue to monitor mitigation measures that are required to be implemented during the operation of the project.

The MMRP is presented in tabular form on the following pages. The components of the MMRP are described briefly below:

Mitigation Measures: The mitigation measures are taken from the Mitigated Negative Declaration in the same order that they appear in the Initial Study.

Mitigation Timing: Identifies at which stage of the project mitigation must be completed.

Monitoring Responsibility: Identifies the department within the City, project applicant, or consultant responsible for mitigation monitoring.

Compliance Verification Responsibility: Identifies the department of the City or other State agency responsible for verifying compliance with the mitigation. In some cases, verification will include a contract with responsible state and federal agencies.

MITIGATION AND MONITORING REPORTING PROGRAM

**TABLE 4.0-1
MITIGATION MONITORING AND REPORTING PROGRAM**

Proposed Mitigation	Monitoring Responsibility	Timing	Verification (Date and Initials)
1. AESTHETICS			
<p>AESH-1: To minimize over lighting and to provide for a quality-built environment. Outdoor lighting placed on structures, within parking lots, along trails or within the public right of way, shall be dark sky compliant, directed downward and contain cut offs to minimize excessive source of light and glare. Future building plan and improvement plan submittals shall indicate and provide details on the type of lighting, location, height, size and intensity.</p>	<p align="center"><i>City of Colusa, Building and Planning Departments</i></p>	<p align="center"><i>Building and improvement plans for the site shall indicate compliance with the mitigation measure prior to issuance of a building permit.</i></p>	
2. AIR QUALITY			
<p>AIR 1: All offroad equipment of greater than 50 horsepower used in Project construction shall be CARB Tier 4 Certified, as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations</p>	<p align="center"><i>The City of Colusa Building and Planning Departments, Colusa County Air Pollution Control District</i></p>	<p align="center"><i>Prior to issuance of a building permit. Building and improvement plans for the site shall indicate compliance with the mitigation measure prior to issuance of a building permit</i></p>	
<p>AIR-2: The Project prohibits the installation, construction, or use of wood stoves and fireplaces in all proposed residential units within the Project Site. Hearths will be limited to natural gas-fueled fireplaces.</p>	<p align="center"><i>The City of Colusa Building and Planning Departments, Colusa County Air Pollution Control District</i></p>	<p align="center"><i>Prior to issuance of a site related improvement permits, such as grading.</i></p>	
3. BIOLOGICAL RESOURCES			
<p>BIO 1: The developer shall implement the following measures to minimize potential impacts on biological resources, including special status bird species:</p> <p>Western Red Bat</p> <ul style="list-style-type: none"> Mature trees should be removed and/or fallen between September 16 – March 15 outside of the bat maternity season. Trees should be removed at dusk to minimize impacts to roosting bats. 	<p align="center"><i>Prior to issuance of grading permits or improvement plans, City staff shall verify that Mitigation wording is included on construction or grading plans, or the compliance completed prior to City permit issuance. Letter reports shall be maintained, as applicable, by Planning staff throughout construction.</i></p>		

MITIGATION AND MONITORING REPORTING PROGRAM

Proposed Mitigation	Monitoring Responsibility	Timing	Verification (Date and Initials)
<p>Swainson's Hawk</p> <ul style="list-style-type: none"> If tree removal cannot be performed outside of the maternity season, a qualified biologist shall conduct a preconstruction survey of suitable roosting habitat within 7 days prior to construction activities. A protocol-level nesting raptor survey shall be conducted within 7 days prior to the initiation of Project activities to determine the presence or absence of active SWHA nests within the BSA or within 500 feet of the Project boundary, where feasible. If an active SWHA nest is found, no work should occur within 250 feet of the active nest and CDFW shall be consulted. <p>Migratory Birds and Raptors</p> <p>To avoid impacts to avian species protected under the Migratory Bird Treaty Act and the CFGC the following are recommended avoidance and minimization measures for migratory birds and raptors:</p> <ul style="list-style-type: none"> Project activities including site grubbing and vegetation removal shall be initiated outside of the bird nesting season (February 1 – August 31). If an active nest (i.e. containing egg(s) or young) is observed within the BSA or in an area adjacent to the BSA where impacts could occur, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist based on the species, nest type and tolerance to disturbance. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails as determined by a qualified biologist. Nests shall be monitored by a qualified biologist once per week and a report submitted to the CEOA lead 		<p><i>Prior to issuance of grading permits or improvement plans and on-going during all construction related activities.</i></p>	

MITIGATION AND MONITORING REPORTING PROGRAM

Proposed Mitigation <small>agency weekly.</small>	Monitoring Responsibility	Timing	Verification <small>(Date and Initials)</small>
<p>5. CULTURAL RESOURCES</p> <p>CULT 1:- A note shall be placed on all grading and construction plans which informs the construction contractor that if any bones, pottery fragments or other potential cultural resources are encountered during construction, all work shall cease within the area of the find pending an examination of the site and materials by a professional archaeologist. If during ground disturbing activities, any bones, pottery fragments or other potential cultural resources are encountered, the developer or their supervising contractor shall cease all work within the area of the find and notify Planning staff at (530) 458-4740. A professional archaeologist who meets the Secretary of the Interior's Professional Archaeologist Standards for prehistoric and historic archaeology and who is familiar with the archaeological record of Colusa County, shall be retained by the applicant to evaluate the significance of the find.</p> <p>Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the City of Colusa Staff, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by the City Staff to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and plans to ensure contractor knowledge and responsibility for proper implementation.</p>	<p align="center"><i>City of Colusa Planning Department</i></p>	<p align="center"><i>Prior to issuance of grading permits or improvement plans, City staff shall verify that Mitigation wording is included on construction or grading plans, prior to City permit issuance. Letter reports shall be maintained, as applicable, by Planning staff throughout construction.</i></p> <p align="center"><i>On going during ground disturbance activities.</i></p>	
<p>CULT-2: If archaeological resources are encountered during construction, work shall be temporarily halted in the vicinity of the discovered materials and a qualified archaeologist and the City of Colusa shall notify all the local tribe on the consultation list maintained by the State of California Native American Heritage Commission, to provide local tribes the opportunity to monitor evaluation of the site. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes, has evaluated the situation and</p>	<p align="center"><i>City of Colusa Planning Department</i></p>	<p align="center"><i>Prior to issuance of grading permits or improvement plans, City staff shall verify that Mitigation wording is included on construction or grading plans, prior to City permit issuance. Letter reports shall be maintained,</i></p>	

MITIGATION AND MONITORING REPORTING PROGRAM

Proposed Mitigation	Monitoring Responsibility	Timing	Verification (Date and Initials)
<p>provided appropriate recommendations. Project personnel shall not collect cultural resources. [Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.</p>		<p>as applicable, by Planning staff throughout construction. On going during ground disturbance activities.</p>	
<p>CULT-3: Any identified cultural resources shall be recorded on DPR 523 historic resource recordation forms by a qualified archaeologist, available online from the Office of Historic Preservation's website: http://ohp.parks.ca.gov/default.asp?page_id=1069.</p>	<p>City of Colusa Planning Department</p>	<p>On going during ground disturbance activities.</p>	
<p>7. GEOLOGY AND SOILS</p>			
<p>GEO-1: In the event that fossils or fossil-bearing deposits are discovered during anticipated future residential construction on-site, the contractor shall notify a qualified paleontologist to examine the discovery and excavations within 50 feet of the find shall be temporarily halted or diverted. The area of discovery shall be protected to ensure that fossils are not removed, handled, altered, or damaged until the Site is properly evaluated and further action is determined. The paleontologist shall document the discovery as needed, in accordance with Society of Vertebrate Paleontology standards (Society of Vertebrate Paleontology 1995), evaluate the potential resource, and assess the significance of the finding under the criteria set forth in CEQA Guidelines Section 15064.5. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the project proponent determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project based on the qualities that make the resource important. The plan shall be submitted to the Board of Directors for review and approval prior to implementation</p>	<p>City of Colusa Planning Department.</p>	<p>On going during ground disturbance activities</p>	
<p>9. HAZARDS AND HAZARDOUS MATERIALS</p>			

MITIGATION AND MONITORING REPORTING PROGRAM

Proposed Mitigation	Monitoring Responsibility	Timing	Verification (Date and Initials)
<p>HAZ-1: Leaks, drips, and spills of hydraulic fluid, oil, or fuel from construction equipment shall be promptly cleaned up to prevent environmental contamination, including contamination of waterways. All workers shall be properly trained in the prevention and clean-up of spills of contaminants. Protective measures shall include the following:</p> <ol style="list-style-type: none"> 1. No discharge of pollutants from vehicle and equipment cleaning shall be allowed into any drainage ditches or watercourses. 2. Spill containment kits shall be properly maintained and located within the vicinity of all operations and fueling of equipment. 	<p align="center"><i>City of Colusa Planning Department</i></p>	<p align="center"><i>Prior to construction, the contractor and EMC Emergency Services will develop a construction safety operation plan.</i></p>	
<p>HAZ-2: If soil staining, odors of respected hazardous materials are encountered during construction activities, work shall cease in the area approximately 100 feet around the discovered site until a qualified firm conducts an environmental site assessment. The assessment shall identify the potential contaminated area and shall recommend measures to reduce or eliminate potential adverse impacts. The contractor shall implement all mitigation measures prior to resumption of work in the 100 foot area.</p>	<p align="center"><i>The City of Colusa Planning Department</i></p>	<p align="center"><i>Prior to issuance of grading permits or improvement plans,</i></p>	
<p>HAZ-3: Prior to issuance of a grading permit, the developer or their successor shall such plans to the Colusa County Airport Land Use Commission staff to determine whether a consistency determination is required by the Colusa County Airport Land Use Compatibility Plan.</p>	<p align="center"><i>The City of Colusa Planning Department</i></p>	<p align="center"><i>Prior to issuance of grading permits or improvement plans,</i></p>	
<p>HAZ-4: In conjunction with recordation of each Subsequent Final Map, an avigation and noise easement consistent with Appendix "E" of the Airport Land Use Compatibility Plan, shall be recorded on all parcels that lie partially or wholly within C1 and C3 Compatibility Zones as defined in the Colusa County Land Use Compatibility Plan. The easement should at a minimum note the proximity of the Colusa County Airport and that complaints against airport operations are waved, that during planting season the airport experiences an increase in air traffic related to crop dusting activities, that the airport has the right to continue operations as necessary, that residence may experiences noise, vibrations and other effects related to aircraft and that no structure or plant</p>	<p align="center"><i>The City of Colusa Planning Department</i></p>	<p align="center"><i>Prior to issuance of grading permits or improvement plans</i></p>	

MITIGATION AND MONITORING REPORTING PROGRAM

Proposed Mitigation	Monitoring Responsibility	Timing	Verification (Date and Initials)
material may exceed height limitation as defined by the Colusa County Land Use Compatibility Plan.			
HAZ-5: Prior to physical development within the Commercial, Open Space and Park zoning districts (not grading, earthwork, underground or road improvement), the developer, or their successor, shall submit such plans to the Colusa County Airport Land Use Commission staff to determine whether a consistency determination is required by the Colusa County Airport Land Use Compatibility Plan.	The City of Colusa Planning Department	Prior to issuance of grading permits or improvement plans	
10. HYDROLOGY AND WATER QUALITY			
HYDR-1: Prior to issuance of a final occupancy permit for structures within the project, the applicant shall ensure that landscaping installed for the single families, duplex, multi-family, and commercial areas are installed pursuant to AB 1881 water usage requirements (the Water Conservation in Landscaping Act of 2006) and will be drought tolerant and on drip irrigation systems with timers. Plant material shall be low or very low in areas that are not dedicated for active play or turf such as within parks.	The City of Colusa Planning Department.	Upon discovery of unknown cultural resources. Mitigation is to be included as part of construction contracts and documents.	
HYDR-2: Prior to landscape improvements within the public right of way, park area and open space, the applicant or their successor shall submit a landscape plan to the City of Colusa. The landscape plan shall utilize drought tolerance plant species, drip irrigation systems for individual plants and trees when appropriate, low flow water systems for sod or active play areas.	The City of Colusa Planning Department	Prior to issuance of a grading permit.	
HYDR-3: Prior to issuance of a grading permit, the applicant, or their successor, shall submit a Stormwater Pollution Prevention Plan which addresses the projects' stormwater drainage system, and any storm water detention or retention facilities (on- or off-site) if necessary, to prevent flooding due to runoff or where existing storm drainage facilities are unable to accommodate increased storm water drainage. This Storm Water Plan will be developed to the satisfaction of the City of Colusa.	The City of Colusa Engineering Department	Prior to issuance of a grading permit.	
11. LAND USE AND PLANNING			
LAND-1: Prior to issuance of a grading permit, the applicant or their successor shall consult with the Agricultural Commissioner and discuss, if need be, an increased agricultural setback along the western boundary of the project when abutting residential lots. To	City of Colusa Engineering and Planning Department	Prior to issuance of a grading permit.	

MITIGATION AND MONITORING REPORTING PROGRAM

Proposed Mitigation	Monitoring Responsibility	Timing	Verification (Date and Initials)
<p>satisfy a buffer, the treatment can include physical setback/distance, increased masonry fence height long Westcott Road, and plantings. The setback distance may be adjusted by the Agricultural Commissioner.</p> <p>LAND-2: In conjunction with recordation of each Subsequent Final Map, a right to farm covenant as provided by the County of Colusa, shall be recorded on all parcels that are within the project boundaries. The covenant should at a minimum note the proximity of agricultural zones and uses, that complaints against agricultural operations are waved, that during planting and harvest season there may be an increase in smells, odors, vibration, dust, noises and other agricultural related activities</p>	<p align="center"><i>City of Colusa Engineering and Planning Department</i></p>	<p align="center"><i>Prior to recordation of a final map.</i></p>	
<p>13. NOISE</p> <p>NOISE-1: The following measures are required in order to reduce potential construction-related impacts to a less-than-significant level:</p> <ul style="list-style-type: none"> • The construction contractor shall ensure that all internal combustion-engine-driven equipment is equipped with mufflers that are in good operating condition and appropriate for the equipment. • The construction contractor shall ensure that “quiet” models of air compressors and other stationary construction equipment are utilized where such technology exists. • The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the Site during all project construction. • The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the Site. • The construction contractor shall prohibit unnecessary idling of internal combustion engines (i.e., in excess of 5 minutes). • The construction contractor shall designate a noise 	<p align="center"><i>The City of Colusa Planning Department</i></p>	<p align="center"><i>Prior to and during grading and construction. The contractor shall provide to all subcontractors contract specifications that reflect the above guideline.</i></p>	

MITIGATION AND MONITORING REPORTING PROGRAM

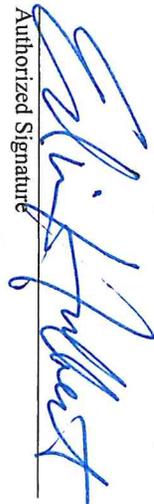
Proposed Mitigation	Monitoring Responsibility	Timing	Verification (Date and Initials)
<p>disturbance coordinator who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaints (starting too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem. The construction contractor shall conspicuously post a telephone number for the disturbance coordinator at the construction site.</p>			
<p>NOISE-2: Construction related activities shall be limited to hours as stipulated in Chapter 11A Noise Regulations of the City of Colusa Municipal Code. A Note shall be placed on all improvement plans, including grading, construction and landscaping noting adherence to the Municipal Code is required.</p>	<p><i>The City of Colusa Engineering and Planning Department</i></p>	<p><i>On going through the life of the project</i></p>	
<p>15. PUBLIC SERVICES</p>			
<p>PUBLIC 1: Prior to recordation of the final map, or a phase within the final map, the applicant or their successor shall annex the boundaries of the Wescott Subdivision to Community Facilities Improvement District 2-2020 or create a new Community Facilities District to serve the project boundary. The District shall include fair funding for costs associated but not limited to, (i) Police and Fire Protection, (ii) maintenance of open space and parks, including trails, improvements, services to include but not limited to, irrigation and vegetation control; (iii) maintenance of roads and roadways, with services to include but not be limited to, regularly scheduled street sweeping, repair of public streets, striping of streets; (iv) storm protection services, including, but not limited to, the operation and maintenance of storm drainage systems; (v) landscaping in public areas and in the public right of way along public streets, including, but not limited to, irrigation, tree trimming and vegetation maintenance and control; and (vi) any other public services authorized to be funded under Section 53313 of the California Government Code that are not already funded by another community facilities district on the property within the CFD.</p>	<p><i>The City of Colusa Engineering and Planning Department</i></p>	<p><i>Prior to recordation of a final map</i></p>	
<p>17. TRAFFIC</p>			
<p>TRAF 1: Improvement plans shall be modified to illustrate a pedestrian connectivity of at least 10-foot width, containing a paved surface of 5 feet, at the terminus of Street "B" and Street "D" to allow internal pedestrian and bicycle connectivity at the end of each</p>	<p><i>The City of Colusa Engineering and Planning Department</i></p>	<p><i>Prior to approval of improvement plans</i></p>	

MITIGATION AND MONITORING REPORTING PROGRAM

Proposed Mitigation	Monitoring Responsibility	Timing	Verification (Date and Initials)
<p>cul-de-sac with the balance of the project.</p> <p>TRAF 2: Improvement plans shall be modified to illustrate a Class II bicycle connectivity along the Westcott Road frontage, connecting existing bicycle improvements to the north and terminating at the southern end of the property. The Class II bicycle path may be improved in phases in correlation with the phase of the tentative subdivision map.</p>	<p><i>The City of Colusa Engineering and Planning Department</i></p>	<p><i>Prior to approval of improvement plans</i></p>	

PROJECT APPLICANT'S INCORPORATION OF MITIGATION INTO THE PROPOSED PROJECT:

I have reviewed the Initial Study for the Westcott Ranch Project and the mitigation measures identified within. As the applicant for the foregoing, I hereby modify the project on file with the City of Colusa and agree to include and incorporate all mitigation measures as set forth in this document.


 Authorized Signature

Edwin Hulbert C.E.O

Printed Name and Date

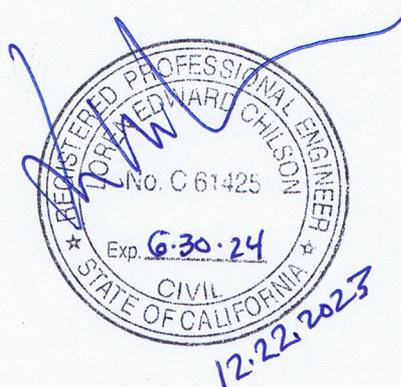
4/30/24

TRAFFIC IMPACT STUDY FOR WESCOTT RANCH

December 22, 2023

PREPARED FOR:
City of Colusa

PREPARED BY:



YOUR QUESTIONS ANSWERED QUICKLY

Why did you perform this study?

This Traffic Impact Study evaluates the potential traffic impacts associated with the proposed Wescott Ranch project in Colusa, California. This study of potential transportation impacts was undertaken for planning purposes and to assist in determining what traffic controls or mitigations may be needed to reduce potential impacts, if any are found.

What does the project consist of?

The project is anticipated to consist of approximately 169 single family detached housing units, 156 single family attached housing units, 120 multifamily units, 12,750 square feet of commercial/retail space, and a 3.51 acre neighborhood park, or a similar mix of units.

How much traffic will the project generate?

The project is anticipated to generate approximately 3,923 Daily, 271 AM peak hour, and 363 PM peak hour trips to the external roadway network. Any mix of land uses generating equal or fewer trips than the proposed uses could be constructed and covered by this Traffic Impact Study.

How will project traffic affect the roadway network?

Under Baseline Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.

Under Future Year Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.

The project would have a less-than-significant impact on public transit.

The project would have a less-than-significant impact on alternative transportation modes.

The project would have a less-than-significant impact on Vehicle Miles Traveled (VMT).

The project would have a less-than-significant impact related to safety and design features.

The project would have a less-than-significant impact related to emergency access.

Are any improvements recommended?

The project should construct sidewalk and Class II bicycle lanes along the project frontage on Wescott Road to maintain consistency and avoid creating gaps in the bicycle and pedestrian network.



The project will construct sidewalks internal to the site in accordance with City standards.

The project site includes two cul-de-sacs in the northern portion of the project. The project should include bicycle/pedestrian connections between the southern ends of the cul-de-sacs and Sunrise Boulevard to provide better connectivity to the park and other destinations.

The project site plan includes a Class I bikeway (part of a proposed bikeway included in the City of Colusa *Bikeway Master Plan*) through the site.



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INTRODUCTION

This report presents the findings of a Traffic Impact Study completed to assess the potential traffic impacts on local roadways and intersections associated with the Wescott Ranch project in Colusa, CA. This traffic impact study has been prepared to document existing traffic conditions, quantify traffic volumes generated by the proposed project, identify potential impacts, document findings, and make recommendations to mitigate impacts, if any are found. The location of the project is shown on **Figures 1 and 2** and the preliminary site plan is shown on **Figure 3**.

Study Area and Evaluated Scenarios

The project consists of residential land uses and a small amount of commercial/retail uses. The project site is located west of SR 20, east of Wescott Road, and south of Country Club Drive. The study intersections were selected based on previous traffic analysis conducted for the project and are shown on **Figure 2**. The following intersections are evaluated in this study:

1. SR 20/Wescott Road
2. SR 20/Cynthia Drive
3. SR 20/Country Club Drive
4. SR 20/Sunrise Boulevard
5. SR 20/Future Access Road (Baseline and Future Year conditions only)

This study includes analysis of both the weekday AM and PM peak hours as these are the periods of time in which peak traffic is anticipated to occur. The evaluated development scenarios are:

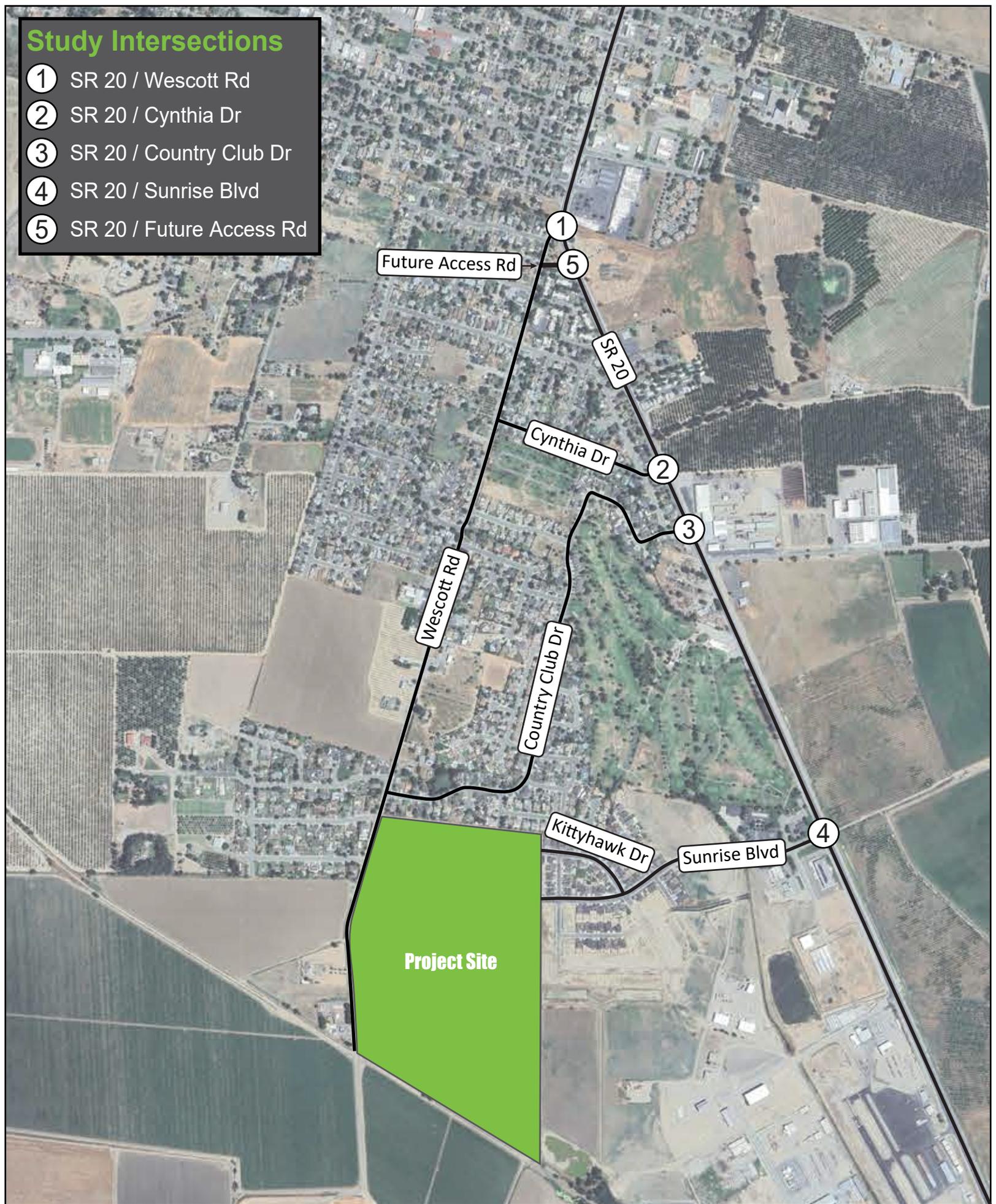
- ▶ Existing Conditions
- ▶ Baseline Conditions – includes the SR 20/Wescott Road Retail Center project that is anticipated to be constructed prior to this project
- ▶ Baseline Plus Project Conditions
- ▶ Future Year Conditions – 20 year horizon, includes the SR 20/Wescott Road Retail Center project
- ▶ Future Year Plus Project Conditions





Study Intersections

- 1 SR 20 / Wescott Rd
- 2 SR 20 / Cynthia Dr
- 3 SR 20 / Country Club Dr
- 4 SR 20 / Sunrise Blvd
- 5 SR 20 / Future Access Rd



ANALYSIS METHODOLOGY

Level of service (LOS) is a term commonly used by transportation practitioners to measure and describe the operational characteristics of intersections, roadway segments, and other facilities. This term equates seconds of delay per vehicle at intersections to letter grades “A” through “F” with “A” representing optimum conditions and “F” representing breakdown or over capacity flows.

Intersections

The complete methodology for intersection level of service analysis is established in *the Highway Capacity Manual (HCM), 6th Edition* published by the Transportation Research Board (TRB). **Table 1** presents the delay thresholds for each level of service grade at signalized and unsignalized intersections.

Table 1: Level of Service Definition for Intersections

Level of Service	Brief Description	Average Delay (seconds per vehicle)	
		Signalized Intersections	Unsignalized Intersections
A	Free flow conditions.	< 10	< 10
B	Stable conditions with some affect from other vehicles.	10 to 20	10 to 15
C	Stable conditions with significant affect from other vehicles.	20 to 35	15 to 25
D	High density traffic conditions still with stable flow.	35 to 55	25 to 35
E	At or near capacity flows.	55 to 80	35 to 50
F	Over capacity conditions.	> 80	> 50

Source: *Highway Capacity Manual, 6th Edition*

Level of service calculations were performed for signalized and stop controlled intersections using the Synchro 11 software package with analysis and results reported in accordance with *HCM* methodology.

Level of Service Policy

City of Colusa

Chapter 4.0 – Circulation of the *City of Colusa General Plan* (October 2007) provides the following level of service policy for City roadways and intersections:

Policy CIR-1.1: The City shall ensure the maintenance of acceptable Levels of Service (LOS) of City streets and intersections when considering new development within Colusa.



Implementing Action CIR-1.1.a: Streets and Roadways Master Plan

The City will prepare, adopt, and periodically update a Streets and Roadways Master Plan that establishes LOS C as the minimum acceptable LOS for City streets and intersections, except in the downtown area on SR 20/45 and SR 20 (Market, Bridge, 10th, and Main Streets), where LOS D is established as the minimum acceptable LOS, consistent with Caltrans LOS standards for state highways through urban areas. If conditions of LOS D or worse are already present, future proposed projects may not cause roadway volumes to increase by five percent or more and will be accompanied by other mitigation measures intended to reduce trip generation.

The study intersections are all located on SR 20; therefore, LOS “D” was used as the threshold criteria for this analysis.

EXISTING CONDITIONS

Roadway Facilities

A brief description of the key roadways in the study area is provided below.

State Route (SR) 20 is generally an east-west state highway that connects Highway 101 in the west to Yuba Pass on Interstate 80 (I-80) east of Grass Valley and Nevada City. In the immediate project vicinity, SR 20 is an arterial roadway that runs in a north-south direction with three lanes (one lane in each direction with a two-way left-turn lane). The posted speed limit in the project area north of Country Club Drive is 40 mph. South of Country Club Drive, the posted speed limit is 55 mph.

Wescott Road in the project area is generally a north-south collector roadway with two lanes (one lane in each direction). The roadway serves primarily residential uses with individual driveways directly accessing the roadway. The posted speed limit is 35 mph.

Cynthia Drive is a two-lane, unstriped, residential roadway that connects Wescott Road to SR 20. The roadway is approximately 1,500 feet long with a posted speed limit of 25 mph.

Country Club Drive is a two-lane, unstriped, residential roadway that connects Wescott Road to SR 20 through a circuitous route. The *City of Colusa General Plan* classifies Country Club Drive as a collector roadway. Country Club Drive does not have a posted speed, however the assumed speed limit is 25 mph based on the residential frontage.

Sunrise Boulevard is an east-west roadway with four lanes for approximately 675 feet west of SR 20. Further west, Sunrise Boulevard has two lanes and serves residential uses with individual driveways directly accessing the roadway. Sunrise Boulevard is currently unfinished at the west end, but will continue west through the project site and serve as an access for the project. The roadway does not have a posted speed limit, but is assumed to have a 25 mph speed limit at completion.



Bicycle & Pedestrian Facilities

Some bicycle and pedestrian facilities exist in project area, but in general there are not many facilities in Colusa. Sidewalk exists on the west side of SR 20 south of Country Club Drive and on the east side of SR 20 from just south of Butte Vista Drive to Wescott Road. Bridge Street (SR 20 north of Wescott Road) has sidewalks on both sides of the roadway. Short segments of sidewalk also exist on Wescott Road.

According to the *City of Colusa Bikeway Master Plan* (December 2012), a Class II bike lane on Wescott Road was striped, but the striping is no longer visible and the signage is non-standard. This was confirmed during field review for the proposed project.

Transit Facilities

Colusa County Transit Agency (CCTA) provides demand responsive service with fixed time routes in Colusa County. Service is provided weekdays from 7:00 AM to 5:00 PM in and between Colusa, Williams, Arbuckle, Princeton, Maxwell, Stonyford, Sites, and Grimes/Meridian.

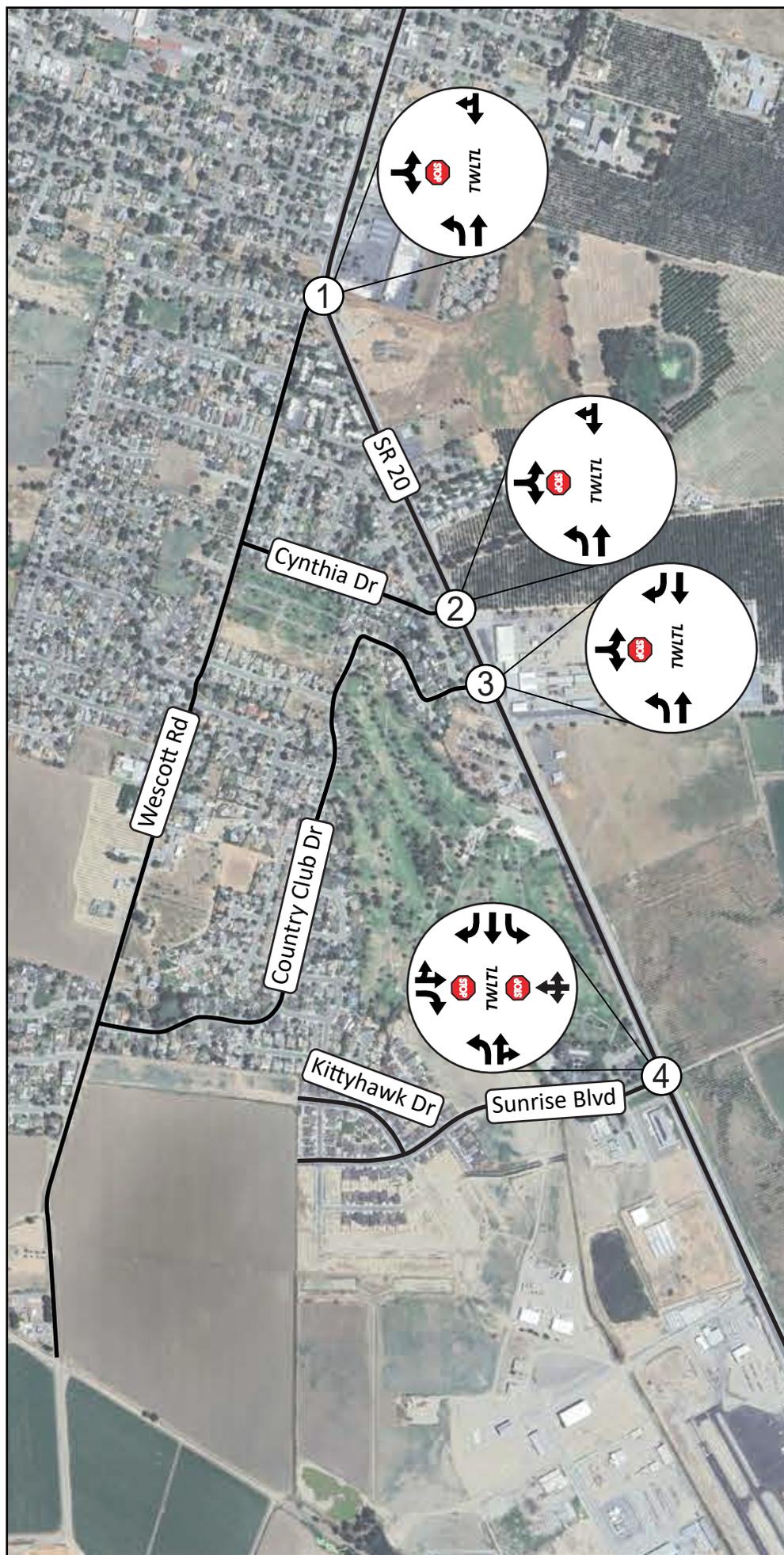
Traffic Volumes

AM and PM peak hour traffic volumes were collected at the study intersections on Wednesday, November 8, 2023 when the weather was clear and local schools were in regular session. The existing AM and PM peak hour intersection turning movement volumes are shown on **Figure 4**. The traffic count data sheets are provided in **Appendix A**.

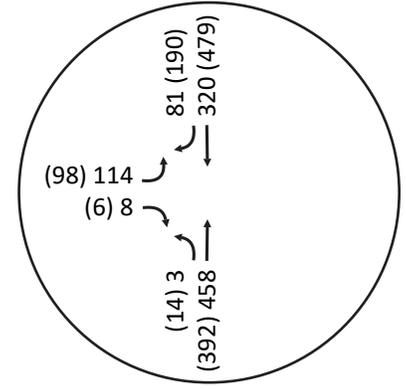
Intersection Level of Service Analysis

Existing AM and PM peak hour intersection level of service analysis was performed for the study intersections. The existing peak hour factors, heavy vehicle percentages, and bicycle and pedestrian volumes were used in the analysis. The existing intersection lane configurations and controls are shown on **Figure 4**. **Table 2** shows the existing conditions level of service results and the technical calculations are provided in **Appendix B**.

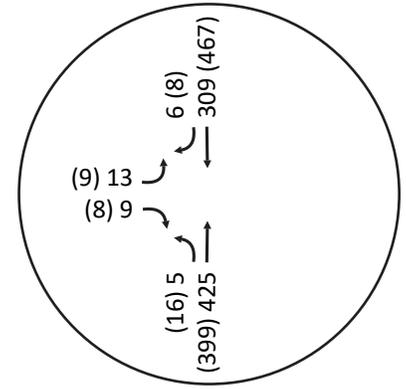




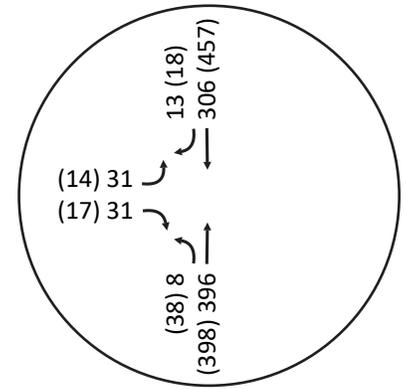
① SR 20 / Wescott Rd



② SR 20 / Cynthia Dr



③ SR 20 / Country Club Dr



④ SR 20 / Sunrise Blvd

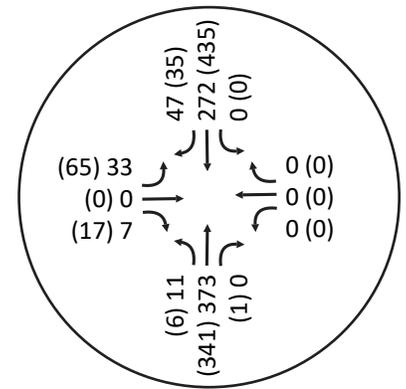


Table 2: Existing Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay ¹	LOS	Delay ¹	LOS
1	SR 20/Wescott Rd	Side Street Stop				
	Eastbound Approach		20	C	19	C
	Northbound Left		8	A	9	A
2	SR 20/Cynthia Dr	Side Street Stop				
	Eastbound Approach		12	B	12	B
	Northbound Left		8	A	9	A
3	SR 20/County Club Dr	Side Street Stop				
	Eastbound Approach		13	B	13	B
	Northbound Left		8	A	9	A
4	SR 20/Sunrise Blvd	Side Street Stop				
	Eastbound Approach		13	B	13	B
	Westbound Approach		0	A	0	A
	Northbound Left		8	A	8	A
	Southbound Left		0	A	0	A

Notes: 1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop controlled intersections.

Source: Headway Transportation, 2023

As shown in the table, the study intersections currently operate at LOS C or better (within policy level of service thresholds) during the AM and PM peak hours.

BASELINE CONDITIONS

The Baseline conditions analysis includes the Wescott Road Retail Center, a planned/approved project that is not yet built. The Wescott Road Retail Center project includes a gas station, fast food restaurants, supermarket, and general retail space, and is located on the east and west sides of SR 20 at Wescott Road. The project trips obtained from the *Traffic Impact Analysis for SR 20/Wescott Road Retail Center* (KD Anderson & Associates, Inc., January 2020) were added to the study intersections to develop Baseline condition traffic volumes. The retail center project will change the roadway network and study intersections in the area of the SR 20/Wescott Road intersection. The planned circulation system improvements are consistent with the *City of Colusa General Plan Circulation Element* and include the following changes:

- ▶ A new Future Access Road will connect Wescott Road to SR 20 south of the existing SR 20/Wescott Road intersection.
- ▶ The northern-most portion of Wescott Road between SR 20 and Louis Lane will be converted to southbound only.
- ▶ Northbound Wescott Road traffic will be rerouted to the Future Access Road to reach SR 20.
- ▶ The SR 20/Future Access Road intersection will be a full access signalized intersection. The east leg of the intersection will provide access to the new retail center.



The Wescott Road Retail Center project site plan and project generated trips are provided in **Appendix C**.

Traffic Volumes

Existing traffic volumes at the SR 20/Wescott Road intersection were rerouted through the SR 20/Future Access Road intersection based on the proposed roadway network changes outlined above. Additionally, project trips from the SR 20/Wescott Road Retail Center project were added to the existing (rerouted) traffic volumes at the study intersections to develop Baseline conditions traffic volumes. The AM and PM peak hour intersection turning movement volumes are shown on **Figure 5**.

Intersection Level of Service Analysis

Baseline AM and PM peak hour intersection level of service analysis was performed for the study intersections. The existing peak hour factors, heavy vehicle percentages, and bicycle and pedestrian volumes were used in the analysis. The Baseline lane configurations and controls at the study intersections are shown on **Figure 5**. **Table 3** shows the Baseline conditions level of service results and the technical calculations are provided in **Appendix D**.

Table 3: Baseline Intersection Level of Service

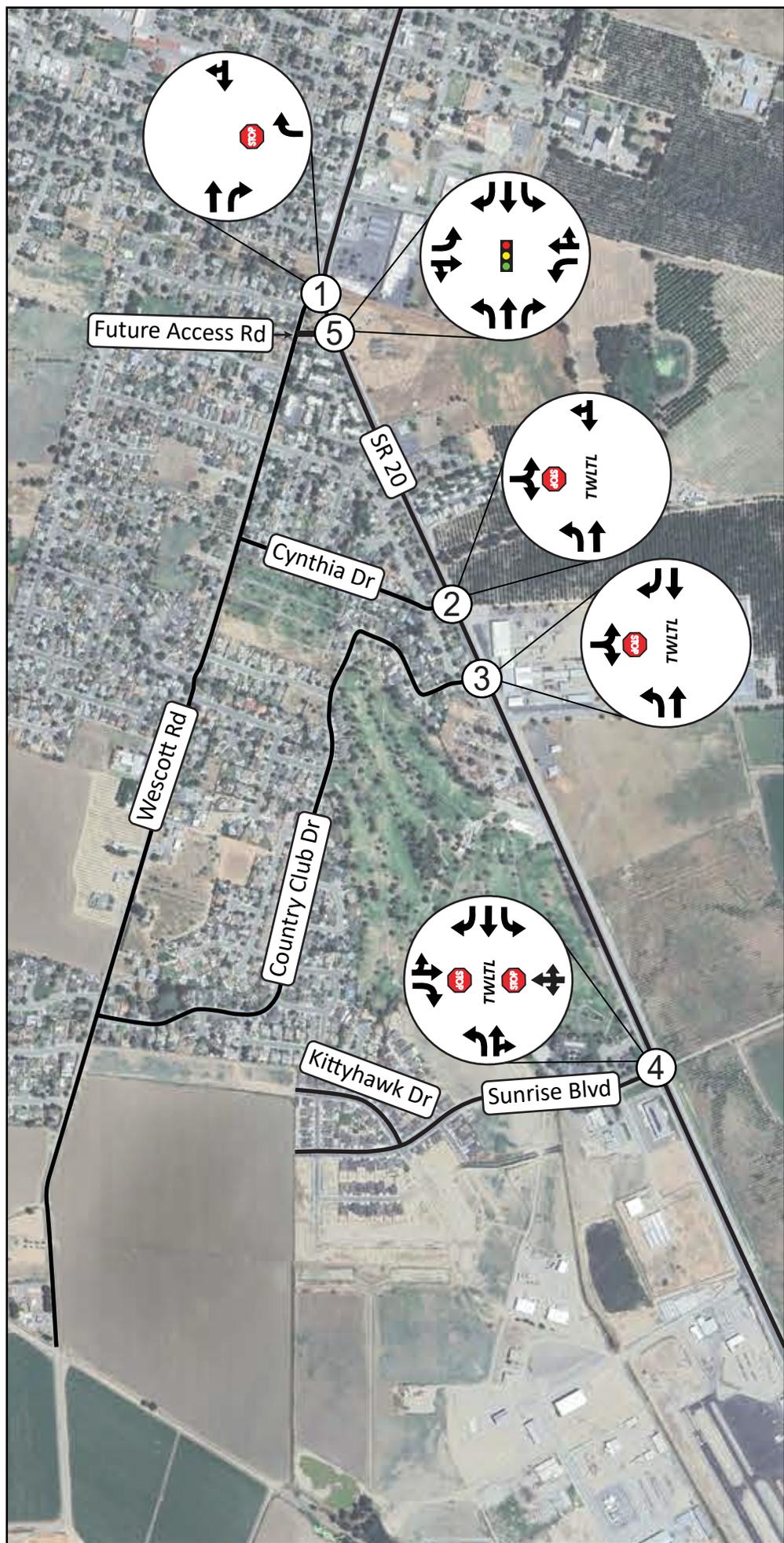
Int. ID	Intersection	Control	AM		PM	
			Delay ¹	LOS	Delay ¹	LOS
1	SR 20/Wescott Rd	Side Street Stop				
	Westbound Right		15	B	13	B
2	SR 20/Cynthia Dr	Side Street Stop				
	Eastbound Approach		13	B	13	B
	Northbound Left		8	A	9	A
3	SR 20/County Club Dr	Side Street Stop				
	Eastbound Approach		13	B	13	B
	Northbound Left		8	A	9	A
4	SR 20/Sunrise Blvd	Side Street Stop				
	Eastbound Approach		14	B	14	B
	Westbound Approach		0	A	0	A
	Northbound Left		8	A	9	A
	Southbound Left		0	A	0	A
5	SR 20/Future Access Rd	Signal				
	Overall		20	C	18	B

Notes: 1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop controlled intersections, and for the overall intersection for signalized intersections.

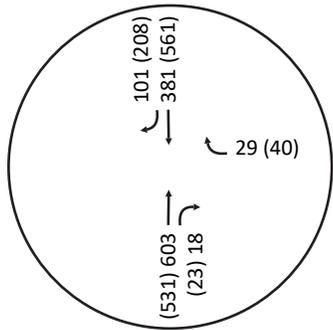
Source: Headway Transportation, 2023

As shown in the table, the study intersections are expected to operate within policy level of service thresholds during the AM and PM peak hours under Baseline (no project) conditions.

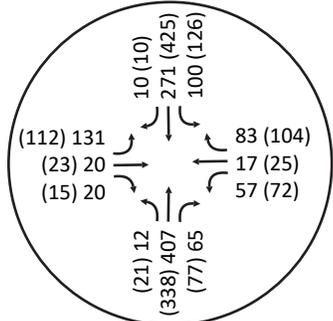




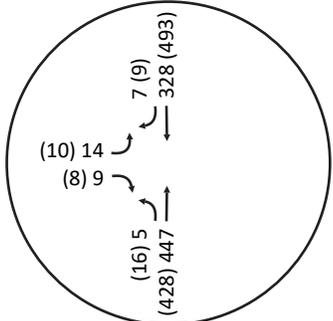
① SR 20 / Wescott Rd



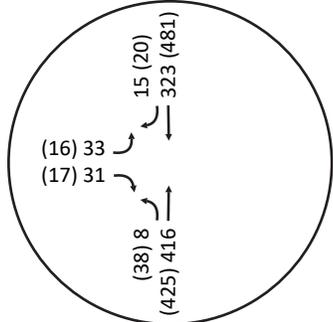
⑤ SR 20 / Future Access Rd



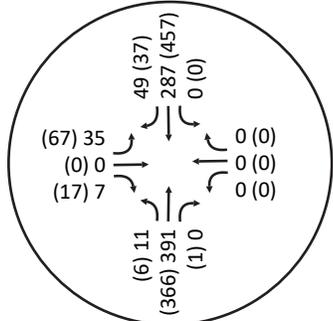
② SR 20 / Cynthia Dr



③ SR 20 / Country Club Dr



④ SR 20 / Sunrise Blvd



PROJECT CONDITIONS

Trip Generation

Trip generation rates from *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE) were used to develop trip generation estimates for the proposed project. **Table 4** shows the Daily, AM peak hour, and PM peak hour trip generation estimates. A small number of internal capture trips (calculated using OTISS Pro software) were included in the calculations to account for trips between the residential and retail uses. Detailed trip generation calculations are provided in **Appendix E**.

Table 4: Trip Generation Estimates

Land Use (ITE Code)	Size ¹	Trips ²				
		Daily	AM	AM In/Out	PM	PM In/Out
Single Family Detached Housing (210)	169 du	1,594	118	30 / 88	159	100 / 59
Single Family Attached Housing (215)	156 du	1,123	75	19 / 56	89	53 / 36
Multifamily Housing (220)	120 du	809	48	12 / 36	61	38 / 23
Public Park (411)	3.51 acres	3	0	0 / 0	0	0 / 0
Strip Retail Plaza (<40k) (822)	12.75 ksf	694	30	18 / 12	84	42 / 42
Total Trips		4,223	271	79 / 192	393	233 / 160
<i>Internal Capture</i>		<i>300</i>	<i>0</i>	<i>0 / 0</i>	<i>30</i>	<i>15 / 15</i>
Net New Trips		3,923	271	79 / 192	363	218 / 145

Notes: 1. du = dwelling units; ksf = 1,000 square feet

2. Detailed trip generation calculations are provided in **Appendix E**.

Source: Headway Transportation, 2023

As shown in the table, the project is expected to generate approximately 3,923 Daily, 271 AM peak hour, and 363 PM peak hour trips to the external roadway network. Any mix of land uses generating equal or fewer trips than the proposed uses in Table 4 could be constructed and covered by this Traffic Impact Study.

Trip Distribution

Project trips were distributed to the adjacent roadway network based on existing traffic volumes, the locations of complimentary land uses, and anticipated travel patterns. Project trips were distributed based on the following:

Residential

- ▶ 15% to/from the north via SR 20
- ▶ 25% to/from the north/west via Wescott Road
- ▶ 25% to/from the south via SR 20
- ▶ 5% to/from the residential area south of Sioc Street



- ▶ 30% to/from the north of Sioc Street and west of 3rd Street

Retail

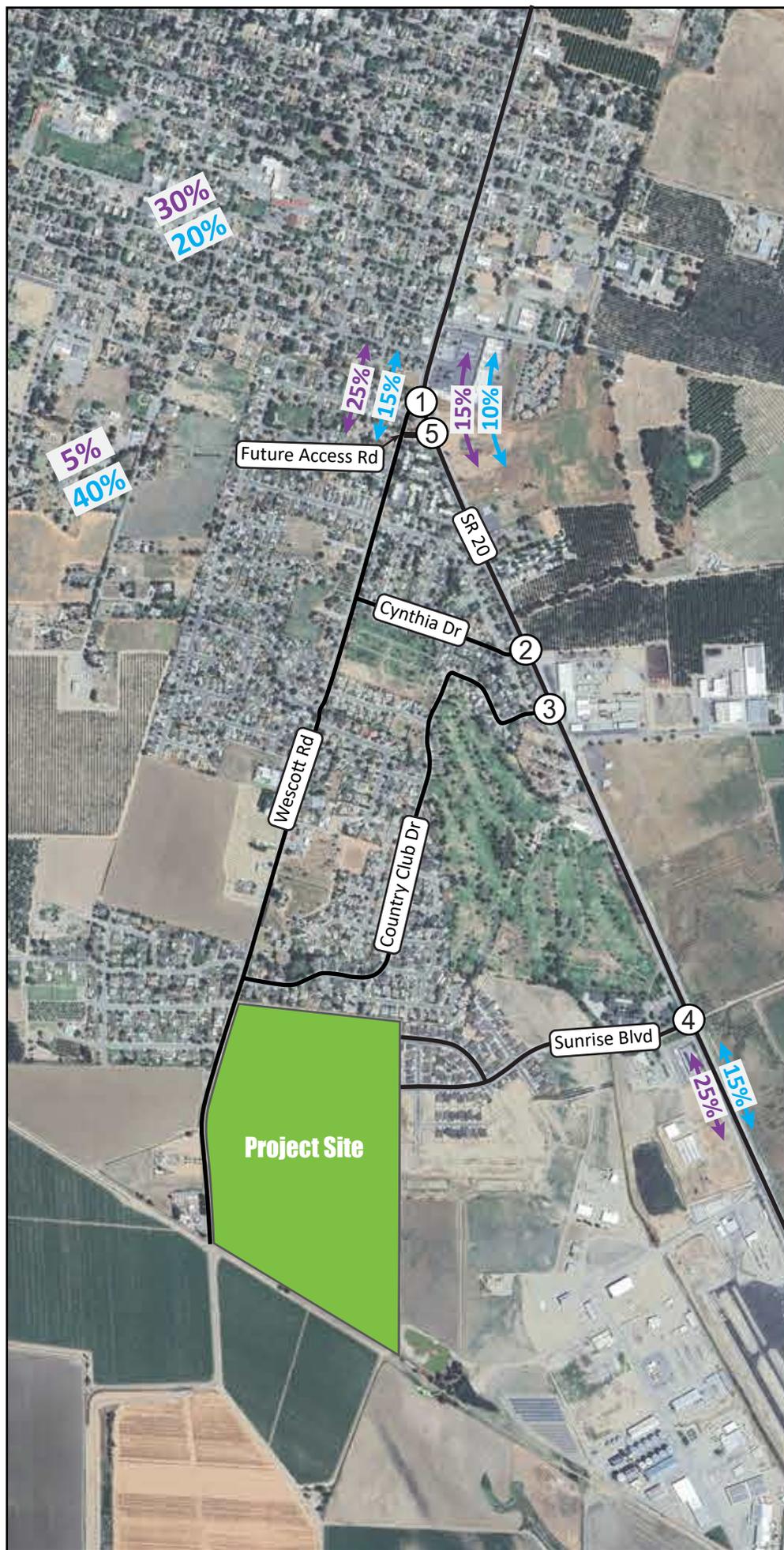
- ▶ 10% to/from the north via SR 20
- ▶ 15% to/from the north/west via Wescott Road
- ▶ 15% to/from the south via SR 20
- ▶ 40% to/from the residential area south of Sioc Street
- ▶ 20% to/from the north of Sioc Street and west of 3rd Street

Figure 6 shows the project trip distribution and assignment.

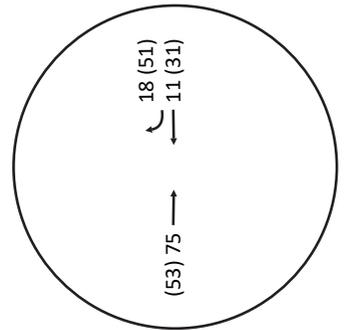
Project Access

The project site includes four access connections to Wescott Road to the west, as well as two internal roadways that tie into Sunrise Boulevard and Kittyhawk Drive to the east (see **Figure 3**).

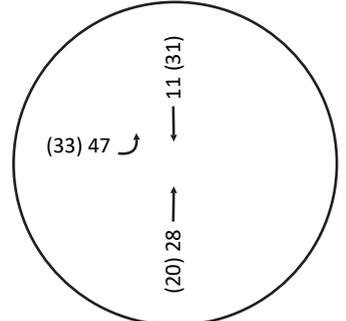




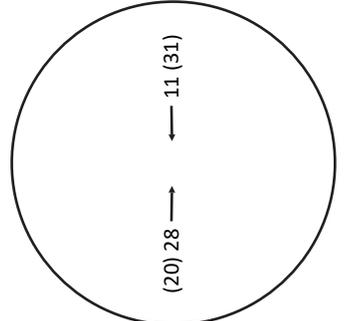
① SR 20 / Wescott Rd



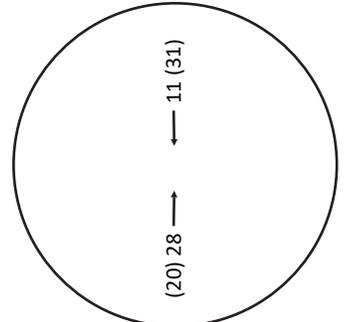
⑤ SR 20 / Future Access Rd



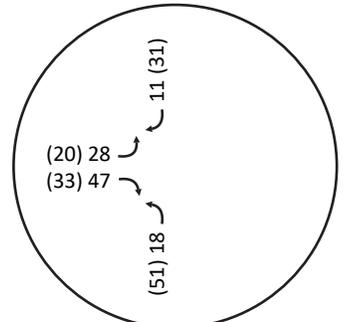
② SR 20 / Cynthia Dr



③ SR 20 / Country Club Dr



④ SR 20 / Sunrise Blvd



AM Peak Hour Volume (PM Peak Hour Volume)

① - Study Intersection

■ - Project Site

←XX%→ - Residential Trip Distribution

←XX%→ - Retail Trip Distribution

NO SCALE

Figure 6

Wescott Ranch
Traffic Impact Study

Project Trip Distribution and Assignment

BASELINE PLUS PROJECT CONDITIONS

Traffic Volumes

Project trips (**Figure 6**) were added to the Baseline traffic volumes (**Figure 5**) to develop the Baseline Plus Project conditions traffic volumes, shown on **Figure 7**.

Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Baseline Plus Project traffic volumes, the existing peak hour factors from the counts, and the lane configurations and controls shown on **Figure 5**. **Table 5** shows the level of service results and the technical calculations are provided in **Appendix F**.

Table 5: Baseline Plus Project Intersection Level of Service

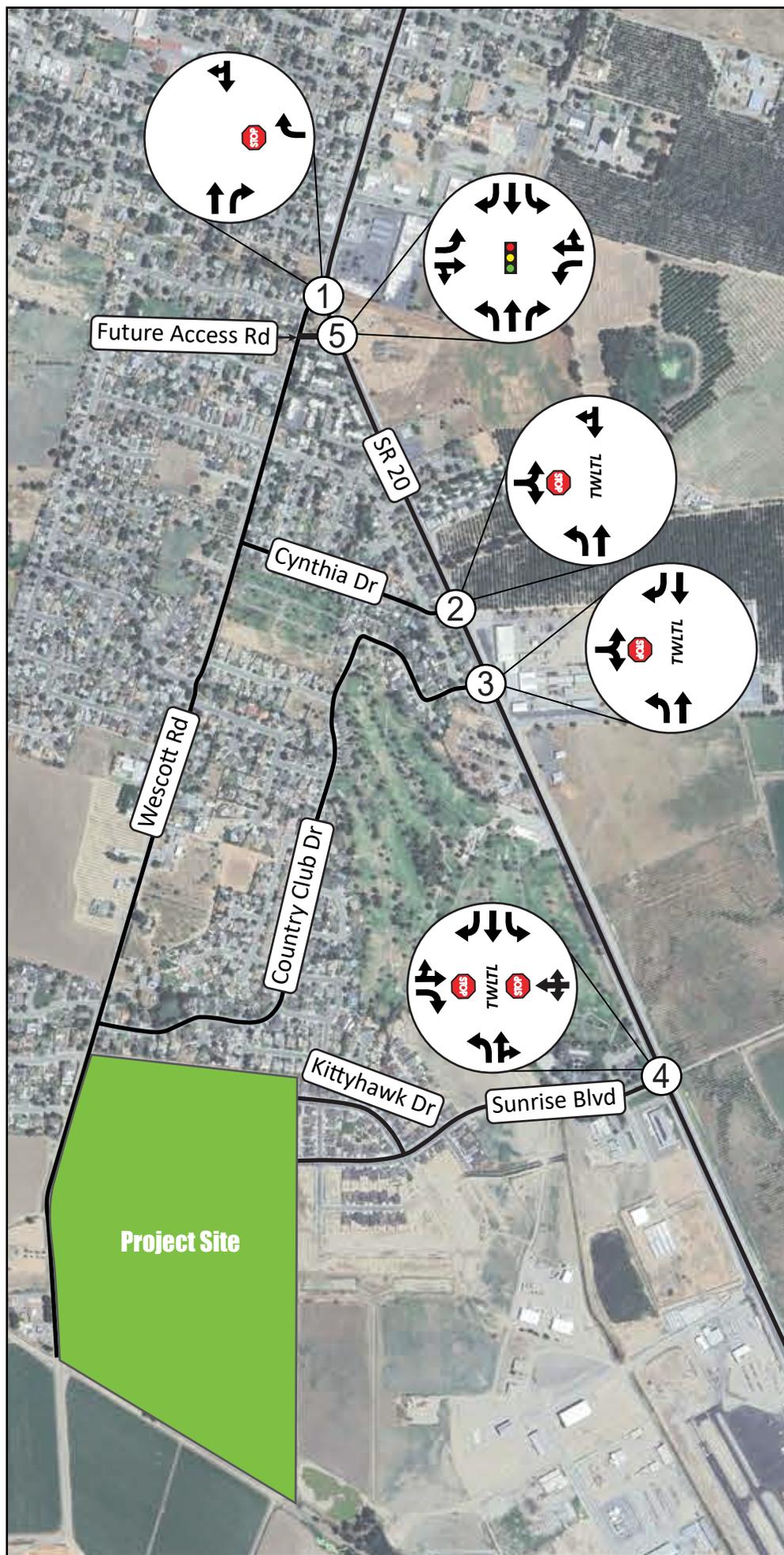
Int. ID	Intersection	Control	Baseline				Baseline Plus Project			
			AM		PM		AM		PM	
			Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1	SR 20/Wescott Rd	Side Street Stop								
	Westbound Right		15	B	13	B	16	C	13	B
2	SR 20/Cynthia Dr	Side Street Stop								
	Eastbound Approach		13	B	13	B	13	B	13	B
	Northbound Left		8	A	9	A	8	A	9	A
3	SR 20/County Club Dr	Side Street Stop								
	Eastbound Approach		13	B	13	B	13	B	13	B
	Northbound Left		8	A	9	A	8	A	9	A
4	SR 20/Sunrise Blvd	Side Street Stop								
	Eastbound Approach		14	B	14	B	14	B	15	C
	Westbound Approach		0	A	0	A	0	A	0	A
	Northbound Left		8	A	9	A	9	A	9	A
	Southbound Left		0	A	0	A	0	A	0	A
5	SR 20/Future Access Rd	Signal								
	Overall		20	C	18	B	24	C	20	B

Notes: 1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop controlled intersections, and for the overall intersection for signalized intersections.

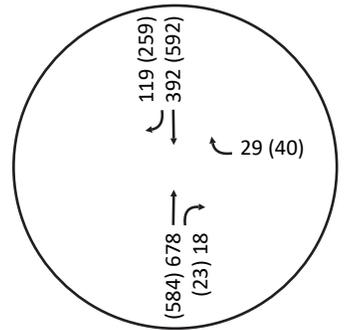
Source: Headway Transportation, 2023

As shown in the table, the study intersections are expected to operate at LOS C or better (within level of service thresholds) with project traffic.

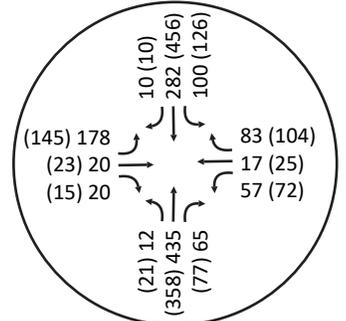




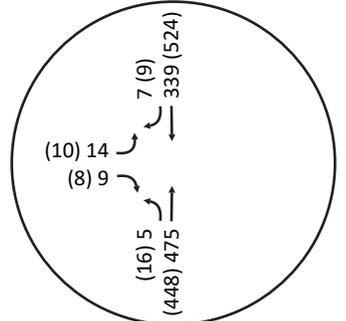
① SR 20 / Wescott Rd



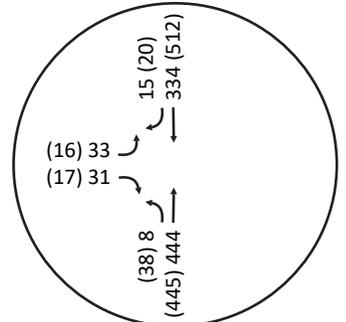
⑤ SR 20 / Future Access Rd



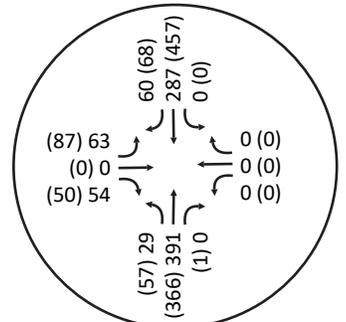
② SR 20 / Cynthia Dr



③ SR 20 / Country Club Dr



④ SR 20 / Sunrise Blvd



FUTURE YEAR CONDITIONS

The Future Year analysis estimates operating conditions for the 20 year horizon. The Future Year analysis includes the Wescott Road Retail Center project, as detailed in the “Baseline Conditions” section of this report.

Traffic Volume Forecasts

The following steps were taken to develop Future Year background traffic volumes for the study intersections:

1. The *Traffic Impact Analysis for SR 20/Wescott Road Retail Center* (KD Anderson & Associates, Inc., January 2020) was used as a starting point.
2. Future Year traffic volumes were developed for the retail center project using the City’s Transportation Master Plan traffic model. The model and land use assumptions used in the analysis did not include the Wescott Ranch project
3. The Future Year Plus Project traffic volumes from the retail center analysis were used as the Future Year (no project) traffic volumes for this project.
4. The Future Year through movement volumes on SR 20 were compared to the existing traffic counts to determine an annual growth rate based on 20 years of growth. Any Future Year through movement volume on SR 20 that had less than 2 percent per year growth was increased based on a 2 percent annual growth rate.
5. All side street and left and right-turn volumes were rounded up to the nearest 5 vehicles.
6. Volumes were balanced between intersections where needed.

Figure 8 shows the Future Year (no project) traffic volumes at the study intersections.

Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on Future Year traffic volumes and the lane configurations and controls shown on **Figure 8** (which are the same as Baseline conditions). **Table 6** shows the Future Year conditions level of service results and the technical calculations are provided in **Appendix G**.



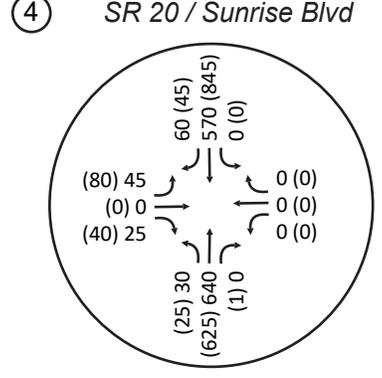
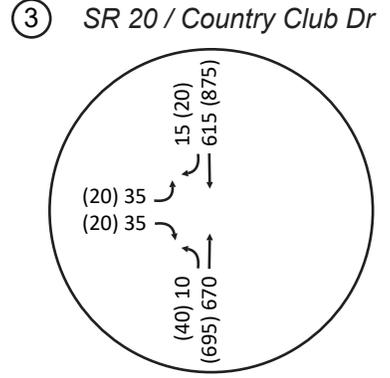
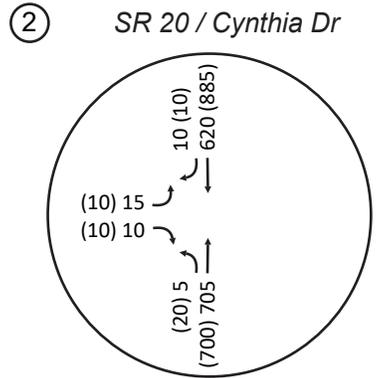
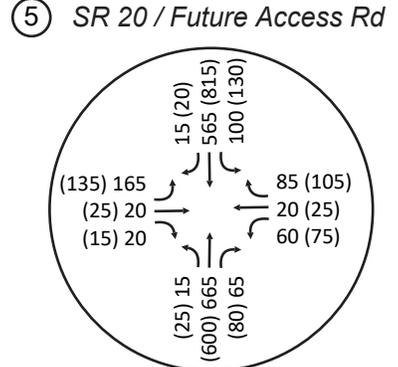
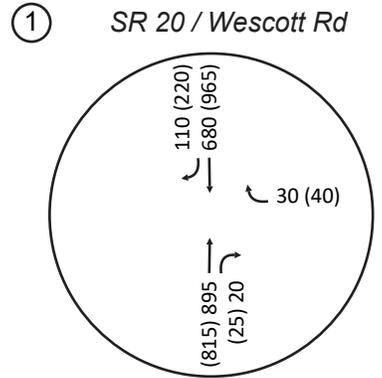
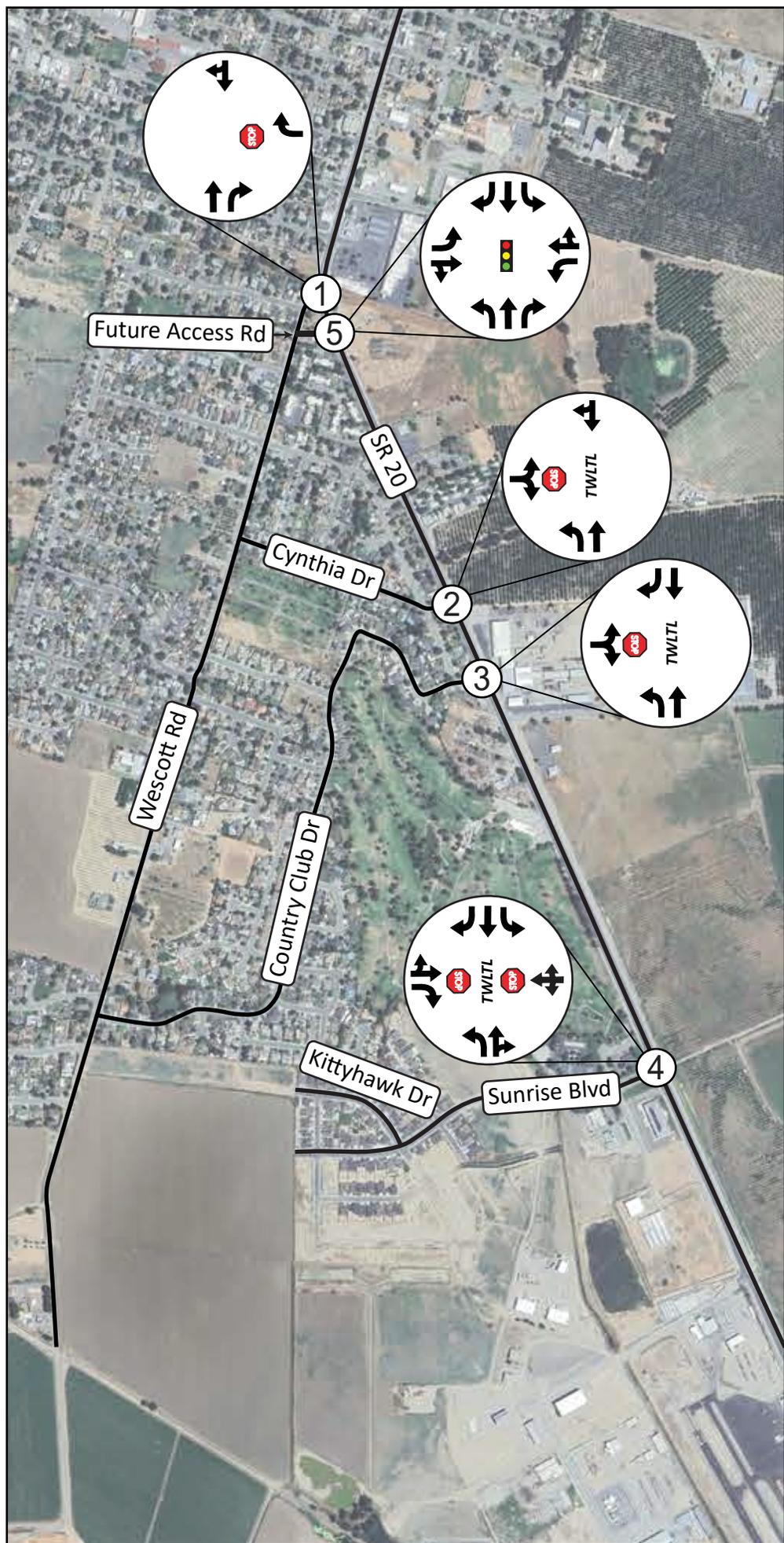


Table 6: Future Year Intersection Level of Service

Int. ID	Intersection	Control	AM		PM	
			Delay ¹	LOS	Delay ¹	LOS
1	SR 20/Wescott Rd	Side Street Stop				
	Westbound Right		22	C	17	C
2	SR 20/Cynthia Dr	Side Street Stop				
	Eastbound Approach		17	C	18	C
	Northbound Left		10	A	10	B
3	SR 20/County Club Dr	Side Street Stop				
	Eastbound Approach		19	C	19	C
	Northbound Left		10	A	10	B
4	SR 20/Sunrise Blvd	Side Street Stop				
	Eastbound Approach		21	C	23	C
	Westbound Approach		0	A	0	A
	Northbound Left		10	A	10	A
	Southbound Left		0	A	0	A
5	SR 20/Future Access Rd	Signal				
	Overall		33	C	28	C

Notes: 1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop controlled intersections, and for the overall intersection for signalized intersections.

Source: Headway Transportation, 2023

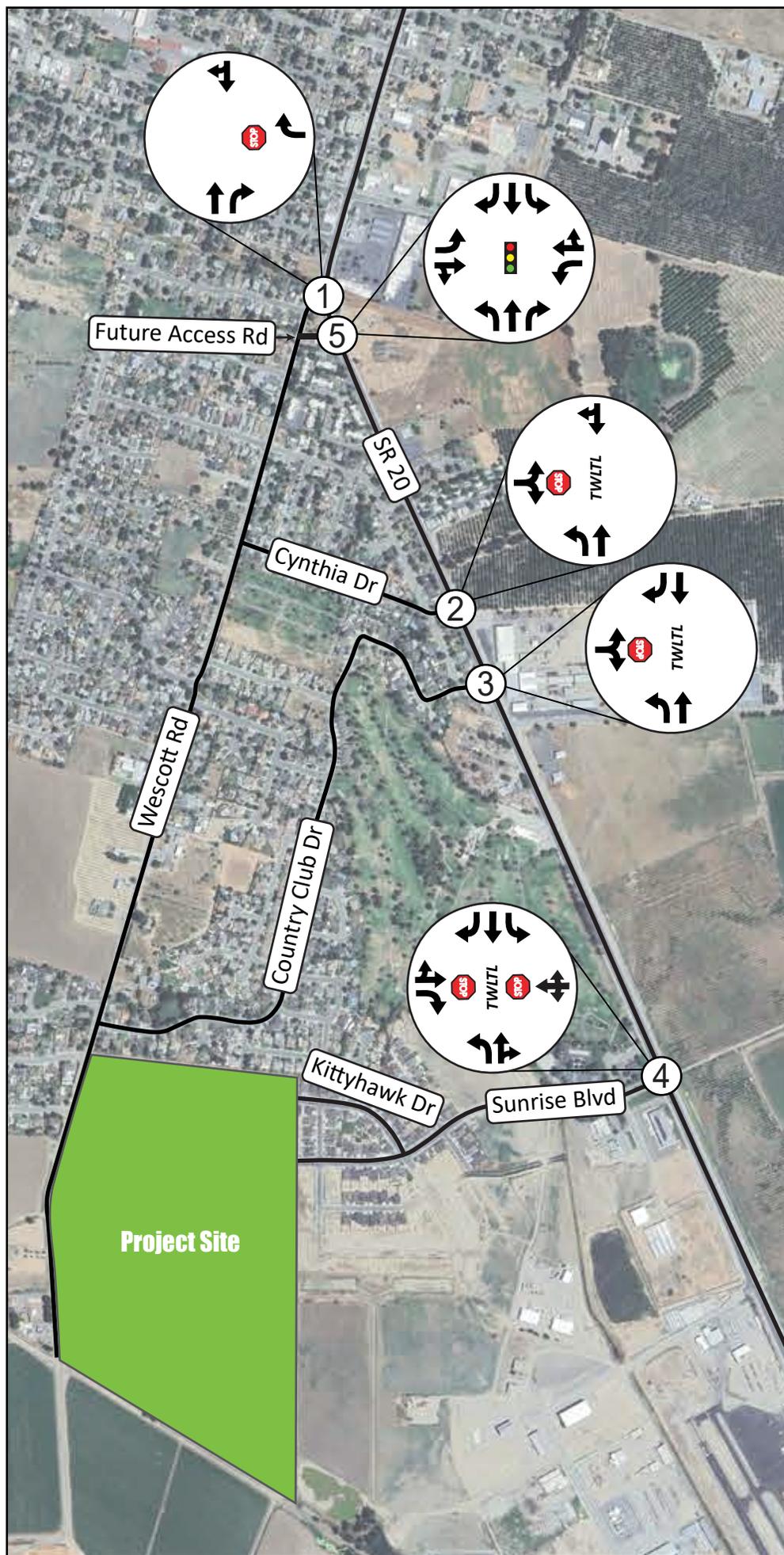
As shown in the table, the study intersections are expected to operate at LOS C or better (within policy level of service thresholds) during the AM and PM peak hours under Future Year (no project) conditions.

FUTURE YEAR PLUS PROJECT CONDITIONS

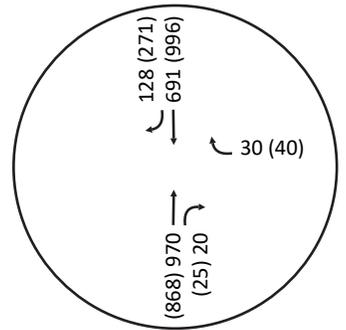
Traffic Volumes

Project trips (**Figure 6**) were added to the Future Year traffic volumes (**Figure 8**) to develop the Future Year Plus Project traffic volumes, shown on **Figure 9**.

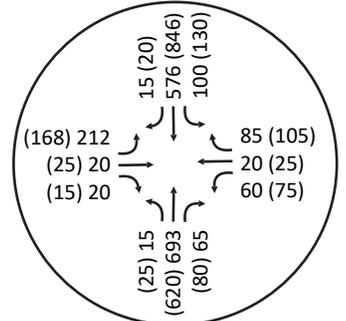




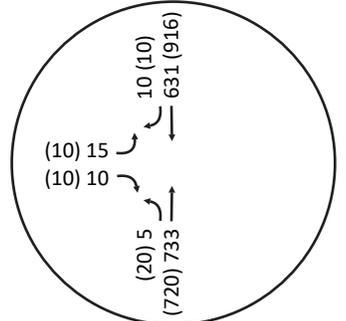
① SR 20 / Wescott Rd



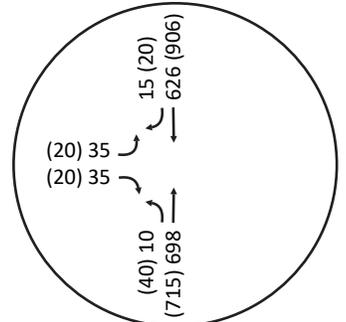
⑤ SR 20 / Future Access Rd



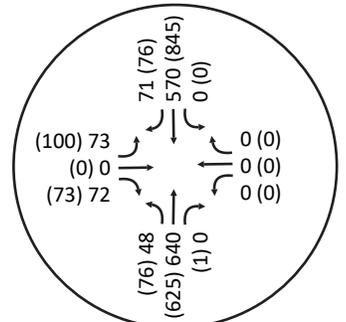
② SR 20 / Cynthia Dr



③ SR 20 / Country Club Dr



④ SR 20 / Sunrise Blvd



Intersection Level of Service

AM and PM peak hour intersection level of service analysis was performed for the study intersections based on the Future Year Plus Project traffic volumes and intersection lane configurations and controls shown on **Figure 9**. **Table 7** shows the level of service results and the technical calculations are provided in **Appendix H**.

Table 7: Future Year Plus Project Intersection Level of Service

Int. ID	Intersection	Control	Future Year				Future Year Plus Project			
			AM		PM		AM		PM	
			Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS	Delay ¹	LOS
1	SR 20/Wescott Rd	Side Street Stop								
	Westbound Right		22	C	17	C	25	C	18	C
2	SR 20/Cynthia Dr	Side								
	Eastbound Approach	Street	17	C	18	C	18	C	21	C
	Northbound Left	Stop	10	A	10	B	10	A	10	B
3	SR 20/County Club Dr	Side								
	Eastbound Approach	Street	19	C	19	C	20	C	23	C
	Northbound Left	Stop	10	A	10	B	10	A	11	B
4	SR 20/Sunrise Blvd	Side Street Stop								
	Eastbound Approach		21	C	23	C	24	C	28	D
	Westbound Approach		0	A	0	A	0	A	0	A
	Northbound Left		10	A	10	A	10	A	11	B
	Southbound Left		0	A	0	A	0	A	0	A
5	SR 20/Future Access Rd	Signal								
	Overall		33	C	28	C	42	D	34	C

Notes: 1. Delay is reported in seconds per vehicle for the worst approach/movement for side street stop controlled intersections, and for the overall intersection for signalized intersections.

Italicized font indicates level of service beyond policy thresholds.

Source: Headway Transportation, 2023

As shown in the table, the study intersections are expected to operate at LOS D or better (within level of service thresholds) during the AM and PM peak hours under Future Year Plus Project conditions.

CEQA THRESHOLDS OF SIGNIFICANCE

Based on criteria outlined in the CEQA Appendix G Environmental Checklist Form (included in **Appendix I**), the project would create a significant transportation impact if it would:

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



- ▶ Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), which addresses Vehicle Miles Traveled (VMT)
- ▶ Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- ▶ Result in inadequate emergency access

IMPACT ANALYSIS

Public Transit Evaluation

The project has the potential to incrementally increase demand for public transit, but the increase is not likely to cause or necessitate changes to the transit system or facilities. The project would not conflict with any public transit programs or plans. Therefore, the project would have a less-than-significant impact on public transit.

Alternative Transportation Mode Evaluation

The project has the potential to incrementally increase bicycle and pedestrian activity within and around the project site. As discussed in the “Existing Conditions” section of this report, short segments of sidewalk exist on Wescott Road. The project should construct sidewalk along the project frontage on Wescott Road to maintain consistency and avoid creating gaps in the system. The project will also construct sidewalks internal to the site in accordance with City standards.

The project site also includes two cul-de-sacs in the northern portion of the project. The project should include bicycle/pedestrian connections between the southern ends of the cul-de-sacs and Sunrise Boulevard to provide better connectivity to the park and other destinations.

The City of Colusa *Bikeway Master Plan* (December 2012) “Existing and Proposed Bikeway” map includes a proposed Class I bikeway around the perimeter of the City with a portion of the path through the project site. The project site plan includes the proposed bike path through the site. The project should also construct Class II bicycle lanes on Wescott Road along the project frontage to complete a loop with the Class I bikeway.

The project would not conflict with the City’s multimodal (bicycle or pedestrian) transportation programs or plans (i.e. *Bikeway Master Plan*).

With construction of the City’s proposed Class I bike path through the project site, internal sidewalks per City standards, and sidewalk and Class II bicycle lanes along the project frontage on Wescott Road, the project would have a less-than-significant impact on bicycle or pedestrian travel.



Roadways / Vehicle Circulation Evaluation

The project would not conflict with any roadway programs, long-range planning, or vehicle circulation policies. Traffic operations, level of service, and delay are no longer considered environmental impacts under the current CEQA guidelines.

Therefore, the project would have a less-than-significant impact on roadway programs and vehicle circulation.

Vehicle Miles Traveled (VMT) Evaluation

The 2018 Colusa County Regional Transportation Plan (RTP) Update states:

Colusa County has experienced relative slow growth (less than 2% per year) in population and employment over the past two decades and is forecast to continue this trend through 2042. Based on this trend and the guidelines established in the California Transportation Commission's 2010 RTP Guidelines, the County is not required to run a network travel demand model to determine VMT. The guidelines cite the lack of road congestion and the fact that emission changes from higher MPG vehicles will continue to help the County comply with future emission caps established by the California Air Resources Board as part of AB 32. The County does monitor VMT levels through Caltrans VMT and Mileage Reports. In 1990, VMT per capita was approximately 21,800 annually in the county. In 2007, this number increased to 22,300 annually. In 2010, the per capita VMT was calculated to be 21,821, which was almost at 1990 levels. The County will continue to monitor population and employment and VMT growth to remain consistent with the RTP and the County's General Plan policies.

Based on the RTP guidelines and County/City policy regarding VMT, the project would have a less-than-significant impact on Vehicle Miles Traveled.

Design Feature Evaluation

Initial evaluation of the existing access routes to the Project does not indicate any incompatible uses or unusual conditions, and the Project will not introduce features significantly affecting safety. Any modifications at the project driveway will be in accordance with City of Colusa/Colusa County standards.

The project would have a less-than-significant impact related to safety and design features.

Emergency Access Evaluation

The Project includes multiple points of access on Wescott Road and Sunrise Boulevard to the external roadway network, which result in adequate emergency access. Therefore, the Project would have a less-than-significant impact related to emergency access.



No significant impacts related to transportation have been identified.

CONCLUSIONS

The following is a list of our key findings and recommendations:

- ▶ The proposed project consists of approximately 169 single family detached housing units, 156 single family attached housing units, 120 multifamily units, 12,750 square feet of retail space, and a 3.51 acre park and is anticipated to generate approximately 3,923 Daily, 271 AM peak hour, and 363 PM peak hour trips to the external roadway network. Any mix of land uses generating equal or fewer trips than the proposed uses could be constructed and covered by this Traffic Impact Study.
- ▶ Under Existing, Baseline, Baseline Plus Project, Future Year, and Future Year Plus Project conditions, the study intersections are expected to operate within policy level of service thresholds.
- ▶ The project would have a less-than-significant impact on public transit.
- ▶ The project should construct sidewalk and Class II bicycle lanes along the project frontage on Wescott Road to maintain consistency and avoid creating gaps in the bicycle and pedestrian network.
- ▶ The project will construct sidewalks internal to the site in accordance with City standards.
- ▶ The project site includes two cul-de-sacs in the northern portion of the project. The project should include bicycle/pedestrian connections between the southern ends of the cul-de-sacs and Sunrise Boulevard to provide better connectivity to the park and other destinations.
- ▶ The project site plan includes a Class I bikeway (part of a proposed bikeway included in the City of Colusa *Bikeway Master Plan*) through the site.
- ▶ The project would have a less-than-significant impact on alternative transportation modes.
- ▶ The project would have a less-than-significant impact on Vehicle Miles Traveled (VMT).
- ▶ The project would have a less-than-significant impact related to safety and design features.
- ▶ The project would have a less-than-significant impact related to emergency access.
- ▶ No significant impacts related to transportation have been identified.



Appendix A

Traffic Count Data Sheets

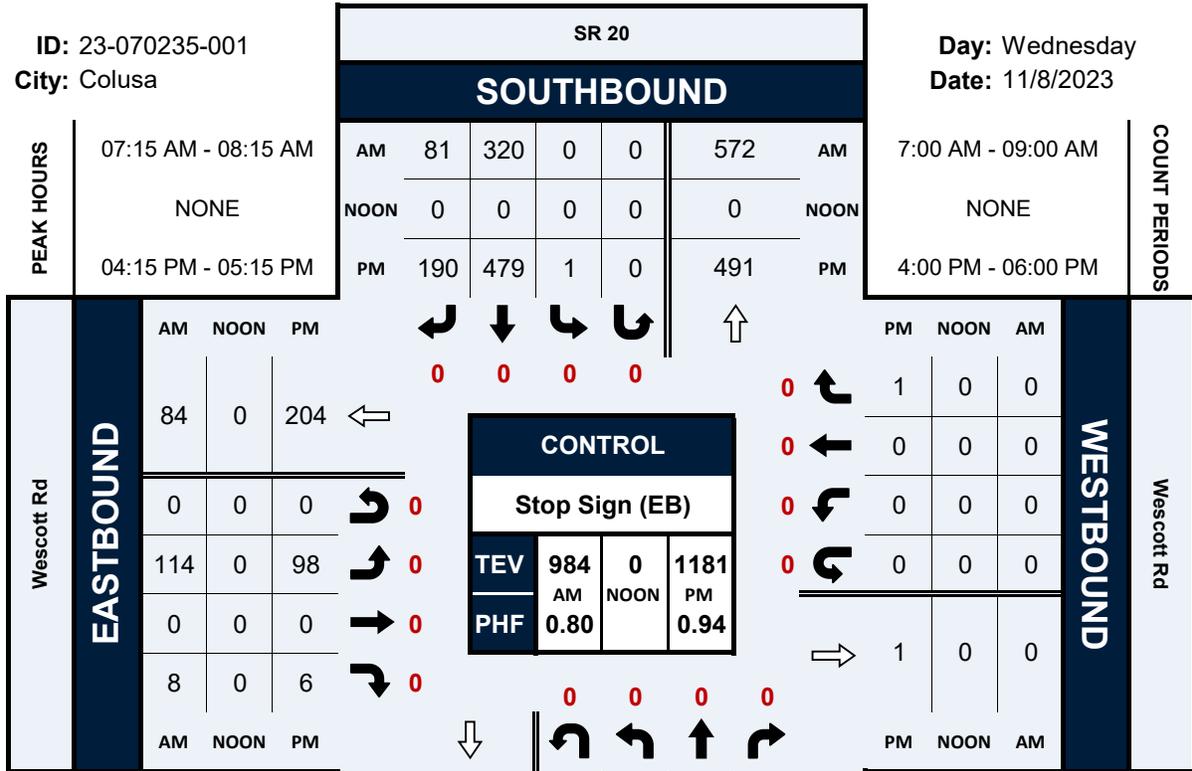


SR 20 & Wescott Rd

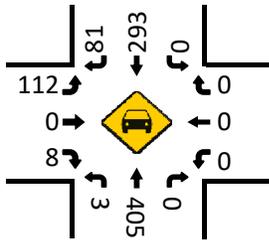
Peak Hour Turning Movement Count

ID: 23-070235-001
City: Colusa

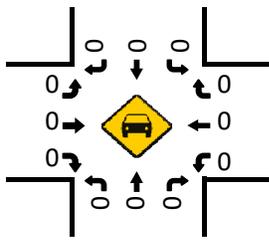
Day: Wednesday
Date: 11/8/2023



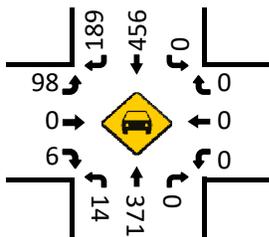
Cars (AM)



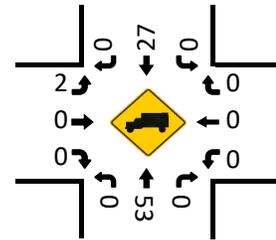
Cars (NOON)



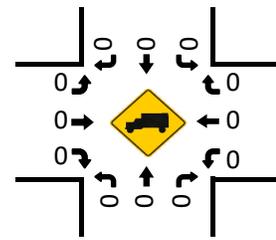
Cars (PM)



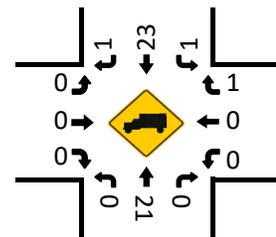
HT (AM)



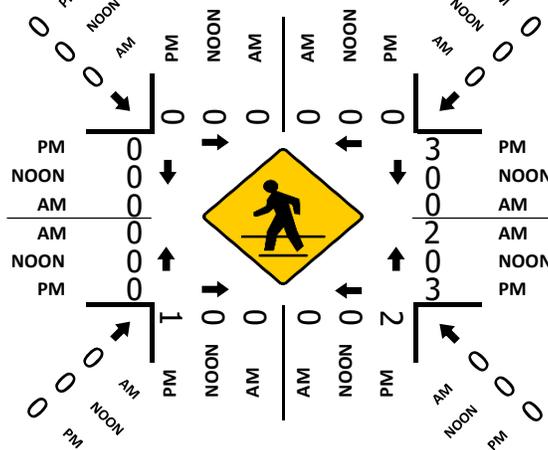
HT (NOON)



HT (PM)



Pedestrians (Crosswalks)

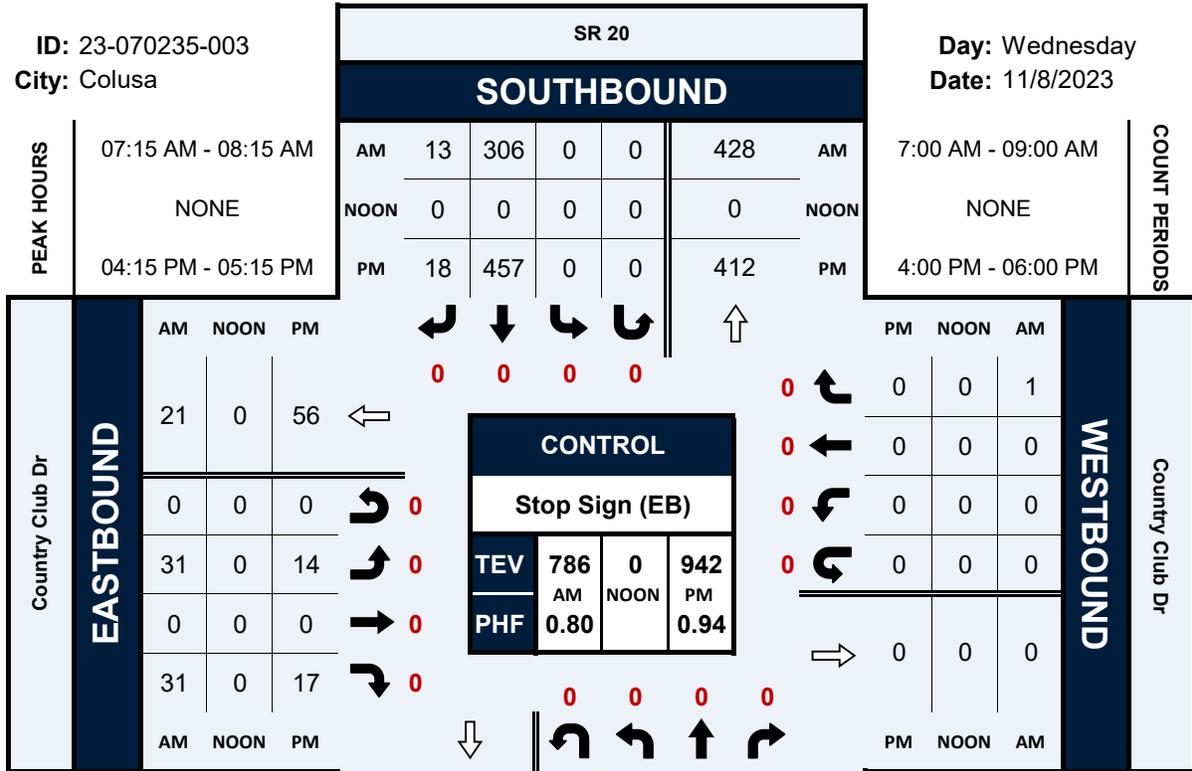


SR 20 & Country Club Dr

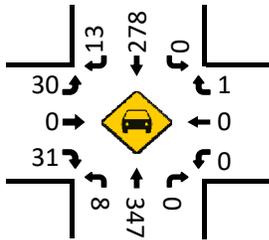
Peak Hour Turning Movement Count

ID: 23-070235-003
City: Colusa

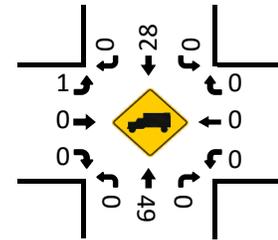
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Date: 11/8/2023



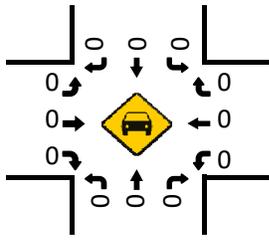
Cars (AM)



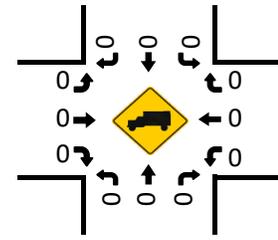
HT (AM)



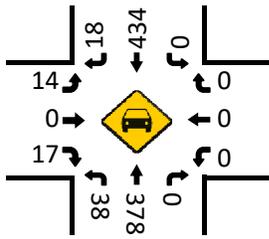
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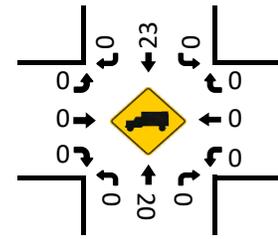
HT (NOON)



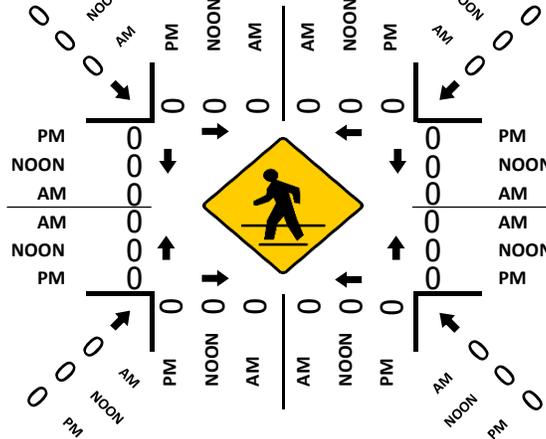
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)

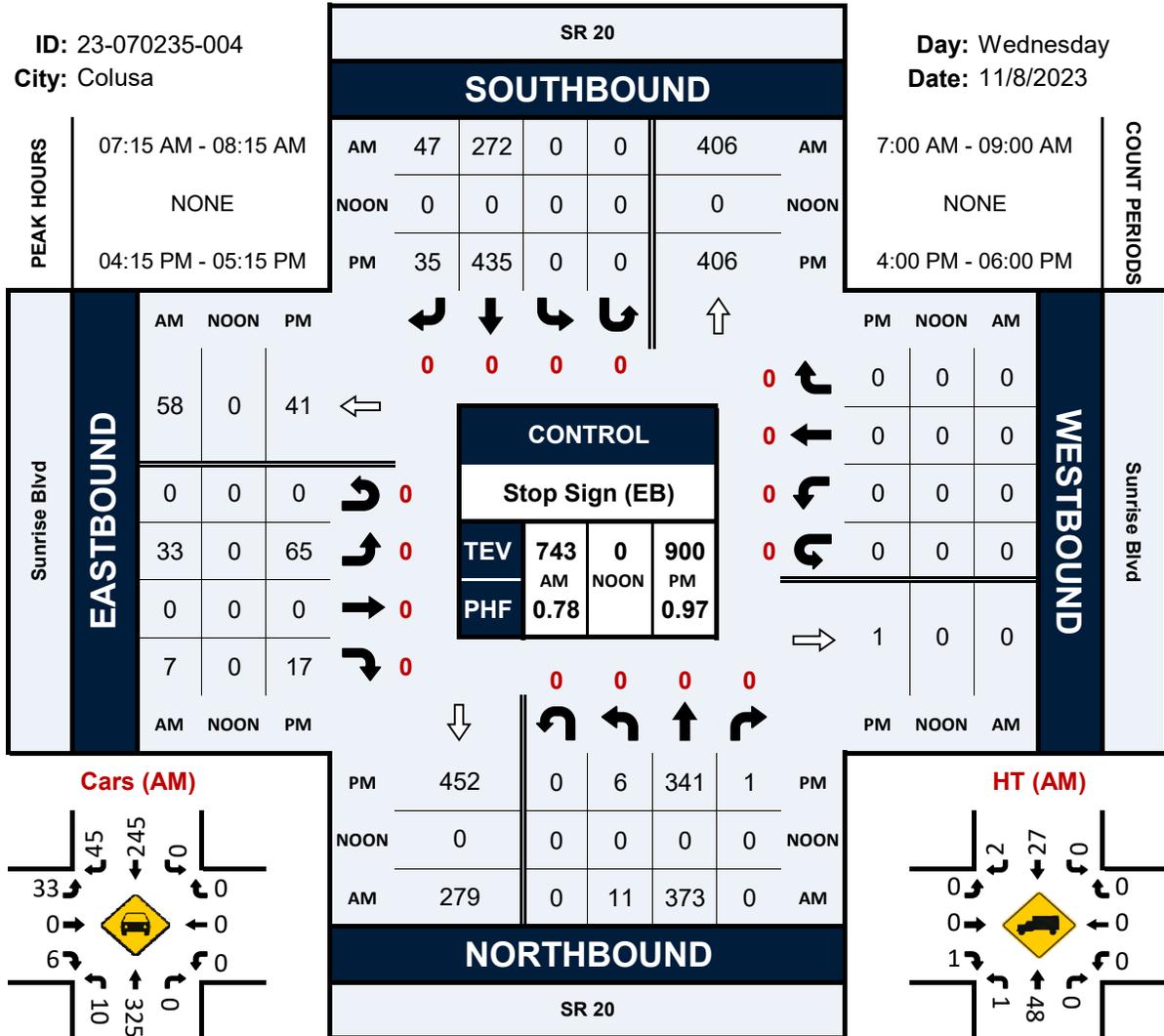


SR 20 & Sunrise Blvd

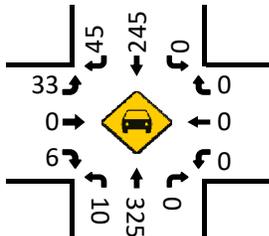
Peak Hour Turning Movement Count

ID: 23-070235-004
City: Colusa

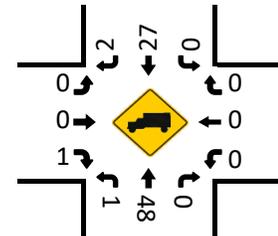
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Date: 11/8/2023



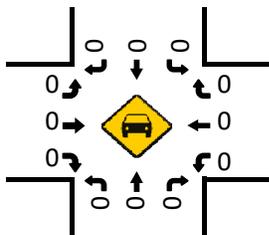
Cars (AM)



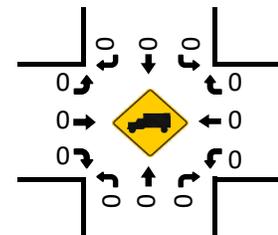
HT (AM)



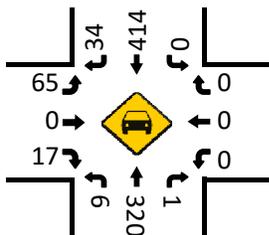
Cars (NOON)



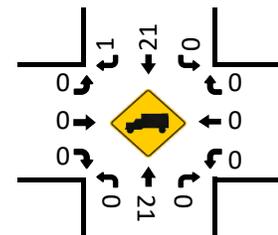
HT (NOON)



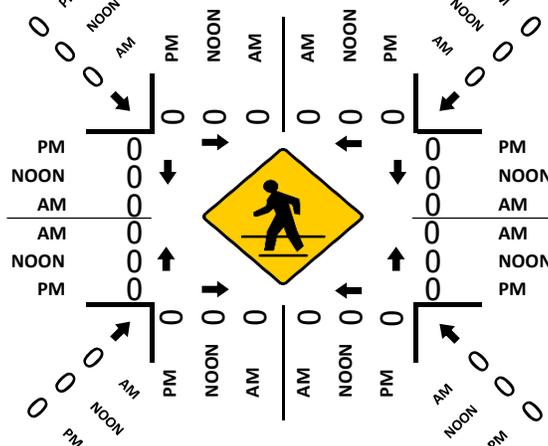
Cars (PM)



HT (PM)



Pedestrians (Crosswalks)



Appendix B

Existing LOS Calculations



Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	114	8	3	458	320	81
Future Vol, veh/h	114	8	3	458	320	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	143	10	4	573	400	101

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1032	451	400	0	0
Stage 1	451	-	-	-	-
Stage 2	581	-	-	-	-
Critical Hdwy	6.48	6.28	4.18	-	-
Critical Hdwy Stg 1	5.48	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-
Follow-up Hdwy	3.572	3.372	2.272	-	-
Pot Cap-1 Maneuver	251	596	1127	-	-
Stage 1	629	-	-	-	-
Stage 2	548	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	250	596	1127	-	-
Mov Cap-2 Maneuver	380	-	-	-	-
Stage 1	626	-	-	-	-
Stage 2	548	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.1	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1127	-	389	-	-
HCM Lane V/C Ratio	0.003	-	0.392	-	-
HCM Control Delay (s)	8.2	-	20.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	1.8	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	13	9	5	425	309	6
Future Vol, veh/h	13	9	5	425	309	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	16	11	6	538	391	8

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	945	395	399	0	0
Stage 1	395	-	-	-	-
Stage 2	550	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-
Pot Cap-1 Maneuver	281	637	1118	-	-
Stage 1	664	-	-	-	-
Stage 2	562	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	280	637	1118	-	-
Mov Cap-2 Maneuver	469	-	-	-	-
Stage 1	661	-	-	-	-
Stage 2	562	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1118	-	526	-	-
HCM Lane V/C Ratio	0.006	-	0.053	-	-
HCM Control Delay (s)	8.2	-	12.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘		↘	↑	↑	↘
Traffic Vol, veh/h	31	31	8	396	306	13
Future Vol, veh/h	31	31	8	396	306	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	39	39	10	495	383	16

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	898	383	399	0	-	0
Stage 1	383	-	-	-	-	-
Stage 2	515	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	300	647	1118	-	-	-
Stage 1	672	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	297	647	1118	-	-	-
Mov Cap-2 Maneuver	485	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	584	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1118	-	554	-	-
HCM Lane V/C Ratio	0.009	-	0.14	-	-
HCM Control Delay (s)	8.2	-	12.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↕	↗		↕	↖	↗
Traffic Vol, veh/h	33	0	7	0	0	0	11	373	0	0	272	47
Future Vol, veh/h	33	0	7	0	0	0	11	373	0	0	272	47
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	11	11	11	11	11	11	11	11	11	11	11	11
Mvmt Flow	42	0	9	0	0	0	14	478	0	0	349	60

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	855	855	349	885	915	478	409	0	0	478	0	0
Stage 1	349	349	-	506	506	-	-	-	-	-	-	-
Stage 2	506	506	-	379	409	-	-	-	-	-	-	-
Critical Hdwy	7.21	6.61	6.31	7.21	6.61	6.31	4.21	-	-	4.21	-	-
Critical Hdwy Stg 1	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Follow-up Hdwy	3.599	4.099	3.399	3.599	4.099	3.399	2.299	-	-	2.299	-	-
Pot Cap-1 Maneuver	268	286	674	256	263	569	1103	-	-	1039	-	-
Stage 1	649	618	-	532	525	-	-	-	-	-	-	-
Stage 2	532	525	-	625	581	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	265	282	674	250	260	569	1103	-	-	1039	-	-
Mov Cap-2 Maneuver	444	441	-	250	260	-	-	-	-	-	-	-
Stage 1	641	618	-	525	518	-	-	-	-	-	-	-
Stage 2	525	518	-	617	581	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.4	0	0.2	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1103	-	-	444	674	-	1039	-	-
HCM Lane V/C Ratio	0.013	-	-	0.095	0.013	-	-	-	-
HCM Control Delay (s)	8.3	-	-	14	10.4	0	0	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	-	0	-	-

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	98	6	14	392	479	190
Future Vol, veh/h	98	6	14	392	479	190
Conflicting Peds, #/hr	0	3	3	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Yield
Storage Length	0	-	150	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	104	6	15	417	510	202

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1061	617	513	0	-	0
Stage 1	614	-	-	-	-	-
Stage 2	447	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	246	486	1042	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	241	483	1039	-	-	-
Mov Cap-2 Maneuver	372	-	-	-	-	-
Stage 1	527	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1039	-	377	-	-
HCM Lane V/C Ratio	0.014	-	0.293	-	-
HCM Control Delay (s)	8.5	-	18.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	1.2	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	8	16	399	467	8
Future Vol, veh/h	9	8	16	399	467	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	10	9	17	424	497	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	960	502	506	0	-	0
Stage 1	502	-	-	-	-	-
Stage 2	458	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	281	563	1043	-	-	-
Stage 1	602	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	277	563	1043	-	-	-
Mov Cap-2 Maneuver	474	-	-	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	631	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1043	-	512	-	-
HCM Lane V/C Ratio	0.016	-	0.035	-	-
HCM Control Delay (s)	8.5	-	12.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	14	17	38	398	457	18
Future Vol, veh/h	14	17	38	398	457	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	15	18	40	423	486	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	989	486	505	0	-	0
Stage 1	486	-	-	-	-	-
Stage 2	503	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	270	575	1044	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	601	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	260	575	1044	-	-	-
Mov Cap-2 Maneuver	459	-	-	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	601	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1044	-	516	-	-
HCM Lane V/C Ratio	0.039	-	0.064	-	-
HCM Control Delay (s)	8.6	-	12.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

HCM 6th TWSC
4: SR 20 & Sunrise Blvd

Existing Conditions
PM Peak Hour

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↖	↗		↖	↕	↗
Traffic Vol, veh/h	65	0	17	0	0	0	6	341	1	0	435	35
Future Vol, veh/h	65	0	17	0	0	0	6	341	1	0	435	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	67	0	18	0	0	0	6	352	1	0	448	36

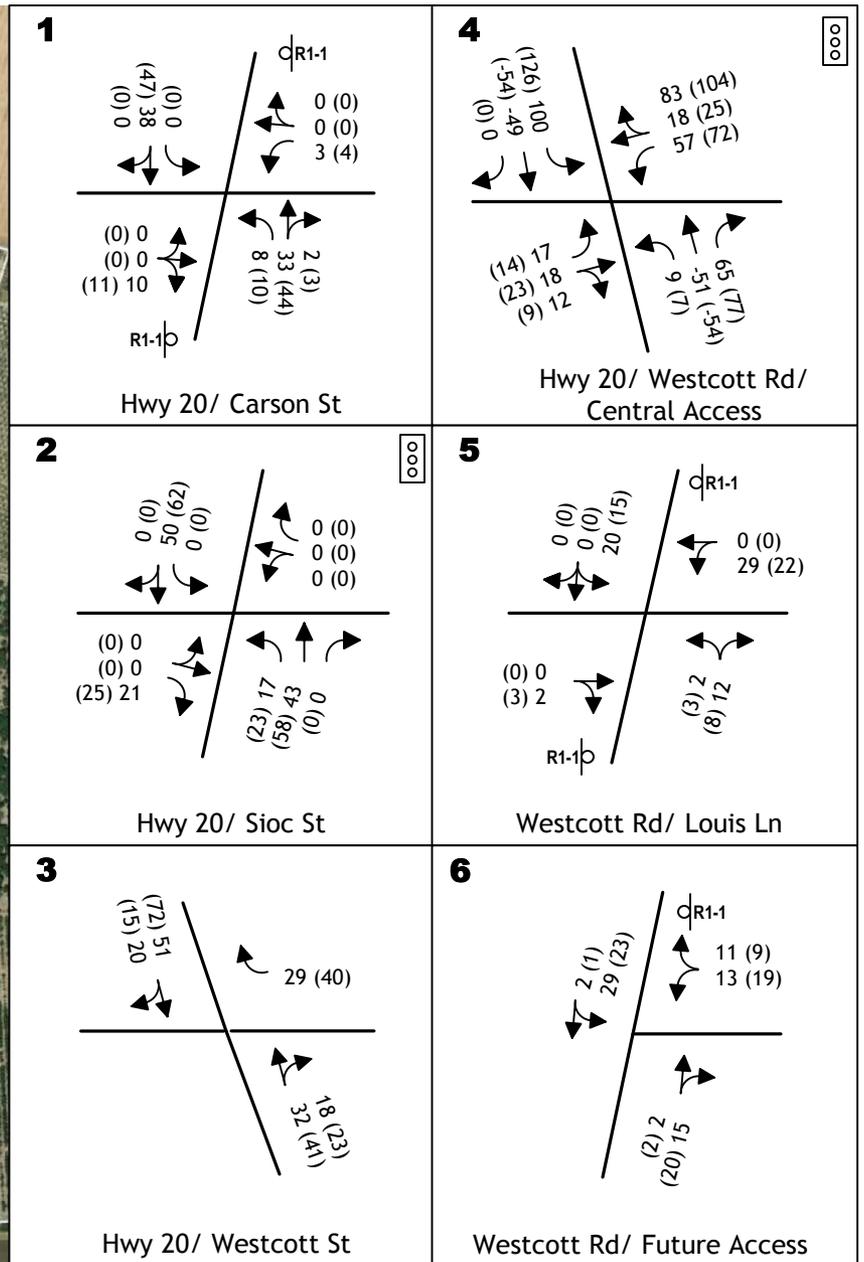
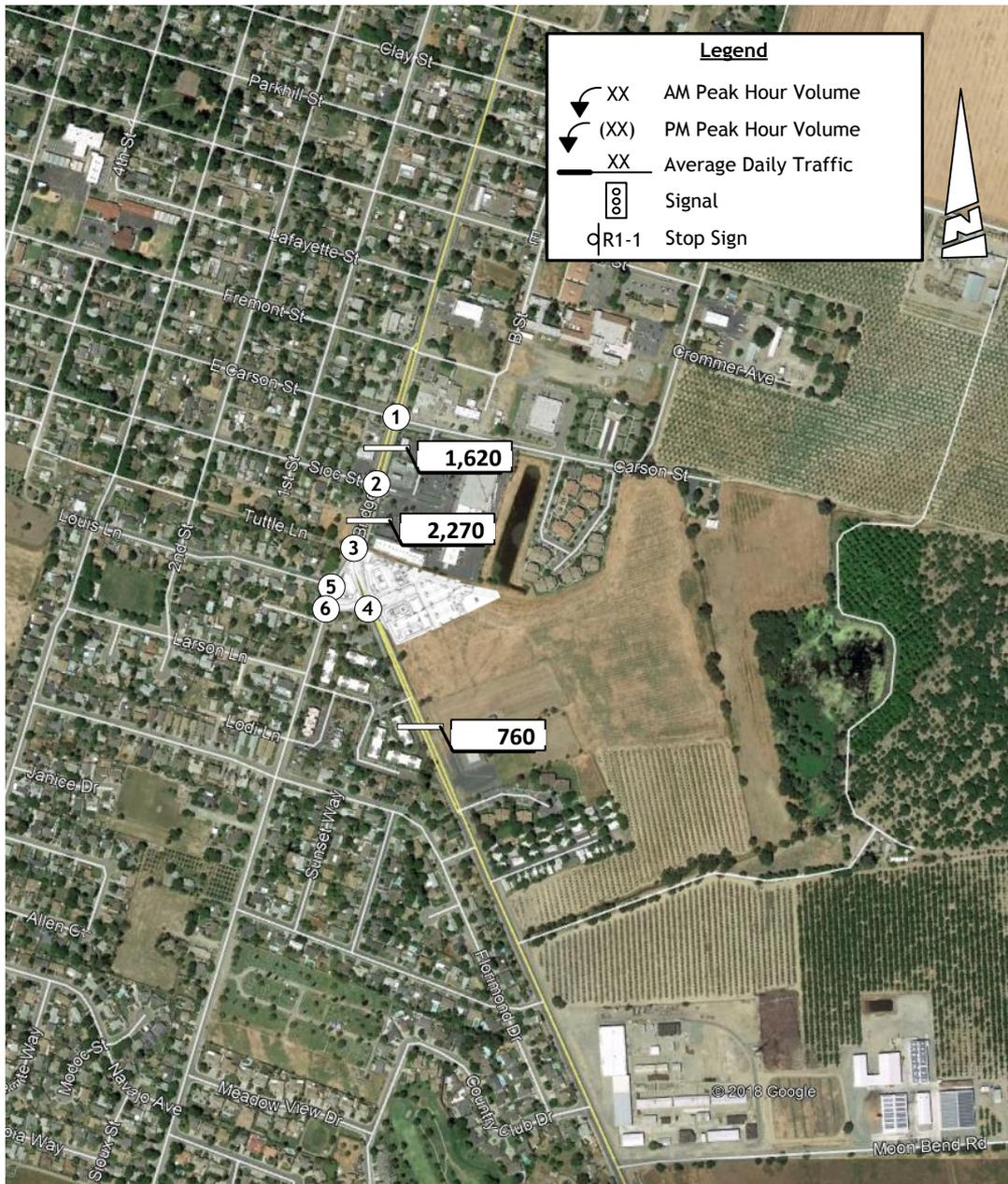
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	813	813	448	831	849	353	484	0	0	353	0	0
Stage 1	448	448	-	365	365	-	-	-	-	-	-	-
Stage 2	365	365	-	466	484	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	294	309	604	285	295	684	1063	-	-	1189	-	-
Stage 1	584	568	-	648	618	-	-	-	-	-	-	-
Stage 2	648	618	-	571	547	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	293	307	604	276	293	684	1063	-	-	1189	-	-
Mov Cap-2 Maneuver	477	470	-	276	293	-	-	-	-	-	-	-
Stage 1	580	568	-	644	614	-	-	-	-	-	-	-
Stage 2	644	614	-	554	547	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	0	0.1	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1063	-	-	477	604	-	1189	-	-
HCM Lane V/C Ratio	0.006	-	-	0.14	0.029	-	-	-	-
HCM Control Delay (s)	8.4	-	-	13.8	11.1	0	0	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	-	0	-	-

Appendix C
SR 20/Wescott Road Retail Center
Traffic Information





Appendix D

Baseline LOS Calculations



Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↑	↖		↘	
Traffic Vol, veh/h	0	0	0	0	0	29	0	603	18	0	381	101
Future Vol, veh/h	0	0	0	0	0	29	0	603	18	0	381	101
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	8	2	8	2	2	2	8	8	2	2	8	8
Mvmt Flow	0	0	0	0	0	36	0	754	23	0	476	126

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	-	754
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.22
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.318
Pot Cap-1 Maneuver	0	0	409
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	0	409
Mov Cap-2 Maneuver	-	0	-
Stage 1	-	0	-
Stage 2	-	0	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT	SBR
Capacity (veh/h)	-	-	409	-
HCM Lane V/C Ratio	-	-	0.089	-
HCM Control Delay (s)	-	-	14.7	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	14	9	5	447	328	7
Future Vol, veh/h	14	9	5	447	328	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	18	11	6	566	415	9

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	998	420	424	0	-	0
Stage 1	420	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	261	617	1094	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	260	617	1094	-	-	-
Mov Cap-2 Maneuver	453	-	-	-	-	-
Stage 1	643	-	-	-	-	-
Stage 2	546	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1094	-	506	-	-
HCM Lane V/C Ratio	0.006	-	0.058	-	-
HCM Control Delay (s)	8.3	-	12.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	Y
Traffic Vol, veh/h	33	31	8	416	323	15
Future Vol, veh/h	33	31	8	416	323	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	41	39	10	520	404	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	944	404	423	0	-	0
Stage 1	404	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	281	630	1095	-	-	-
Stage 1	657	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	278	630	1095	-	-	-
Mov Cap-2 Maneuver	469	-	-	-	-	-
Stage 1	651	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1095	-	535	-	-
HCM Lane V/C Ratio	0.009	-	0.15	-	-
HCM Control Delay (s)	8.3	-	12.9	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↕	↗		↕	↖	↗
Traffic Vol, veh/h	35	0	7	0	0	0	11	391	0	0	287	49
Future Vol, veh/h	35	0	7	0	0	0	11	391	0	0	287	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	11	11	11	11	11	11	11	11	11	11	11	11
Mvmt Flow	45	0	9	0	0	0	14	501	0	0	368	63

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	897	897	368	929	960	501	431	0	0	501	0	0
Stage 1	368	368	-	529	529	-	-	-	-	-	-	-
Stage 2	529	529	-	400	431	-	-	-	-	-	-	-
Critical Hdwy	7.21	6.61	6.31	7.21	6.61	6.31	4.21	-	-	4.21	-	-
Critical Hdwy Stg 1	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Follow-up Hdwy	3.599	4.099	3.399	3.599	4.099	3.399	2.299	-	-	2.299	-	-
Pot Cap-1 Maneuver	251	270	658	239	248	552	1082	-	-	1018	-	-
Stage 1	634	606	-	517	513	-	-	-	-	-	-	-
Stage 2	517	513	-	609	568	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	248	266	658	234	245	552	1082	-	-	1018	-	-
Mov Cap-2 Maneuver	429	429	-	234	245	-	-	-	-	-	-	-
Stage 1	626	606	-	510	506	-	-	-	-	-	-	-
Stage 2	510	506	-	601	568	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.7	0	0.2	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1082	-	-	429	658	-	1018	-	-
HCM Lane V/C Ratio	0.013	-	-	0.105	0.014	-	-	-	-
HCM Control Delay (s)	8.4	-	-	14.4	10.5	0	0	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0	-	0	-	-

HCM 6th Signalized Intersection Summary
5: SR 20 & Future Access Rd

Baseline Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	20	20	57	17	83	12	407	65	100	271	10
Future Volume (veh/h)	131	20	20	57	17	83	12	407	65	100	271	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	25	25	71	21	104	15	509	81	125	339	12
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	212	150	150	108	32	157	33	641	543	162	776	658
Arrive On Green	0.12	0.17	0.17	0.06	0.12	0.12	0.02	0.34	0.34	0.09	0.42	0.42
Sat Flow, veh/h	1781	858	858	1781	273	1353	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	164	0	50	71	0	125	15	509	81	125	339	12
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	0	1627	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.8	0.0	1.3	2.1	0.0	4.0	0.5	13.3	1.9	3.7	7.0	0.2
Cycle Q Clear(g_c), s	4.8	0.0	1.3	2.1	0.0	4.0	0.5	13.3	1.9	3.7	7.0	0.2
Prop In Lane	1.00		0.50	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	0	300	108	0	189	33	641	543	162	776	658
V/C Ratio(X)	0.77	0.00	0.17	0.66	0.00	0.66	0.45	0.79	0.15	0.77	0.44	0.02
Avail Cap(c_a), veh/h	425	0	704	287	0	542	165	1083	918	326	1252	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	0.0	19.0	24.8	0.0	22.9	26.3	16.1	12.3	24.0	11.3	9.3
Incr Delay (d2), s/veh	5.9	0.0	0.3	6.6	0.0	3.9	9.3	2.3	0.1	7.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.5	1.0	0.0	1.6	0.3	5.3	0.6	1.8	2.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	0.0	19.2	31.5	0.0	26.8	35.5	18.3	12.4	31.5	11.7	9.3
LnGrp LOS	C	A	B	C	A	C	D	B	B	C	B	A
Approach Vol, veh/h		214			196			605			476	
Approach Delay, s/veh		26.7			28.5			18.0			16.8	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	23.6	7.4	14.0	5.1	27.5	10.5	10.9				
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6				
Max Green Setting (Gmax), s	9.9	31.3	8.7	22.2	5.0	36.2	12.9	18.0				
Max Q Clear Time (g_c+I1), s	5.7	15.3	4.1	3.3	2.5	9.0	6.8	6.0				
Green Ext Time (p_c), s	0.1	3.2	0.0	0.2	0.0	2.2	0.2	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				20.3								
HCM 6th LOS				C								

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↑	↘		↖	
Traffic Vol, veh/h	0	0	0	0	0	40	0	531	23	0	561	208
Future Vol, veh/h	0	0	0	0	0	40	0	531	23	0	561	208
Conflicting Peds, #/hr	0	0	3	0	0	0	3	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	2	4	2	2	2	4	4	2	2	4	4
Mvmt Flow	0	0	0	0	0	43	0	565	24	0	597	221

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	-	565
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.22
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.318
Pot Cap-1 Maneuver	0	0	524
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	0	524
Mov Cap-2 Maneuver	-	0	-
Stage 1	-	0	-
Stage 2	-	0	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT	SBR
Capacity (veh/h)	-	-	524	-
HCM Lane V/C Ratio	-	-	0.081	-
HCM Control Delay (s)	-	-	12.5	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑	↑	
Traffic Vol, veh/h	10	8	16	428	493	9
Future Vol, veh/h	10	8	16	428	493	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	11	9	17	455	524	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1018	529	534	0	-	0
Stage 1	529	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	260	544	1019	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	610	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	256	544	1019	-	-	-
Mov Cap-2 Maneuver	455	-	-	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	610	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1019	-	491	-	-
HCM Lane V/C Ratio	0.017	-	0.039	-	-
HCM Control Delay (s)	8.6	-	12.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗		↘	↑	↑	↘
Traffic Vol, veh/h	16	17	38	425	481	20
Future Vol, veh/h	16	17	38	425	481	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	17	18	40	452	512	21

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1044	512	533	0	-	0
Stage 1	512	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	250	556	1020	-	-	-
Stage 1	596	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	240	556	1020	-	-	-
Mov Cap-2 Maneuver	442	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	583	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1020	-	494	-	-
HCM Lane V/C Ratio	0.04	-	0.071	-	-
HCM Control Delay (s)	8.7	-	12.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔	↔		↔		↔	↔		↔	↔	↔
Traffic Vol, veh/h	67	0	17	0	0	0	6	366	1	0	457	37
Future Vol, veh/h	67	0	17	0	0	0	6	366	1	0	457	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	69	0	18	0	0	0	6	377	1	0	471	38

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	861	861	471	880	899	378	509	0	0	378	0	0
Stage 1	471	471	-	390	390	-	-	-	-	-	-	-
Stage 2	390	390	-	490	509	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	272	290	587	264	275	662	1041	-	-	1164	-	-
Stage 1	568	554	-	628	602	-	-	-	-	-	-	-
Stage 2	628	602	-	554	533	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	271	288	587	255	273	662	1041	-	-	1164	-	-
Mov Cap-2 Maneuver	460	454	-	255	273	-	-	-	-	-	-	-
Stage 1	565	554	-	624	598	-	-	-	-	-	-	-
Stage 2	624	598	-	537	533	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.6	0	0.1	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1041	-	-	460	587	-	1164	-	-
HCM Lane V/C Ratio	0.006	-	-	0.15	0.03	-	-	-	-
HCM Control Delay (s)	8.5	-	-	14.2	11.3	0	0	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.5	0.1	-	0	-	-

HCM 6th Signalized Intersection Summary
5: SR 20 & Future Access Rd

Baseline Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	23	15	72	25	104	21	338	77	126	425	10
Future Volume (veh/h)	112	23	15	72	25	104	21	338	77	126	425	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	122	25	16	78	27	113	23	367	84	137	462	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	163	104	124	42	175	50	515	437	180	653	553
Arrive On Green	0.09	0.15	0.15	0.07	0.13	0.13	0.03	0.28	0.28	0.10	0.35	0.35
Sat Flow, veh/h	1781	1066	682	1781	315	1318	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	122	0	41	78	0	140	23	367	84	137	462	11
Grp Sat Flow(s),veh/h/ln	1781	0	1748	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.0	0.0	0.9	1.9	0.0	3.6	0.6	7.9	1.8	3.3	9.5	0.2
Cycle Q Clear(g_c), s	3.0	0.0	0.9	1.9	0.0	3.6	0.6	7.9	1.8	3.3	9.5	0.2
Prop In Lane	1.00		0.39	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	0	268	124	0	217	50	515	437	180	653	553
V/C Ratio(X)	0.76	0.00	0.15	0.63	0.00	0.64	0.46	0.71	0.19	0.76	0.71	0.02
Avail Cap(c_a), veh/h	474	0	798	379	0	658	215	1226	1039	514	1540	1305
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	0.0	16.4	20.2	0.0	18.4	21.4	14.6	12.4	19.6	12.6	9.5
Incr Delay (d2), s/veh	7.3	0.0	0.3	5.2	0.0	3.2	6.6	1.8	0.2	6.4	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.3	0.9	0.0	1.4	0.3	3.0	0.6	1.5	3.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.0	16.7	25.5	0.0	21.6	28.0	16.4	12.6	26.0	14.0	9.5
LnGrp LOS	C	A	B	C	A	C	C	B	B	C	B	A
Approach Vol, veh/h		163			218			474			610	
Approach Delay, s/veh		24.6			23.0			16.3			16.6	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	8.6	17.4	7.2	11.4	5.3	20.7	8.1	10.5				
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6				
Max Green Setting (Gmax), s	12.9	29.3	9.5	20.4	5.4	36.8	11.9	18.0				
Max Q Clear Time (g_c+I1), s	5.3	9.9	3.9	2.9	2.6	11.5	5.0	5.6				
Green Ext Time (p_c), s	0.2	2.4	0.1	0.1	0.0	3.1	0.1	0.6				
Intersection Summary												
HCM 6th Ctrl Delay				18.3								
HCM 6th LOS				B								

Appendix E

Trip Generation Calculations



Appendix E
 Trip Generation Calculations

Land Use	Size		Trip Rates							Trips						
			Daily	AM	AM In	AM Out	PM	PM In	PM Out	Daily	AM	AM In	AM Out	PM	PM In	PM Out
Single Family Detached Housing (210)	169	du	9.43	0.70	0.18	0.53	0.94	0.59	0.35	1594	118	30	89	159	100	59
Single Family Attached Housing (215)	156	du	7.2	0.48	0.12	0.36	0.57	0.34	0.23	1123	75	19	56	89	52	36
Multifamily Housing (220)	120	du	6.74	0.40	0.10	0.30	0.51	0.32	0.19	809	48	12	36	61	39	23
Public Park (411)	3.51	acres	0.78	0.02	0.01	0.01	0.11	0.06	0.05	3	0	0	0	0	0	0
Strip Retail Plaza (<40k) (822)	12.75	ksf	54.45	2.36	1.42	0.94	6.59	3.30	3.30	694	30	18	12	84	42	42
Total Trips										4223	271	79	193	393	233	160
Internal Capture										30	0	0	0	30	15	15
Net New Trips										4193	271	79	193	363	218	145

Appendix F

Baseline Plus Project LOS Calculations



Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↑	↖		↘	
Traffic Vol, veh/h	0	0	0	0	0	29	0	678	18	0	392	119
Future Vol, veh/h	0	0	0	0	0	29	0	678	18	0	392	119
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	8	2	8	2	2	2	8	8	2	2	8	8
Mvmt Flow	0	0	0	0	0	36	0	848	23	0	490	149

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	-	848
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.22
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.318
Pot Cap-1 Maneuver	0	0	361
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	0	361
Mov Cap-2 Maneuver	-	0	-
Stage 1	-	0	-
Stage 2	-	0	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT	SBR
Capacity (veh/h)	-	-	361	-
HCM Lane V/C Ratio	-	-	0.1	-
HCM Control Delay (s)	-	-	16.1	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	9	5	475	339	7
Future Vol, veh/h	14	9	5	475	339	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	79	79	79	79	79	79
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	18	11	6	601	429	9

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1047	434	438	0	0
Stage 1	434	-	-	-	-
Stage 2	613	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-
Pot Cap-1 Maneuver	244	605	1081	-	-
Stage 1	637	-	-	-	-
Stage 2	525	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	243	605	1081	-	-
Mov Cap-2 Maneuver	436	-	-	-	-
Stage 1	633	-	-	-	-
Stage 2	525	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1081	-	490	-	-
HCM Lane V/C Ratio	0.006	-	0.059	-	-
HCM Control Delay (s)	8.3	-	12.8	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘		↘	↑	↑	↘
Traffic Vol, veh/h	33	31	8	444	334	15
Future Vol, veh/h	33	31	8	444	334	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	41	39	10	555	418	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	993	418	437	0	-	0
Stage 1	418	-	-	-	-	-
Stage 2	575	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	263	618	1081	-	-	-
Stage 1	647	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	261	618	1081	-	-	-
Mov Cap-2 Maneuver	453	-	-	-	-	-
Stage 1	641	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1081	-	520	-	-
HCM Lane V/C Ratio	0.009	-	0.154	-	-
HCM Control Delay (s)	8.4	-	13.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↘		↗	↕	↗
Traffic Vol, veh/h	63	0	54	0	0	0	29	391	0	0	287	60
Future Vol, veh/h	63	0	54	0	0	0	29	391	0	0	287	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	11	11	11	11	11	11	11	11	11	11	11	11
Mvmt Flow	81	0	69	0	0	0	37	501	0	0	368	77

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	943	943	368	982	1020	501	445	0	0	501	0	0
Stage 1	368	368	-	575	575	-	-	-	-	-	-	-
Stage 2	575	575	-	407	445	-	-	-	-	-	-	-
Critical Hdwy	7.21	6.61	6.31	7.21	6.61	6.31	4.21	-	-	4.21	-	-
Critical Hdwy Stg 1	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Follow-up Hdwy	3.599	4.099	3.399	3.599	4.099	3.399	2.299	-	-	2.299	-	-
Pot Cap-1 Maneuver	234	254	658	220	228	552	1069	-	-	1018	-	-
Stage 1	634	606	-	488	489	-	-	-	-	-	-	-
Stage 2	488	489	-	603	560	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	228	245	658	192	220	552	1069	-	-	1018	-	-
Mov Cap-2 Maneuver	402	406	-	192	220	-	-	-	-	-	-	-
Stage 1	612	606	-	471	472	-	-	-	-	-	-	-
Stage 2	471	472	-	540	560	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.8	0	0.6	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1069	-	-	402	658	-	1018	-	-
HCM Lane V/C Ratio	0.035	-	-	0.201	0.105	-	-	-	-
HCM Control Delay (s)	8.5	-	-	16.2	11.1	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.4	-	0	-	-

HCM 6th Signalized Intersection Summary
5: SR 20 & Future Access Rd

Baseline Plus Project Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	20	20	57	17	83	12	435	65	100	282	10
Future Volume (veh/h)	178	20	20	57	17	83	12	435	65	100	282	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	222	25	25	71	21	104	15	544	81	125	352	12
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	179	179	102	31	152	33	657	556	161	791	671
Arrive On Green	0.15	0.21	0.21	0.06	0.11	0.11	0.02	0.35	0.35	0.09	0.42	0.42
Sat Flow, veh/h	1781	858	858	1781	273	1353	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	222	0	50	71	0	125	15	544	81	125	352	12
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	0	1627	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	7.4	0.0	1.5	2.4	0.0	4.5	0.5	16.3	2.1	4.2	8.2	0.3
Cycle Q Clear(g_c), s	7.4	0.0	1.5	2.4	0.0	4.5	0.5	16.3	2.1	4.2	8.2	0.3
Prop In Lane	1.00		0.50	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	0	357	102	0	183	33	657	556	161	791	671
V/C Ratio(X)	0.81	0.00	0.14	0.70	0.00	0.68	0.46	0.83	0.15	0.77	0.44	0.02
Avail Cap(c_a), veh/h	376	0	624	254	0	479	146	958	812	289	1108	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	19.7	28.3	0.0	26.1	29.7	18.1	13.6	27.2	12.5	10.2
Incr Delay (d2), s/veh	9.3	0.0	0.2	8.2	0.0	4.5	9.6	4.1	0.1	7.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	0.6	1.2	0.0	1.9	0.3	7.0	0.7	2.0	3.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.3	0.0	19.9	36.5	0.0	30.5	39.3	22.2	13.7	34.9	12.9	10.3
LnGrp LOS	C	A	B	D	A	C	D	C	B	C	B	B
Approach Vol, veh/h		272			196			640			489	
Approach Delay, s/veh		31.7			32.7			21.5			18.5	
Approach LOS		C			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.6	26.5	7.6	17.3	5.2	31.0	13.5	11.5				
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6				
Max Green Setting (Gmax), s	9.9	31.3	8.7	22.2	5.0	36.2	12.9	18.0				
Max Q Clear Time (g_c+I1), s	6.2	18.3	4.4	3.5	2.5	10.2	9.4	6.5				
Green Ext Time (p_c), s	0.1	3.2	0.0	0.2	0.0	2.2	0.2	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				23.7								
HCM 6th LOS				C								

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↑	↖		↘	
Traffic Vol, veh/h	0	0	0	0	0	40	0	584	23	0	592	259
Future Vol, veh/h	0	0	0	0	0	40	0	584	23	0	592	259
Conflicting Peds, #/hr	0	0	3	0	0	0	3	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	2	4	2	2	2	4	4	2	2	4	4
Mvmt Flow	0	0	0	0	0	43	0	621	24	0	630	276

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	-	621
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.22
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.318
Pot Cap-1 Maneuver	0	0	487
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	0	487
Mov Cap-2 Maneuver	-	0	-
Stage 1	-	0	-
Stage 2	-	0	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT	SBR
Capacity (veh/h)	-	-	487	-
HCM Lane V/C Ratio	-	-	0.087	-
HCM Control Delay (s)	-	-	13.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	8	16	448	524	9
Future Vol, veh/h	10	8	16	448	524	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	11	9	17	477	557	10

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1073	562	567	0	-	0
Stage 1	562	-	-	-	-	-
Stage 2	511	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	241	521	990	-	-	-
Stage 1	565	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	237	521	990	-	-	-
Mov Cap-2 Maneuver	438	-	-	-	-	-
Stage 1	555	-	-	-	-	-
Stage 2	596	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	990	-	471	-	-
HCM Lane V/C Ratio	0.017	-	0.041	-	-
HCM Control Delay (s)	8.7	-	13	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗		↘	↑	↑	↘
Traffic Vol, veh/h	16	17	38	445	512	20
Future Vol, veh/h	16	17	38	445	512	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	17	18	40	473	545	21

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1098	545	566	0	-	0
Stage 1	545	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	232	532	991	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	223	532	991	-	-	-
Mov Cap-2 Maneuver	425	-	-	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	570	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.2	0.7	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	991	-	474	-	-
HCM Lane V/C Ratio	0.041	-	0.074	-	-
HCM Control Delay (s)	8.8	-	13.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

HCM 6th TWSC
4: SR 20 & Sunrise Blvd

Baseline Plus Project Conditions
PM Peak Hour

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↘		↗	↕	↗
Traffic Vol, veh/h	87	0	50	0	0	0	57	366	1	0	457	68
Future Vol, veh/h	87	0	50	0	0	0	57	366	1	0	457	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	90	0	52	0	0	0	59	377	1	0	471	70

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	967	967	471	1002	1037	378	541	0	0	378	0	0
Stage 1	471	471	-	496	496	-	-	-	-	-	-	-
Stage 2	496	496	-	506	541	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	231	251	587	218	228	662	1013	-	-	1164	-	-
Stage 1	568	554	-	550	540	-	-	-	-	-	-	-
Stage 2	550	540	-	543	516	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	221	236	587	190	215	662	1013	-	-	1164	-	-
Mov Cap-2 Maneuver	403	410	-	190	215	-	-	-	-	-	-	-
Stage 1	535	554	-	518	509	-	-	-	-	-	-	-
Stage 2	518	509	-	495	516	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	0	1.2	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1013	-	-	403	587	-	1164	-	-
HCM Lane V/C Ratio	0.058	-	-	0.223	0.088	-	-	-	-
HCM Control Delay (s)	8.8	-	-	16.5	11.7	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	0.3	-	0	-	-

HCM 6th Signalized Intersection Summary
5: SR 20 & Future Access Rd

Baseline Plus Project Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	23	15	72	25	104	21	358	77	126	456	10
Future Volume (veh/h)	145	23	15	72	25	104	21	358	77	126	456	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	158	25	16	78	27	113	23	389	84	137	496	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	190	122	120	41	172	49	528	447	180	665	564
Arrive On Green	0.12	0.18	0.18	0.07	0.13	0.13	0.03	0.28	0.28	0.10	0.36	0.36
Sat Flow, veh/h	1781	1066	682	1781	315	1318	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	158	0	41	78	0	140	23	389	84	137	496	11
Grp Sat Flow(s),veh/h/ln	1781	0	1748	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.2	0.0	1.0	2.1	0.0	3.9	0.6	9.1	1.9	3.6	11.2	0.2
Cycle Q Clear(g_c), s	4.2	0.0	1.0	2.1	0.0	3.9	0.6	9.1	1.9	3.6	11.2	0.2
Prop In Lane	1.00		0.39	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	0	312	120	0	213	49	528	447	180	665	564
V/C Ratio(X)	0.77	0.00	0.13	0.65	0.00	0.66	0.47	0.74	0.19	0.76	0.75	0.02
Avail Cap(c_a), veh/h	439	0	739	351	0	609	199	1136	963	476	1427	1209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	0.0	16.7	21.9	0.0	20.0	23.1	15.7	13.1	21.1	13.6	10.1
Incr Delay (d2), s/veh	5.9	0.0	0.2	5.9	0.0	3.5	6.8	2.0	0.2	6.5	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.4	1.0	0.0	1.5	0.3	3.6	0.6	1.7	4.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	0.0	16.9	27.8	0.0	23.4	29.9	17.7	13.3	27.6	15.3	10.1
LnGrp LOS	C	A	B	C	A	C	C	B	B	C	B	B
Approach Vol, veh/h		199			218			496			644	
Approach Delay, s/veh		24.6			25.0			17.5			17.8	
Approach LOS		C			C			B			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.0	18.7	7.3	13.2	5.4	22.3	9.7	10.9				
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6				
Max Green Setting (Gmax), s	12.9	29.3	9.5	20.4	5.4	36.8	11.9	18.0				
Max Q Clear Time (g_c+I1), s	5.6	11.1	4.1	3.0	2.6	13.2	6.2	5.9				
Green Ext Time (p_c), s	0.2	2.5	0.1	0.1	0.0	3.3	0.2	0.5				
Intersection Summary												
HCM 6th Ctrl Delay				19.6								
HCM 6th LOS				B								

Appendix G

Future Year LOS Calculations



Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↑	↘		↖	
Traffic Vol, veh/h	0	0	0	0	0	30	0	895	20	0	680	110
Future Vol, veh/h	0	0	0	0	0	30	0	895	20	0	680	110
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	8	2	8	2	2	2	8	8	2	2	8	8
Mvmt Flow	0	0	0	0	0	38	0	1119	25	0	850	138

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	- 1119	- 0 0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	- 6.22	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	- 3.318	-
Pot Cap-1 Maneuver	0	0 252	0 - - 0 - -
Stage 1	0	0 -	0 - - 0 - -
Stage 2	0	0 -	0 - - 0 - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	-	0 252	- - - -
Mov Cap-2 Maneuver	-	0 -	- - - -
Stage 1	-	0 -	- - - -
Stage 2	-	0 -	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	21.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT	SBR
Capacity (veh/h)	-	- 252	-	-
HCM Lane V/C Ratio	-	- 0.149	-	-
HCM Control Delay (s)	-	- 21.8	-	-
HCM Lane LOS	-	- C	-	-
HCM 95th %tile Q(veh)	-	- 0.5	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	10	5	705	620	10
Future Vol, veh/h	15	10	5	705	620	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	19	13	6	881	775	13

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1675	782	788	0	-	0
Stage 1	782	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	100	382	797	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	99	382	797	-	-	-
Mov Cap-2 Maneuver	290	-	-	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	387	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	797	-	321	-	-
HCM Lane V/C Ratio	0.008	-	0.097	-	-
HCM Control Delay (s)	9.6	-	17.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	Y
Traffic Vol, veh/h	35	35	10	670	615	15
Future Vol, veh/h	35	35	10	670	615	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	44	44	13	838	769	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1633	769	788	0	-	0
Stage 1	769	-	-	-	-	-
Stage 2	864	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	106	389	797	-	-	-
Stage 1	444	-	-	-	-	-
Stage 2	400	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	104	389	797	-	-	-
Mov Cap-2 Maneuver	297	-	-	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	400	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.4	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	797	-	337	-	-
HCM Lane V/C Ratio	0.016	-	0.26	-	-
HCM Control Delay (s)	9.6	-	19.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

HCM 6th TWSC
4: SR 20 & Sunrise Blvd

Future Conditions
AM Peak Hour

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↘		↗	↕	↗
Traffic Vol, veh/h	45	0	25	0	0	0	30	640	0	0	570	60
Future Vol, veh/h	45	0	25	0	0	0	30	640	0	0	570	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	11	11	11	11	11	11	11	11	11	11	11	11
Mvmt Flow	56	0	31	0	0	0	38	800	0	0	713	75

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1589	1589	713	1627	1664	800	788	0	0	800	0	0
Stage 1	713	713	-	876	876	-	-	-	-	-	-	-
Stage 2	876	876	-	751	788	-	-	-	-	-	-	-
Critical Hdwy	7.21	6.61	6.31	7.21	6.61	6.31	4.21	-	-	4.21	-	-
Critical Hdwy Stg 1	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Follow-up Hdwy	3.599	4.099	3.399	3.599	4.099	3.399	2.299	-	-	2.299	-	-
Pot Cap-1 Maneuver	83	103	417	78	92	371	793	-	-	785	-	-
Stage 1	409	422	-	331	354	-	-	-	-	-	-	-
Stage 2	331	354	-	389	390	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	80	98	417	69	88	371	793	-	-	785	-	-
Mov Cap-2 Maneuver	244	266	-	69	88	-	-	-	-	-	-	-
Stage 1	389	422	-	315	337	-	-	-	-	-	-	-
Stage 2	315	337	-	360	390	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.6	0	0.4	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	793	-	-	244	417	-	785	-	-
HCM Lane V/C Ratio	0.047	-	-	0.231	0.075	-	-	-	-
HCM Control Delay (s)	9.8	-	-	24.1	14.3	0	0	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.2	-	0	-	-

HCM 6th Signalized Intersection Summary
5: SR 20 & Future Access Rd

Future Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	20	20	60	20	85	15	665	65	100	565	15
Future Volume (veh/h)	165	20	20	60	20	85	15	665	65	100	565	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	206	25	25	75	25	106	19	831	81	125	706	19
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	158	158	97	32	136	37	915	776	154	1039	880
Arrive On Green	0.14	0.18	0.18	0.05	0.10	0.10	0.02	0.49	0.49	0.09	0.56	0.56
Sat Flow, veh/h	1781	858	858	1781	312	1321	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	206	0	50	75	0	131	19	831	81	125	706	19
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.9	0.0	2.4	4.0	0.0	7.6	1.0	39.4	2.7	6.7	26.0	0.5
Cycle Q Clear(g_c), s	10.9	0.0	2.4	4.0	0.0	7.6	1.0	39.4	2.7	6.7	26.0	0.5
Prop In Lane	1.00		0.50	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	0	316	97	0	168	37	915	776	154	1039	880
V/C Ratio(X)	0.85	0.00	0.16	0.77	0.00	0.78	0.52	0.91	0.10	0.81	0.68	0.02
Avail Cap(c_a), veh/h	334	0	435	214	0	304	92	1102	934	168	1181	1001
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	0.0	33.1	45.1	0.0	42.3	46.8	22.7	13.3	43.3	15.3	9.7
Incr Delay (d2), s/veh	14.1	0.0	0.2	12.2	0.0	7.6	10.7	9.7	0.1	23.4	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	1.0	2.1	0.0	3.4	0.6	18.6	0.9	3.9	10.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.9	0.0	33.3	57.3	0.0	49.9	57.5	32.3	13.3	66.8	16.7	9.7
LnGrp LOS	D	A	C	E	A	D	E	C	B	E	B	A
Approach Vol, veh/h		256			206			931			850	
Approach Delay, s/veh		50.7			52.6			31.2			23.9	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	52.4	9.4	22.4	6.1	58.7	17.2	14.5				
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6				
Max Green Setting (Gmax), s	9.1	56.9	11.6	24.5	5.0	61.0	18.1	18.0				
Max Q Clear Time (g_c+I1), s	8.7	41.4	6.0	4.4	3.0	28.0	12.9	9.6				
Green Ext Time (p_c), s	0.0	5.8	0.1	0.2	0.0	5.8	0.3	0.4				
Intersection Summary												
HCM 6th Ctrl Delay				32.6								
HCM 6th LOS				C								

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↑	↘		↘	
Traffic Vol, veh/h	0	0	0	0	0	40	0	815	25	0	965	220
Future Vol, veh/h	0	0	0	0	0	40	0	815	25	0	965	220
Conflicting Peds, #/hr	0	0	3	0	0	0	3	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	2	4	2	2	2	4	4	2	2	4	4
Mvmt Flow	0	0	0	0	0	43	0	867	27	0	1027	234

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	-	867
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.22
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.318
Pot Cap-1 Maneuver	0	0	352
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	0	352
Mov Cap-2 Maneuver	-	0	-
Stage 1	-	0	-
Stage 2	-	0	-

Approach	WB	NB	SB
HCM Control Delay, s	16.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT	SBR
Capacity (veh/h)	-	-	352	-
HCM Lane V/C Ratio	-	-	0.121	-
HCM Control Delay (s)	-	-	16.6	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	10	10	20	700	885	10
Future Vol, veh/h	10	10	20	700	885	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	11	11	21	745	941	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1734	947	952	0	-	0
Stage 1	947	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	95	313	710	-	-	-
Stage 1	372	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	92	313	710	-	-	-
Mov Cap-2 Maneuver	279	-	-	-	-	-
Stage 1	361	-	-	-	-	-
Stage 2	443	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.2	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	710	-	295	-	-
HCM Lane V/C Ratio	0.03	-	0.072	-	-
HCM Control Delay (s)	10.2	-	18.2	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	Y
Traffic Vol, veh/h	20	20	40	695	875	20
Future Vol, veh/h	20	20	40	695	875	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	21	21	43	739	931	21

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1756	931	952	0	-	0
Stage 1	931	-	-	-	-	-
Stage 2	825	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	92	319	710	-	-	-
Stage 1	379	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	86	319	710	-	-	-
Mov Cap-2 Maneuver	271	-	-	-	-	-
Stage 1	356	-	-	-	-	-
Stage 2	425	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.4	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	710	-	293	-	-
HCM Lane V/C Ratio	0.06	-	0.145	-	-
HCM Control Delay (s)	10.4	-	19.4	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

HCM 6th TWSC
4: SR 20 & Sunrise Blvd

Future Conditions
PM Peak Hour

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↖		↗	↖	↗
Traffic Vol, veh/h	80	0	40	0	0	0	25	625	1	0	845	45
Future Vol, veh/h	80	0	40	0	0	0	25	625	1	0	845	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	82	0	41	0	0	0	26	644	1	0	871	46

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1568	1568	871	1591	1614	645	917	0	0	645	0	0
Stage 1	871	871	-	697	697	-	-	-	-	-	-	-
Stage 2	697	697	-	894	917	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	89	109	346	85	102	467	732	-	-	926	-	-
Stage 1	342	364	-	427	438	-	-	-	-	-	-	-
Stage 2	427	438	-	332	347	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	87	105	346	73	98	467	732	-	-	926	-	-
Mov Cap-2 Maneuver	257	279	-	73	98	-	-	-	-	-	-	-
Stage 1	330	364	-	412	422	-	-	-	-	-	-	-
Stage 2	412	422	-	292	347	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	22.6	0	0.4	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	732	-	-	257	346	-	926	-	-
HCM Lane V/C Ratio	0.035	-	-	0.321	0.119	-	-	-	-
HCM Control Delay (s)	10.1	-	-	25.5	16.8	0	0	-	-
HCM Lane LOS	B	-	-	D	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	0.4	-	0	-	-

HCM 6th Signalized Intersection Summary
5: SR 20 & Future Access Rd

Future Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	25	15	75	25	105	25	600	80	130	815	20
Future Volume (veh/h)	135	25	15	75	25	105	25	600	80	130	815	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	27	16	82	27	114	27	652	87	141	886	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	183	174	103	106	36	152	51	848	719	177	981	831
Arrive On Green	0.10	0.16	0.16	0.06	0.11	0.11	0.03	0.45	0.45	0.10	0.52	0.52
Sat Flow, veh/h	1781	1101	652	1781	313	1320	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	147	0	43	82	0	141	27	652	87	141	886	22
Grp Sat Flow(s),veh/h/ln	1781	0	1753	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	6.3	0.0	1.7	3.5	0.0	6.5	1.2	22.8	2.5	6.0	33.4	0.5
Cycle Q Clear(g_c), s	6.3	0.0	1.7	3.5	0.0	6.5	1.2	22.8	2.5	6.0	33.4	0.5
Prop In Lane	1.00		0.37	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	278	106	0	188	51	848	719	177	981	831
V/C Ratio(X)	0.80	0.00	0.15	0.78	0.00	0.75	0.53	0.77	0.12	0.80	0.90	0.03
Avail Cap(c_a), veh/h	240	0	476	167	0	377	123	1026	869	247	1155	979
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	28.3	36.2	0.0	33.5	37.4	17.9	12.3	34.4	16.8	8.9
Incr Delay (d2), s/veh	13.6	0.0	0.3	11.5	0.0	6.0	8.5	2.9	0.1	11.7	9.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.7	1.8	0.0	2.8	0.6	9.7	0.8	3.1	15.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.0	28.6	47.7	0.0	39.4	45.9	20.8	12.4	46.1	25.8	9.0
LnGrp LOS	D	A	C	D	A	D	D	C	B	D	C	A
Approach Vol, veh/h		190			223			766			1049	
Approach Delay, s/veh		43.5			42.5			20.7			28.1	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.8	40.5	8.7	17.0	6.3	46.0	12.1	13.6				
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6				
Max Green Setting (Gmax), s	10.8	42.8	7.3	21.2	5.4	48.2	10.5	18.0				
Max Q Clear Time (g_c+I1), s	8.0	24.8	5.5	3.7	3.2	35.4	8.3	8.5				
Green Ext Time (p_c), s	0.1	4.6	0.0	0.1	0.0	5.5	0.1	0.5				
Intersection Summary												
HCM 6th Ctrl Delay			28.3									
HCM 6th LOS			C									

Appendix H
Future Year Plus Project
LOS Calculations



Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↑	↘		↖	
Traffic Vol, veh/h	0	0	0	0	0	30	0	970	20	0	691	128
Future Vol, veh/h	0	0	0	0	0	30	0	970	20	0	691	128
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	8	2	8	2	2	2	8	8	2	2	8	8
Mvmt Flow	0	0	0	0	0	38	0	1213	25	0	864	160

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	- 1213	- 0 0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	- 6.22	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	- 3.318	-
Pot Cap-1 Maneuver	0	0 222	0 - - 0 - -
Stage 1	0	0 -	0 - - 0 - -
Stage 2	0	0 -	0 - - 0 - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	-	0 222	- - - -
Mov Cap-2 Maneuver	-	0 -	- - - -
Stage 1	-	0 -	- - - -
Stage 2	-	0 -	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	24.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT	SBR
Capacity (veh/h)	-	- 222	-	-
HCM Lane V/C Ratio	-	- 0.169	-	-
HCM Control Delay (s)	-	- 24.5	-	-
HCM Lane LOS	-	- C	-	-
HCM 95th %tile Q(veh)	-	- 0.6	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	15	10	5	733	631	10
Future Vol, veh/h	15	10	5	733	631	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	19	13	6	916	789	13

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1724	796	802	0	0
Stage 1	796	-	-	-	-
Stage 2	928	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-
Pot Cap-1 Maneuver	93	375	787	-	-
Stage 1	431	-	-	-	-
Stage 2	372	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	92	375	787	-	-
Mov Cap-2 Maneuver	280	-	-	-	-
Stage 1	428	-	-	-	-
Stage 2	372	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.8	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	787	-	312	-	-
HCM Lane V/C Ratio	0.008	-	0.1	-	-
HCM Control Delay (s)	9.6	-	17.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	Y
Traffic Vol, veh/h	35	35	10	698	626	15
Future Vol, veh/h	35	35	10	698	626	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	44	44	13	873	783	19

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1682	783	802	0	-	0
Stage 1	783	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Critical Hdwy	6.5	6.3	4.2	-	-	-
Critical Hdwy Stg 1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	5.5	-	-	-	-	-
Follow-up Hdwy	3.59	3.39	2.29	-	-	-
Pot Cap-1 Maneuver	99	381	787	-	-	-
Stage 1	437	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	97	381	787	-	-	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	430	-	-	-	-	-
Stage 2	385	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	787	-	327	-	-
HCM Lane V/C Ratio	0.016	-	0.268	-	-
HCM Control Delay (s)	9.6	-	20	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	1.1	-	-

HCM 6th TWSC
4: SR 20 & Sunrise Blvd

Future Year Plus Project Conditions
AM Peak Hour

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↘		↗	↕	↗
Traffic Vol, veh/h	73	0	72	0	0	0	48	640	0	0	570	71
Future Vol, veh/h	73	0	72	0	0	0	48	640	0	0	570	71
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	11	11	11	11	11	11	11	11	11	11	11	11
Mvmt Flow	91	0	90	0	0	0	60	800	0	0	713	89

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1633	1633	713	1678	1722	800	802	0	0	800	0	0
Stage 1	713	713	-	920	920	-	-	-	-	-	-	-
Stage 2	920	920	-	758	802	-	-	-	-	-	-	-
Critical Hdwy	7.21	6.61	6.31	7.21	6.61	6.31	4.21	-	-	4.21	-	-
Critical Hdwy Stg 1	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.21	5.61	-	6.21	5.61	-	-	-	-	-	-	-
Follow-up Hdwy	3.599	4.099	3.399	3.599	4.099	3.399	2.299	-	-	2.299	-	-
Pot Cap-1 Maneuver	~ 77	96	417	72	85	371	783	-	-	785	-	-
Stage 1	409	422	-	313	338	-	-	-	-	-	-	-
Stage 2	313	338	-	386	384	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 72	89	417	53	78	371	783	-	-	785	-	-
Mov Cap-2 Maneuver	227	251	-	53	78	-	-	-	-	-	-	-
Stage 1	378	422	-	289	312	-	-	-	-	-	-	-
Stage 2	289	312	-	303	384	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.6	0	0.7	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	783	-	-	227	417	-	785	-	-
HCM Lane V/C Ratio	0.077	-	-	0.402	0.216	-	-	-	-
HCM Control Delay (s)	10	-	-	31.1	16	0	0	-	-
HCM Lane LOS	A	-	-	D	C	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	1.8	0.8	-	0	-	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
5: SR 20 & Future Access Rd

Future Year Plus Project Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	212	20	20	60	20	85	15	693	65	100	576	15
Future Volume (veh/h)	212	20	20	60	20	85	15	693	65	100	576	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	265	25	25	75	25	106	19	866	81	125	720	19
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	180	180	96	31	132	36	916	776	148	1034	876
Arrive On Green	0.16	0.21	0.21	0.05	0.10	0.10	0.02	0.49	0.49	0.08	0.55	0.55
Sat Flow, veh/h	1781	858	858	1781	312	1321	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	265	0	50	75	0	131	19	866	81	125	720	19
Grp Sat Flow(s),veh/h/ln	1781	0	1716	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	16.0	0.0	2.6	4.6	0.0	8.6	1.2	48.3	3.0	7.6	30.7	0.6
Cycle Q Clear(g_c), s	16.0	0.0	2.6	4.6	0.0	8.6	1.2	48.3	3.0	7.6	30.7	0.6
Prop In Lane	1.00		0.50	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	0	360	96	0	163	36	916	776	148	1034	876
V/C Ratio(X)	0.91	0.00	0.14	0.78	0.00	0.80	0.53	0.95	0.10	0.85	0.70	0.02
Avail Cap(c_a), veh/h	294	0	383	188	0	268	81	970	822	148	1039	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	0.0	35.3	51.3	0.0	48.3	53.3	26.6	15.1	49.6	17.9	11.1
Incr Delay (d2), s/veh	29.5	0.0	0.2	12.5	0.0	8.9	11.8	16.8	0.1	34.1	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	1.1	2.4	0.0	3.9	0.6	24.7	1.1	4.8	13.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.5	0.0	35.5	63.8	0.0	57.2	65.0	43.4	15.1	83.8	19.9	11.1
LnGrp LOS	E	A	D	E	A	E	E	D	B	F	B	B
Approach Vol, veh/h		315			206			966			864	
Approach Delay, s/veh		68.3			59.6			41.4			28.9	
Approach LOS		E			E			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.2	58.9	10.0	27.7	6.3	65.8	22.1	15.6				
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6				
Max Green Setting (Gmax), s	9.1	56.9	11.6	24.5	5.0	61.0	18.1	18.0				
Max Q Clear Time (g_c+I1), s	9.6	50.3	6.6	4.6	3.2	32.7	18.0	10.6				
Green Ext Time (p_c), s	0.0	3.5	0.1	0.2	0.0	5.8	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay			42.0									
HCM 6th LOS			D									

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						↗		↑	↘		↘	
Traffic Vol, veh/h	0	0	0	0	0	40	0	868	25	0	996	271
Future Vol, veh/h	0	0	0	0	0	40	0	868	25	0	996	271
Conflicting Peds, #/hr	0	0	3	0	0	0	3	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	0	-	-	50	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	4	2	4	2	2	2	4	4	2	2	4	4
Mvmt Flow	0	0	0	0	0	43	0	923	27	0	1060	288

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	-	923
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	6.22
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	3.318
Pot Cap-1 Maneuver	0	0	327
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %			
Mov Cap-1 Maneuver	-	0	327
Mov Cap-2 Maneuver	-	0	-
Stage 1	-	0	-
Stage 2	-	0	-

Approach	WB	NB	SB
HCM Control Delay, s	17.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT	SBR
Capacity (veh/h)	-	-	327	-
HCM Lane V/C Ratio	-	-	0.13	-
HCM Control Delay (s)	-	-	17.6	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.4	-

HCM 6th TWSC
2: SR 20 & Cynthia Dr

Future Year Plus Project Conditions
PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	10	10	20	720	916	10
Future Vol, veh/h	10	10	20	720	916	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	75	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	11	11	21	766	974	11

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1788	980	985	0	-	0
Stage 1	980	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	88	299	689	-	-	-
Stage 1	359	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	85	299	689	-	-	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	348	-	-	-	-	-
Stage 2	433	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.8	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	689	-	249	-	-
HCM Lane V/C Ratio	0.031	-	0.085	-	-
HCM Control Delay (s)	10.4	-	20.8	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	Y
Traffic Vol, veh/h	20	20	40	715	906	20
Future Vol, veh/h	20	20	40	715	906	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	140
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	21	21	43	761	964	21

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1811	964	985	0	-	0
Stage 1	964	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Critical Hdwy	6.45	6.25	4.15	-	-	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.345	2.245	-	-	-
Pot Cap-1 Maneuver	85	306	689	-	-	-
Stage 1	365	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	80	306	689	-	-	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	342	-	-	-	-	-
Stage 2	415	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.6	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	689	-	247	-	-
HCM Lane V/C Ratio	0.062	-	0.172	-	-
HCM Control Delay (s)	10.6	-	22.6	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

HCM 6th TWSC
4: SR 20 & Sunrise Blvd

Future Year Plus Project Conditions
PM Peak Hour

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↖		↗	↖	↗
Traffic Vol, veh/h	100	0	73	0	0	0	76	625	1	0	845	76
Future Vol, veh/h	100	0	73	0	0	0	76	625	1	0	845	76
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	315	-	-	150	-	75
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	103	0	75	0	0	0	78	644	1	0	871	78

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1672	1672	871	1711	1750	645	949	0	0	645	0	0
Stage 1	871	871	-	801	801	-	-	-	-	-	-	-
Stage 2	801	801	-	910	949	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.15	6.55	6.25	4.15	-	-	4.15	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.15	5.55	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.545	4.045	3.345	2.245	-	-	2.245	-	-
Pot Cap-1 Maneuver	~ 75	94	346	70	84	467	711	-	-	926	-	-
Stage 1	342	364	-	374	393	-	-	-	-	-	-	-
Stage 2	374	393	-	325	335	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 69	84	346	50	75	467	711	-	-	926	-	-
Mov Cap-2 Maneuver	223	252	-	50	75	-	-	-	-	-	-	-
Stage 1	304	364	-	333	350	-	-	-	-	-	-	-
Stage 2	333	350	-	254	335	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27.5	0	1.2	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	711	-	-	223	346	-	926	-	-
HCM Lane V/C Ratio	0.11	-	-	0.462	0.218	-	-	-	-
HCM Control Delay (s)	10.7	-	-	34.3	18.3	0	0	-	-
HCM Lane LOS	B	-	-	D	C	A	A	-	-
HCM 95th %tile Q(veh)	0.4	-	-	2.2	0.8	-	0	-	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary
5: SR 20 & Future Access Rd

Future Year Plus Project Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	25	15	75	25	105	25	620	80	130	846	20
Future Volume (veh/h)	168	25	15	75	25	105	25	620	80	130	846	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	27	16	82	27	114	27	674	87	141	920	22
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	193	115	105	35	148	49	854	724	175	986	835
Arrive On Green	0.12	0.18	0.18	0.06	0.11	0.11	0.03	0.46	0.46	0.10	0.53	0.53
Sat Flow, veh/h	1781	1101	652	1781	313	1320	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	183	0	43	82	0	141	27	674	87	141	920	22
Grp Sat Flow(s),veh/h/ln	1781	0	1753	1781	0	1633	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	8.5	0.0	1.8	3.9	0.0	7.1	1.3	26.0	2.7	6.6	38.9	0.6
Cycle Q Clear(g_c), s	8.5	0.0	1.8	3.9	0.0	7.1	1.3	26.0	2.7	6.6	38.9	0.6
Prop In Lane	1.00		0.37	1.00		0.81	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	308	105	0	184	49	854	724	175	986	835
V/C Ratio(X)	0.84	0.00	0.14	0.78	0.00	0.77	0.55	0.79	0.12	0.81	0.93	0.03
Avail Cap(c_a), veh/h	220	0	437	153	0	345	113	941	798	226	1060	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	0.0	29.6	39.5	0.0	36.7	40.8	19.6	13.3	37.6	18.7	9.6
Incr Delay (d2), s/veh	23.9	0.0	0.2	14.3	0.0	6.6	9.1	4.2	0.1	14.9	13.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	0.7	2.1	0.0	3.1	0.7	11.5	0.9	3.6	18.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.4	0.0	29.8	53.7	0.0	43.3	49.9	23.8	13.4	52.5	32.6	9.7
LnGrp LOS	E	A	C	D	A	D	D	C	B	D	C	A
Approach Vol, veh/h		226			223			788			1083	
Approach Delay, s/veh		54.6			47.1			23.6			34.7	
Approach LOS		D			D			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.5	43.9	9.1	19.5	6.5	49.9	14.5	14.2				
Change Period (Y+Rc), s	4.1	5.1	4.1	4.6	4.1	5.1	4.1	4.6				
Max Green Setting (Gmax), s	10.8	42.8	7.3	21.2	5.4	48.2	10.5	18.0				
Max Q Clear Time (g_c+I1), s	8.6	28.0	5.9	3.8	3.3	40.9	10.5	9.1				
Green Ext Time (p_c), s	0.1	4.4	0.0	0.1	0.0	3.9	0.0	0.4				
Intersection Summary												
HCM 6th Ctrl Delay			34.1									
HCM 6th LOS			C									

Appendix I

CEQA Appendix G Checklist



Appendix J - CEQA Appendix G: Environmental Checklist Form

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

XVI. RECREATION.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Would the project 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

XVII. TRANSPORTATION. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

XVIII. TRIBAL CULTURAL RESOURCES.

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 cultural value to a California Native American tribe, and that is: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 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 Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|--------------------------|

Air Quality & Greenhouse Gas Emissions Assessment Wescott Road Subdivision Project

City of Colusa, California

Prepared For:

City of Colusa
425 Webster Street
Colusa, CA 95932

Prepared By:



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April 2024

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LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ATCM	Airborne Toxics Control Measure
AQAP 2021	Northern Sacramento Valley Planning Area 2021 Triennial Air Quality Attainment Plan
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCAPCD	Colusa County Air Pollution Control District
CEQA	California Environmental Quality Act
CH ₄	Methane
City	Colusa
CO	Carbon monoxide
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalents
DPM	Diesel particulate matter
EO	Executive Order
GHG	Greenhouse gas emissions
HVAC	Heating, Ventilation, and Air Conditioning
IPCC	Intergovernmental Panel on Climate Change
µg/m ³	Micrograms per cubic meter
N ₂ O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO ₂	Nitrogen dioxide
NO _x	Nitrous oxides
NSVAB	Northern Sacramento Valley Air Basin
OEHHA	Office of Environmental Health Hazard Assessment
O ₃	Ozone
PG&E	Pacific Gas & Electric Company
ppm	parts per million
PM ₁₀	Coarse particulate matter
PM _{2.5}	Fine particulate matter
PM	Particulate Matter
Project	Wescott Road Subdivision Project
ROG	Reactive organic gases
SB	Senate Bill
SIP	State Implementation Plan
SO _x	Sulfur oxides
SO ₂	Sulfur dioxide
TACs	Toxic air contaminants
VOC	Volatile organic compounds
ZEV	Zero-Emission Vehicles

1 INTRODUCTION

This report documents the results of an Air Quality and Greenhouse Gas (GHG) Emissions Assessment completed for the Wescott Road Subdivision Project (Project), which proposes the construction of a mixed-use development in the City of Colusa. The purpose of this assessment is to estimate criteria air pollutants and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

1.1 Project Location and Description

The Project Site is located in the City of Colusa (City) on 90.95 acres and is bordered by Wescott Road to the west, an abandoned railroad right of way to the south, Sunrise Landing subdivision to the east (which is currently under construction), and an established single-family subdivision to the north. The Project is proposing the development of 170 single-family residential lots, 52 two-family residential lots, a 7.45 acre neighborhood apartment, 14.03 acres of open space, a 3.51 acre park and 1.17 acres of commercial development. Additionally, the Project is proposing internal streets, sidewalks and a bike path. The Project is proposed to be construction in 7 phases described in detail below:

- *Phase 1:* 45 single-family lots
- *Phase 2:* 39 single-family lots and 1.17 acres of commercial development
- *Phase 3:* 38 single-family lots and 3.51 acre park
- *Phase 4:* 45 single-family lots and bike path
- *Phase 5:* 20 two-family residential lots
- *Phase 6:* 23 two-family residential lots
- *Phase 7:* 7.45 acres of high-density apartments

2 AIR QUALITY

2.1 Environmental Setting

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the Colusa County portion of the Northern Sacramento Valley Air Basin (NSVAB), which encompasses the Project Site.

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following section describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project Area.

2.1.1 Northern Sacramento Valley Air Basin

The California Air Resources Board (CARB) divides the state into air basins that share similar meteorological and topographical features. The City of Colusa lies in the NSVAB, which includes Sutter, Yuba, Colusa, Butte, Glenn, Tehama, and Shasta counties. The NSVAB is bounded on the north and west by the Coastal Mountain Range and on the east by the southern end of the Cascade Mountain Range and the northern end of the Sierra Nevada. These mountain ranges reach heights in excess of 6,000 feet above mean sea level, with individual peaks rising much higher. The mountains form a substantial physical barrier to locally created pollution as well as to pollution transported northward on prevailing winds from the Sacramento metropolitan area.

The environmental conditions of Colusa County are conducive to potentially adverse air quality conditions. The basin area traps pollutants between two mountain ranges to the east and the west. This problem is exacerbated by a temperature inversion layer that traps air at lower levels below an overlying layer of warmer air. Prevailing winds in the area are generally from the south and southwest. Sea breezes flow over the San Francisco Bay Area and into the Sacramento Valley, transporting pollutants from the large urban areas.

2.1.2 Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O₃), coarse particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO₂), and sulfur dioxide (SO₂) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1.

Table 2-1. Summary of Criteria Air Pollutants Sources and Effects

Pollutant	Major Manmade Sources	Human Health and Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO ₂	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O ₃	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N ₂ O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM _{2.5} & PM ₁₀	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO ₂	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.

Source: California Air Pollution Control Offices Association (CAPCOA 2013)

2.1.2.1 Carbon Monoxide

CO, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances (i.e., up to 600 feet or 185 meters) of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

2.1.2.2 Nitrogen Oxides

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides (NO_x). Motor vehicle emissions are the main source of NO_x in urban areas. NO_x is very toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO_x increases susceptibility to

respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of NO_x, such as NO and NO₂, attribute to the formation of O₃ and PM_{2.5}. Epidemiological studies have also shown associations between NO₂ concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

2.1.2.3 Ozone

Ozone (O₃) is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) also known as reactive organic gases (ROG) and NO_x undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. Sunlight and hot weather cause ground-level O₃ to form. Ground-level O₃ is the primary constituent of smog. Because O₃ formation occurs over extended periods of time, both O₃ and its precursors are transported by wind and high O₃ concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when O₃ levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O₃ exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

2.1.2.4 Sulfur Dioxide

SO₂ is a colorless gas with a pungent odor, however sulfur dioxide can react with other particulates in the atmosphere to form particulates which contribute to the haze effect. SO₂ standards have been developed by the EPA to regulate all sulfur oxides, however SO₂ is by far the most abundant sulfur oxide in the atmosphere. Currently, SO₂ is primarily a result of the burning of fossil fuels for power generation and other industrial sources. Modern regulations on diesel fuel have greatly reduced the amount of SO₂ in the atmosphere and there are currently no areas in California that have levels of SO₂ that are not acceptable by state or federal standards.

2.1.2.5 Particulate Matter

Particulate matter includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM₁₀) and small than or equal to 2.5 microns in diameter (PM_{2.5}). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM₁₀ is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM₁₀ generally settles out of the atmosphere rapidly and is not readily transported over large distances. PM_{2.5} is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO_x, sulfur oxides (SO_x) and VOCs. PM_{2.5} can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high PM_{2.5} and PM₁₀ levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease. According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM₁₀ and PM_{2.5}. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM₁₀ and PM_{2.5}. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

2.1.3 Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis. Carcinogenic TACs can also have noncarcinogenic health hazard levels.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Additionally, diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children (whose lungs are still developing) and the elderly (who may have other serious health problems). Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's PM_{2.5} air quality problems. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

2.1.4 Ambient Air Quality

Ambient air quality at the Project Site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. O₃, PM₁₀ and PM_{2.5} are the pollutant species most potently affecting the Project region. The Colusa-Sunrise Boulevard air quality monitoring station (100 Sunrise Boulevard, Colusa), which is located approximately 0.36 miles east of the Project Site, monitors ambient concentrations of O₃, PM_{2.5} and PM₁₀. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations in the Project Area.

Table 2-2 summarizes the published data concerning O₃, PM_{2.5} and PM₁₀ since 2020 for each year that the monitoring data is provided.

Table 2-2. Summary of Ambient Air Quality Data			
Pollutant Scenario	2020	2021	2022
O₃			
Max 1-hour concentration (ppm)	0.085	0.074	0.068
Max 8-hour concentration (ppm) (state/federal)	0.068 / 0.068	0.064 / 0.064	0.063 / 0.062
Number of days above 1-hour standard (state/federal)	0 / 0	0 / 0	0 / 0
Number of days above 8-hour standard (state/federal)	0 / 0	0 / 0	0 / 0
PM₁₀			
Max 24-hour concentration (µg/m ³) (state/federal)	304.8 / 299.2	184.5 / 183.7	75.2 / 76.0
Number of days above 24-hour standard (state/federal)	77.0 / 7.0	48.3 / 1.0	17.0 / 0.0
PM_{2.5}			
Max 24-hour concentration (µg/m ³) (state/federal)	96.7 / 96.7	86.8 / 86.8	37.0 / 37.0
Number of days above federal 24-hour standard	23	*	1

Source: CARB 2023

Notes: * = Insufficient data available

µg/m³ = micrograms per cubic meter; ppm = parts per million

The USEPA and CARB designate air basins or portions of air basins and counties as being in “attainment” or “nonattainment” for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. Acceptable exceedances of the maximum value vary for the National Ambient Air Quality Standards (NAAQS) from 4th highest concentration for the 8-hour O₃ standard to 99th percentile to the SO₂ standard. The NAAQS for O₃, PM₁₀, and PM_{2.5} are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the Colusa County portion of the NSVAB, which encompasses the Project Site, is included in Table 2-3.

Table 2-3. Attainment Status of Criteria Pollutants in the Colusa County Portion of the NSVAB		
Pollutant	State Designation	Federal Designation
O ₃	Attainment	Unclassified/Attainment
PM ₁₀	Nonattainment	Unclassified
PM _{2.5}	Attainment	Unclassified/Attainment
CO	Unclassified	Unclassified/Attainment
NO ₂	Attainment	Unclassified/Attainment
SO ₂	Attainment	Unclassified/Attainment

Source: CARB 2022a

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The Colusa County region is designated as a nonattainment area for the state standard for PM₁₀ (CARB 2022a).

2.1.5 Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The Project is proposing a mixed-use developed with the primary focus being residential land uses. The nearest sensitive receptors to the Project Site are residences located adjacent to the northern Project Site boundary.

2.2 Regulatory Framework

2.2.1 Federal

2.2.1.1 Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those “sensitive receptors” most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 lists the federal attainment status of the Colusa County portion of the NSVAB for the criteria pollutants.

2.2.2 State

2.2.2.1 California Clean Air Act

The California Clean Air Act (CCAA) allows the state to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

2.2.2.2 California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The Colusa County Air Pollution Control District (CCAPCD) is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions are maintained in the Colusa County portion of the NSVAB. In an attempt to achieve NAAQS and CAAQS and maintain air quality, the air district, in coordination with the other air districts of the NSVAB, has completed several air quality attainment plans and reports, which together constitute the SIP for the NSVAB. Specifically, all of the air districts in the NSVAB including the CCAPCD prepared an air quality attainment plan for O₃ in 1994. Updated every three years since adoption, the current *Northern Sacramento Valley Planning Area 2021 Triennial Air Quality Attainment Plan* (2021 AQAP) includes forecast ROG and NO_x emissions (O₃ precursors) for the entire NSVAB through the year 2025. The 2021 AQAP provides local guidance for air basins to achieve attainment of the California ambient air quality O₃ standard.

2.2.2.3 Tanner Air Toxics Act & Air Toxics “Hot Spot” Information and Assessment Act

CARB’s Statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the state’s mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics “Hot Spots” Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by Senate Bill (SB) 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

2.2.3 Local

2.2.3.1 Colusa County Air Pollution Control District

In the City of Colusa, the air quality regulating authority is the CCAPCD, which adopts and enforces controls on stationary sources of air pollutants through its permit and inspection programs. The district also regulates agricultural burning. Other responsibilities include monitoring air quality, preparing clean air plans, and responding to citizen complaints concerning air quality. The CCAPCD develops regulations to improve air quality and protect the health and welfare of Colusa County residents and their environment.

The following is a list of noteworthy CCAPCD rules and regulations that are required of activities associated with the Proposed Project:

- **Rule 200 (Nuisance)** – This rule prohibits the discharge from any non-vehicular source such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.
- **Rule 201 (Visible Emissions)** – As provided by Section 41701 of the California Health and Safety Code, a person shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminants for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated as No. 2 on the Ringelmann Chart as published by the U.S. Bureau of Mines.

- **Rule 230 (Architectural Coatings)** – This rule requires manufacturers, distributors, and users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings by placing limits on the VOC content of various coating categories.
- **Rule 231 (Cutback and Emulsified Asphalt)** –The purpose of this Rule is to limit emissions of volatile organic compounds (VOCs) from the use of cutback and emulsified asphalt in paving, construction, or maintenance of parking lots, driveways, streets, and highways. This rule prohibits the use or application for paving, construction or maintenance of parking lots, driveways, streets, or highways any rapid or medium cure cutback asphalt or slow cure cutback asphalt containing more than 0.5 percent by volume of VOCs which evaporate at 260°C (500°F) or less. This rule also prohibits any emulsified asphalt material containing more than 3.0 percent by volume of VOCs which evaporate at 260°C (500°F) or less.
- **Rule 252 (Stationary Internal Combustion Engines)** – To limit emissions of NO_x and CO from stationary internal combustion engines any gaseous, diesel, or any other liquid-fueled stationary internal combustion engine within Colusa County shall not be operated in a manner that results in emissions exceeding limits established by the CCAPCD.
- **Rule 430 (New Source Review)** – The CCAPCD has established pre-construction review requirements for new and modified stationary sources of air pollution in order to analyze air quality impacts and insure that the operation of such sources does not interfere with the attainment or maintenance of ambient air quality standards. This rule applies to all new and modified stationary sources which are subject to CCAPCD permit requirements and, after construction, emit or may emit any affected pollutants. Rule 430 provides for no net increase in emissions, pursuant to Section 40918 of the California Health & Safety Code (HSC), from new or modified stationary sources which emit, or have the potential to emit, 25 tons per year or more of any non-attainment pollutant or its precursors.
- **Rule 431 (Emission Reduction Credits and Banking)** – This rule provides a mechanism for permitted and non-permitted emission sources to deposit, transfer, and use Emission Reduction Credits (ERCs) as offsets as allowed by applicable laws and regulations. All uses of emission reductions that are required under the CCAPCD’s Rule 430 shall be processed in accordance with this Rule. The provisions of this rule apply to the deposit, transfer, and use of ERCs from stationary sources and open biomass burning sources of air pollution emissions.

2.3 Air Quality Emissions Impact Assessment

2.3.1 Threshold of Significance

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would do any of the following:

- 1) Conflict with or obstruct implementation of any applicable air quality plan.

- 2) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- 3) Expose sensitive receptors to substantial pollutant concentrations.
- 4) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

Implementation of the Proposed Project could result in air quality impacts during construction and operations. Neither the City of Colusa nor the CCAPCD have established air pollution thresholds under the California Environmental Quality Act (CEQA) for the assessment of air quality impacts. However, CCAPCD staff has recommended that the CEQA documents use CCAPCD Rule 403, *New Source Review*, Best Available Control Technology thresholds as CEQA significance threshold for criteria pollutant emissions. The thresholds of significance are summarized in Table 2-4.

Table 2-4. Significance Thresholds	
Air Pollutant	Average Daily Emissions (pounds per day)
ROG	25
NO _x	25
SO _x	80
PM ₁₀	80
CO	500

Source: CCAPCD 2024

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project’s individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project’s individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulatively considerable.

2.3.2 Methodology

Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using a combination of CalEEMod model defaults for Colusa County and information provided by the Project proponent such as Project construction phasing. Operational air pollutant emissions were calculated based on the site dimensions and lot acreage identified in the Project Site plans and the average daily vehicle trips generated by the Project identified in the Traffic Impact Study prepared by Headway Transportations (2023).

2.3.3 Impact Analysis

2.3.3.1 Project Construction-Generated Criteria Air Quality Emissions

Emissions associated with Project construction would be temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., tractors, forklifts, pavers), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving and coating activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation.

Construction-generated emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Attachment A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 2-5. Construction-generated emissions are short-term and of temporary duration, lasting only if construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the applicable thresholds of significance.

Table 2-5. Unmitigated Construction-Related Criteria Air Pollutant Emissions					
Construction Year	Pollutant (pounds per day)				
	ROG	NO_x	SO_x	PM₁₀	CO
Calendar Year One	15.16	72.08	0.12	42.88	68.17
Calendar Year Two	25.55	48.91	0.10	11.87	56.12
Calendar Year Three	27.09	64.01	0.14	22.46	81.30

Calendar Year Four	21.41	45.50	0.10	22.05	55.32
Calendar Year Five	16.18	29.70	0.07	8.66	44.67
Calendar Year Six	11.27	25.35	0.06	8.63	38.58
Calendar Year Seven	16.30	37.70	0.07	21.69	48.68
Calendar Year Eight	9.90	14.77	0.03	1.20	25.93
<i>Potentially Significant Impact Threshold</i>	25	25	80	80	500
Exceed Threshold?	Yes	Yes	No	No	No

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emissions taken of the season, summer or winter, with the highest outputs. Building construction, paving and painting are assumed to occur simultaneously. Construction phasing provided by the Project proponent.

As shown in Table 2-5, criteria air pollutant emissions generated during Project construction would result in significant concentrations of ROG and NO_x emissions for multiple years of construction. Therefore, Mitigation Measure AQ-1 is required in order to reduce ROG and NO_x emissions to levels below the significance thresholds.

Mitigation Measure AQ-1 would mandate the use of Tier 4 Certified engines for the Project offroad construction equipment used during Project construction. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the USEPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, Wis-Con, and Yanmar). On August 27, 1998, the USEPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 horsepower and increasingly more stringent Tier 2, Tier 3, and Tier 4 standards for all equipment with phase-in schedules from 2000 to 2015. As a result, all off-road, diesel-fueled construction equipment manufactured from 2006 to 2015 has been manufactured to Tier 3 standards. The Tier 3 standards can reduce NO_x emissions by as much as 64 percent and PM emissions by as much as 39 percent. On May 11, 2004, the USEPA signed the final rule introducing Tier 4 emission standards, which are currently phased-in over the period of 2008-2015. The Tier 4 standards require that NO_x emissions be further reduced by about 90 percent. This, as a result, decreases ROG emissions as well. All off-road, diesel-fueled construction equipment manufactured in 2015 or later have been manufactured to Tier 4 standards.

Mitigation Measure

AQ-1: Prior to the certificate of construction-related permits for the Wescott Road Subdivision Project, the Project Applicant shall demonstrate to the satisfaction of the City of Colusa Planning Division that the following measure would be implemented during Project construction.

- All offroad equipment of greater than 50 horsepower used in Project construction shall be CARB Tier 4 Certified, as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations.

Table 2-6 shows the results of construction emissions with implementation of Mitigation Measure AQ-1.

Table 2-6. Mitigated Construction-Related Criteria Air Pollutant Emissions					
Construction Year	Pollutant (pounds per day)				
	ROG	NO_x	SO_x	PM₁₀	CO
Calendar Year One	10.48	10.39	0.12	39.88	73.35
Calendar Year Two	22.46	12.09	0.10	9.94	63.38
Calendar Year Three	21.80	16.32	0.14	20.60	94.16
Calendar Year Four	18.40	11.44	0.10	20.39	64.91
Calendar Year Five	13.89	12.17	0.07	7.74	48.48
Calendar Year Six	9.33	12.98	0.06	7.27	41.44
Calendar Year Seven	14.30	12.59	0.07	20.49	50.57
Calendar Year Eight	8.86	5.98	0.03	0.90	28.33
<i>Potentially Significant Impact Threshold</i>	25	25	80	80	500
Exceed Threshold?	No	No	No	No	No

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emissions taken of the season, summer or winter, with the highest outputs. Building construction, paving and painting are assumed to occur simultaneously. Construction phasing provided by the Project proponent.

As shown in Table 2-6, adherence to Mitigation Measure AQ-1 would ensure that the Proposed Project would be constructed in a manner that daily pollutants would be generated at levels below the potentially significant threshold. With implementation of Mitigation Measure AQ-1, criteria pollutant emissions generated during construction of the Proposed Project would not 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. Further, since the Project’s emissions do not exceed significance thresholds, no exceedance of the ambient air quality standards would occur, and no regional health effects from Project criteria pollutants would occur.

2.3.3.2 Project Operations Criteria Air Quality Emissions

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM₁₀, PM_{2.5}, CO, and SO₂ as well as O₃ precursors such as ROG and NO_x. Project-generated increases in emissions would be predominantly associated with motor vehicle use from the proposed residences. As previously described, operational air pollutant emissions were specified based on the site dimensions and lot acreage identified in Project Site plans and the average daily vehicle trips generated by the Project identified in the Traffic Impact Study prepared by Headway Transportations (2023). Long-terms operational emissions attributable to the Project are identified in Table 2-7.

Emission Source	Pollutant (pounds per day)				
	ROG	NO _x	SO _x	PM ₁₀	CO
Mobile	14.13	13.41	0.37	35.92	141.36
Area	433.67	8.47	0.95	72.36	543.23
Energy	0.12	2.16	0.01	0.17	1.08
Total	447.92	24.04	1.33	108.45	685.67
<i>Potentially Significance Threshold</i>	25	25	80	80	500
Exceed Threshold?	Yes	No	No	Yes	Yes

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emissions taken of the season, summer or winter, with the highest outputs. Emission projections predominately based on CalEEMod model defaults for Colusa County, site acreage and building dimensions provided by the Project Site Plans, and average daily vehicle trips provided by Headway Transportations (2023).

As shown in Table 2-7, daily emissions associated with Project operations would exceed the significance threshold for ROG, PM₁₀ and CO. Therefore, Mitigation Measure AQ-2 is required in order to reduce ROG, PM₁₀ and CO emissions to levels below the significance thresholds. Implementation of this measures would prohibit the installation of wood stoves and fireplaces.

Mitigation Measure

AQ-2: Prior to the issuance of individual building permits, the Colusa County Planning Division shall confirm that the Project prohibits the installation, construction, or use of wood stoves and fireplaces in all proposed residential units within the Project Site. Hearths will be limited to natural gas-fueled fireplaces.

Table 2-8 shows the results of operational emissions with the implementation of mitigation measure AQ-2.

Emission Source	Pollutant (pounds per day)				
	ROG	NO _x	SO _x	PM ₁₀	CO
Mobile	14.13	13.41	0.37	35.92	141.36
Area	8.37	0.16	0.00	0.01	18.05
Energy	0.12	2.16	0.01	0.17	1.08
Total	22.62	15.73	0.38	36.10	160.49
<i>Potentially Significance Threshold</i>	25	25	80	80	500
Exceed Threshold?	No	No	No	No	Yes

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emissions taken of the season, summer or winter, with the highest outputs. Emission projections predominately based on CalEEMod model defaults for Colusa County, site acreage and building dimensions provided by the Project Site Plans, and average daily vehicle trips provided by Headway Transportations (2023).

As shown in Table 2-8, with implementation of mitigation measure AQ-2 operational emissions would be below the significance threshold for all criteria air pollutants.

2.3.3.3 Project Consistency with Air Quality Planning

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date. As previously stated, the Colusa County portion of the NSVAB, which encompasses the Project Site, is classified as attainment for all federal standards. As such, Colusa County is not subject to a SIP.

The CCAPCD attains and maintains air quality conditions in the City of Colusa through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. In an attempt to achieve and maintain air quality standards, the air district has participated in the preparation of air quality attainment plans and reports. Specifically, all of the air districts in the NSVAB including the CCAPCD, prepared an air quality attainment plan for O₃ in 1994. Updated every three years since adoption, the current *Northern Sacramento Valley Planning Area 2021 Triennial Air Quality Attainment Plan* includes forecast ROG and NO_x emissions (O₃ precursors) for the entire NSVAB. The 2021 AQAP provides local guidance for air basins to achieve and maintain attainment of the California O₃ standard. Pollutant control strategies are based on the latest scientific and technical information and planning assumptions, and updated emission inventory methodologies for various source categories.

A Project would not be consistent with the 2021 AQAP if it would result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQAP. The Project would not exceed the short-term construction standards (see Table 2-6) or long-term operational standards (see Table 2-8) with implementation of mitigation measure AQ-1 and AQ-2.

Therefore, the Project would not conflict with or obstruct reduction measures presented in the 2021 AQAP.

2.3.3.4 Exposure of Sensitive Receptors to Toxic Air Contaminants

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the Project Site are residences located adjacent to the northern Project Site boundary.

Construction- Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of DPM, ROG, NO_x, CO, and PM₁₀ from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The Colusa County portion of the NSVAB is listed as an attainment area for the state standard for PM₁₀ (CARB 2022a). Thus, PM₁₀ levels in the Colusa County portion of the NSVAB are at unhealthy levels during certain periods. However, as shown in Table 2-6, the Project would not exceed the significance thresholds for any criteria air pollutant emissions, including PM₁₀ with implementation of mitigation measure AQ-1.

The health effects associated with O₃ are generally associated with reduced lung function. The Project's construction activities, with the implementation of AQ-1, would not result in O₃ precursor emissions (ROG or NO_x) in excess of the significance thresholds. Thus, the Project is not anticipated to substantially contribute to regional O₃ concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the significance threshold. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM₁₀ and PM_{2.5}) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. PM₁₀ exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM and PM₁₀ contains PM_{2.5} as a subset. As with O₃ and NO_x, the Project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the significance thresholds with implementation of mitigation measure AQ-1. Accordingly, the Project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, Project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants with implementation of mitigation measure AQ-1 and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. The Project would not have a high carcinogenic or non-carcinogenic risk during operation.

2.3.3.5 Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or “hot spots,” are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the NSVAB is designated as in attainment. Detailed modeling of Project-specific CO “hot spots” is not necessary and thus this potential impact is addressed qualitatively.

A CO “hot spot” would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The Bay Area Air Quality Management District concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

The Project would result in approximately 3,923 new automobile trips per day (Headway Transportation 2023). Thus, the Proposed Project would not generate traffic volumes at any intersection of more than 44,000 vehicles per day and there is no likelihood of the Project traffic exceeding CO values.

2.3.3.6 Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person’s reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses as being associated with odors.

3 GREENHOUSE GAS EMISSIONS

3.1 Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are CO₂, methane (CH₄), and N₂O. Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. More specifically, experts agree that human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020. (Intergovernmental Panel on Climate Change [IPCC] 2023).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps over 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e), which weight each gas by its global warming potential. Expressing GHG emissions in CO₂e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO₂ is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Despite the sequestration of CO₂, human-caused climate

change is already causing damaging effects, including weather and climate extremes in every region across the globe (IPCC 2023).

Table 3-1. Summary of Greenhouse Gases	
Greenhouse Gas	Description
CO ₂	Carbon dioxide is a colorless, odorless gas. CO ₂ is emitted in a number of ways, both naturally and through human activities. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO ₂ emissions. The atmospheric lifetime of CO ₂ is variable because it is so readily exchanged in the atmosphere. ¹
CH ₄	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH ₄ to the atmosphere. Natural sources of CH ₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH ₄ is about 12 years. ²
N ₂ O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N ₂ O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N ₂ O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N ₂ O is approximately 120 years. ³

Sources: ¹U.S. Environmental Protection Agency (USEPA) 2023a, ²USEPA 2023b, ³USEPA2023c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

3.1.1 Sources of Greenhouse Gas Emissions

In 2022, CARB released the 2022 edition of the California GHG inventory covering calendar year 2020 emissions. In 2020, California emitted 369.2 million gross metric tons of CO₂e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of California’s GHG emissions in 2020, accounting for approximately 38 percent of total GHG emissions in the state. Continuing the downward trend from previous years, transportation emissions decreased 27 million metric tons of CO₂e in 2020, though the intensity of this decrease was most likely from light duty vehicles after shelter-in-place orders were enacted in response to the COVID-19 pandemic. Emissions from the electricity sector account for 16 percent of the inventory and have remained at a similar level as in 2019 despite a 44 percent decrease in in-state hydropower generation (due to below average precipitation levels), which was more than compensated for by a 10 percent growth in in-state solar generation and cleaner imported

electricity incentivized by California's clean energy policies. California's industrial sector accounts for the second largest source of the state's GHG emissions in 2020, accounting for 23 percent (CARB 2022b).

3.2 Regulatory Framework

3.2.1 State

3.2.1.1 Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

3.2.1.2 Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlined measures to meet the 2020 GHG reduction goals. California exceeded the target of reducing GHG emissions to 1990 levels by the year 2017.

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2022 Scoping Plan Update, outlines strategies and actions to reduce greenhouse gas emissions in California. The plan focuses on achieving the state's goal of reaching carbon neutrality by 2045 and reducing greenhouse gas emissions to 40 percent below 1990 levels by 2030. The plan includes a range of strategies across various sectors, including transportation, industry, energy, and agriculture. Some of the key strategies include transitioning to zero-emission vehicles, expanding renewable energy sources, promoting sustainable land use practices, implementing a low-carbon fuel standard, and reducing emissions from buildings. Additionally, the plan addresses equity and environmental justice by prioritizing investments in communities most impacted by pollution and climate change. The plan also aims to promote economic growth and job creation through the transition to a low-carbon economy.

3.2.1.3 Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030.

3.2.1.4 Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

In 2018, SB 100 was signed codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

3.2.1.5 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2022 California Building Codes include provisions related to energy efficiency to reduce energy consumption and greenhouse gas emissions from buildings. Some of the key energy efficiency components of the codes are:

1. Energy Performance Requirements: The codes specify minimum energy performance standards for the building envelope, lighting, heating and cooling systems, and other components.
2. Lighting Efficiency: The codes require that lighting systems meet minimum efficiency standards, such as the use of energy-efficient light bulbs and fixtures.
3. Heating, Ventilation, and Air Conditioning (HVAC) Systems: The codes establish requirements for HVAC systems, including the use of high-efficiency equipment, duct sealing, and controls.
4. Building Envelope: The codes include provisions for insulation, air sealing, glazing, and other building envelope components to reduce energy loss and improve indoor comfort.
5. Renewable Energy: The codes encourage the use of renewable energy systems, such as photovoltaic panels and wind turbines, to reduce dependence on non-renewable energy sources.
6. Commissioning: The codes require the commissioning of building energy systems to ensure that they are installed and operate correctly and efficiently.

Overall, the energy efficiency provisions of the 2022 California Building Codes aim to reduce the energy consumption of buildings, lower energy costs for building owners and occupants, and reduce the environmental impact of the built environment. The 2022 Building Energy Efficiency Standards improve upon the 2019 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The exact amount by which the 2022 Building Codes are more efficient compared to the 2019 Building Codes would depend on the specific provisions that have been updated and the specific building being considered. However, in general, the 2022 Building Codes have been updated to include increased requirements for energy efficiency, such as higher insulation and air sealing standards, which are intended to result in more efficient buildings. The 2022 standards are a major step toward meeting Zero Net Energy.

3.3 Greenhouse Gas Emissions Impact Assessment

3.3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

- 1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or
- 2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The Appendix G thresholds for GHG's do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines § 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 California Code of Regulations [CCR] 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. 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 GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines § 15130(f)). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines § 15064(h)(3), a project’s incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a “water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions.” Put another way, CEQA Guidelines § 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project’s GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Neither the City of Colusa nor the CCAPCD promulgate GHG emission thresholds or have adopted plans intended to reduce GHG emissions. Therefore, the Project will be assessed for consistency with the 2022 Scoping Plan.

3.3.2 Methodology

Where GHG emission quantification was required, emissions were modeled using CalEEMod, version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated emissions were calculated using a combination of CalEEMod model defaults for Colusa County and information provided by the Project proponent such as Project construction phasing. Operational emissions were calculated based on the site dimensions and lot acreage identified in Project Site plans and the average daily vehicle trips generated by the Project identified in the Traffic Impact Study prepared by Headway Transportations (2023).

3.3.3 Generation of GHG Emissions

Project Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 3-2. Construction-Related Greenhouse Gas Emissions	
Emission Source	CO₂e Emissions (Metric Tons/Year)
Calendar Year One	397

Calendar Year Two	1,092
Calendar Year Three	584
Calendar Year Four	572
Calendar Year Five	508
Calendar Year Six	395
Calendar Year Seven	487
Calendar Year Eight	219
Total Construction Emissions	4,254

Sources: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs

Notes: Building construction, paving and painting are assumed to occur simultaneously. Construction phasing provided by the Project proponent. Construction GHG emissions account for the implementation of mitigation measure AQ-1.

As shown in Table 3-2, Project construction would result in the generation of approximately 4,254 metric tons of CO₂e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease.

Project Operations

Operation of the Project would result in an increase in GHG emissions primarily associated with mobile sources. Long-term operational GHG emissions attributed to the Project are identified in Table 3-3.

Table 3-3. Operational-Related Greenhouse Gas Emissions	
Emission Source	CO₂e Emissions (Metric Tons/Year)
Mobile	5,859
Area	4
Energy	736
Water	36
Waste	78
Refrigeration	0
Total	6,713

Sources: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs

Notes: Emission projections predominately based on CalEEMod model defaults for Colusa County, site acreage and building dimensions provided by the Project Site Plans, and average daily vehicle trips provided by Headway Transportations (2023). Operational GHG emissions account for the implementation of mitigation measure AQ-2.

As shown in Table 3-3, operations of the Project would result in 6,713 metric tons of CO₂e annually.

3.3.4 Impact Analysis

3.3.4.1 Generation of Greenhouse Gas Emissions Resulting in a Conflicts with an Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

CARB's 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. The 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high global warming potential; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines Section 15183.5.

Statewide strategies to reduce GHG emissions in the latest 2022 Scoping Plan include implementing SB 100, which would achieve 100 percent clean electricity by 2045; achieving 100 percent zero emission vehicle sales in 2035 through Advanced Clean Cars II; and implementing the Advanced Clean Fleets regulation to deploy zero-emission vehicles (ZEV) buses and trucks. Additional transportation policies include the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, Clean Off-Road Fleet Recognition Program, and Amendments to the In-use Off-Road Diesel-Fueled Fleets Regulation. The 2022 Scoping Plan would continue to implement SB 375. GHGs would be further reduced through the Cap-and-Trade Program carbon pricing and SB 905. SB 905 requires CARB to create the Carbon Capture, Removal, Utilization, and Storage Program to evaluate, demonstrate, and regulate carbon dioxide removal projects and technology.

GHG reductions are also achieved as a result of State of California energy and water efficiency requirements for new residential developments. These efficiency improvements correspond to reductions in secondary GHG emissions. For example, in California, most of the electricity that powers homes are derived from natural gas combustion. Therefore, energy saving measures, such as Title 24, reduces GHG emissions from the power generation facilities by reducing load demand.

The 2022 Scoping Plan Appendix D provides local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. The 2022 Scoping Plan Appendix D focuses on Residential and Mixed-Use Projects.

The 2022 Scoping Plan Appendix D lists potential actions that support the state's climate goals. However, the 2022 Scoping Plan notes that the applicability and performance of the actions may vary across the regions. The document is organized into two categories (A) examples of plan-level GHG reduction actions that could be implemented by local governments and (B) examples of on-site project design features, mitigation measures, that could be required of individual projects under CEQA, if feasible, when the local jurisdiction is the lead agency.

The Project would include a number of the 2022 Scoping Plan standard conditions and mitigation measures for construction and operation. For example, the 2022 Scoping Plan's construction actions include enforcing idling time restrictions on construction vehicles and requiring construction vehicles to operate highest tier engines commercially available.

The Project would include a majority of the feasible operational mitigation measures listed in the 2022 Scoping Plan Appendix D as design features. Some of the recommended operational measures would include creating on-site safety improvements for bikes and pedestrians, requiring solar panels, and energy conserving appliances.

As identified in Table 3-4 below, the Project would be consistent with all applicable plan goals and applicable regulatory programs designed to reduce GHG emissions generated by land use projects. The Project would be subject to compliance with all building codes in effect at the time of construction, which include energy conservation measures mandated by California Building Standards Code Title 24 – Energy Efficiency Standards. Because Title 24 standards require energy conservation features in new construction (e.g., high- efficiency lighting, high-efficiency HVAC systems, thermal insulation, double-glazed windows, water conserving plumbing fixtures), they indirectly regulate and reduce GHG emissions. California's Building Energy Efficiency Standards are updated on an approximately three-year cycle.

As shown in Table 3-3, approximately 98 percent of the Project's emissions are from energy and mobile sources, which would be further reduced by the 2022 Scoping Plan actions described above. The City has no control over vehicle emissions (approximately 87 percent of the Project's total emissions). However, these emissions would decline in the future due to statewide measures, as well as cleaner technology and fleet turnover. Several of the state's plans and policies would contribute to a reduction in the Project's mobile source emissions, including the following:

- CARB's Advanced Clean Truck Regulation: Adopted in June 2020, CARB's Advanced Clean Truck Regulation requires truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8.
- Executive Order N-79-20: This Executive Order establishes the goal for all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, to be zero-emission by 2035 and all medium and heavy-duty vehicles to be zero-emission by 2045. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent."
- CARB's Mobile Source Strategy: CARB's Mobile Source Strategy takes an integrated planning approach to identify the level of transition to cleaner mobile source technologies needed to achieve all of California's targets by increasing the adoption of ZEV buses and trucks.

- CARB’s Sustainable Freight Action Plan: The Sustainable Freight Action Plan which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks. This Plan applies to all trucks accessing the Project Site and may include existing trucks or new trucks that are part of the Statewide goods movement sector.
- CARB’s Emissions Reduction Plan for Ports and Goods Movement: CARB’s Emissions Reduction Plan for Ports and Goods Movement identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories.

While these measures are not directly applicable to the Project, any activity associated with goods movement would be required to comply with these measures as adopted. The Project would not obstruct or interfere with efforts to increase ZEVs or state efforts to improve system efficiency. Compliance with applicable state standards (e.g., continuation of the Cap-and-Trade regulation; CARB’s Mobile Source Strategy, Sustainable Freight Action Plan, and Advanced Clean Truck Regulation; Executive Order N-79-20; SB 100/renewable electricity portfolio improvements that require 60 percent renewable electricity by 2030 and 100 percent renewable by 2045, etc.) would ensure consistency with state and regional GHG reduction planning efforts, including the 2022 Scoping Plan. It is also noted that the Project would not convert any or decrease the state’s urban forest carbon stock, which is an area of emphasis in the 2022 Scoping Plan.

Regarding goals for 2050 under Executive Order S-3-05, at this time it is not possible to quantify the emissions savings from future regulatory measures, as they have not yet been developed; nevertheless, it can be anticipated that Project operations would benefit from applicable measures enacted to meet state GHG reduction goals. The Project would not impede the state’s progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Table 3-4 below shows the Projects consistency with the 2022 Scoping Plan.

Scoping Plan Sector	Scoping Plan Measure	Implementing Regulations	Project Consistency
Transportation	California Cap-and Trade Program Linked to Western Climate Initiative	Regulation for the California Cap on GHG Emissions and Market-Based Compliance Mechanism October 20, 2015 (CCR 95800)	Consistent. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers. However, the regulation indirectly affects people who use the products and services produced by these industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects’ electricity usage are covered by the Cap-and-Trade

			Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. The Proposed Project would not conflict with implementation of the Cap-and-Trade Program and would indirectly be consistent with regard to the use of electricity and fuel.
	California Light-Duty Vehicle GHG Standards	Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles Pavley I 2005 Regulations to Control GHG Emissions from Motor Vehicles	Consistent. This measure applies to all new vehicles starting with model year 2012. The Project would not conflict with its implementation as it would apply to all new passenger vehicles purchased in California. Passenger vehicles, model year 2012 and later, associated with Project construction and operation would be required to comply with the Pavley emissions standards.
		2012 LEV III California GHG and Criteria Pollutant Exhaust and Evaporative Emission Standards	Consistent. The LEV III amendments provide reductions from new vehicles sold in California between 2017 and 2025. Passenger vehicles associated with Project construction and operations would be required to comply with LEV III standards.
	Low Carbon Fuel Standard	2009 readopted in 2015. Regulations to Achieve GHG Emission Reductions Subarticle 7. Low Carbon Fuel Standard CCR 95480	Consistent. This measure applies to transportation fuels utilized by vehicles in California. The Project would not conflict with implementation of this measure. It is assumed that any motor vehicles associated with Project construction and operations would be consistent with the measure and utilize low carbon transportation fuels.
	Goods Movement	Goods Movement Action Plan January 2007	Not Applicable. The Project does not propose any changes to maritime, rail, or intermodal facilities or forms of transportation.
	Medium/Heavy-Duty Vehicle	2010 Amendments to the Truck and Bus Regulation, the Drayage Truck Regulation and the Tractor-Trailer GHG Regulation	Consistent. This measure applies to medium- and heavy-duty vehicles that operate in the state. The Project would not conflict with implementation of this measure. Medium- and heavy-duty vehicles associated with Project construction would be required to comply with this regulation
	High Speed Rail	Funded under SB 862	Not Applicable. This is a Statewide measure that cannot be implemented by a project applicant or Lead Agency

Electricity and Natural Gas	Energy Efficiency	Title 20 Appliance Efficiency Regulation	Consistent. The Project would not conflict with implementation of this measure, as it would be subject to compliance with the latest energy efficiency standards.
		Title 24 Part 6 Energy Efficiency Standards for Residential and Non-Residential Building	
		Title 24 Part 11 California Green Building Code Standards	
	Renewable Portfolio Standard/Renewable Electricity Standard	2010 Regulation to Implement the Renewable Electricity Standard (33% 2020)	Consistent. The Project would obtain electricity from the Pacific Gas & Electric Company (PG&E). PG&E delivers approximately 40 percent of the electricity that they provide from renewable resources. PG&E also offers a program to customers to purchase up to 100 percent of their electricity from either solar or regional renewable energy sources. Therefore, the utility would provide power to the Project that would be comprised of a greater percentage of renewable sources.
Million Solar Roofs Program	SB 350 Clean Energy and Pollution Reduction Act of 2015 (50% 2030)		
Million Solar Roofs Program	Tax Incentive Program	Consistent. This measure is to increase solar use throughout California, which is being done by various electricity providers and existing solar programs. The program provides incentives that are in place at the time of construction.	
Water	Water	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would comply with the CALGreen Code, which require a 20 percent reduction in indoor water use.
		SBX 7-7—The Water Conservation Act of 2009	
		Model Water Efficient Landscape Ordinance	
Green Buildings	Green Building Strategy	Title 24 Part 11 California Green Building Code Standards	Consistent. The state is required to increase use of green building practices. The Project would implement required green building strategies through existing regulations that require the Project to comply with various CALGreen Code standards.
Industry	Industrial Emissions	2010 CARB Mandatory Reporting Regulation	Not Applicable. The Mandatory Reporting Regulation requires facilities and entities with more than 10,000 metric tons of CO ₂ e of combustion and process emissions, all

			facilities belonging to certain industries, and all electric power entities to submit an annual GHG emissions data report directly to CARB. The Project is not considered a "facility" and the majority of these emissions are from mobile sources. Therefore, this regulation would not apply.
Recycling and Waste Management	Recycling and Waste	Title 24 Part 11 California Green Building Code Standards	Consistent. The Project would not conflict with implementation of these measures. The Project is required to achieve the recycling mandates via compliance with the CALGreen Code.
		AB 341 Statewide 75 Percent Diversion Goal	
Forests	Sustainable Forests	Cap-and-Trade Offset Projects	Not Applicable. The Project is in an area designated for urban uses. No forested lands exist on the site.
High Global Warming Potential	High Global Warming Potential Gases	CARB Refrigerant Management Program CCR 95380	Consistent. The regulations are applicable to refrigerants used by large air conditioning systems and large commercial and industrial refrigerators and cold storage systems. The Project would not conflict with the refrigerant management regulations adopted by CARB.
Agriculture	Agriculture	Cap-and-Trade Offset Projects for Livestock and Rice Cultivation	Not Applicable. No grazing, feedlot, or other agricultural activities that generate manure occur currently on site or are proposed by the Project.

In conclusion, the Project does not conflict with the applicable plans and regulatory programs that are discussed above.

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CalEEMod Output Files – Criteria Air Pollutant and Greenhouse Gas Emissions

PHASE 1 CONSTRUCTION

Wescott Phase 1 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Phase 1
Construction Start Date	7/1/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.18350867868236, -122.01753638321199
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	48.0	Dwelling Unit	15.6	93,600	562,217	—	138	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.44	11.4	36.0	34.3	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,841	6,841	0.28	0.07	2.18	6,867
Mit.	0.76	9.76	5.80	36.9	0.06	0.12	19.8	19.9	0.12	10.1	10.2	—	6,841	6,841	0.28	0.07	2.18	6,867
% Reduced	83%	15%	84%	-8%	—	92%	—	7%	92%	—	12%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.82	11.4	20.4	26.4	0.04	0.92	0.42	1.35	0.85	0.10	0.95	—	4,601	4,601	0.19	0.07	0.06	4,627
Mit.	0.73	9.73	5.86	28.5	0.04	0.11	0.42	0.53	0.11	0.10	0.21	—	4,601	4,601	0.19	0.07	0.06	4,627
% Reduced	74%	15%	71%	-8%	—	88%	—	60%	87%	—	78%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67	7.14	12.2	16.6	0.03	0.51	1.43	1.82	0.47	0.61	0.97	—	2,917	2,917	0.12	0.05	0.55	2,934
Mit.	0.45	6.16	3.68	18.0	0.03	0.07	1.43	1.47	0.07	0.61	0.65	—	2,917	2,917	0.12	0.05	0.55	2,934
% Reduced	73%	14%	70%	-9%	—	87%	—	20%	86%	—	33%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.30	1.30	2.22	3.02	< 0.005	0.09	0.26	0.33	0.09	0.11	0.18	—	483	483	0.02	0.01	0.09	486
Mit.	0.08	1.12	0.67	3.28	< 0.005	0.01	0.26	0.27	0.01	0.11	0.12	—	483	483	0.02	0.01	0.09	486
% Reduced	73%	14%	70%	-9%	—	87%	—	20%	86%	—	33%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.44	11.4	36.0	34.3	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,841	6,841	0.28	0.07	2.18	6,867
2025	2.67	11.3	19.1	26.8	0.04	0.81	0.42	1.23	0.75	0.10	0.85	—	4,640	4,640	0.18	0.07	2.02	4,668
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.82	11.4	20.4	26.4	0.04	0.92	0.42	1.35	0.85	0.10	0.95	—	4,601	4,601	0.19	0.07	0.06	4,627
2025	2.63	11.3	19.2	26.1	0.04	0.81	0.42	1.23	0.75	0.10	0.85	—	4,590	4,590	0.19	0.07	0.05	4,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.19	3.30	8.99	10.2	0.02	0.40	1.43	1.82	0.37	0.61	0.97	—	1,884	1,884	0.08	0.03	0.28	1,894
2025	1.67	7.14	12.2	16.6	0.03	0.51	0.27	0.78	0.47	0.06	0.54	—	2,917	2,917	0.12	0.05	0.55	2,934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.22	0.60	1.64	1.87	< 0.005	0.07	0.26	0.33	0.07	0.11	0.18	—	312	312	0.01	< 0.005	0.05	314
2025	0.30	1.30	2.22	3.02	< 0.005	0.09	0.05	0.14	0.09	0.01	0.10	—	483	483	0.02	0.01	0.09	486

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.76	9.76	5.80	36.9	0.06	0.12	19.8	19.9	0.12	10.1	10.2	—	6,841	6,841	0.28	0.07	2.18	6,867
2025	0.75	9.74	5.76	29.0	0.04	0.11	0.42	0.53	0.11	0.10	0.21	—	4,640	4,640	0.18	0.07	2.02	4,668
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.73	9.73	5.86	28.5	0.04	0.11	0.42	0.53	0.11	0.10	0.21	—	4,601	4,601	0.19	0.07	0.06	4,627
2025	0.71	9.71	5.83	28.3	0.04	0.11	0.42	0.53	0.11	0.10	0.21	—	4,590	4,590	0.19	0.07	0.05	4,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.26	2.55	1.93	11.1	0.02	0.04	1.43	1.47	0.04	0.61	0.65	—	1,884	1,884	0.08	0.03	0.28	1,894
2025	0.45	6.16	3.68	18.0	0.03	0.07	0.27	0.34	0.07	0.06	0.13	—	2,917	2,917	0.12	0.05	0.55	2,934
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.05	0.47	0.35	2.02	< 0.005	0.01	0.26	0.27	0.01	0.11	0.12	—	312	312	0.01	< 0.005	0.05	314
2025	0.08	1.12	0.67	3.28	< 0.005	0.01	0.05	0.06	0.01	0.01	0.02	—	483	483	0.02	0.01	0.09	486

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement:	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.36	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	212	212	0.01	0.01	0.83	215

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.27	5.27	< 0.005	< 0.005	0.01	5.34	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.88	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.2. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.08	1.36	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	212	212	0.01	0.01	0.83	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.27	5.27	< 0.005	< 0.005	0.01	5.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.82	2.48	0.01	0.12	—	0.12	0.11	—	0.11	—	542	542	0.02	< 0.005	—	544

Dust From Material Movement:	—	—	—	—	—	—	0.76	0.76	—	0.30	0.30	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.06	0.05	0.51	0.45	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement:	—	—	—	—	—	—	0.14	0.14	—	0.05	0.05	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.12	0.11	0.09	1.55	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	242	242	0.01	0.01	0.95	246
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.1	18.1	< 0.005	< 0.005	0.03	18.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.99	2.99	< 0.005	< 0.005	0.01	3.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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3.4. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621	
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.36	2.91	0.01	0.01	—	0.01	0.01	—	0.01	—	542	542	0.02	< 0.005	—	544	
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.30	0.30	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	89.8	89.8	< 0.005	< 0.005	—	90.1	

Dust From Material Movement:	—	—	—	—	—	—	0.14	0.14	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.09	1.55	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	242	242	0.01	0.01	0.95	246
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.1	18.1	< 0.005	< 0.005	0.03	18.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.99	2.99	< 0.005	< 0.005	0.01	3.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.31	2.85	3.34	0.01	0.13	—	0.13	0.12	—	0.12	—	610	610	0.02	< 0.005	—	612
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.52	0.61	< 0.005	0.02	—	0.02	0.02	—	0.02	—	101	101	< 0.005	< 0.005	—	101
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.08	1.34	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	209	209	0.01	0.01	0.82	213
Vendor	0.01	0.01	0.24	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	177	177	< 0.005	0.03	0.48	185
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	0.96	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	184	184	0.01	0.01	0.02	187
Vendor	0.01	0.01	0.25	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	177	177	< 0.005	0.03	0.01	185
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.3	48.3	< 0.005	< 0.005	0.09	49.0
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.0	45.0	< 0.005	0.01	0.05	47.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	0.01	8.11
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.45	7.45	< 0.005	< 0.005	0.01	7.78
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.83	14.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.35	0.33	2.83	14.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.72	3.77	0.01	0.02	—	0.02	0.02	—	0.02	—	610	610	0.02	< 0.005	—	612
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.69	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	101	101	< 0.005	< 0.005	—	101
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.08	1.34	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	209	209	0.01	0.01	0.82	213
Vendor	0.01	0.01	0.24	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	177	177	< 0.005	0.03	0.48	185
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	0.96	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	184	184	0.01	0.01	0.02	187
Vendor	0.01	0.01	0.25	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	177	177	< 0.005	0.03	0.01	185
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48.3	48.3	< 0.005	< 0.005	0.09	49.0
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	45.0	45.0	< 0.005	0.01	0.05	47.0

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	0.01	8.11	
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.45	7.45	< 0.005	< 0.005	0.01	7.78	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.62	8.27	0.01	0.27	—	0.27	0.25	—	0.25	—	1,520	1,520	0.06	0.01	—	1,525
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.16	0.13	1.21	1.51	< 0.005	0.05	—	0.05	0.05	—	0.05	—	252	252	0.01	< 0.005	—	253
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.06	1.23	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	205	205	0.01	0.01	0.75	208
Vendor	0.01	0.01	0.22	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	174	174	< 0.005	0.02	0.48	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	0.88	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	180	180	0.01	0.01	0.02	183
Vendor	0.01	0.01	0.24	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	174	174	< 0.005	0.02	0.01	181
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	0.01	< 0.005	0.20	120
Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	110	110	< 0.005	0.02	0.13	115
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.5	19.5	< 0.005	< 0.005	0.03	19.8
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.02	19.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.21	1.79	9.40	0.01	0.05	—	0.05	0.05	—	0.05	—	1,520	1,520	0.06	0.01	—	1,525
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.33	1.72	< 0.005	0.01	—	0.01	0.01	—	0.01	—	252	252	0.01	< 0.005	—	253
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.06	1.23	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	205	205	0.01	0.01	0.75	208
Vendor	0.01	0.01	0.22	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	174	174	< 0.005	0.02	0.48	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	0.88	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	180	180	0.01	0.01	0.02	183
Vendor	0.01	0.01	0.24	0.08	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	174	174	< 0.005	0.02	0.01	181
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.58	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	0.01	< 0.005	0.20	120
Vendor	0.01	< 0.005	0.15	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	110	110	< 0.005	0.02	0.13	115
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.5	19.5	< 0.005	< 0.005	0.03	19.8
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.02	19.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.99	2.55	< 0.005	0.10	—	0.10	0.09	—	0.09	—	385	385	0.02	< 0.005	—	386
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.36	0.47	< 0.005	0.02	—	0.02	0.02	—	0.02	—	63.7	63.7	< 0.005	< 0.005	—	63.9
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.07	1.16	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	182	182	0.01	0.01	0.71	185
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	160	160	0.01	0.01	0.02	162

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.9	41.9	< 0.005	< 0.005	0.08	42.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.94	6.94	< 0.005	< 0.005	0.01	7.04	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.49	2.70	< 0.005	0.01	—	0.01	0.01	—	0.01	—	385	385	0.02	< 0.005	—	386	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01	0.01	0.09	0.49	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.7	63.7	< 0.005	< 0.005	—	63.9	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.09	0.08	0.07	1.16	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	182	182	0.01	0.01	0.71	185	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	160	160	0.01	0.01	0.02	162	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.9	41.9	< 0.005	< 0.005	0.08	42.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.94	6.94	< 0.005	< 0.005	0.01	7.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.51	4.73	6.33	0.01	0.22	—	0.22	0.20	—	0.20	—	958	958	0.04	0.01	—	962
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.86	1.16	< 0.005	0.04	—	0.04	0.04	—	0.04	—	159	159	0.01	< 0.005	—	159	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.09	0.08	0.06	1.07	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	178	178	0.01	0.01	0.65	181	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.08	0.77	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	0.01	0.01	0.02	159	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.04	0.04	0.51	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	102	102	0.01	< 0.005	0.18	104	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.03	17.2	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.12. Paving (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	1.23	6.72	0.01	0.02	—	0.02	0.02	—	0.02	—	958	958	0.04	0.01	—	962
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.22	1.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	159	159	0.01	< 0.005	—	159
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.07	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	178	178	0.01	0.01	0.65	181	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.08	0.77	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	0.01	0.01	0.02	159	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.04	0.04	0.51	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	102	102	0.01	< 0.005	0.18	104	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.03	17.2	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.13. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.23	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.0	34.0	< 0.005	< 0.005	—	34.1
Architectural Coatings	—	2.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.62	5.62	< 0.005	< 0.005	—	5.64
Architectural Coatings	—	0.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.9	41.9	< 0.005	< 0.005	0.16	42.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.8	36.8	< 0.005	< 0.005	< 0.005	37.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.66	9.66	< 0.005	< 0.005	0.02	9.80	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.62	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.14. Architectural Coating (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.16	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.0	34.0	< 0.005	< 0.005	—	34.1
Architectural Coatings	—	2.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.62	5.62	< 0.005	< 0.005	—	5.64
Architectural Coatings	—	0.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.9	41.9	< 0.005	< 0.005	0.16	42.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.02	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.8	36.8	< 0.005	< 0.005	< 0.005	37.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.66	9.66	< 0.005	< 0.005	0.02	9.80	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.62	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.15. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.56	0.72	< 0.005	0.02	—	0.02	0.02	—	0.02	—	84.7	84.7	< 0.005	< 0.005	—	85.0
Architectural Coatings	—	5.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.0	14.0	< 0.005	< 0.005	—	14.1
Architectural Coatings	—	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.25	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.0	41.0	< 0.005	< 0.005	0.15	41.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.01	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.1	36.1	< 0.005	< 0.005	< 0.005	36.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	23.9	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.90	3.90	< 0.005	< 0.005	0.01	3.96	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.16. Architectural Coating (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.41	0.61	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	84.7	84.7	< 0.005	< 0.005	—	85.0
Architectural Coatings	—	5.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.07	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.0	14.0	< 0.005	< 0.005	—	14.1
Architectural Coatings	—	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.25	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	41.0	41.0	< 0.005	< 0.005	0.15	41.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.01	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.1	36.1	< 0.005	< 0.005	< 0.005	36.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.6	23.6	< 0.005	< 0.005	0.04	23.9	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.90	3.90	< 0.005	< 0.005	0.01	3.96	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	7/1/2024	7/12/2024	5.00	10.0	—
Grading	Grading	7/13/2024	8/23/2024	5.00	30.0	—
Building Construction	Building Construction	8/24/2024	11/20/2025	5.00	324	—
Paving	Paving	8/24/2024	11/20/2025	5.00	324	—
Architectural Coating	Architectural Coating	8/24/2024	11/20/2025	5.00	324	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29

Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	17.3	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	5.13	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT

Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.46	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	17.3	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	5.13	10.8	HHDT,MHDT

Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.46	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	189,540	63,180	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—

Grading	—	—	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.53

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.53	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events.

Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2

Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6
Pesticides	92.1
Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7

Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3
Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—
Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183
Education	—
Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151

Active commuting	26.67778776
Social	—
2-parent households	15.50109072
Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841
Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859
Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5

Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9

Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Building construction, paving and painting assumed to occur simultaneously.
Operations: Vehicle Data	Model run done for construction emissions only.
Operations: Hearths	Model run done for construction emissions only.
Operations: Energy Use	Model run done for construction emissions only.
Operations: Water and Waste Water	Model run done for construction emissions only.

Operations: Solid Waste

Model run done for construction emissions only.

PHASE 2 CONSTRUCTION

Wescott Phase 2 Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Phase 2
Construction Start Date	11/21/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.1835, -122.0175
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	39.0	Dwelling Unit	12.7	76,050	456,801	—	112	—

Office Park	51.0	1000sqft	1.17	50,960	0.00	—	—	—
Parking Lot	75.0	Space	0.67	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.77	14.3	19.5	28.0	0.04	0.81	0.66	1.47	0.75	0.16	0.91	—	5,077	5,077	0.19	0.11	3.39	5,119
Mit.	0.85	12.7	6.14	30.2	0.04	0.11	0.66	0.77	0.11	0.16	0.27	—	5,077	5,077	0.19	0.11	3.39	5,119
% Reduced	69%	11%	69%	-8%	—	86%	—	48%	85%	—	70%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.43	14.2	36.1	33.9	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,811	6,811	0.28	0.11	0.09	6,837
Mit.	0.80	12.7	6.26	36.5	0.06	0.12	19.8	19.9	0.12	10.1	10.2	—	6,811	6,811	0.28	0.11	0.09	6,837
% Reduced	82%	11%	83%	-8%	—	92%	—	7%	92%	—	12%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	1.98	9.85	14.3	19.4	0.03	0.59	1.04	1.32	0.55	0.47	0.76	—	3,638	3,638	0.14	0.08	1.01	3,667
Mit.	0.57	8.72	4.39	21.1	0.03	0.08	1.04	1.05	0.08	0.47	0.48	—	3,638	3,638	0.14	0.08	1.01	3,667
% Reduced	71%	11%	69%	-9%	—	86%	—	20%	86%	—	37%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	1.80	2.61	3.54	0.01	0.11	0.19	0.24	0.10	0.09	0.14	—	602	602	0.02	0.01	0.17	607
Mit.	0.10	1.59	0.80	3.86	0.01	0.01	0.19	0.19	0.01	0.09	0.09	—	602	602	0.02	0.01	0.17	607
% Reduced	71%	11%	69%	-9%	—	86%	—	20%	86%	—	37%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.77	14.3	19.5	28.0	0.04	0.81	0.66	1.47	0.75	0.16	0.91	—	5,077	5,077	0.19	0.11	3.39	5,119
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	4.43	3.73	36.1	33.9	0.06	1.60	19.8	21.4	1.47	10.1	11.6	—	6,811	6,811	0.28	0.06	0.02	6,837
2025	3.90	14.2	29.8	29.3	0.06	1.23	9.41	10.6	1.14	3.70	4.84	—	6,808	6,808	0.28	0.11	0.09	6,833
2026	2.58	14.1	18.6	26.6	0.04	0.73	0.66	1.38	0.67	0.16	0.83	—	4,984	4,984	0.18	0.11	0.08	5,022
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.35	0.29	2.80	2.59	< 0.005	0.12	1.04	1.16	0.11	0.47	0.58	—	511	511	0.02	< 0.005	0.03	513
2025	1.98	9.85	14.3	19.4	0.03	0.59	0.73	1.32	0.55	0.22	0.76	—	3,638	3,638	0.14	0.08	1.01	3,667
2026	0.35	1.94	2.55	3.66	0.01	0.10	0.09	0.19	0.09	0.02	0.11	—	685	685	0.02	0.02	0.18	690
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	0.06	0.05	0.51	0.47	< 0.005	0.02	0.19	0.21	0.02	0.09	0.11	—	84.5	84.5	< 0.005	< 0.005	0.01	84.9
2025	0.36	1.80	2.61	3.54	0.01	0.11	0.13	0.24	0.10	0.04	0.14	—	602	602	0.02	0.01	0.17	607
2026	0.06	0.35	0.46	0.67	< 0.005	0.02	0.02	0.03	0.02	< 0.005	0.02	—	113	113	< 0.005	< 0.005	0.03	114

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.85	12.7	6.14	30.2	0.04	0.11	0.66	0.77	0.11	0.16	0.27	—	5,077	5,077	0.19	0.11	3.39	5,119
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.75	0.74	4.54	36.5	0.06	0.12	19.8	19.9	0.12	10.1	10.2	—	6,811	6,811	0.28	0.06	0.02	6,837
2025	0.80	12.7	6.26	36.4	0.06	0.12	9.41	9.54	0.12	3.70	3.83	—	6,808	6,808	0.28	0.11	0.09	6,833
2026	0.78	12.7	6.19	29.0	0.04	0.11	0.66	0.77	0.11	0.16	0.27	—	4,984	4,984	0.18	0.11	0.08	5,022
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.06	0.05	0.31	2.73	< 0.005	0.01	1.04	1.05	0.01	0.47	0.48	—	511	511	0.02	< 0.005	0.03	513
2025	0.57	8.72	4.39	21.1	0.03	0.08	0.73	0.81	0.08	0.22	0.30	—	3,638	3,638	0.14	0.08	1.01	3,667
2026	0.11	1.74	0.84	3.98	0.01	0.02	0.09	0.11	0.01	0.02	0.04	—	685	685	0.02	0.02	0.18	690
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.01	0.01	0.06	0.50	< 0.005	< 0.005	0.19	0.19	< 0.005	0.09	0.09	—	84.5	84.5	< 0.005	< 0.005	0.01	84.9
2025	0.10	1.59	0.80	3.86	0.01	0.01	0.13	0.15	0.01	0.04	0.05	—	602	602	0.02	0.01	0.17	607
2026	0.02	0.32	0.15	0.73	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	113	113	< 0.005	< 0.005	0.03	114

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.34	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.99	0.90	< 0.005	0.04	—	0.04	0.04	—	0.04	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1

Dust From Material Movement:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.10	0.97	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	187	187	0.01	0.01	0.02	189
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.27	5.27	< 0.005	< 0.005	0.01	5.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.10	0.97	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	187	187	0.01	0.01	0.02	189
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.27	5.27	< 0.005	< 0.005	0.01	5.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.19	3.52	34.3	30.2	0.06	1.45	—	1.45	1.33	—	1.33	—	6,598	6,598	0.27	0.05	—	6,621

Dust From Material Movement:	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.81	1.59	< 0.005	0.08	—	0.08	0.07	—	0.07	—	349	349	0.01	< 0.005	—	350
Dust From Material Movement:	—	—	—	—	—	—	0.49	0.49	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.33	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.7	57.7	< 0.005	< 0.005	—	57.9
Dust From Material Movement:	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.11	1.11	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	213	213	0.01	0.01	0.02	216
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.6	11.6	< 0.005	< 0.005	0.02	11.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.92	1.92	< 0.005	< 0.005	< 0.005	1.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	1.87	< 0.005	0.01	—	0.01	0.01	—	0.01	—	349	349	0.01	< 0.005	—	350

Dust From Material Movement:	—	—	—	—	—	—	0.49	0.49	—	0.19	0.19	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	57.7	57.7	< 0.005	< 0.005	—	57.9
Dust From Material Movement:	—	—	—	—	—	—	0.09	0.09	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.10	0.11	1.11	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	213	213	0.01	0.01	0.02	216
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.6	11.6	< 0.005	< 0.005	0.02	11.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.92	1.92	< 0.005	< 0.005	< 0.005	1.95
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.80	3.20	29.7	28.3	0.06	1.23	—	1.23	1.14	—	1.14	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement:	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.83	< 0.005	0.04	—	0.04	0.03	—	0.03	—	194	194	0.01	< 0.005	—	194
Dust From Material Movement:	—	—	—	—	—	—	0.27	0.27	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.1	32.1	< 0.005	< 0.005	—	32.2

Dust From Material Movement:	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.02	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	209	209	0.01	0.01	0.02	212
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.31	6.31	< 0.005	< 0.005	0.01	6.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,599	6,599	0.27	0.05	—	6,622
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	1.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	194	194	0.01	< 0.005	—	194
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.11	0.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.1	32.1	< 0.005	< 0.005	—	32.2
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.02	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	209	209	0.01	0.01	0.02	212
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.31	6.31	< 0.005	< 0.005	0.01	6.41
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.35	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	7.15	8.93	0.02	0.30	—	0.30	0.27	—	0.27	—	1,642	1,642	0.07	0.01	—	1,648
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.31	1.63	< 0.005	0.05	—	0.05	0.05	—	0.05	—	272	272	0.01	< 0.005	—	273
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.11	2.17	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	360	360	0.02	0.01	1.32	365
Vendor	0.02	0.02	0.55	0.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	424	424	< 0.005	0.06	1.16	443
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.16	1.55	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	317	317	0.02	0.01	0.03	321
Vendor	0.02	0.02	0.59	0.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	425	425	< 0.005	0.06	0.03	442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.09	1.11	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	224	224	0.01	0.01	0.39	227
Vendor	0.01	0.01	0.40	0.13	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	< 0.005	0.04	0.34	303
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.0	37.0	< 0.005	< 0.005	0.06	37.6
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.1	48.1	< 0.005	0.01	0.06	50.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.23	1.93	10.2	0.02	0.05	—	0.05	0.05	—	0.05	—	1,642	1,642	0.07	0.01	—	1,648

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.35	1.85	< 0.005	0.01	—	0.01	0.01	—	0.01	—	272	272	0.01	< 0.005	—	273	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.17	0.15	0.11	2.17	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	360	360	0.02	0.01	1.32	365	
Vendor	0.02	0.02	0.55	0.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	424	424	< 0.005	0.06	1.16	443	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.15	0.13	0.16	1.55	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	317	317	0.02	0.01	0.03	321	
Vendor	0.02	0.02	0.59	0.19	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	425	425	< 0.005	0.06	0.03	442	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.10	0.09	0.09	1.11	0.00	0.00	0.22	0.22	0.00	0.05	0.05	—	224	224	0.01	0.01	0.39	227	
Vendor	0.01	0.01	0.40	0.13	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	< 0.005	0.04	0.34	303	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	37.0	37.0	< 0.005	< 0.005	0.06	37.6	
Vendor	< 0.005	< 0.005	0.07	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.1	48.1	< 0.005	0.01	0.06	50.2	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.9. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.35	1.78	< 0.005	0.05	—	0.05	0.05	—	0.05	—	328	328	0.01	< 0.005	—	330
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.4	54.4	< 0.005	< 0.005	—	54.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.14	0.12	0.14	1.43	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	310	310	0.01	0.01	0.03	314
Vendor	0.02	0.02	0.56	0.17	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	417	417	< 0.005	0.06	0.03	435
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.8	43.8	< 0.005	< 0.005	0.07	44.4
Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	57.1	57.1	< 0.005	0.01	0.06	59.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.35
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.45	9.45	< 0.005	< 0.005	0.01	9.86
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.05	0.39	2.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	328	328	0.01	< 0.005	—	330
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	54.4	54.4	< 0.005	< 0.005	—	54.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.14	1.43	0.00	0.00	0.32	0.32	0.00	0.08	0.08	—	310	310	0.01	0.01	0.03	314
Vendor	0.02	0.02	0.56	0.17	< 0.005	0.01	0.11	0.12	0.01	0.03	0.04	—	417	417	< 0.005	0.06	0.03	435
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.8	43.8	< 0.005	< 0.005	0.07	44.4
Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	57.1	57.1	< 0.005	0.01	0.06	59.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.25	7.25	< 0.005	< 0.005	0.01	7.35
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.45	9.45	< 0.005	< 0.005	0.01	9.86
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.55	5.11	6.84	0.01	0.24	—	0.24	0.22	—	0.22	—	1,035	1,035	0.04	0.01	—	1,039
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.93	1.25	< 0.005	0.04	—	0.04	0.04	—	0.04	—	171	171	0.01	< 0.005	—	172
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.07	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	178	178	0.01	0.01	0.65	181
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.77	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	0.01	0.01	0.02	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.55	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	111	111	0.01	< 0.005	0.19	112
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.03	18.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,517
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	1.32	7.26	0.01	0.02	—	0.02	0.02	—	0.02	—	1,035	1,035	0.04	0.01	—	1,039
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.24	1.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	171	171	0.01	< 0.005	—	172
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.06	1.07	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	178	178	0.01	0.01	0.65	181
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.08	0.77	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	157	157	0.01	0.01	0.02	159
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.55	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	111	111	0.01	< 0.005	0.19	112
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.3	18.3	< 0.005	< 0.005	0.03	18.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.98	1.36	< 0.005	0.04	—	0.04	0.04	—	0.04	—	207	207	0.01	< 0.005	—	208	
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.02	0.02	0.18	0.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.3	34.3	< 0.005	< 0.005	—	34.4	
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.07	0.71	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	153	153	< 0.005	0.01	0.02	155	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.03	22.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.58	3.58	< 0.005	< 0.005	0.01	3.63	

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.26	1.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	207	207	0.01	< 0.005	—	208
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.3	34.3	< 0.005	< 0.005	—	34.4
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.71	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	153	153	< 0.005	0.01	0.02	155
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.6	21.6	< 0.005	< 0.005	0.03	22.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.58	3.58	< 0.005	< 0.005	0.01	3.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134

Architectural	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.60	0.78	< 0.005	0.02	—	0.02	0.02	—	0.02	—	91.5	91.5	< 0.005	< 0.005	—	91.8
Architectural Coatings	—	8.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.1	15.1	< 0.005	< 0.005	—	15.2
Architectural Coatings	—	1.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.02	0.43	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	72.0	72.0	< 0.005	< 0.005	0.26	73.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	63.4	63.4	< 0.005	< 0.005	0.01	64.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	44.7	44.7	< 0.005	< 0.005	0.08	45.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.40	7.40	< 0.005	< 0.005	0.01	7.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.44	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	91.5	91.5	< 0.005	< 0.005	—	91.8
Architectural Coatings	—	8.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.1	15.1	< 0.005	< 0.005	—	15.2
Architectural Coatings	—	1.49	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.43	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	72.0	72.0	< 0.005	< 0.005	0.26	73.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	63.4	63.4	< 0.005	< 0.005	0.01	64.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	44.7	44.7	< 0.005	< 0.005	0.08	45.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.40	7.40	< 0.005	< 0.005	0.01	7.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Architectural Coatings	—	1.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.03	3.03	< 0.005	< 0.005	—	3.04
Architectural Coatings	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.29	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	62.1	62.1	< 0.005	< 0.005	0.01	62.9

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.76	8.76	< 0.005	< 0.005	0.01	8.88	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.45	1.45	< 0.005	< 0.005	< 0.005	1.47	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.18. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	11.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.09	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Architectural Coatings	—	1.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.03	3.03	< 0.005	< 0.005	—	3.04
Architectural Coatings	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.29	0.00	0.00	0.06	0.06	0.00	0.02	0.02	—	62.1	62.1	< 0.005	< 0.005	0.01	62.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.76	8.76	< 0.005	< 0.005	0.01	8.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.45	1.45	< 0.005	< 0.005	< 0.005	1.47

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	11/21/2024	12/4/2024	5.00	10.0	—
Grading	Grading	12/5/2024	1/15/2025	5.00	30.0	—

Building Construction	Building Construction	1/16/2025	3/11/2026	5.00	300	—
Paving	Paving	1/16/2025	3/11/2026	5.00	300	—
Architectural Coating	Architectural Coating	1/16/2025	3/11/2026	5.00	300	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2

Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.3	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	12.5	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.07	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—

Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.3	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	12.5	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.07	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	154,001	51,334	76,440	25,480	1,764

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	1.10

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.43	0%
Office Park	0.00	0%
Parking Lot	0.67	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
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2025	0.00	204	0.03	< 0.005
2026	0.00	204	0.03	< 0.005
2024	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A

Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6
Pesticides	92.1
Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7
Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3
Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—
Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4

Unemployment	14.4
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7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183
Education	—
Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151
Active commuting	26.67778776
Social	—
2-parent households	15.50109072
Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841
Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859

Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5
Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0

No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9
Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Building construction, paving and painting assumed to occur at the same time.

PHASE 3 CONSTRUCTION

Wescott Phase 3 Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Phase 3
Construction Start Date	3/12/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.1835, -122.0175
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	38.0	Dwelling Unit	12.3	74,100	445,089	—	109	—

City Park	3.51	Acre	3.51	0.00	1.75	1.75	—	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.22	13.0	45.4	55.0	0.10	1.84	9.78	11.6	1.70	3.79	5.49	—	11,372	11,372	0.46	0.13	2.37	11,424
Mit.	1.44	9.13	10.2	65.2	0.10	0.23	9.78	10.0	0.23	3.79	4.02	—	11,372	11,372	0.46	0.13	2.37	11,424
% Reduced	77%	30%	78%	-18%	—	87%	—	14%	87%	—	27%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.82	9.82	29.2	29.6	0.06	1.24	19.8	21.1	1.14	10.1	11.3	—	6,803	6,803	0.27	0.07	0.04	6,828
Mit.	0.73	8.37	5.72	36.3	0.06	0.12	19.8	19.9	0.12	10.1	10.2	—	6,803	6,803	0.27	0.07	0.04	6,828
% Reduced	81%	15%	80%	-22%	—	90%	—	5%	89%	—	9%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.57	4.96	11.6	15.2	0.03	0.47	1.49	1.96	0.43	0.62	1.05	—	2,827	2,827	0.11	0.04	0.36	2,841

Mit.	0.40	4.01	3.12	16.9	0.03	0.06	1.49	1.55	0.06	0.62	0.69	—	2,827	2,827	0.11	0.04	0.36	2,841
% Reduced	75%	19%	73%	-11%	—	86%	—	21%	86%	—	35%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.90	2.11	2.77	< 0.005	0.09	0.27	0.36	0.08	0.11	0.19	—	468	468	0.02	0.01	0.06	470
Mit.	0.07	0.73	0.57	3.09	< 0.005	0.01	0.27	0.28	0.01	0.11	0.13	—	468	468	0.02	0.01	0.06	470
% Reduced	75%	19%	73%	-11%	—	86%	—	21%	86%	—	35%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.22	13.0	45.4	55.0	0.10	1.84	9.78	11.6	1.70	3.79	5.49	—	11,372	11,372	0.46	0.13	2.37	11,424
2027	2.40	9.75	17.4	26.0	0.04	0.66	0.37	1.02	0.60	0.09	0.69	—	4,532	4,532	0.17	0.06	1.43	4,556
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.82	9.82	29.2	29.6	0.06	1.24	19.8	21.1	1.14	10.1	11.3	—	6,803	6,803	0.27	0.07	0.04	6,828
2027	2.39	9.74	17.5	25.4	0.04	0.66	0.37	1.02	0.60	0.09	0.69	—	4,489	4,489	0.17	0.07	0.04	4,513
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.57	4.96	11.6	15.2	0.03	0.47	1.49	1.96	0.43	0.62	1.05	—	2,827	2,827	0.11	0.04	0.36	2,841
2027	0.84	3.43	6.15	8.98	0.01	0.23	0.13	0.36	0.21	0.03	0.24	—	1,585	1,585	0.06	0.02	0.22	1,593
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.29	0.90	2.11	2.77	< 0.005	0.09	0.27	0.36	0.08	0.11	0.19	—	468	468	0.02	0.01	0.06	470
2027	0.15	0.63	1.12	1.64	< 0.005	0.04	0.02	0.07	0.04	0.01	0.04	—	262	262	0.01	< 0.005	0.04	264

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.44	9.13	10.2	65.2	0.10	0.23	9.78	10.0	0.23	3.79	4.02	—	11,372	11,372	0.46	0.13	2.37	11,424
2027	0.69	8.38	5.66	28.4	0.04	0.11	0.37	0.48	0.10	0.09	0.19	—	4,532	4,532	0.17	0.06	1.43	4,556
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.73	8.37	5.72	36.3	0.06	0.12	19.8	19.9	0.12	10.1	10.2	—	6,803	6,803	0.27	0.07	0.04	6,828
2027	0.67	8.37	5.70	27.8	0.04	0.11	0.37	0.48	0.10	0.09	0.19	—	4,489	4,489	0.17	0.07	0.04	4,513
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.40	4.01	3.12	16.9	0.03	0.06	1.49	1.55	0.06	0.62	0.69	—	2,827	2,827	0.11	0.04	0.36	2,841
2027	0.24	2.95	2.00	9.81	0.01	0.04	0.13	0.17	0.04	0.03	0.07	—	1,585	1,585	0.06	0.02	0.22	1,593
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07	0.73	0.57	3.09	< 0.005	0.01	0.27	0.28	0.01	0.11	0.13	—	468	468	0.02	0.01	0.06	470
2027	0.04	0.54	0.37	1.79	< 0.005	0.01	0.02	0.03	0.01	0.01	0.01	—	262	262	0.01	< 0.005	0.04	264

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.80	0.79	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	179	179	< 0.005	0.01	0.02	181
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	0.01	5.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement:	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.83	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	179	179	< 0.005	0.01	0.02	181
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	0.01	5.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621

Dust From Material Movement:	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	2.24	2.27	0.01	0.09	—	0.09	0.08	—	0.08	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement:	—	—	—	—	—	—	0.76	0.76	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.41	0.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement:	—	—	—	—	—	—	0.14	0.14	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	1.32	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	232	232	0.01	0.01	0.79	236
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.08	0.09	0.95	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	205	205	< 0.005	0.01	0.02	207
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.03	17.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.87	2.87	< 0.005	< 0.005	< 0.005	2.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement:	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.36	2.91	0.01	0.01	—	0.01	0.01	—	0.01	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement:	—	—	—	—	—	—	0.76	0.76	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement:	—	—	—	—	—	—	0.14	0.14	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	1.32	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	232	232	0.01	0.01	0.79	236
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.09	0.95	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	205	205	< 0.005	0.01	0.02	207
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.03	17.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.87	2.87	< 0.005	< 0.005	< 0.005	2.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.63	6.09	0.01	0.18	—	0.18	0.16	—	0.16	—	1,126	1,126	0.05	0.01	—	1,130
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.84	1.11	< 0.005	0.03	—	0.03	0.03	—	0.03	—	186	186	0.01	< 0.005	—	187
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.90	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	159	159	0.01	0.01	0.54	161
Vendor	0.01	0.01	0.17	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.35	141
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.65	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	140	140	< 0.005	0.01	0.01	142
Vendor	0.01	0.01	0.18	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.01	141
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.7	67.7	< 0.005	< 0.005	0.11	68.6
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.5	63.5	< 0.005	0.01	0.07	66.2

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.02	11.4	
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.01	11.0	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.6. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.15	1.32	6.96	0.01	0.04	—	0.04	0.03	—	0.03	—	1,126	1,126	0.05	0.01	—	1,130
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.03	0.24	1.27	< 0.005	0.01	—	0.01	0.01	—	0.01	—	186	186	0.01	< 0.005	—	187
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.90	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	159	159	0.01	0.01	0.54	161
Vendor	0.01	0.01	0.17	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.35	141
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.65	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	140	140	< 0.005	0.01	0.01	142
Vendor	0.01	0.01	0.18	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	135	135	< 0.005	0.02	0.01	141
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.7	67.7	< 0.005	< 0.005	0.11	68.6
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.5	63.5	< 0.005	0.01	0.07	66.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.02	11.4
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.01	11.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.31	4.56	0.01	0.12	—	0.12	0.11	—	0.11	—	844	844	0.03	0.01	—	847
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.60	0.83	< 0.005	0.02	—	0.02	0.02	—	0.02	—	140	140	0.01	< 0.005	—	140
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.83	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	156	156	< 0.005	0.01	0.49	158
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	132	132	< 0.005	0.02	0.32	138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.60	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	137	137	< 0.005	0.01	0.01	139
Vendor	0.01	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	132	132	< 0.005	0.02	0.01	138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.8	49.8	< 0.005	< 0.005	0.07	50.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.6	46.6	< 0.005	0.01	0.05	48.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.24	8.24	< 0.005	< 0.005	0.01	8.35
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.72	7.72	< 0.005	< 0.005	0.01	8.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.12	0.99	5.22	0.01	0.03	—	0.03	0.03	—	0.03	—	844	844	0.03	0.01	—	847
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.95	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	140	140	0.01	< 0.005	—	140
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.83	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	156	156	< 0.005	0.01	0.49	158
Vendor	0.01	< 0.005	0.16	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	132	132	< 0.005	0.02	0.32	138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.60	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	137	137	< 0.005	0.01	0.01	139
Vendor	0.01	< 0.005	0.17	0.05	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	132	132	< 0.005	0.02	0.01	138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.8	49.8	< 0.005	< 0.005	0.07	50.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.6	46.6	< 0.005	0.01	0.05	48.7

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.24	8.24	< 0.005	< 0.005	0.01	8.35	
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.72	7.72	< 0.005	< 0.005	0.01	8.06	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.36	3.34	4.67	0.01	0.15	—	0.15	0.14	—	0.14	—	709	709	0.03	0.01	—	712
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.61	0.85	< 0.005	0.03	—	0.03	0.03	—	0.03	—	117	117	< 0.005	< 0.005	—	118	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.08	0.07	0.05	0.99	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	174	174	0.01	0.01	0.59	177	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.07	0.71	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	153	153	< 0.005	0.01	0.02	155	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.03	0.03	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	74.2	74.2	< 0.005	< 0.005	0.12	75.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.10. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.91	4.98	0.01	0.01	—	0.01	0.01	—	0.01	—	709	709	0.03	0.01	—	712
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.17	0.91	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	117	117	< 0.005	< 0.005	—	118
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.99	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	174	174	0.01	0.01	0.59	177	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.07	0.71	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	153	153	< 0.005	0.01	0.02	155	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.03	0.03	0.34	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	74.2	74.2	< 0.005	< 0.005	0.12	75.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.11. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.45	3.51	< 0.005	0.11	—	0.11	0.10	—	0.10	—	532	532	0.02	< 0.005	—	534
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.64	< 0.005	0.02	—	0.02	0.02	—	0.02	—	88.1	88.1	< 0.005	< 0.005	—	88.4
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.07	0.07	0.05	0.92	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	171	171	< 0.005	0.01	0.53	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.66	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	150	150	< 0.005	0.01	0.01	152
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.6	54.6	< 0.005	< 0.005	0.08	55.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.03	9.03	< 0.005	< 0.005	0.01	9.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.06	0.06	0.68	3.73	< 0.005	0.01	—	0.01	0.01	—	0.01	—	532	532	0.02	< 0.005	—	534	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01	0.01	0.12	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.1	88.1	< 0.005	< 0.005	—	88.4	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.07	0.05	0.92	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	171	171	< 0.005	0.01	0.53	173	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Worker	0.07	0.06	0.06	0.66	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	150	150	< 0.005	0.01	0.01	152
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.6	54.6	< 0.005	< 0.005	0.08	55.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.03	9.03	< 0.005	< 0.005	0.01	9.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	7.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.40	0.53	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Architectural Coatings	—	3.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.4
Architectural Coatings	—	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.8	31.8	< 0.005	< 0.005	0.11	32.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	< 0.005	28.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.5	13.5	< 0.005	< 0.005	0.02	13.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.24	2.24	< 0.005	< 0.005	< 0.005	2.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.30	0.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Architectural Coatings	—	3.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.4	10.4	< 0.005	< 0.005	—	10.4
Architectural Coatings	—	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.8	31.8	< 0.005	< 0.005	0.11	32.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.0	28.0	< 0.005	< 0.005	< 0.005	28.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.5	13.5	< 0.005	< 0.005	0.02	13.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.24	2.24	< 0.005	< 0.005	< 0.005	2.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.29	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Architectural Coatings	—	2.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Architectural Coatings	—	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.1	31.1	< 0.005	< 0.005	0.10	31.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.4	27.4	< 0.005	< 0.005	< 0.005	27.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.95	9.95	< 0.005	< 0.005	0.01	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	7.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.23	0.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Architectural Coatings	—	2.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Architectural Coatings	—	0.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.1	31.1	< 0.005	< 0.005	0.10	31.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.4	27.4	< 0.005	< 0.005	< 0.005	27.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.95	9.95	< 0.005	< 0.005	0.01	10.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.65	1.65	< 0.005	< 0.005	< 0.005	1.67
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
------------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
---------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	3/12/2026	3/25/2026	5.00	10.0	—
Grading	Grading	3/26/2026	5/6/2026	5.00	30.0	—
Building Construction	Building Construction	5/6/2026	6/29/2027	5.00	300	—
Paving	Paving	5/6/2026	6/29/2027	5.00	300	—
Architectural Coating	Architectural Coating	5/6/2026	6/29/2027	5.00	300	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	13.7	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	4.06	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.74	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	13.7	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	4.06	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT

Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.74	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	150,053	50,018	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.42

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.42	0%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	1	1	1	2
-------------------------	---	---	---	---

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6
Pesticides	92.1
Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7
Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3

Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—
Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183
Education	—
Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151
Active commuting	26.67778776
Social	—
2-parent households	15.50109072

Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841
Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859
Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5
Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9

Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9
Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Building construction, paving and painting assumed to occur at the same time.

PHASE 4 CONSTRUCTION

Wescott Phase 4 Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Phase 4
Construction Start Date	6/30/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.1835, -122.0175
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	45.0	Dwelling Unit	14.6	87,750	527,079	—	130	—

Other Non-Asphalt Surfaces	2.00	Acre	2.00	0.00	—	—	—	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.72	11.4	28.0	29.3	0.06	1.17	19.8	21.0	1.08	10.1	11.2	—	6,826	6,826	0.27	0.07	1.60	6,852
Mit.	0.74	10.0	5.70	36.6	0.06	0.12	19.8	19.9	0.12	10.1	10.2	—	6,826	6,826	0.27	0.07	1.60	6,852
% Reduced	80%	12%	80%	-25%	—	89%	—	5%	88%	—	9%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.40	11.4	17.5	25.6	0.04	0.66	0.41	1.06	0.60	0.10	0.70	—	4,544	4,544	0.17	0.07	0.04	4,569
Mit.	0.69	10.0	5.75	28.0	0.04	0.11	0.41	0.51	0.10	0.10	0.20	—	4,544	4,544	0.17	0.07	0.04	4,569
% Reduced	71%	12%	67%	-9%	—	84%	—	52%	83%	—	71%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.29	6.42	9.49	14.5	0.02	0.33	1.42	1.70	0.30	0.61	0.87	—	2,588	2,588	0.10	0.04	0.35	2,602

Mit.	0.38	5.70	3.25	15.9	0.02	0.06	1.42	1.46	0.06	0.61	0.65	—	2,588	2,588	0.10	0.04	0.35	2,602
% Reduced	71%	11%	66%	-10%	—	81%	—	14%	80%	—	26%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.24	1.17	1.73	2.65	< 0.005	0.06	0.26	0.31	0.05	0.11	0.16	—	428	428	0.02	0.01	0.06	431
Mit.	0.07	1.04	0.59	2.90	< 0.005	0.01	0.26	0.27	0.01	0.11	0.12	—	428	428	0.02	0.01	0.06	431
% Reduced	71%	11%	66%	-10%	—	81%	—	14%	80%	—	26%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	3.72	11.4	28.0	29.3	0.06	1.17	19.8	21.0	1.08	10.1	11.2	—	6,826	6,826	0.27	0.07	1.60	6,852
2028	2.30	11.3	16.6	26.0	0.04	0.57	0.41	0.98	0.53	0.10	0.63	—	4,579	4,579	0.17	0.07	1.44	4,605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.40	11.4	17.5	25.6	0.04	0.66	0.41	1.06	0.60	0.10	0.70	—	4,544	4,544	0.17	0.07	0.04	4,569
2028	2.27	11.3	16.7	25.4	0.04	0.57	0.41	0.98	0.53	0.10	0.63	—	4,534	4,534	0.17	0.07	0.04	4,558
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.00	3.21	7.29	9.58	0.02	0.28	1.42	1.70	0.26	0.61	0.87	—	1,859	1,859	0.07	0.02	0.21	1,868
2028	1.29	6.42	9.49	14.5	0.02	0.33	0.23	0.56	0.30	0.06	0.36	—	2,588	2,588	0.10	0.04	0.35	2,602
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.18	0.59	1.33	1.75	< 0.005	0.05	0.26	0.31	0.05	0.11	0.16	—	308	308	0.01	< 0.005	0.03	309
2028	0.24	1.17	1.73	2.65	< 0.005	0.06	0.04	0.10	0.05	0.01	0.06	—	428	428	0.02	0.01	0.06	431

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.74	10.0	5.70	36.6	0.06	0.12	19.8	19.9	0.12	10.1	10.2	—	6,826	6,826	0.27	0.07	1.60	6,852
2028	0.70	10.0	5.68	28.4	0.04	0.11	0.41	0.51	0.10	0.10	0.20	—	4,579	4,579	0.17	0.07	1.44	4,605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.69	10.0	5.75	28.0	0.04	0.11	0.41	0.51	0.10	0.10	0.20	—	4,544	4,544	0.17	0.07	0.04	4,569
2028	0.67	10.00	5.72	27.8	0.04	0.11	0.41	0.51	0.10	0.10	0.20	—	4,534	4,534	0.17	0.07	0.04	4,558
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.25	2.60	1.89	10.8	0.02	0.04	1.42	1.46	0.04	0.61	0.65	—	1,859	1,859	0.07	0.02	0.21	1,868
2028	0.38	5.70	3.25	15.9	0.02	0.06	0.23	0.29	0.06	0.06	0.11	—	2,588	2,588	0.10	0.04	0.35	2,602
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.05	0.47	0.34	1.98	< 0.005	0.01	0.26	0.27	0.01	0.11	0.12	—	308	308	0.01	< 0.005	0.03	309
2028	0.07	1.04	0.59	2.90	< 0.005	0.01	0.04	0.05	0.01	0.01	0.02	—	428	428	0.02	0.01	0.06	431

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.63	3.05	28.0	28.3	0.05	1.17	—	1.17	1.08	—	1.08	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	0.77	< 0.005	0.03	—	0.03	0.03	—	0.03	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement:	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.07	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	199	199	< 0.005	0.01	0.62	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.95	4.95	< 0.005	< 0.005	0.01	5.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement:	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.78	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	145	145	0.01	< 0.005	—	146
Dust From Material Movement:	—	—	—	—	—	—	0.54	0.54	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	24.0	24.0	< 0.005	< 0.005	—	24.1
Dust From Material Movement:	—	—	—	—	—	—	0.10	0.10	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.07	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	199	199	< 0.005	0.01	0.62	202
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.95	4.95	< 0.005	< 0.005	0.01	5.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	< 0.005	0.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.51	2.95	25.6	27.3	0.06	1.04	—	1.04	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.10	2.24	0.01	0.09	—	0.09	0.08	—	0.08	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.41	< 0.005	0.02	—	0.02	0.01	—	0.01	—	89.8	89.8	< 0.005	< 0.005	—	90.1
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	1.22	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	228	228	< 0.005	0.01	0.71	231
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.03	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.81	2.81	< 0.005	< 0.005	< 0.005	2.85	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.4. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	4.43	35.3	0.06	0.12	—	0.12	0.12	—	0.12	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.36	2.91	0.01	0.01	—	0.01	0.01	—	0.01	—	542	542	0.02	< 0.005	—	544
Dust From Material Movement	—	—	—	—	—	—	0.76	0.76	—	0.30	0.30	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	89.8	89.8	< 0.005	< 0.005	—	90.1	
Dust From Material Movement	—	—	—	—	—	—	0.14	0.14	—	0.05	0.05	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.10	0.09	0.07	1.22	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	228	228	< 0.005	0.01	0.71	231	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.03	17.2	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.81	2.81	< 0.005	< 0.005	< 0.005	2.85	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.5. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.37	3.27	0.01	0.08	—	0.08	0.08	—	0.08	—	605	605	0.02	< 0.005	—	607
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.43	0.60	< 0.005	0.02	—	0.02	0.01	—	0.01	—	100	100	< 0.005	< 0.005	—	101
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.99	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	184	184	< 0.005	0.01	0.58	187
Vendor	0.01	0.01	0.19	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	< 0.005	0.02	0.38	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	162	162	< 0.005	0.01	0.01	164
Vendor	0.01	< 0.005	0.21	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	< 0.005	0.02	0.01	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.2	42.2	< 0.005	< 0.005	0.06	42.8
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.6	39.6	< 0.005	0.01	0.04	41.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.99	6.99	< 0.005	< 0.005	0.01	7.09
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.55	6.55	< 0.005	< 0.005	0.01	6.84
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.82	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.71	3.74	0.01	0.02	—	0.02	0.02	—	0.02	—	605	605	0.02	< 0.005	—	607
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	100	100	< 0.005	< 0.005	—	101
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.99	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	184	184	< 0.005	0.01	0.58	187
Vendor	0.01	0.01	0.19	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	< 0.005	0.02	0.38	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.71	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	162	162	< 0.005	0.01	0.01	164

Vendor	0.01	< 0.005	0.21	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	157	157	< 0.005	0.02	0.01	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	42.2	42.2	< 0.005	< 0.005	0.06	42.8
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	39.6	39.6	< 0.005	0.01	0.04	41.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.99	6.99	< 0.005	< 0.005	0.01	7.09
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.55	6.55	< 0.005	< 0.005	0.01	6.84
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.08	7.37	0.01	0.17	—	0.17	0.16	—	0.16	—	1,365	1,365	0.06	0.01	—	1,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.93	1.34	< 0.005	0.03	—	0.03	0.03	—	0.03	—	226	226	0.01	< 0.005	—	227
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.92	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.52	183
Vendor	0.01	0.01	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	0.34	160
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	159	159	< 0.005	0.01	0.01	161
Vendor	0.01	< 0.005	0.20	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	0.01	159
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.5	93.5	< 0.005	< 0.005	0.13	94.7
Vendor	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	87.1	87.1	< 0.005	0.01	0.08	90.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.4	14.4	< 0.005	< 0.005	0.01	15.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.81	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.81	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.19	1.60	8.44	0.01	0.04	—	0.04	0.04	—	0.04	—	1,365	1,365	0.06	0.01	—	1,370
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.29	1.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	226	226	0.01	< 0.005	—	227
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.92	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.52	183
Vendor	0.01	0.01	0.18	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	0.34	160
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.66	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	159	159	< 0.005	0.01	0.01	161
Vendor	0.01	< 0.005	0.20	0.06	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	0.01	159
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	93.5	93.5	< 0.005	< 0.005	0.13	94.7
Vendor	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	87.1	87.1	< 0.005	0.01	0.08	90.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.5	15.5	< 0.005	< 0.005	0.02	15.7
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.4	14.4	< 0.005	< 0.005	0.01	15.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	1.75	2.51	< 0.005	0.08	—	0.08	0.07	—	0.07	—	381	381	0.02	< 0.005	—	383
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.92	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	171	171	< 0.005	0.01	0.53	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.66	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	150	150	< 0.005	0.01	0.01	152
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.1	39.1	< 0.005	< 0.005	0.06	39.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.49	2.68	< 0.005	0.01	—	0.01	0.01	—	0.01	—	381	381	0.02	< 0.005	—	383
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.49	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.92	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	171	171	< 0.005	0.01	0.53	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.66	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	150	150	< 0.005	0.01	0.01	152

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.1	39.1	< 0.005	< 0.005	0.06	39.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.47	6.47	< 0.005	< 0.005	0.01	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.39	3.77	5.64	0.01	0.15	—	0.15	0.13	—	0.13	—	860	860	0.03	0.01	—	863	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.08	0.07	0.69	1.03	< 0.005	0.03	—	0.03	0.02	—	0.02	—	142	142	0.01	< 0.005	—	143	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.04	0.85	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.48	170	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.06	0.06	0.06	0.61	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.01	149	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.03	0.03	0.36	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.5	86.5	< 0.005	< 0.005	0.12	87.7	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.3	14.3	< 0.005	< 0.005	0.02	14.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	—	1,516
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	1.10	6.04	0.01	0.02	—	0.02	0.02	—	0.02	—	860	860	0.03	0.01	—	863
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	1.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	142	142	0.01	< 0.005	—	143	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.04	0.85	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.48	170	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.06	0.06	0.06	0.61	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.01	149	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.03	0.03	0.36	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.5	86.5	< 0.005	< 0.005	0.12	87.7	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.3	14.3	< 0.005	< 0.005	0.02	14.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.13. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.21	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.7	33.7	< 0.005	< 0.005	—	33.8
Architectural Coatings	—	2.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.58	5.58	< 0.005	< 0.005	—	5.60
Architectural Coatings	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.9	36.9	< 0.005	< 0.005	0.12	37.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.5	32.5	< 0.005	< 0.005	< 0.005	32.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.45	8.45	< 0.005	< 0.005	0.01	8.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.40	1.40	< 0.005	< 0.005	< 0.005	1.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.16	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.7	33.7	< 0.005	< 0.005	—	33.8
Architectural Coatings	—	2.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.58	5.58	< 0.005	< 0.005	—	5.60
Architectural Coatings	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.9	36.9	< 0.005	< 0.005	0.12	37.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.5	32.5	< 0.005	< 0.005	< 0.005	32.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.45	8.45	< 0.005	< 0.005	0.01	8.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.40	1.40	< 0.005	< 0.005	< 0.005	1.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	0.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.0	76.0	< 0.005	< 0.005	—	76.3
Architectural Coatings	—	5.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.6
Architectural Coatings	—	0.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.2	36.2	< 0.005	< 0.005	0.10	36.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.9	31.9	< 0.005	< 0.005	< 0.005	32.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.03	18.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	9.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.37	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.0	76.0	< 0.005	< 0.005	—	76.3
Architectural Coatings	—	5.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.07	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.6	12.6	< 0.005	< 0.005	—	12.6
Architectural Coatings	—	0.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.2	36.2	< 0.005	< 0.005	0.10	36.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.9	31.9	< 0.005	< 0.005	< 0.005	32.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.03	18.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/30/2027	7/13/2027	5.00	10.0	—
Grading	Grading	7/14/2027	8/24/2027	5.00	30.0	—
Building Construction	Building Construction	8/25/2027	10/17/2028	5.00	300	—
Paving	Paving	8/25/2027	10/17/2028	5.00	300	—
Architectural Coating	Architectural Coating	8/25/2027	10/17/2028	5.00	300	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38

Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	16.2	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	4.81	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.24	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	14.9	LDA,LDT1,LDT2

Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	16.2	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	4.81	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.24	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	177,694	59,231	0.00	0.00	5,227

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	15.0	0.00	—
Grading	—	—	90.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.50

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	0.50	0%
Other Non-Asphalt Surfaces	2.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events.

Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6

Pesticides	92.1
Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7
Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3
Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—
Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183

Education	—
Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151
Active commuting	26.67778776
Social	—
2-parent households	15.50109072
Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841
Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859
Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5
Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0

Climate Change Adaptive Capacity	—
Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9
Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Building construction, paving and painting assumed to occur at the same time.

PHASE 5 CONSTRUCTION

Wescott Phase 5 Detailed Report

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 - 3.3. Grading (2028) - Unmitigated
 - 3.4. Grading (2028) - Mitigated
 - 3.5. Building Construction (2028) - Unmitigated

3.6. Building Construction (2028) - Mitigated

3.7. Building Construction (2029) - Unmitigated

3.8. Building Construction (2029) - Mitigated

3.9. Paving (2028) - Unmitigated

3.10. Paving (2028) - Mitigated

3.11. Paving (2029) - Unmitigated

3.12. Paving (2029) - Mitigated

3.13. Architectural Coating (2028) - Unmitigated

3.14. Architectural Coating (2028) - Mitigated

3.15. Architectural Coating (2029) - Unmitigated

3.16. Architectural Coating (2029) - Mitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Phase 5
Construction Start Date	10/18/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.1835, -122.0175
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse	20.0	Dwelling Unit	1.25	21,200	0.00	—	58.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.83	4.86	12.6	19.0	0.03	0.36	0.33	0.69	0.33	0.08	0.41	—	3,318	3,318	0.12	0.05	0.99	3,336
Mit.	0.61	3.90	6.42	20.4	0.03	0.10	0.33	0.43	0.09	0.08	0.17	—	3,318	3,318	0.12	0.05	0.99	3,336
% Reduced	67%	20%	49%	-8%	—	74%	—	38%	72%	—	58%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.88	4.90	13.0	18.7	0.03	0.52	7.19	7.70	0.47	3.45	3.92	—	3,287	3,287	0.13	0.05	0.03	3,304
Mit.	0.60	3.89	6.47	20.1	0.03	0.10	7.19	7.23	0.09	3.45	3.50	—	3,287	3,287	0.13	0.05	0.03	3,304
% Reduced	68%	21%	50%	-7%	—	81%	—	6%	81%	—	11%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.76	2.02	5.26	7.75	0.01	0.15	0.16	0.29	0.14	0.06	0.17	—	1,371	1,371	0.05	0.02	0.18	1,378
Mit.	0.25	1.61	2.68	8.35	0.01	0.04	0.16	0.18	0.04	0.06	0.08	—	1,371	1,371	0.05	0.02	0.18	1,378
% Reduced	67%	20%	49%	-8%	—	74%	—	38%	72%	—	55%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.14	0.37	0.96	1.42	< 0.005	0.03	0.03	0.05	0.03	0.01	0.03	—	227	227	0.01	< 0.005	0.03	228
Mit.	0.05	0.29	0.49	1.52	< 0.005	0.01	0.03	0.03	0.01	0.01	0.01	—	227	227	0.01	< 0.005	0.03	228
% Reduced	67%	20%	49%	-8%	—	74%	—	38%	72%	—	55%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.83	4.86	12.6	19.0	0.03	0.36	0.33	0.69	0.33	0.08	0.41	—	3,318	3,318	0.12	0.05	0.99	3,336
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	1.88	4.90	13.0	18.7	0.03	0.52	7.19	7.70	0.47	3.45	3.92	—	3,287	3,287	0.13	0.05	0.03	3,304
2029	1.82	4.84	12.6	18.6	0.03	0.36	0.33	0.69	0.33	0.08	0.41	—	3,279	3,279	0.12	0.05	0.03	3,296
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.27	0.66	1.89	2.68	< 0.005	0.06	0.16	0.22	0.05	0.06	0.12	—	472	472	0.02	0.01	0.06	474
2029	0.76	2.02	5.26	7.75	0.01	0.15	0.14	0.29	0.14	0.03	0.17	—	1,371	1,371	0.05	0.02	0.18	1,378
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.05	0.12	0.35	0.49	< 0.005	0.01	0.03	0.04	0.01	0.01	0.02	—	78.1	78.1	< 0.005	< 0.005	0.01	78.5
2029	0.14	0.37	0.96	1.42	< 0.005	0.03	0.03	0.05	0.03	0.01	0.03	—	227	227	0.01	< 0.005	0.03	228

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.61	3.90	6.42	20.4	0.03	0.10	0.33	0.43	0.09	0.08	0.17	—	3,318	3,318	0.12	0.05	0.99	3,336
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.60	3.89	6.47	20.1	0.03	0.10	7.19	7.23	0.09	3.45	3.50	—	3,287	3,287	0.13	0.05	0.03	3,304
2029	0.60	3.87	6.45	20.0	0.03	0.10	0.33	0.43	0.09	0.08	0.17	—	3,279	3,279	0.12	0.05	0.03	3,296
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.08	0.51	0.87	2.87	< 0.005	0.01	0.16	0.17	0.01	0.06	0.08	—	472	472	0.02	0.01	0.06	474
2029	0.25	1.61	2.68	8.35	0.01	0.04	0.14	0.18	0.04	0.03	0.07	—	1,371	1,371	0.05	0.02	0.18	1,378
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.02	0.09	0.16	0.52	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	78.1	78.1	< 0.005	< 0.005	0.01	78.5
2029	0.05	0.29	0.49	1.52	< 0.005	0.01	0.03	0.03	0.01	0.01	0.01	—	227	227	0.01	< 0.005	0.03	228

3. Construction Emissions Details

3.1. Site Preparation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.39	1.17	10.1	11.6	0.02	0.45	—	0.45	0.42	—	0.42	—	2,066	2,066	0.08	0.02	—	2,073
Dust From Material Movement:	—	—	—	—	—	—	6.26	6.26	—	3.00	3.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.4
Dust From Material Movement:	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.87	1.87	< 0.005	< 0.005	—	1.88
Dust From Material Movement:	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.8	73.8	< 0.005	< 0.005	0.01	74.7

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.42	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.2. Site Preparation (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.9	0.02	0.04	—	0.04	0.04	—	0.04	—	2,066	2,066	0.08	0.02	—	2,073
Dust From Material Movement	—	—	—	—	—	—	6.26	6.26	—	3.00	3.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.4
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.87	1.87	< 0.005	< 0.005	—	1.88
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	73.8	73.8	< 0.005	< 0.005	0.01	74.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.3. Grading (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.61	1.35	11.8	13.9	0.02	0.52	—	0.52	0.47	—	0.47	—	2,456	2,456	0.10	0.02	—	2,465
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.9	26.9	< 0.005	< 0.005	—	27.0
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	—	4.46	4.46	< 0.005	< 0.005	—	4.47
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.41	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	98.3	98.3	< 0.005	< 0.005	0.01	99.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.13	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.20	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,456	2,456	0.10	0.02	—	2,465
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.9	26.9	< 0.005	< 0.005	—	27.0
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.46	4.46	< 0.005	< 0.005	—	4.47

Dust From Material Movement:	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.41	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	98.3	98.3	< 0.005	< 0.005	0.01	99.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.11	1.11	< 0.005	< 0.005	< 0.005	1.13
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.93	7.89	9.88	0.02	0.23	—	0.23	0.21	—	0.21	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.03	1.29	< 0.005	0.03	—	0.03	0.03	—	0.03	—	236	236	0.01	< 0.005	—	237
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.1	39.1	< 0.005	< 0.005	—	39.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.59	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	142	142	< 0.005	0.01	0.01	143
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	68.0	68.0	< 0.005	0.01	< 0.005	70.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	0.03	19.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.91	8.91	< 0.005	< 0.005	0.01	9.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.17	3.17	< 0.005	< 0.005	< 0.005	3.21
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.47	1.47	< 0.005	< 0.005	< 0.005	1.54
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.57	1.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	236	236	0.01	< 0.005	—	237
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	39.1	39.1	< 0.005	< 0.005	—	39.2

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.59	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	142	142	< 0.005	0.01	0.01	143	
Vendor	< 0.005	< 0.005	0.09	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	68.0	68.0	< 0.005	0.01	< 0.005	70.8	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.1	19.1	< 0.005	< 0.005	0.03	19.4	
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.91	8.91	< 0.005	< 0.005	0.01	9.29	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.17	3.17	< 0.005	< 0.005	< 0.005	3.21	
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.47	1.47	< 0.005	< 0.005	< 0.005	1.54	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.7. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.07	0.89	7.62	9.82	0.02	0.21	—	0.21	0.19	—	0.19	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.89	7.62	9.82	0.02	0.21	—	0.21	0.19	—	0.19	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.37	3.18	4.09	0.01	0.09	—	0.09	0.08	—	0.08	—	751	751	0.03	0.01	—	753
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.58	0.75	< 0.005	0.02	—	0.02	0.01	—	0.01	—	124	124	0.01	< 0.005	—	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.76	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.41	160
Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.1	66.1	< 0.005	0.01	0.14	69.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	139	139	< 0.005	0.01	0.01	141

Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.2	66.2	< 0.005	0.01	< 0.005	69.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.7	59.7	< 0.005	< 0.005	0.07	60.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.6	27.6	< 0.005	< 0.005	0.02	28.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.89	9.89	< 0.005	< 0.005	0.01	10.0
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.56	4.56	< 0.005	< 0.005	< 0.005	4.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.12	1.80	4.58	0.01	0.03	—	0.03	0.02	—	0.02	—	751	751	0.03	0.01	—	753
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.33	0.84	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	124	124	0.01	< 0.005	—	125
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.76	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.41	160
Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.1	66.1	< 0.005	0.01	0.14	69.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	139	139	< 0.005	0.01	0.01	141
Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	66.2	66.2	< 0.005	0.01	< 0.005	69.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.7	59.7	< 0.005	< 0.005	0.07	60.5
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.6	27.6	< 0.005	< 0.005	0.02	28.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.89	9.89	< 0.005	< 0.005	0.01	10.0

Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.56	4.56	< 0.005	< 0.005	< 0.005	4.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	4.13	6.47	0.01	0.15	—	0.15	0.13	—	0.13	—	991	991	0.04	0.01	—	995
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.85	< 0.005	0.02	—	0.02	0.02	—	0.02	—	130	130	0.01	< 0.005	—	130
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.5	21.5	< 0.005	< 0.005	—	21.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	16.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	< 0.005	2.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	995
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	130	130	0.01	< 0.005	—	130
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.5	21.5	< 0.005	< 0.005	—	21.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	123	123	< 0.005	0.01	0.01	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.02	16.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	< 0.005	2.79	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.11. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.42	4.03	6.48	0.01	0.14	—	0.14	0.13	—	0.13	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.42	4.03	6.48	0.01	0.14	—	0.14	0.13	—	0.13	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.68	2.70	< 0.005	0.06	—	0.06	0.05	—	0.05	—	413	413	0.02	< 0.005	—	415
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.31	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	68.4	68.4	< 0.005	< 0.005	—	68.6	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.05	0.03	0.66	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	< 0.005	< 0.005	0.36	139	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.04	0.04	0.47	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	122	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	51.8	51.8	< 0.005	< 0.005	0.06	52.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.58	8.58	< 0.005	< 0.005	0.01	8.70	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.12. Paving (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.54	2.87	< 0.005	0.01	—	0.01	0.01	—	0.01	—	413	413	0.02	< 0.005	—	415
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	68.4	68.4	< 0.005	< 0.005	—	68.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.66	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	< 0.005	< 0.005	0.36	139	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.04	0.04	0.47	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	122	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	51.8	51.8	< 0.005	< 0.005	0.06	52.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.58	8.58	< 0.005	< 0.005	0.01	8.70	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.13. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.5	17.5	< 0.005	< 0.005	—	17.6
Architectural Coatings	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.90	2.90	< 0.005	< 0.005	—	2.91
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.3	28.3	< 0.005	< 0.005	< 0.005	28.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.83	3.83	< 0.005	< 0.005	0.01	3.88
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.08	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.5	17.5	< 0.005	< 0.005	—	17.6	
Architectural Coatings	—	0.43	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.90	2.90	< 0.005	< 0.005	—	2.91	
Architectural Coatings	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	28.3	28.3	< 0.005	< 0.005	< 0.005	28.7	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.83	3.83	< 0.005	< 0.005	0.01	3.88	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.64	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.15. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.05	0.04	0.33	0.46	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	55.7	55.7	< 0.005	< 0.005	—	55.8
Architectural Coatings	—	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.21	9.21	< 0.005	< 0.005	—	9.25
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	0.08	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	< 0.005	28.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.98	1.98	< 0.005	< 0.005	< 0.005	2.00	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.16. Architectural Coating (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	3.32	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.27	0.40	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	55.7	55.7	< 0.005	< 0.005	—	55.8
Architectural Coatings	—	1.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.21	9.21	< 0.005	< 0.005	—	9.25
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	0.08	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.8	27.8	< 0.005	< 0.005	< 0.005	28.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.98	1.98	< 0.005	< 0.005	< 0.005	2.00	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
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Site Preparation	Site Preparation	10/18/2028	10/19/2028	5.00	2.00	—
Grading	Grading	10/20/2028	10/25/2028	5.00	4.00	—
Building Construction	Building Construction	10/26/2028	8/1/2029	5.00	200	—
Paving	Paving	10/26/2028	8/1/2029	5.00	200	—
Architectural Coating	Architectural Coating	10/26/2028	8/1/2029	5.00	200	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38

Paving	Tractors/Loaders/Backh	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backh oes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	14.4	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	2.14	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.88	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	14.4	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	2.14	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.88	14.9	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	42,930	14,310	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	1.88	0.00	—
Grading	—	—	4.00	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento–San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
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Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6
Pesticides	92.1
Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7
Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3
Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—

Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183
Education	—
Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151
Active commuting	26.67778776
Social	—
2-parent households	15.50109072
Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841

Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859
Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5
Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0

Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9
Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Building construction, paving and painting assumed to occur simultaneously.

PHASE 6 CONSTRUCTION

Wescott Phase 6 Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Phase 6
Construction Start Date	8/2/2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.1835, -122.0175
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse	32.0	Dwelling Unit	2.00	33,920	0.00	—	92.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.87	6.41	12.7	19.6	0.03	0.48	7.19	7.67	0.44	3.45	3.89	—	3,471	3,471	0.12	0.05	1.36	3,492
Mit.	0.66	5.45	6.49	21.0	0.03	0.10	7.19	7.23	0.09	3.45	3.50	—	3,471	3,471	0.12	0.05	1.36	3,492
% Reduced	65%	15%	49%	-7%	—	80%	—	6%	79%	—	10%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.86	6.38	12.7	19.0	0.03	0.36	0.45	0.82	0.33	0.11	0.44	—	3,419	3,419	0.13	0.06	0.04	3,439
Mit.	0.64	5.42	6.54	20.4	0.03	0.10	0.45	0.55	0.09	0.11	0.20	—	3,419	3,419	0.13	0.06	0.04	3,439
% Reduced	66%	15%	49%	-8%	—	73%	—	33%	72%	—	55%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.59	2.09	4.11	6.24	0.01	0.11	0.29	0.40	0.10	0.11	0.21	—	1,131	1,131	0.04	0.02	0.17	1,138
Mit.	0.21	1.79	2.15	6.73	0.01	0.03	0.29	0.32	0.03	0.11	0.14	—	1,131	1,131	0.04	0.02	0.17	1,138
% Reduced	65%	15%	48%	-8%	—	72%	—	20%	70%	—	35%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.38	0.75	1.14	< 0.005	0.02	0.05	0.07	0.02	0.02	0.04	—	187	187	0.01	< 0.005	0.03	188
Mit.	0.04	0.33	0.39	1.23	< 0.005	0.01	0.05	0.06	0.01	0.02	0.03	—	187	187	0.01	< 0.005	0.03	188
% Reduced	65%	15%	48%	-8%	—	72%	—	20%	70%	—	35%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.87	6.41	12.7	19.6	0.03	0.48	7.19	7.67	0.44	3.45	3.89	—	3,471	3,471	0.12	0.05	1.36	3,492
2030	1.81	6.35	12.4	19.4	0.03	0.34	0.45	0.79	0.31	0.11	0.42	—	3,461	3,461	0.12	0.05	1.21	3,481
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	1.86	6.38	12.7	19.0	0.03	0.36	0.45	0.82	0.33	0.11	0.44	—	3,419	3,419	0.13	0.06	0.04	3,439
2030	1.79	6.33	12.5	18.8	0.03	0.34	0.45	0.79	0.31	0.11	0.42	—	3,409	3,409	0.13	0.05	0.03	3,429
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.54	1.77	3.72	5.50	0.01	0.11	0.29	0.40	0.10	0.11	0.21	—	993	993	0.04	0.02	0.16	998
2030	0.59	2.09	4.11	6.24	0.01	0.11	0.15	0.26	0.10	0.04	0.14	—	1,131	1,131	0.04	0.02	0.17	1,138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.10	0.32	0.68	1.00	< 0.005	0.02	0.05	0.07	0.02	0.02	0.04	—	164	164	0.01	< 0.005	0.03	165
2030	0.11	0.38	0.75	1.14	< 0.005	0.02	0.03	0.05	0.02	0.01	0.03	—	187	187	0.01	< 0.005	0.03	188

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.66	5.45	6.49	21.0	0.03	0.10	7.19	7.23	0.09	3.45	3.50	—	3,471	3,471	0.12	0.05	1.36	3,492
2030	0.65	5.43	6.47	20.9	0.03	0.10	0.45	0.55	0.09	0.11	0.20	—	3,461	3,461	0.12	0.05	1.21	3,481
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.64	5.42	6.54	20.4	0.03	0.10	0.45	0.55	0.09	0.11	0.20	—	3,419	3,419	0.13	0.06	0.04	3,439
2030	0.63	5.41	6.51	20.3	0.03	0.10	0.45	0.55	0.09	0.11	0.20	—	3,409	3,409	0.13	0.05	0.03	3,429
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.18	1.48	1.80	5.90	0.01	0.03	0.29	0.32	0.03	0.11	0.14	—	993	993	0.04	0.02	0.16	998
2030	0.21	1.79	2.15	6.73	0.01	0.03	0.15	0.18	0.03	0.04	0.07	—	1,131	1,131	0.04	0.02	0.17	1,138
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2029	0.03	0.27	0.33	1.08	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.03	—	164	164	0.01	< 0.005	0.03	165
2030	0.04	0.33	0.39	1.23	< 0.005	0.01	0.03	0.03	0.01	0.01	0.01	—	187	187	0.01	< 0.005	0.03	188

3. Construction Emissions Details

3.1. Site Preparation (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.35	1.14	9.43	11.5	0.02	0.42	—	0.42	0.39	—	0.39	—	2,065	2,065	0.08	0.02	—	2,072
Dust From Material Movement:	—	—	—	—	—	—	6.26	6.26	—	3.00	3.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.0	17.0	< 0.005	< 0.005	—	17.0
Dust From Material Movement:	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.81	2.81	< 0.005	< 0.005	—	2.82
Dust From Material Movement:	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.2	82.2	< 0.005	< 0.005	0.21	83.3

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.2. Site Preparation (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.19	1.01	11.9	0.02	0.04	—	0.04	0.04	—	0.04	—	2,065	2,065	0.08	0.02	—	2,072
Dust From Material Movement	—	—	—	—	—	—	6.26	6.26	—	3.00	3.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.0	17.0	< 0.005	< 0.005	—	17.0
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.81	2.81	< 0.005	< 0.005	—	2.82
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.2	82.2	< 0.005	< 0.005	0.21	83.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.56	1.31	11.1	13.8	0.02	0.48	—	0.48	0.44	—	0.44	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.18	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.3	40.3	< 0.005	< 0.005	—	40.5

Dust From Material Movement:	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70
Dust From Material Movement:	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.53	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	110	110	< 0.005	< 0.005	0.29	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.64	1.64	< 0.005	< 0.005	< 0.005	1.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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3.4. Grading (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.20	14.2	0.02	0.05	—	0.05	0.05	—	0.05	—	2,455	2,455	0.10	0.02	—	2,463	
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.3	40.3	< 0.005	< 0.005	—	40.5	
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.68	6.68	< 0.005	< 0.005	—	6.70	

Dust From Material Movement:	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.53	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	110	110	< 0.005	< 0.005	0.29	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.64	1.64	< 0.005	< 0.005	< 0.005	1.66
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.89	7.62	9.82	0.02	0.21	—	0.21	0.19	—	0.19	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.89	7.62	9.82	0.02	0.21	—	0.21	0.19	—	0.19	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.24	2.07	2.67	0.01	0.06	—	0.06	0.05	—	0.05	—	490	490	0.02	< 0.005	—	492
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.49	< 0.005	0.01	—	0.01	0.01	—	0.01	—	81.1	81.1	< 0.005	< 0.005	—	81.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	1.22	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.66	256
Vendor	< 0.005	< 0.005	0.12	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.22	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.87	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	222	222	< 0.005	0.01	0.02	225
Vendor	< 0.005	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.01	110
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.3	62.3	< 0.005	< 0.005	0.08	63.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.8	28.8	< 0.005	< 0.005	0.03	30.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.77	4.77	< 0.005	< 0.005	< 0.005	4.98
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	1.18	2.99	0.01	0.02	—	0.02	0.02	—	0.02	—	490	490	0.02	< 0.005	—	492
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.21	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	81.1	81.1	< 0.005	< 0.005	—	81.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.06	1.22	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	253	253	< 0.005	0.01	0.66	256
Vendor	< 0.005	< 0.005	0.12	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.22	111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.87	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	222	222	< 0.005	0.01	0.02	225
Vendor	< 0.005	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	106	106	< 0.005	0.02	0.01	110
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.3	62.3	< 0.005	< 0.005	0.08	63.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28.8	28.8	< 0.005	< 0.005	0.03	30.1

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.5	
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.77	4.77	< 0.005	< 0.005	< 0.005	4.98	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.7. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.87	7.48	9.79	0.02	0.20	—	0.20	0.18	—	0.18	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.87	7.48	9.79	0.02	0.20	—	0.20	0.18	—	0.18	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.47	3.24	0.01	0.06	—	0.06	0.06	—	0.06	—	596	596	0.02	< 0.005	—	598
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.05	0.45	0.59	< 0.005	0.01	—	0.01	0.01	—	0.01	—	98.6	98.6	< 0.005	< 0.005	—	99.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	1.14	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.58	251
Vendor	< 0.005	< 0.005	0.12	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	103	103	< 0.005	0.01	0.19	107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.81	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	219	219	< 0.005	0.01	0.02	222
Vendor	< 0.005	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	103	103	< 0.005	0.01	< 0.005	107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.28	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	74.5	74.5	< 0.005	< 0.005	0.08	75.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.0	34.0	< 0.005	< 0.005	0.03	35.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.01	12.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	< 0.005	5.87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.30	4.32	11.0	0.02	0.06	—	0.06	0.06	—	0.06	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.10	1.43	3.64	0.01	0.02	—	0.02	0.02	—	0.02	—	596	596	0.02	< 0.005	—	598
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.26	0.66	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.6	98.6	< 0.005	< 0.005	—	99.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	1.14	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	248	248	< 0.005	0.01	0.58	251
Vendor	< 0.005	< 0.005	0.12	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	103	103	< 0.005	0.01	0.19	107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.81	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	219	219	< 0.005	0.01	0.02	222
Vendor	< 0.005	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	103	103	< 0.005	0.01	< 0.005	107
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.28	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	74.5	74.5	< 0.005	< 0.005	0.08	75.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	34.0	34.0	< 0.005	< 0.005	0.03	35.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.01	12.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	< 0.005	5.87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.42	4.03	6.48	0.01	0.14	—	0.14	0.13	—	0.13	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.42	4.03	6.48	0.01	0.14	—	0.14	0.13	—	0.13	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.10	1.76	< 0.005	0.04	—	0.04	0.03	—	0.03	—	270	270	0.01	< 0.005	—	271
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.6	44.6	< 0.005	< 0.005	—	44.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.66	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	< 0.005	< 0.005	0.36	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.47	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	122

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.8	33.8	< 0.005	< 0.005	0.04	34.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.60	5.60	< 0.005	< 0.005	0.01	5.68	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.10. Paving (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.35	1.87	< 0.005	0.01	—	0.01	0.01	—	0.01	—	270	270	0.01	< 0.005	—	271	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01	0.01	0.06	0.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.6	44.6	< 0.005	< 0.005	—	44.8	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.05	0.03	0.66	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	< 0.005	< 0.005	0.36	139	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.04	0.04	0.47	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	121	121	< 0.005	0.01	0.01	122	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.8	33.8	< 0.005	< 0.005	0.04	34.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.60	5.60	< 0.005	< 0.005	0.01	5.68	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.11. Paving (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.94	6.47	0.01	0.13	—	0.13	0.12	—	0.12	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.94	6.47	0.01	0.13	—	0.13	0.12	—	0.12	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.30	2.14	< 0.005	0.04	—	0.04	0.04	—	0.04	—	328	328	0.01	< 0.005	—	329
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.24	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.3	54.3	< 0.005	< 0.005	—	54.5	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.04	0.03	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.32	136	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.04	0.04	0.04	0.44	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	119	119	< 0.005	0.01	0.01	120	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.4	40.4	< 0.005	< 0.005	0.05	41.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.69	6.69	< 0.005	< 0.005	0.01	6.78	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.12. Paving (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.14	1.30	6.89	0.01	0.03	—	0.03	0.03	—	0.03	—	991	991	0.04	0.01	—	994
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.43	2.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	328	328	0.01	< 0.005	—	329
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.42	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	54.3	54.3	< 0.005	< 0.005	—	54.5
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	< 0.005	0.32	136	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.04	0.04	0.04	0.44	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	119	119	< 0.005	0.01	0.01	120	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.4	40.4	< 0.005	< 0.005	0.05	41.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.69	6.69	< 0.005	< 0.005	0.01	6.78	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.13. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	4.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	4.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.3	36.3	< 0.005	< 0.005	—	36.4
Architect ural Coatings	—	1.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.01	6.01	< 0.005	< 0.005	—	6.03
Architect ural Coatings	—	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	50.5	50.5	< 0.005	< 0.005	0.13	51.2	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.01	0.02	0.17	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	44.5	44.5	< 0.005	< 0.005	< 0.005	45.1	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.06	2.06	< 0.005	< 0.005	< 0.005	2.09	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.14. Architectural Coating (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	4.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	4.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.18	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	36.3	36.3	< 0.005	< 0.005	—	36.4
Architectural Coatings	—	1.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.01	6.01	< 0.005	< 0.005	—	6.03
Architectural Coatings	—	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	50.5	50.5	< 0.005	< 0.005	0.13	51.2	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.01	0.02	0.17	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	44.5	44.5	< 0.005	< 0.005	< 0.005	45.1	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.02	12.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.06	2.06	< 0.005	< 0.005	< 0.005	2.09	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.15. Architectural Coating (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	4.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	4.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.26	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.2	44.2	< 0.005	< 0.005	—	44.3
Architect ural Coatings	—	1.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.31	7.31	< 0.005	< 0.005	—	7.34
Architect ural Coatings	—	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.6	49.6	< 0.005	< 0.005	0.12	50.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	43.7	43.7	< 0.005	< 0.005	< 0.005	44.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	0.02	15.1	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.47	2.47	< 0.005	< 0.005	< 0.005	2.50	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.16. Architectural Coating (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	4.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	4.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.21	0.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.2	44.2	< 0.005	< 0.005	—	44.3
Architectural Coatings	—	1.60	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.31	7.31	< 0.005	< 0.005	—	7.34
Architectural Coatings	—	0.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	49.6	49.6	< 0.005	< 0.005	0.12	50.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.01	0.01	0.16	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	43.7	43.7	< 0.005	< 0.005	< 0.005	44.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	< 0.005	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	0.02	15.1	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.47	2.47	< 0.005	< 0.005	< 0.005	2.50	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	8/2/2029	8/6/2029	5.00	3.00	—
Grading	Grading	8/7/2029	8/14/2029	5.00	6.00	—
Building Construction	Building Construction	8/15/2029	6/18/2030	5.00	220	—
Paving	Paving	8/15/2029	6/18/2030	5.00	220	—
Architectural Coating	Architectural Coating	8/15/2029	6/18/2030	5.00	220	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40

Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40

Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	23.0	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	3.42	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.61	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	14.9	LDA,LDT1,LDT2

Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	23.0	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	3.42	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	4.61	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	68,688	22,896	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	2.81	0.00	—
Grading	—	—	6.00	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat

Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6
Pesticides	92.1

Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7
Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3
Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—
Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183
Education	—

Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151
Active commuting	26.67778776
Social	—
2-parent households	15.50109072
Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841
Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859
Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5
Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0
Climate Change Adaptive Capacity	—

Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9
Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
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Construction: Construction Phases

Building construction, paving and painting assumed to occur simultaneously.

PHASE 7 CONSTRUCTION

Wescott Phase 7 Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Phase 7
Construction Start Date	6/19/2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.1835, -122.0175
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Low Rise	56.0	Dwelling Unit	3.50	59,360	0.00	—	161	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.54	9.96	25.2	29.3	0.05	1.07	19.8	20.9	0.98	10.1	11.1	—	5,484	5,484	0.22	0.08	2.07	5,505
Mit.	0.87	8.89	5.95	29.2	0.05	0.13	19.8	19.9	0.12	10.1	10.2	—	5,484	5,484	0.22	0.08	2.07	5,505
% Reduced	75%	11%	76%	< 0.5%	—	88%	—	5%	88%	—	8%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.20	9.93	15.2	25.3	0.04	0.46	0.78	1.24	0.42	0.18	0.61	—	4,709	4,709	0.17	0.09	0.05	4,739
Mit.	0.85	8.86	6.02	27.6	0.04	0.13	0.78	0.90	0.12	0.18	0.31	—	4,709	4,709	0.17	0.09	0.05	4,739
% Reduced	62%	11%	60%	-9%	—	72%	—	27%	71%	—	50%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.86	3.55	5.94	9.67	0.02	0.19	0.70	0.89	0.17	0.28	0.45	—	1,799	1,799	0.06	0.03	0.32	1,810
Mit.	0.31	3.12	2.18	10.5	0.02	0.05	0.70	0.75	0.05	0.28	0.32	—	1,799	1,799	0.06	0.03	0.32	1,810
% Reduced	64%	12%	63%	-9%	—	75%	—	16%	74%	—	28%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	0.65	1.08	1.76	< 0.005	0.03	0.13	0.16	0.03	0.05	0.08	—	298	298	0.01	0.01	0.05	300
Mit.	0.06	0.57	0.40	1.92	< 0.005	0.01	0.13	0.14	0.01	0.05	0.06	—	298	298	0.01	0.01	0.05	300
% Reduced	64%	12%	63%	-9%	—	75%	—	16%	74%	—	28%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	3.54	9.96	25.2	29.3	0.05	1.07	19.8	20.9	0.98	10.1	11.1	—	5,484	5,484	0.22	0.08	2.07	5,505
2031	2.17	9.90	14.7	25.9	0.04	0.43	0.78	1.21	0.40	0.18	0.58	—	4,779	4,779	0.17	0.06	1.83	4,803
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	2.20	9.93	15.2	25.3	0.04	0.46	0.78	1.24	0.42	0.18	0.61	—	4,709	4,709	0.17	0.09	0.05	4,739
2031	2.14	9.88	14.8	25.0	0.04	0.43	0.78	1.21	0.40	0.18	0.58	—	4,693	4,693	0.17	0.08	0.05	4,722
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.86	3.55	5.94	9.67	0.02	0.19	0.70	0.89	0.17	0.28	0.45	—	1,799	1,799	0.06	0.03	0.32	1,810
2031	0.60	2.76	4.13	7.03	0.01	0.12	0.22	0.34	0.11	0.05	0.16	—	1,319	1,319	0.05	0.02	0.22	1,327
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.16	0.65	1.08	1.76	< 0.005	0.03	0.13	0.16	0.03	0.05	0.08	—	298	298	0.01	0.01	0.05	300
2031	0.11	0.50	0.75	1.28	< 0.005	0.02	0.04	0.06	0.02	0.01	0.03	—	218	218	0.01	< 0.005	0.04	220

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.87	8.89	5.95	29.2	0.05	0.13	19.8	19.9	0.12	10.1	10.2	—	5,484	5,484	0.22	0.08	2.07	5,505
2031	0.86	8.87	5.94	28.3	0.04	0.13	0.78	0.90	0.12	0.18	0.31	—	4,779	4,779	0.17	0.06	1.83	4,803
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.85	8.86	6.02	27.6	0.04	0.13	0.78	0.90	0.12	0.18	0.31	—	4,709	4,709	0.17	0.09	0.05	4,739
2031	0.83	8.84	5.99	27.4	0.04	0.13	0.78	0.90	0.12	0.18	0.31	—	4,693	4,693	0.17	0.08	0.05	4,722
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.31	3.12	2.18	10.5	0.02	0.05	0.70	0.75	0.05	0.28	0.32	—	1,799	1,799	0.06	0.03	0.32	1,810
2031	0.23	2.48	1.67	7.70	0.01	0.04	0.22	0.25	0.03	0.05	0.09	—	1,319	1,319	0.05	0.02	0.22	1,327
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.06	0.57	0.40	1.92	< 0.005	0.01	0.13	0.14	0.01	0.05	0.06	—	298	298	0.01	0.01	0.05	300
2031	0.04	0.45	0.31	1.41	< 0.005	0.01	0.04	0.05	0.01	0.01	0.02	—	218	218	0.01	< 0.005	0.04	220

3. Construction Emissions Details

3.1. Site Preparation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	3.47	2.92	25.2	28.4	0.05	1.07	—	1.07	0.98	—	0.98	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.39	< 0.005	0.01	—	0.01	0.01	—	0.01	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.86	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	188	188	< 0.005	0.01	0.44	191

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.34	2.34	< 0.005	< 0.005	< 0.005	2.38	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	< 0.005	0.39	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.2. Site Preparation (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	72.5	72.5	< 0.005	< 0.005	—	72.8
Dust From Material Movement	—	—	—	—	—	—	0.27	0.27	—	0.14	0.14	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.1
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.86	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	188	188	< 0.005	0.01	0.44	191
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.34	2.34	< 0.005	< 0.005	< 0.005	2.38
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	< 0.005	0.39
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.76	1.48	12.6	17.3	0.03	0.51	—	0.51	0.47	—	0.47	—	2,959	2,959	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	64.9	64.9	< 0.005	< 0.005	—	65.1

Dust From Material Movement:	—	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8
Dust From Material Movement:	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.74	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	162	162	< 0.005	0.01	0.38	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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3.4. Grading (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.29	2.04	17.8	0.03	0.06	—	0.06	0.06	—	0.06	—	2,959	2,959	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	—	7.08	7.08	—	3.42	3.42	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.9	64.9	< 0.005	< 0.005	—	65.1
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.7	10.7	< 0.005	< 0.005	—	10.8

Dust From Material Movement:	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.74	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	162	162	< 0.005	0.01	0.38	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.33	2.94	4.51	0.01	0.09	—	0.09	0.08	—	0.08	—	840	840	0.03	0.01	—	842
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.82	< 0.005	0.02	—	0.02	0.02	—	0.02	—	139	139	0.01	< 0.005	—	139
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.09	1.99	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	434	434	0.01	0.02	1.02	440
Vendor	0.01	0.01	0.21	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	180	180	< 0.005	0.03	0.33	188
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.12	1.42	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	383	383	0.01	0.02	0.03	388
Vendor	0.01	0.01	0.22	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	180	180	< 0.005	0.03	0.01	188
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.52	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	138	138	< 0.005	0.01	0.15	140
Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.0	63.0	< 0.005	0.01	0.05	65.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.03	23.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.4	10.4	< 0.005	< 0.005	0.01	10.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.81	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.35	0.33	2.81	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.11	0.98	5.19	0.01	0.03	—	0.03	0.02	—	0.02	—	840	840	0.03	0.01	—	842
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.95	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	139	139	0.01	< 0.005	—	139
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.09	1.99	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	434	434	0.01	0.02	1.02	440
Vendor	0.01	0.01	0.21	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	180	180	< 0.005	0.03	0.33	188
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.12	1.42	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	383	383	0.01	0.02	0.03	388
Vendor	0.01	0.01	0.22	0.07	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	180	180	< 0.005	0.03	0.01	188
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.52	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	138	138	< 0.005	0.01	0.15	140
Vendor	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	63.0	63.0	< 0.005	0.01	0.05	65.7

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.03	23.2	
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.4	10.4	< 0.005	< 0.005	0.01	10.9	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.7. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	2.27	3.59	0.01	0.07	—	0.07	0.06	—	0.06	—	671	671	0.03	0.01	—	673
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.05	0.41	0.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	111	111	< 0.005	< 0.005	—	111
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.09	1.85	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	427	427	0.01	< 0.005	0.91	429
Vendor	0.01	< 0.005	0.20	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	174	174	< 0.005	0.03	0.29	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.11	1.33	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	376	376	0.01	0.02	0.02	381
Vendor	0.01	< 0.005	0.22	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	174	174	< 0.005	0.03	0.01	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.38	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.11	110
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	48.8	48.8	< 0.005	0.01	0.04	50.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.0	18.0	< 0.005	< 0.005	0.02	18.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.07	8.07	< 0.005	< 0.005	0.01	8.43
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.81	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.33	2.81	14.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.79	4.15	0.01	0.02	—	0.02	0.02	—	0.02	—	671	671	0.03	0.01	—	673
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.76	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	111	111	< 0.005	< 0.005	—	111
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.13	0.09	1.85	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	427	427	0.01	< 0.005	0.91	429
Vendor	0.01	< 0.005	0.20	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	174	174	< 0.005	0.03	0.29	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.11	1.33	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	376	376	0.01	0.02	0.02	381
Vendor	0.01	< 0.005	0.22	0.06	< 0.005	< 0.005	0.05	0.06	< 0.005	0.02	0.02	—	174	174	< 0.005	0.03	0.01	182
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.38	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.11	110
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	48.8	48.8	< 0.005	0.01	0.04	50.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	18.0	18.0	< 0.005	< 0.005	0.02	18.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.07	8.07	< 0.005	< 0.005	0.01	8.43
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.60	5.61	8.79	0.01	0.19	—	0.19	0.17	—	0.17	—	1,350	1,350	0.05	0.01	—	1,354
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	0.60	5.61	8.79	0.01	0.19	—	0.19	0.17	—	0.17	—	1,350	1,350	0.05	0.01	—	1,354
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.21	1.97	3.08	< 0.005	0.06	—	0.06	0.06	—	0.06	—	473	473	0.02	< 0.005	—	474
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.36	0.56	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.3	78.3	< 0.005	< 0.005	—	78.6
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.04	0.99	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	215	215	< 0.005	0.01	0.51	218
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.71	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	190	190	< 0.005	0.01	0.01	192

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.5	68.5	< 0.005	< 0.005	0.08	69.4	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.5	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	2.14	9.35	0.01	0.05	—	0.05	0.05	—	0.05	—	1,350	1,350	0.05	0.01	—	1,354
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	2.14	9.35	0.01	0.05	—	0.05	0.05	—	0.05	—	1,350	1,350	0.05	0.01	—	1,354
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.75	3.28	< 0.005	0.02	—	0.02	0.02	—	0.02	—	473	473	0.02	< 0.005	—	474	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Off-Road Equipment	0.01	0.01	0.14	0.60	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	78.3	78.3	< 0.005	< 0.005	—	78.6	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.08	0.07	0.04	0.99	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	215	215	< 0.005	0.01	0.51	218	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.06	0.71	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	190	190	< 0.005	0.01	0.01	192	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	68.5	68.5	< 0.005	< 0.005	0.08	69.4	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.49	8.78	0.01	0.18	—	0.18	0.16	—	0.16	—	1,350	1,350	0.05	0.01	—	1,354
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.58	5.49	8.78	0.01	0.18	—	0.18	0.16	—	0.16	—	1,350	1,350	0.05	0.01	—	1,354
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.54	2.46	< 0.005	0.05	—	0.05	0.05	—	0.05	—	378	378	0.02	< 0.005	—	379
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.45	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.5	62.5	< 0.005	< 0.005	—	62.8	
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.07	0.04	0.92	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	212	212	< 0.005	< 0.005	0.45	213	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.01	189	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.01	0.19	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.8	53.8	< 0.005	< 0.005	0.05	54.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.91	8.91	< 0.005	< 0.005	0.01	9.03	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.12. Paving (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	2.14	9.35	0.01	0.05	—	0.05	0.05	—	0.05	—	1,350	1,350	0.05	0.01	—	1,354
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.21	2.14	9.35	0.01	0.05	—	0.05	0.05	—	0.05	—	1,350	1,350	0.05	0.01	—	1,354
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.60	2.62	< 0.005	0.01	—	0.01	0.01	—	0.01	—	378	378	0.02	< 0.005	—	379
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.48	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	62.5	62.5	< 0.005	< 0.005	—	62.8
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.92	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	212	212	< 0.005	< 0.005	0.45	213	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.07	0.06	0.05	0.66	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	187	187	< 0.005	0.01	0.01	189	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.02	0.02	0.01	0.19	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.8	53.8	< 0.005	< 0.005	0.05	54.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.91	8.91	< 0.005	< 0.005	0.01	9.03	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.13. Architectural Coating (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	8.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	8.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.27	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.8	46.8	< 0.005	< 0.005	—	46.9
Architect ural Coatings	—	2.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.74	7.74	< 0.005	< 0.005	—	7.77
Architect ural Coatings	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.8	86.8	< 0.005	< 0.005	0.20	88.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.02	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	76.5	76.5	< 0.005	< 0.005	0.01	77.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.6	27.6	< 0.005	< 0.005	0.03	28.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.57	4.57	< 0.005	< 0.005	0.01	4.63	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.14. Architectural Coating (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	8.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	8.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.23	0.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.8	46.8	< 0.005	< 0.005	—	46.9
Architectural Coatings	—	2.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.74	7.74	< 0.005	< 0.005	—	7.77
Architectural Coatings	—	0.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.40	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	86.8	86.8	< 0.005	< 0.005	0.20	88.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.02	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	76.5	76.5	< 0.005	< 0.005	0.01	77.6	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.6	27.6	< 0.005	< 0.005	0.03	28.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.57	4.57	< 0.005	< 0.005	0.01	4.63	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.15. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	8.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	8.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.4	37.4	< 0.005	< 0.005	—	37.5
Architect ural Coatings	—	2.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.19	6.19	< 0.005	< 0.005	—	6.21
Architect ural Coatings	—	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.37	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	85.4	85.4	< 0.005	< 0.005	0.18	85.8	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.02	0.02	0.27	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	75.3	75.3	< 0.005	< 0.005	< 0.005	76.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.7	21.7	< 0.005	< 0.005	0.02	22.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.59	3.59	< 0.005	< 0.005	< 0.005	3.64	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.16. Architectural Coating (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	8.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	8.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.18	0.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.4	37.4	< 0.005	< 0.005	—	37.5
Architectural Coatings	—	2.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.19	6.19	< 0.005	< 0.005	—	6.21
Architectural Coatings	—	0.41	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.37	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	85.4	85.4	< 0.005	< 0.005	0.18	85.8	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.02	0.02	0.27	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	75.3	75.3	< 0.005	< 0.005	< 0.005	76.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.7	21.7	< 0.005	< 0.005	0.02	22.0	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.59	3.59	< 0.005	< 0.005	< 0.005	3.64	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/19/2030	6/25/2030	5.00	5.00	—
Grading	Grading	6/26/2030	7/5/2030	5.00	8.00	—
Building Construction	Building Construction	7/6/2030	5/23/2031	5.00	230	—
Paving	Paving	7/6/2030	5/23/2031	5.00	230	—
Architectural Coating	Architectural Coating	7/6/2030	5/23/2031	5.00	230	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40

Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.9	LDA,LDT1,LDT2
Grading	Vendor	—	10.8	HHDT,MHDT

Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	40.3	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	5.99	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	8.06	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.8	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.9	LDA,LDT1,LDT2

Grading	Vendor	—	10.8	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	40.3	14.9	LDA,LDT1,LDT2
Building Construction	Vendor	5.99	10.8	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	14.9	LDA,LDT1,LDT2
Paving	Vendor	—	10.8	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	8.06	14.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.8	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	120,204	40,068	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	7.50	0.00	—
Grading	—	—	8.00	0.00	—
Paving	0.00	0.00	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Low Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat

Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6
Pesticides	92.1

Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7
Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3
Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—
Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183
Education	—

Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151
Active commuting	26.67778776
Social	—
2-parent households	15.50109072
Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841
Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859
Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5
Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0
Climate Change Adaptive Capacity	—

Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9
Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
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Construction: Construction Phases

Building construction, paving and painting assumed to occur at the same time.

PROJECT BUILDOUT UNMITIGATED

Wescott Buildout- Unmitigated Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Buildout- Unmitigated
Operational Year	2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.1835, -122.0175
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	170	Dwelling Unit	55.2	331,500	1,991,186	0.00	490	—

Office Park	51.0	1000sqft	1.17	50,990	0.00	—	—	—
Parking Lot	75.0	Space	0.67	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	2.00	Acre	2.00	0.00	0.00	—	—	—
City Park	3.51	Acre	3.51	0.00	0.00	0.00	—	—
Condo/Townhouse	52.0	Dwelling Unit	3.25	55,120	0.00	—	150	—
Apartments Low Rise	56.0	Dwelling Unit	3.50	59,360	0.00	—	161	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-46*	Improve Transit Access, Safety, and Comfort
Energy	E-2	Require Energy Efficient Appliances

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	450	448	21.9	686	1.34	72.8	35.7	108	72.4	9.05	81.5	7,893	45,497	53,391	26.0	1.91	77.0	54,687
Mit.	450	448	21.9	686	1.34	72.8	35.7	108	72.4	9.05	81.5	7,893	45,495	53,389	26.0	1.91	77.0	54,685
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	447	445	23.9	639	1.30	72.8	35.7	108	72.4	9.05	81.5	7,893	41,852	49,745	26.1	2.04	5.23	51,011
Mit.	447	445	23.9	639	1.30	72.8	35.7	108	72.4	9.05	81.5	7,893	41,850	49,743	26.1	2.04	5.23	51,009
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	112	116	16.6	242	0.57	16.7	35.7	52.3	16.6	9.04	25.6	1,907	40,186	42,094	20.5	1.54	35.2	43,102
Mit.	112	116	16.6	242	0.57	16.7	35.7	52.3	16.6	9.04	25.6	1,907	40,184	42,091	20.5	1.54	35.2	43,100
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20.5	21.2	3.03	44.2	0.10	3.04	6.51	9.55	3.02	1.65	4.67	316	6,653	6,969	3.40	0.26	5.82	7,136
Mit.	20.5	21.2	3.03	44.2	0.10	3.04	6.51	9.55	3.02	1.65	4.67	316	6,653	6,969	3.40	0.26	5.82	7,136
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.2	14.1	11.3	141	0.37	0.23	35.7	35.9	0.21	9.05	9.26	—	37,739	37,739	1.00	1.22	73.7	38,203
Area	434	434	8.47	543	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,271	10,991	7.13	0.55	—	11,335
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,426	4,426	0.52	0.04	—	4,451
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219

Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	450	448	21.9	686	1.34	72.8	35.7	108	72.4	9.05	81.5	7,893	45,497	53,391	26.0	1.91	77.0	54,687
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.8	12.7	13.4	113	0.34	0.23	35.7	35.9	0.21	9.05	9.26	—	34,145	34,145	1.12	1.35	1.91	34,579
Area	433	432	8.31	525	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,219	10,940	7.12	0.55	—	11,283
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,426	4,426	0.52	0.04	—	4,451
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	447	445	23.9	639	1.30	72.8	35.7	108	72.4	9.05	81.5	7,893	41,852	49,745	26.1	2.04	5.23	51,011
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.9	12.8	12.5	114	0.34	0.23	35.7	35.9	0.21	9.04	9.25	—	34,951	34,951	1.05	1.29	31.8	35,393
Area	98.1	103	1.95	127	0.21	16.3	—	16.3	16.2	—	16.2	1,734	749	2,483	1.60	0.12	—	2,560
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,426	4,426	0.52	0.04	—	4,451
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	112	116	16.6	242	0.57	16.7	35.7	52.3	16.6	9.04	25.6	1,907	40,186	42,094	20.5	1.54	35.2	43,102
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.53	2.33	2.27	20.9	0.06	0.04	6.51	6.55	0.04	1.65	1.69	—	5,786	5,786	0.17	0.21	5.27	5,860
Area	17.9	18.8	0.36	23.2	0.04	2.97	—	2.97	2.95	—	2.95	287	124	411	0.27	0.02	—	424
Energy	0.05	0.02	0.39	0.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	733	733	0.09	0.01	—	737
Water	—	—	—	—	—	—	—	—	—	—	—	6.07	10.1	16.2	0.62	0.01	—	36.2
Waste	—	—	—	—	—	—	—	—	—	—	—	22.5	0.00	22.5	2.25	0.00	—	78.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55

Total	20.5	21.2	3.03	44.2	0.10	3.04	6.51	9.55	3.02	1.65	4.67	316	6,653	6,969	3.40	0.26	5.82	7,136
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2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.2	14.1	11.3	141	0.37	0.23	35.7	35.9	0.21	9.05	9.26	—	37,739	37,739	1.00	1.22	73.7	38,203
Area	434	434	8.47	543	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,271	10,991	7.13	0.55	—	11,335
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,424	4,424	0.52	0.04	—	4,449
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	450	448	21.9	686	1.34	72.8	35.7	108	72.4	9.05	81.5	7,893	45,495	53,389	26.0	1.91	77.0	54,685
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.8	12.7	13.4	113	0.34	0.23	35.7	35.9	0.21	9.05	9.26	—	34,145	34,145	1.12	1.35	1.91	34,579
Area	433	432	8.31	525	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,219	10,940	7.12	0.55	—	11,283
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,424	4,424	0.52	0.04	—	4,449
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	447	445	23.9	639	1.30	72.8	35.7	108	72.4	9.05	81.5	7,893	41,850	49,743	26.1	2.04	5.23	51,009
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.9	12.8	12.5	114	0.34	0.23	35.7	35.9	0.21	9.04	9.25	—	34,951	34,951	1.05	1.29	31.8	35,393
Area	98.1	103	1.95	127	0.21	16.3	—	16.3	16.2	—	16.2	1,734	749	2,483	1.60	0.12	—	2,560

Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,424	4,424	0.52	0.04	—	4,449
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	112	116	16.6	242	0.57	16.7	35.7	52.3	16.6	9.04	25.6	1,907	40,184	42,091	20.5	1.54	35.2	43,100
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.53	2.33	2.27	20.9	0.06	0.04	6.51	6.55	0.04	1.65	1.69	—	5,786	5,786	0.17	0.21	5.27	5,860
Area	17.9	18.8	0.36	23.2	0.04	2.97	—	2.97	2.95	—	2.95	287	124	411	0.27	0.02	—	424
Energy	0.05	0.02	0.39	0.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	732	732	0.09	0.01	—	737
Water	—	—	—	—	—	—	—	—	—	—	—	6.07	10.1	16.2	0.62	0.01	—	36.2
Waste	—	—	—	—	—	—	—	—	—	—	—	22.5	0.00	22.5	2.25	0.00	—	78.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55
Total	20.5	21.2	3.03	44.2	0.10	3.04	6.51	9.55	3.02	1.65	4.67	316	6,653	6,969	3.40	0.26	5.82	7,136

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.80	4.43	3.59	46.8	0.12	0.07	11.9	12.0	0.07	3.02	3.09	—	12,532	12,532	0.32	0.39	24.6	12,680
Office Park	2.04	1.92	1.56	14.7	0.04	0.03	3.50	3.53	0.03	0.89	0.91	—	3,899	3,899	0.12	0.17	7.40	3,960

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.79	0.74	0.45	5.66	0.01	0.01	1.33	1.34	0.01	0.34	0.35	—	1,416	1,416	0.05	0.05	2.75	1,434	
Condo/Townhouse	3.81	3.52	2.85	37.1	0.10	0.06	9.47	9.53	0.06	2.40	2.45	—	9,947	9,947	0.26	0.31	19.5	10,065	
Apartments Low Rise	3.81	3.52	2.85	37.1	0.10	0.06	9.47	9.53	0.06	2.40	2.45	—	9,946	9,946	0.26	0.31	19.5	10,064	
Total	15.2	14.1	11.3	141	0.37	0.23	35.7	35.9	0.21	9.05	9.26	—	37,739	37,739	1.00	1.22	73.7	38,203	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.35	3.98	4.28	37.0	0.11	0.07	11.9	12.0	0.07	3.02	3.09	—	11,328	11,328	0.36	0.43	0.64	11,466	
Office Park	1.83	1.71	1.81	12.4	0.03	0.03	3.50	3.53	0.03	0.89	0.91	—	3,555	3,555	0.14	0.18	0.19	3,613	
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.71	0.66	0.53	4.77	0.01	0.01	1.33	1.34	0.01	0.34	0.35	—	1,281	1,281	0.05	0.05	0.07	1,299	
Condo/Townhouse	3.45	3.16	3.40	29.3	0.09	0.06	9.47	9.53	0.06	2.40	2.45	—	8,991	8,991	0.29	0.34	0.51	9,101	
Apartments Low Rise	3.45	3.16	3.40	29.3	0.09	0.06	9.47	9.53	0.06	2.40	2.45	—	8,990	8,990	0.29	0.34	0.51	9,100	
Total	13.8	12.7	13.4	113	0.34	0.23	35.7	35.9	0.21	9.05	9.26	—	34,145	34,145	1.12	1.35	1.91	34,579	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.80	0.73	0.72	6.86	0.02	0.01	2.18	2.19	0.01	0.55	0.56	—	1,920	1,920	0.06	0.07	1.76	1,944
Office Park	0.34	0.31	0.31	2.24	0.01	0.01	0.64	0.64	< 0.005	0.16	0.17	—	601	601	0.02	0.03	0.53	611
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.13	0.12	0.09	0.86	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	217	217	0.01	0.01	0.20	220
Condo/Townhouse	0.63	0.58	0.58	5.45	0.02	0.01	1.73	1.74	0.01	0.44	0.45	—	1,524	1,524	0.04	0.05	1.39	1,543
Apartments Low Rise	0.63	0.58	0.58	5.45	0.02	0.01	1.73	1.74	0.01	0.44	0.45	—	1,524	1,524	0.04	0.05	1.39	1,543
Total	2.53	2.33	2.27	20.9	0.06	0.04	6.51	6.55	0.04	1.65	1.69	—	5,786	5,786	0.17	0.21	5.27	5,860

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.80	4.43	3.59	46.8	0.12	0.07	11.9	12.0	0.07	3.02	3.09	—	12,532	12,532	0.32	0.39	24.6	12,680
Office Park	2.04	1.92	1.56	14.7	0.04	0.03	3.50	3.53	0.03	0.89	0.91	—	3,899	3,899	0.12	0.17	7.40	3,960
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.79	0.74	0.45	5.66	0.01	0.01	1.33	1.34	0.01	0.34	0.35	—	1,416	1,416	0.05	0.05	2.75	1,434	
Condo/Townhouse	3.81	3.52	2.85	37.1	0.10	0.06	9.47	9.53	0.06	2.40	2.45	—	9,947	9,947	0.26	0.31	19.5	10,065	
Apartments Low Rise	3.81	3.52	2.85	37.1	0.10	0.06	9.47	9.53	0.06	2.40	2.45	—	9,946	9,946	0.26	0.31	19.5	10,064	
Total	15.2	14.1	11.3	141	0.37	0.23	35.7	35.9	0.21	9.05	9.26	—	37,739	37,739	1.00	1.22	73.7	38,203	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.35	3.98	4.28	37.0	0.11	0.07	11.9	12.0	0.07	3.02	3.09	—	11,328	11,328	0.36	0.43	0.64	11,466	
Office Park	1.83	1.71	1.81	12.4	0.03	0.03	3.50	3.53	0.03	0.89	0.91	—	3,555	3,555	0.14	0.18	0.19	3,613	
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.71	0.66	0.53	4.77	0.01	0.01	1.33	1.34	0.01	0.34	0.35	—	1,281	1,281	0.05	0.05	0.07	1,299	
Condo/Townhouse	3.45	3.16	3.40	29.3	0.09	0.06	9.47	9.53	0.06	2.40	2.45	—	8,991	8,991	0.29	0.34	0.51	9,101	
Apartments Low Rise	3.45	3.16	3.40	29.3	0.09	0.06	9.47	9.53	0.06	2.40	2.45	—	8,990	8,990	0.29	0.34	0.51	9,100	
Total	13.8	12.7	13.4	113	0.34	0.23	35.7	35.9	0.21	9.05	9.26	—	34,145	34,145	1.12	1.35	1.91	34,579	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.80	0.73	0.72	6.86	0.02	0.01	2.18	2.19	0.01	0.55	0.56	—	1,920	1,920	0.06	0.07	1.76	1,944
Office Park	0.34	0.31	0.31	2.24	0.01	0.01	0.64	0.64	< 0.005	0.16	0.17	—	601	601	0.02	0.03	0.53	611
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.13	0.12	0.09	0.86	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	217	217	0.01	0.01	0.20	220
Condo/Townhouse	0.63	0.58	0.58	5.45	0.02	0.01	1.73	1.74	0.01	0.44	0.45	—	1,524	1,524	0.04	0.05	1.39	1,543
Apartments Low Rise	0.63	0.58	0.58	5.45	0.02	0.01	1.73	1.74	0.01	0.44	0.45	—	1,524	1,524	0.04	0.05	1.39	1,543
Total	2.53	2.33	2.27	20.9	0.06	0.04	6.51	6.55	0.04	1.65	1.69	—	5,786	5,786	0.17	0.21	5.27	5,860

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	810	810	0.13	0.02	—	818
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	596	596	0.10	0.01	—	602

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.02	< 0.005	—	151
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.02	< 0.005	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,710	1,710	0.28	0.03	—	1,727
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	810	810	0.13	0.02	—	818
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	596	596	0.10	0.01	—	602
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.02	< 0.005	—	151
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.02	< 0.005	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,710	1,710	0.28	0.03	—	1,727
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	134	134	0.02	< 0.005	—	135
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	98.7	98.7	0.02	< 0.005	—	99.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2.38	2.38	< 0.005	< 0.005	—	2.41
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	24.8	24.8	< 0.005	< 0.005	—	25.1
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	23.0	23.0	< 0.005	< 0.005	—	23.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	283	283	0.05	0.01	—	286

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	808	808	0.13	0.02	—	816
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	596	596	0.10	0.01	—	602
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.02	< 0.005	—	151
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.02	< 0.005	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,708	1,708	0.28	0.03	—	1,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	808	808	0.13	0.02	—	816
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	596	596	0.10	0.01	—	602
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.02	< 0.005	—	151
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.02	< 0.005	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,708	1,708	0.28	0.03	—	1,725
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	134	134	0.02	< 0.005	—	135
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	98.7	98.7	0.02	< 0.005	—	99.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2.38	2.38	< 0.005	< 0.005	—	2.41
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	24.8	24.8	< 0.005	< 0.005	—	25.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	23.0	23.0	< 0.005	< 0.005	—	23.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	283	283	0.05	0.01	—	286

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.07	1.25	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,585	1,585	0.14	< 0.005	—	1,589
Office Park	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
Parking Lot	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

Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	387	387	0.03	< 0.005	—	388
Apartments Low Rise	0.03	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.02	< 0.005	—	274
Total	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	2,716	2,716	0.24	0.01	—	2,724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.07	1.25	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,585	1,585	0.14	< 0.005	—	1,589
Office Park	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
Parking Lot	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
Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	387	387	0.03	< 0.005	—	388
Apartments Low Rise	0.03	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.02	< 0.005	—	274
Total	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	2,716	2,716	0.24	0.01	—	2,724
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	262	262	0.02	< 0.005	—	263
Office Park	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.1	78.1	0.01	< 0.005	—	78.3
Parking Lot	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
Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.1	64.1	0.01	< 0.005	—	64.2
Apartments Low Rise	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.2	45.2	< 0.005	< 0.005	—	45.3
Total	0.05	0.02	0.39	0.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	450	450	0.04	< 0.005	—	451

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.07	1.25	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,585	1,585	0.14	< 0.005	—	1,589
Office Park	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
Parking Lot	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

Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	387	387	0.03	< 0.005	—	388
Apartments Low Rise	0.03	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.02	< 0.005	—	274
Total	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	2,716	2,716	0.24	0.01	—	2,724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.07	1.25	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,585	1,585	0.14	< 0.005	—	1,589
Office Park	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
Parking Lot	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
Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	387	387	0.03	< 0.005	—	388
Apartments Low Rise	0.03	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.02	< 0.005	—	274
Total	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	2,716	2,716	0.24	0.01	—	2,724
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	262	262	0.02	< 0.005	—	263
Office Park	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.1	78.1	0.01	< 0.005	—	78.3
Parking Lot	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
Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.1	64.1	0.01	< 0.005	—	64.2
Apartments Low Rise	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.2	45.2	< 0.005	< 0.005	—	45.3
Total	0.05	0.02	0.39	0.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	450	450	0.04	< 0.005	—	451

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	433	425	8.31	525	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,219	10,940	7.12	0.55	—	11,283
Consumer Products	—	4.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.83	1.73	0.16	18.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
Total	434	434	8.47	543	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,271	10,991	7.13	0.55	—	11,335
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	433	425	8.31	525	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,219	10,940	7.12	0.55	—	11,283
Consumer Products	—	4.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	433	432	8.31	525	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,219	10,940	7.12	0.55	—	11,283
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	17.7	17.4	0.34	21.5	0.04	2.97	—	2.97	2.95	—	2.95	287	120	407	0.26	0.02	—	420
Consumer Products	—	0.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.19	4.19	< 0.005	< 0.005	—	4.20
Total	17.9	18.8	0.36	23.2	0.04	2.97	—	2.97	2.95	—	2.95	287	124	411	0.27	0.02	—	424

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	433	425	8.31	525	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,219	10,940	7.12	0.55	—	11,283
Consumer Products	—	4.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.83	1.73	0.16	18.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
Total	434	434	8.47	543	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,271	10,991	7.13	0.55	—	11,335
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	433	425	8.31	525	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,219	10,940	7.12	0.55	—	11,283
Consumer Products	—	4.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	433	432	8.31	525	0.95	72.4	—	72.4	72.0	—	72.0	7,721	3,219	10,940	7.12	0.55	—	11,283
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	17.7	17.4	0.34	21.5	0.04	2.97	—	2.97	2.95	—	2.95	287	120	407	0.26	0.02	—	420
Consumer Products	—	0.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.19	4.19	< 0.005	< 0.005	—	4.20
Total	17.9	18.8	0.36	23.2	0.04	2.97	—	2.97	2.95	—	2.95	287	124	411	0.27	0.02	—	424

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.8	38.2	50.0	1.22	0.03	—	89.2
Office Park	—	—	—	—	—	—	—	—	—	—	—	17.4	15.9	33.2	1.78	0.04	—	90.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.61	3.30	6.91	0.37	0.01	—	18.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.89	3.55	7.45	0.40	0.01	—	20.3

Total	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.8	38.2	50.0	1.22	0.03	—	89.2
Office Park	—	—	—	—	—	—	—	—	—	—	—	17.4	15.9	33.2	1.78	0.04	—	90.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.61	3.30	6.91	0.37	0.01	—	18.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.89	3.55	7.45	0.40	0.01	—	20.3
Total	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.96	6.32	8.28	0.20	< 0.005	—	14.8
Office Park	—	—	—	—	—	—	—	—	—	—	—	2.88	2.63	5.50	0.30	0.01	—	15.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Condo/T	—	—	—	—	—	—	—	—	—	—	—	0.60	0.55	1.14	0.06	< 0.005	—	3.12
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.64	0.59	1.23	0.07	< 0.005	—	3.36
Total	—	—	—	—	—	—	—	—	—	—	—	6.07	10.1	16.2	0.62	0.01	—	36.2

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.8	38.2	50.0	1.22	0.03	—	89.2
Office Park	—	—	—	—	—	—	—	—	—	—	—	17.4	15.9	33.2	1.78	0.04	—	90.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.61	3.30	6.91	0.37	0.01	—	18.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.89	3.55	7.45	0.40	0.01	—	20.3
Total	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.8	38.2	50.0	1.22	0.03	—	89.2
Office Park	—	—	—	—	—	—	—	—	—	—	—	17.4	15.9	33.2	1.78	0.04	—	90.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.61	3.30	6.91	0.37	0.01	—	18.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.89	3.55	7.45	0.40	0.01	—	20.3
Total	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.96	6.32	8.28	0.20	< 0.005	—	14.8
Office Park	—	—	—	—	—	—	—	—	—	—	—	2.88	2.63	5.50	0.30	0.01	—	15.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.60	0.55	1.14	0.06	< 0.005	—	3.12

Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.64	0.59	1.23	0.07	< 0.005	—	3.36
Total	—	—	—	—	—	—	—	—	—	—	—	6.07	10.1	16.2	0.62	0.01	—	36.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	67.4	0.00	67.4	6.73	0.00	—	236
Office Park	—	—	—	—	—	—	—	—	—	—	—	25.6	0.00	25.6	2.55	0.00	—	89.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.57
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.07	0.00	—	72.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	77.9
Total	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	67.4	0.00	67.4	6.73	0.00	—	236
Office Park	—	—	—	—	—	—	—	—	—	—	—	25.6	0.00	25.6	2.55	0.00	—	89.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.57
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.07	0.00	—	72.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	77.9
Total	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.2	0.00	11.2	1.12	0.00	—	39.0
Office Park	—	—	—	—	—	—	—	—	—	—	—	4.23	0.00	4.23	0.42	0.00	—	14.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	0.00	—	0.09

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.44	0.00	3.44	0.34	0.00	—	12.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	22.5	0.00	22.5	2.25	0.00	—	78.9

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	67.4	0.00	67.4	6.73	0.00	—	236
Office Park	—	—	—	—	—	—	—	—	—	—	—	25.6	0.00	25.6	2.55	0.00	—	89.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.57
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.07	0.00	—	72.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	77.9
Total	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	67.4	0.00	67.4	6.73	0.00	—	236
Office Park	—	—	—	—	—	—	—	—	—	—	—	25.6	0.00	25.6	2.55	0.00	—	89.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.57
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.07	0.00	—	72.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	77.9
Total	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.2	0.00	11.2	1.12	0.00	—	39.0
Office Park	—	—	—	—	—	—	—	—	—	—	—	4.23	0.00	4.23	0.42	0.00	—	14.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	0.00	—	0.09

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.44	0.00	3.44	0.34	0.00	—	12.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	22.5	0.00	22.5	2.25	0.00	—	78.9

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.37	2.37
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.37	2.37
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.37	2.37
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.37	2.37
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Daily, Winter (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Annual	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Daily, Winter (Max)	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Annual	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Total	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	1,200	1,200	1,200	438,073	16,942	16,942	16,942	6,183,689
Office Park	590	590	590	215,333	4,948	4,948	4,948	1,806,159
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	226	226	226	82,480	1,895	1,895	1,895	691,824
Condo/Townhouse	953	953	953	347,714	13,447	13,447	13,447	4,908,207
Apartments Low Rise	953	953	953	347,684	13,446	13,446	13,446	4,907,794

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	1,200	1,200	1,200	438,073	16,942	16,942	16,942	6,183,689
Office Park	590	590	590	215,333	4,948	4,948	4,948	1,806,159
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	226	226	226	82,480	1,895	1,895	1,895	691,824
Condo/Townhouse	953	953	953	347,714	13,447	13,447	13,447	4,908,207
Apartments Low Rise	953	953	953	347,684	13,446	13,446	13,446	4,907,794

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	60
Gas Fireplaces	94
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	17
Conventional Wood Stoves	0
Catalytic Wood Stoves	9
Non-Catalytic Wood Stoves	9
Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	18
Gas Fireplaces	29
Propane Fireplaces	0
Electric Fireplaces	0

No Fireplaces	5
Conventional Wood Stoves	0
Catalytic Wood Stoves	3
Non-Catalytic Wood Stoves	3
Pellet Wood Stoves	0
Apartments Low Rise	—
Wood Fireplaces	20
Gas Fireplaces	31
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	6
Conventional Wood Stoves	0
Catalytic Wood Stoves	3
Non-Catalytic Wood Stoves	3
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	60
Gas Fireplaces	94
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	17
Conventional Wood Stoves	0
Catalytic Wood Stoves	9
Non-Catalytic Wood Stoves	9

Pellet Wood Stoves	0
Condo/Townhouse	—
Wood Fireplaces	18
Gas Fireplaces	29
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	5
Conventional Wood Stoves	0
Catalytic Wood Stoves	3
Non-Catalytic Wood Stoves	3
Pellet Wood Stoves	0
Apartments Low Rise	—
Wood Fireplaces	20
Gas Fireplaces	31
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	6
Conventional Wood Stoves	0
Catalytic Wood Stoves	3
Non-Catalytic Wood Stoves	3
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
903109.5	301,037	76,485	25,495	6,991

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	1,449,371	204	0.0330	0.0040	4,945,304
Office Park	1,067,187	204	0.0330	0.0040	1,472,031
Parking Lot	25,757	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00
Condo/Townhouse	268,276	204	0.0330	0.0040	1,207,437
Apartments Low Rise	248,913	204	0.0330	0.0040	851,151

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
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Single Family Housing	1,446,652	204	0.0330	0.0040	4,945,304
Office Park	1,067,187	204	0.0330	0.0040	1,472,031
Parking Lot	25,757	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00
Condo/Townhouse	267,639	204	0.0330	0.0040	1,207,437
Apartments Low Rise	248,493	204	0.0330	0.0040	851,151

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	6,165,288	30,391,321
Office Park	9,062,644	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00
Condo/Townhouse	1,885,853	0.00
Apartments Low Rise	2,030,918	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	6,165,288	30,391,321
Office Park	9,062,644	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

Condo/Townhouse	1,885,853	0.00
Apartments Low Rise	2,030,918	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	125	—
Office Park	47.4	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—
City Park	0.30	—
Condo/Townhouse	38.5	—
Apartments Low Rise	41.3	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	125	—
Office Park	47.4	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—
City Park	0.30	—
Condo/Townhouse	38.5	—
Apartments Low Rise	41.3	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00

Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A

Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6
Pesticides	92.1
Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7
Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3
Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—
Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4

Unemployment	14.4
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7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183
Education	—
Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151
Active commuting	26.67778776
Social	—
2-parent households	15.50109072
Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841
Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859

Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5
Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0

No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9
Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Project trips updated to match traffic report. Percentages of trip distribution over the land uses taken from CalEEMod.
Operations: Hearths	No fireplaces or stoves proposed.
Operations: Refrigerants	No amenities proposed in City Park
Operations: Consumer Products	ROG per square foot emission factor specific to statewide 2015 ROG Inventory for Consumer Products
Operations: Fleet Mix	Residential heavy-duty truck fleet adjusted per FHWA Traffic Noise Prediction Model
Operations: Architectural Coatings	rule

PROJECT BUILDOUT MITIGATED

Wescott Buildout- Mitigated Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wescott Buildout- Mitigated
Operational Year	2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	1.20
Location	39.1835, -122.0175
County	Colusa
City	Unincorporated
Air District	Colusa County APCD
Air Basin	Sacramento Valley
TAZ	229
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.22

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	170	Dwelling Unit	55.2	331,500	1,991,186	0.00	490	—

Office Park	51.0	1000sqft	1.17	50,990	0.00	—	—	—
Parking Lot	75.0	Space	0.67	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	2.00	Acre	2.00	0.00	0.00	—	—	—
City Park	3.51	Acre	3.51	0.00	0.00	0.00	—	—
Condo/Townhouse	52.0	Dwelling Unit	3.25	55,120	0.00	—	150	—
Apartments Low Rise	56.0	Dwelling Unit	3.50	59,360	0.00	—	161	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Transportation	T-46*	Improve Transit Access, Safety, and Comfort
Energy	E-2	Require Energy Efficient Appliances

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.3	22.6	13.6	161	0.39	0.41	35.7	36.1	0.40	9.05	9.44	173	42,278	42,451	18.9	1.35	77.0	43,404
Mit.	17.3	22.6	13.6	161	0.39	0.41	35.7	36.1	0.40	9.05	9.44	173	42,276	42,449	18.9	1.35	77.0	43,402
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.0	19.4	15.6	114	0.35	0.40	35.7	36.1	0.39	9.05	9.43	173	38,632	38,805	19.0	1.48	5.23	39,728
Mit.	14.0	19.4	15.6	114	0.35	0.40	35.7	36.1	0.39	9.05	9.43	173	38,630	38,803	19.0	1.48	5.23	39,726
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	15.0	20.4	14.7	124	0.36	0.41	35.7	36.1	0.39	9.04	9.43	173	39,463	39,636	18.9	1.42	35.2	40,568
Mit.	15.0	20.4	14.7	124	0.36	0.41	35.7	36.1	0.39	9.04	9.43	173	39,461	39,634	18.9	1.42	35.2	40,565
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	—	—	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.74	3.72	2.68	22.7	0.07	0.07	6.51	6.58	0.07	1.65	1.72	28.6	6,534	6,562	3.14	0.24	5.82	6,716
Mit.	2.74	3.72	2.68	22.7	0.07	0.07	6.51	6.58	0.07	1.65	1.72	28.6	6,533	6,562	3.14	0.23	5.82	6,716
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.2	14.1	11.3	141	0.37	0.23	35.7	35.9	0.21	9.05	9.26	—	37,739	37,739	1.00	1.22	73.7	38,203
Area	1.83	8.37	0.16	18.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,426	4,426	0.52	0.04	—	4,451
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219

Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	17.3	22.6	13.6	161	0.39	0.41	35.7	36.1	0.40	9.05	9.44	173	42,278	42,451	18.9	1.35	77.0	43,404
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.8	12.7	13.4	113	0.34	0.23	35.7	35.9	0.21	9.05	9.26	—	34,145	34,145	1.12	1.35	1.91	34,579
Area	—	6.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,426	4,426	0.52	0.04	—	4,451
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	14.0	19.4	15.6	114	0.35	0.40	35.7	36.1	0.39	9.05	9.43	173	38,632	38,805	19.0	1.48	5.23	39,728
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.9	12.8	12.5	114	0.34	0.23	35.7	35.9	0.21	9.04	9.25	—	34,951	34,951	1.05	1.29	31.8	35,393
Area	0.90	7.50	0.08	8.91	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	25.3	25.3	< 0.005	< 0.005	—	25.4
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,426	4,426	0.52	0.04	—	4,451
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	15.0	20.4	14.7	124	0.36	0.41	35.7	36.1	0.39	9.04	9.43	173	39,463	39,636	18.9	1.42	35.2	40,568
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.53	2.33	2.27	20.9	0.06	0.04	6.51	6.55	0.04	1.65	1.69	—	5,786	5,786	0.17	0.21	5.27	5,860
Area	0.17	1.37	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.19	4.19	< 0.005	< 0.005	—	4.20
Energy	0.05	0.02	0.39	0.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	733	733	0.09	0.01	—	737
Water	—	—	—	—	—	—	—	—	—	—	—	6.07	10.1	16.2	0.62	0.01	—	36.2
Waste	—	—	—	—	—	—	—	—	—	—	—	22.5	0.00	22.5	2.25	0.00	—	78.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55

Total	2.74	3.72	2.68	22.7	0.07	0.07	6.51	6.58	0.07	1.65	1.72	28.6	6,534	6,562	3.14	0.24	5.82	6,716
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2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.2	14.1	11.3	141	0.37	0.23	35.7	35.9	0.21	9.05	9.26	—	37,739	37,739	1.00	1.22	73.7	38,203
Area	1.83	8.37	0.16	18.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,424	4,424	0.52	0.04	—	4,449
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	17.3	22.6	13.6	161	0.39	0.41	35.7	36.1	0.40	9.05	9.44	173	42,276	42,449	18.9	1.35	77.0	43,402
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.8	12.7	13.4	113	0.34	0.23	35.7	35.9	0.21	9.05	9.26	—	34,145	34,145	1.12	1.35	1.91	34,579
Area	—	6.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,424	4,424	0.52	0.04	—	4,449
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	14.0	19.4	15.6	114	0.35	0.40	35.7	36.1	0.39	9.05	9.43	173	38,630	38,803	19.0	1.48	5.23	39,726
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.9	12.8	12.5	114	0.34	0.23	35.7	35.9	0.21	9.04	9.25	—	34,951	34,951	1.05	1.29	31.8	35,393
Area	0.90	7.50	0.08	8.91	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	25.3	25.3	< 0.005	< 0.005	—	25.4

Energy	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	4,424	4,424	0.52	0.04	—	4,449
Water	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Waste	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Total	15.0	20.4	14.7	124	0.36	0.41	35.7	36.1	0.39	9.04	9.43	173	39,461	39,634	18.9	1.42	35.2	40,565
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.53	2.33	2.27	20.9	0.06	0.04	6.51	6.55	0.04	1.65	1.69	—	5,786	5,786	0.17	0.21	5.27	5,860
Area	0.17	1.37	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.19	4.19	< 0.005	< 0.005	—	4.20
Energy	0.05	0.02	0.39	0.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	732	732	0.09	0.01	—	737
Water	—	—	—	—	—	—	—	—	—	—	—	6.07	10.1	16.2	0.62	0.01	—	36.2
Waste	—	—	—	—	—	—	—	—	—	—	—	22.5	0.00	22.5	2.25	0.00	—	78.9
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55
Total	2.74	3.72	2.68	22.7	0.07	0.07	6.51	6.58	0.07	1.65	1.72	28.6	6,533	6,562	3.14	0.23	5.82	6,716

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.80	4.43	3.59	46.8	0.12	0.07	11.9	12.0	0.07	3.02	3.09	—	12,532	12,532	0.32	0.39	24.6	12,680
Office Park	2.04	1.92	1.56	14.7	0.04	0.03	3.50	3.53	0.03	0.89	0.91	—	3,899	3,899	0.12	0.17	7.40	3,960

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.79	0.74	0.45	5.66	0.01	0.01	1.33	1.34	0.01	0.34	0.35	—	1,416	1,416	0.05	0.05	2.75	1,434	
Condo/Townhouse	3.81	3.52	2.85	37.1	0.10	0.06	9.47	9.53	0.06	2.40	2.45	—	9,947	9,947	0.26	0.31	19.5	10,065	
Apartments Low Rise	3.81	3.52	2.85	37.1	0.10	0.06	9.47	9.53	0.06	2.40	2.45	—	9,946	9,946	0.26	0.31	19.5	10,064	
Total	15.2	14.1	11.3	141	0.37	0.23	35.7	35.9	0.21	9.05	9.26	—	37,739	37,739	1.00	1.22	73.7	38,203	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.35	3.98	4.28	37.0	0.11	0.07	11.9	12.0	0.07	3.02	3.09	—	11,328	11,328	0.36	0.43	0.64	11,466	
Office Park	1.83	1.71	1.81	12.4	0.03	0.03	3.50	3.53	0.03	0.89	0.91	—	3,555	3,555	0.14	0.18	0.19	3,613	
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.71	0.66	0.53	4.77	0.01	0.01	1.33	1.34	0.01	0.34	0.35	—	1,281	1,281	0.05	0.05	0.07	1,299	
Condo/Townhouse	3.45	3.16	3.40	29.3	0.09	0.06	9.47	9.53	0.06	2.40	2.45	—	8,991	8,991	0.29	0.34	0.51	9,101	
Apartments Low Rise	3.45	3.16	3.40	29.3	0.09	0.06	9.47	9.53	0.06	2.40	2.45	—	8,990	8,990	0.29	0.34	0.51	9,100	
Total	13.8	12.7	13.4	113	0.34	0.23	35.7	35.9	0.21	9.05	9.26	—	34,145	34,145	1.12	1.35	1.91	34,579	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.80	0.73	0.72	6.86	0.02	0.01	2.18	2.19	0.01	0.55	0.56	—	1,920	1,920	0.06	0.07	1.76	1,944
Office Park	0.34	0.31	0.31	2.24	0.01	0.01	0.64	0.64	< 0.005	0.16	0.17	—	601	601	0.02	0.03	0.53	611
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.13	0.12	0.09	0.86	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	217	217	0.01	0.01	0.20	220
Condo/Townhouse	0.63	0.58	0.58	5.45	0.02	0.01	1.73	1.74	0.01	0.44	0.45	—	1,524	1,524	0.04	0.05	1.39	1,543
Apartments Low Rise	0.63	0.58	0.58	5.45	0.02	0.01	1.73	1.74	0.01	0.44	0.45	—	1,524	1,524	0.04	0.05	1.39	1,543
Total	2.53	2.33	2.27	20.9	0.06	0.04	6.51	6.55	0.04	1.65	1.69	—	5,786	5,786	0.17	0.21	5.27	5,860

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.80	4.43	3.59	46.8	0.12	0.07	11.9	12.0	0.07	3.02	3.09	—	12,532	12,532	0.32	0.39	24.6	12,680
Office Park	2.04	1.92	1.56	14.7	0.04	0.03	3.50	3.53	0.03	0.89	0.91	—	3,899	3,899	0.12	0.17	7.40	3,960
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.79	0.74	0.45	5.66	0.01	0.01	1.33	1.34	0.01	0.34	0.35	—	1,416	1,416	0.05	0.05	2.75	1,434	
Condo/Townhouse	3.81	3.52	2.85	37.1	0.10	0.06	9.47	9.53	0.06	2.40	2.45	—	9,947	9,947	0.26	0.31	19.5	10,065	
Apartments Low Rise	3.81	3.52	2.85	37.1	0.10	0.06	9.47	9.53	0.06	2.40	2.45	—	9,946	9,946	0.26	0.31	19.5	10,064	
Total	15.2	14.1	11.3	141	0.37	0.23	35.7	35.9	0.21	9.05	9.26	—	37,739	37,739	1.00	1.22	73.7	38,203	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	4.35	3.98	4.28	37.0	0.11	0.07	11.9	12.0	0.07	3.02	3.09	—	11,328	11,328	0.36	0.43	0.64	11,466	
Office Park	1.83	1.71	1.81	12.4	0.03	0.03	3.50	3.53	0.03	0.89	0.91	—	3,555	3,555	0.14	0.18	0.19	3,613	
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.71	0.66	0.53	4.77	0.01	0.01	1.33	1.34	0.01	0.34	0.35	—	1,281	1,281	0.05	0.05	0.07	1,299	
Condo/Townhouse	3.45	3.16	3.40	29.3	0.09	0.06	9.47	9.53	0.06	2.40	2.45	—	8,991	8,991	0.29	0.34	0.51	9,101	
Apartments Low Rise	3.45	3.16	3.40	29.3	0.09	0.06	9.47	9.53	0.06	2.40	2.45	—	8,990	8,990	0.29	0.34	0.51	9,100	
Total	13.8	12.7	13.4	113	0.34	0.23	35.7	35.9	0.21	9.05	9.26	—	34,145	34,145	1.12	1.35	1.91	34,579	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.80	0.73	0.72	6.86	0.02	0.01	2.18	2.19	0.01	0.55	0.56	—	1,920	1,920	0.06	0.07	1.76	1,944
Office Park	0.34	0.31	0.31	2.24	0.01	0.01	0.64	0.64	< 0.005	0.16	0.17	—	601	601	0.02	0.03	0.53	611
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.13	0.12	0.09	0.86	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	217	217	0.01	0.01	0.20	220
Condo/Townhouse	0.63	0.58	0.58	5.45	0.02	0.01	1.73	1.74	0.01	0.44	0.45	—	1,524	1,524	0.04	0.05	1.39	1,543
Apartments Low Rise	0.63	0.58	0.58	5.45	0.02	0.01	1.73	1.74	0.01	0.44	0.45	—	1,524	1,524	0.04	0.05	1.39	1,543
Total	2.53	2.33	2.27	20.9	0.06	0.04	6.51	6.55	0.04	1.65	1.69	—	5,786	5,786	0.17	0.21	5.27	5,860

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	810	810	0.13	0.02	—	818
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	596	596	0.10	0.01	—	602

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.02	< 0.005	—	151
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.02	< 0.005	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,710	1,710	0.28	0.03	—	1,727
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	810	810	0.13	0.02	—	818
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	596	596	0.10	0.01	—	602
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.02	< 0.005	—	151
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.02	< 0.005	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,710	1,710	0.28	0.03	—	1,727
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	134	134	0.02	< 0.005	—	135
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	98.7	98.7	0.02	< 0.005	—	99.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2.38	2.38	< 0.005	< 0.005	—	2.41
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	24.8	24.8	< 0.005	< 0.005	—	25.1
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	23.0	23.0	< 0.005	< 0.005	—	23.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	283	283	0.05	0.01	—	286

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	808	808	0.13	0.02	—	816
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	596	596	0.10	0.01	—	602
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.02	< 0.005	—	151
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.02	< 0.005	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,708	1,708	0.28	0.03	—	1,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	808	808	0.13	0.02	—	816
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	596	596	0.10	0.01	—	602
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	14.4	14.4	< 0.005	< 0.005	—	14.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	150	150	0.02	< 0.005	—	151
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	139	139	0.02	< 0.005	—	140
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,708	1,708	0.28	0.03	—	1,725
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	134	134	0.02	< 0.005	—	135
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	98.7	98.7	0.02	< 0.005	—	99.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2.38	2.38	< 0.005	< 0.005	—	2.41
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	24.8	24.8	< 0.005	< 0.005	—	25.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	23.0	23.0	< 0.005	< 0.005	—	23.2
Total	—	—	—	—	—	—	—	—	—	—	—	—	283	283	0.05	0.01	—	286

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.07	1.25	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,585	1,585	0.14	< 0.005	—	1,589
Office Park	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
Parking Lot	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

Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	387	387	0.03	< 0.005	—	388
Apartments Low Rise	0.03	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.02	< 0.005	—	274
Total	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	2,716	2,716	0.24	0.01	—	2,724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.07	1.25	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,585	1,585	0.14	< 0.005	—	1,589
Office Park	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
Parking Lot	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
Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	387	387	0.03	< 0.005	—	388
Apartments Low Rise	0.03	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.02	< 0.005	—	274
Total	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	2,716	2,716	0.24	0.01	—	2,724
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	262	262	0.02	< 0.005	—	263
Office Park	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.1	78.1	0.01	< 0.005	—	78.3
Parking Lot	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
Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.1	64.1	0.01	< 0.005	—	64.2
Apartments Low Rise	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.2	45.2	< 0.005	< 0.005	—	45.3
Total	0.05	0.02	0.39	0.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	450	450	0.04	< 0.005	—	451

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.07	1.25	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,585	1,585	0.14	< 0.005	—	1,589
Office Park	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
Parking Lot	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

Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	387	387	0.03	< 0.005	—	388
Apartments Low Rise	0.03	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.02	< 0.005	—	274
Total	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	2,716	2,716	0.24	0.01	—	2,724
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.15	0.07	1.25	0.53	0.01	0.10	—	0.10	0.10	—	0.10	—	1,585	1,585	0.14	< 0.005	—	1,589
Office Park	0.04	0.02	0.40	0.33	< 0.005	0.03	—	0.03	0.03	—	0.03	—	472	472	0.04	< 0.005	—	473
Parking Lot	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
Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.04	0.02	0.30	0.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	387	387	0.03	< 0.005	—	388
Apartments Low Rise	0.03	0.01	0.21	0.09	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.02	< 0.005	—	274
Total	0.25	0.13	2.16	1.08	0.01	0.17	—	0.17	0.17	—	0.17	—	2,716	2,716	0.24	0.01	—	2,724
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.03	0.01	0.23	0.10	< 0.005	0.02	—	0.02	0.02	—	0.02	—	262	262	0.02	< 0.005	—	263
Office Park	0.01	< 0.005	0.07	0.06	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.1	78.1	0.01	< 0.005	—	78.3
Parking Lot	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
Other Non-Asphalt Surfaces	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
City Park	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
Condo/Townhouse	0.01	< 0.005	0.06	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	64.1	64.1	0.01	< 0.005	—	64.2
Apartments Low Rise	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.2	45.2	< 0.005	< 0.005	—	45.3
Total	0.05	0.02	0.39	0.20	< 0.005	0.03	—	0.03	0.03	—	0.03	—	450	450	0.04	< 0.005	—	451

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipment	1.83	1.73	0.16	18.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
Total	1.83	8.37	0.16	18.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	6.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.19	4.19	< 0.005	< 0.005	—	4.20
Total	0.17	1.37	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.19	4.19	< 0.005	< 0.005	—	4.20

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	—	4.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.83	1.73	0.16	18.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
Total	1.83	8.37	0.16	18.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.3	51.3	< 0.005	< 0.005	—	51.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.67	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	6.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.19	4.19	< 0.005	< 0.005	—	4.20
Total	0.17	1.37	0.01	1.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.19	4.19	< 0.005	< 0.005	—	4.20

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.8	38.2	50.0	1.22	0.03	—	89.2
Office Park	—	—	—	—	—	—	—	—	—	—	—	17.4	15.9	33.2	1.78	0.04	—	90.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.61	3.30	6.91	0.37	0.01	—	18.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.89	3.55	7.45	0.40	0.01	—	20.3
Total	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.8	38.2	50.0	1.22	0.03	—	89.2

Office Park	—	—	—	—	—	—	—	—	—	—	—	17.4	15.9	33.2	1.78	0.04	—	90.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.61	3.30	6.91	0.37	0.01	—	18.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.89	3.55	7.45	0.40	0.01	—	20.3
Total	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.96	6.32	8.28	0.20	< 0.005	—	14.8
Office Park	—	—	—	—	—	—	—	—	—	—	—	2.88	2.63	5.50	0.30	0.01	—	15.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.60	0.55	1.14	0.06	< 0.005	—	3.12
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.64	0.59	1.23	0.07	< 0.005	—	3.36
Total	—	—	—	—	—	—	—	—	—	—	—	6.07	10.1	16.2	0.62	0.01	—	36.2

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.8	38.2	50.0	1.22	0.03	—	89.2
Office Park	—	—	—	—	—	—	—	—	—	—	—	17.4	15.9	33.2	1.78	0.04	—	90.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.61	3.30	6.91	0.37	0.01	—	18.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.89	3.55	7.45	0.40	0.01	—	20.3
Total	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.8	38.2	50.0	1.22	0.03	—	89.2
Office Park	—	—	—	—	—	—	—	—	—	—	—	17.4	15.9	33.2	1.78	0.04	—	90.5

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.61	3.30	6.91	0.37	0.01	—	18.8
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.89	3.55	7.45	0.40	0.01	—	20.3
Total	—	—	—	—	—	—	—	—	—	—	—	36.7	60.9	97.6	3.77	0.09	—	219
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	1.96	6.32	8.28	0.20	< 0.005	—	14.8
Office Park	—	—	—	—	—	—	—	—	—	—	—	2.88	2.63	5.50	0.30	0.01	—	15.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	0.60	0.55	1.14	0.06	< 0.005	—	3.12
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	0.64	0.59	1.23	0.07	< 0.005	—	3.36
Total	—	—	—	—	—	—	—	—	—	—	—	6.07	10.1	16.2	0.62	0.01	—	36.2

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	67.4	0.00	67.4	6.73	0.00	—	236
Office Park	—	—	—	—	—	—	—	—	—	—	—	25.6	0.00	25.6	2.55	0.00	—	89.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.57
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.07	0.00	—	72.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	77.9
Total	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	67.4	0.00	67.4	6.73	0.00	—	236

Office Park	—	—	—	—	—	—	—	—	—	—	—	25.6	0.00	25.6	2.55	0.00	—	89.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.57
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.07	0.00	—	72.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	77.9
Total	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.2	0.00	11.2	1.12	0.00	—	39.0
Office Park	—	—	—	—	—	—	—	—	—	—	—	4.23	0.00	4.23	0.42	0.00	—	14.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	0.00	—	0.09
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.44	0.00	3.44	0.34	0.00	—	12.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	22.5	0.00	22.5	2.25	0.00	—	78.9

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	67.4	0.00	67.4	6.73	0.00	—	236
Office Park	—	—	—	—	—	—	—	—	—	—	—	25.6	0.00	25.6	2.55	0.00	—	89.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.57
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.07	0.00	—	72.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	77.9
Total	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	67.4	0.00	67.4	6.73	0.00	—	236
Office Park	—	—	—	—	—	—	—	—	—	—	—	25.6	0.00	25.6	2.55	0.00	—	89.4

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.57
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	20.8	0.00	20.8	2.07	0.00	—	72.6
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	22.3	0.00	22.3	2.23	0.00	—	77.9
Total	—	—	—	—	—	—	—	—	—	—	—	136	0.00	136	13.6	0.00	—	476
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	11.2	0.00	11.2	1.12	0.00	—	39.0
Office Park	—	—	—	—	—	—	—	—	—	—	—	4.23	0.00	4.23	0.42	0.00	—	14.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	0.00	—	0.09
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	3.44	0.00	3.44	0.34	0.00	—	12.0
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	3.69	0.00	3.69	0.37	0.00	—	12.9
Total	—	—	—	—	—	—	—	—	—	—	—	22.5	0.00	22.5	2.25	0.00	—	78.9

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.37	2.37
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.37	2.37
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39

Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Condo/T ownhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.37	2.37
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Condo/T ownhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39

Apartments	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.37	2.37
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.43	0.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.32	3.32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.39	0.39
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Apartments Low Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.55	0.55

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
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Single Family Housing	1,200	1,200	1,200	438,073	16,942	16,942	16,942	6,183,689
Office Park	590	590	590	215,333	4,948	4,948	4,948	1,806,159
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	226	226	226	82,480	1,895	1,895	1,895	691,824
Condo/Townhouse	953	953	953	347,714	13,447	13,447	13,447	4,908,207
Apartments Low Rise	953	953	953	347,684	13,446	13,446	13,446	4,907,794

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	1,200	1,200	1,200	438,073	16,942	16,942	16,942	6,183,689
Office Park	590	590	590	215,333	4,948	4,948	4,948	1,806,159
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	226	226	226	82,480	1,895	1,895	1,895	691,824
Condo/Townhouse	953	953	953	347,714	13,447	13,447	13,447	4,908,207
Apartments Low Rise	953	953	953	347,684	13,446	13,446	13,446	4,907,794

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
903109.5	301,037	76,485	25,495	6,991

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	1,449,371	204	0.0330	0.0040	4,945,304
Office Park	1,067,187	204	0.0330	0.0040	1,472,031
Parking Lot	25,757	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00

Condo/Townhouse	268,276	204	0.0330	0.0040	1,207,437
Apartments Low Rise	248,913	204	0.0330	0.0040	851,151

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	1,446,652	204	0.0330	0.0040	4,945,304
Office Park	1,067,187	204	0.0330	0.0040	1,472,031
Parking Lot	25,757	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
City Park	0.00	204	0.0330	0.0040	0.00
Condo/Townhouse	267,639	204	0.0330	0.0040	1,207,437
Apartments Low Rise	248,493	204	0.0330	0.0040	851,151

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	6,165,288	30,391,321
Office Park	9,062,644	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00
Condo/Townhouse	1,885,853	0.00
Apartments Low Rise	2,030,918	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	6,165,288	30,391,321
Office Park	9,062,644	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00
Condo/Townhouse	1,885,853	0.00
Apartments Low Rise	2,030,918	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	125	—
Office Park	47.4	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—
City Park	0.30	—
Condo/Townhouse	38.5	—
Apartments Low Rise	41.3	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	125	—
Office Park	47.4	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—

City Park	0.30	—
Condo/Townhouse	38.5	—
Apartments Low Rise	41.3	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
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Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Apartments Low Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Low Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	26.1	annual days of extreme heat
Extreme Precipitation	2.25	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	10.5	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events.

Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	40.0
AQ-PM	23.6
AQ-DPM	14.9
Drinking Water	8.53
Lead Risk Housing	57.6
Pesticides	92.1
Toxic Releases	5.96
Traffic	2.81
Effect Indicators	—
CleanUp Sites	81.9
Groundwater	84.7
Haz Waste Facilities/Generators	43.3
Impaired Water Bodies	91.9
Solid Waste	83.3
Sensitive Population	—
Asthma	44.7
Cardio-vascular	91.2
Low Birth Weights	46.5
Socioeconomic Factor Indicators	—

Education	62.4
Housing	22.1
Linguistic	64.1
Poverty	65.4
Unemployment	14.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	34.05620429
Employed	22.03259335
Median HI	33.85089183
Education	—
Bachelor's or higher	36.60977801
High school enrollment	11.18952906
Preschool enrollment	63.87783909
Transportation	—
Auto Access	35.49339151
Active commuting	26.67778776
Social	—
2-parent households	15.50109072
Voting	78.08289491
Neighborhood	—
Alcohol availability	56.64057487
Park access	34.21018863
Retail density	3.054022841

Supermarket access	55.34453997
Tree canopy	68.09957654
Housing	—
Homeownership	59.19414859
Housing habitability	86.46220968
Low-inc homeowner severe housing cost burden	96.34287181
Low-inc renter severe housing cost burden	71.48723213
Uncrowded housing	57.46182471
Health Outcomes	—
Insured adults	36.77659438
Arthritis	0.0
Asthma ER Admissions	37.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	53.5
Cognitively Disabled	43.0
Physically Disabled	23.7
Heart Attack ER Admissions	4.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0

Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	10.6
Elderly	29.3
English Speaking	70.0
Foreign-born	29.8
Outdoor Workers	9.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	83.0
Traffic Density	2.1
Traffic Access	0.0
Other Indices	—
Hardship	61.9
Other Decision Support	—
2016 Voting	73.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	61.0
Healthy Places Index Score for Project Location (b)	35.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Project trips updated to match traffic report. Percentages of trip distribution over the land uses taken from CalEEMod.
Operations: Hearths	No hearth mitigation
Operations: Refrigerants	No amenities proposed in City Park
Operations: Consumer Products	ROG per square foot emission factor specific to statewide 2015 ROG Inventory for Consumer Products
Operations: Fleet Mix	Residential heavy-duty truck fleet adjusted per FHWA Traffic Noise Prediction Model
Operations: Architectural Coatings	rule

January 24, 2024

Jesse Cain
City Manager
City of Colusa, CA

RE: Colusa Fire Department Review of the Westcott Subdivision General Plan Amendment, Rezone and Tentative Subdivision Map

Dear Jesse –

I have reviewed the Westcott Subdivision Map dated October 2023, which notes the creation of 170 single-family lots, 53 medium-density lots, 7.45 acres dedicated to high density, 1.17 acres dedicated to commercial, and 3.51 acres dedicated to parklands, and finally, 14.03 acres dedicated to open space. I understand the proposed project will also be developed in several phases.

Colusa Fire Department comments and notes:

1. The Colusa Fire Department has the ability and capacity to serve the proposed project.
 - a. We currently have 7 paid positions, including the following: 3 firefighters, 2 Fire Apparatus Engineers, 1 Captain, and 1 Fire Chief. We respond with 2 personnel on the first out engine and are supported by a roster of 15 volunteers.
 - b. Our department also operates under the California Master Mutual Aid Agreement and utilizes the Mutual Aid System within Colusa County when necessary.
 - c. Our response time to the proposed project area is anticipated to be 5 to 6 minutes from dispatch. This estimated response time is based on an average response, including turnout and code 3 drive time.
2. All future buildings shall be constructed to the current California Building Code standards, which currently include the requirement for fire sprinklers in new single-family homes.
3. The applicant shall submit improvement plans to the Colusa Fire Department before grading activities. The plans shall indicate streets, alleys, utility, and emergency access. They must also indicate hydrant locations, spacing, and “estimated” (gpm) for each hydrant. All submitted plans are required to conform with the most current ICC and NFPA standards.

Name: Logan Conley
Title: Fire Chief

Signature:



January 24, 2024

Jesse Cain
City Manager
City of Colusa, CA

RE: Colusa Police Department Review of the Westcott Subdivision General Plan Amendment, Rezone and Tentative Subdivision Map

Dear Jesse –

I have reviewed the Westcott Subdivision Map dated October 2023, which notes the creation of 170 single family lots, 53 medium density lots, 7.45 acres dedicated to high density, 1.17 acres dedicated to commercial, and 3.51 acres dedicated to park lands and finally, 14.03 acres dedicated to open space. It is my understanding that the proposed project will also be developed in several phases over time.

The Colusa Fire Department has the following comments and notes:

1. The Colusa Police Department has the ability and capacity to serve the project.
 - a. We are currently budgeted for 11 paid staff (three pending hire)
 - b. Our response time to the project is anticipated to be 2-4 minutes.
 - c. The City is currently in negotiations on securing property to facilitate the construction of a new Police Station, which will further aid our ability and capacity to serve the site and reduce our response time as well.

Joshua Fitch
Chief of Police



YOCHA DEHE
CULTURAL RESOURCES

December 15, 2023

Guillon Inc
Attn: Jake Morley, Consulting Planner
2550 Lakewest Dr, Suite 50
Chico, CA 95928

RECEIVED
DEC 23 2023

RE: Wescott Rd Ashley Dr Subdivison Colusa YD-02082022-06

Dear Mr. Morley:

Thank you for your project notification letter regarding cultural information on or near the proposed Wescott Rd Ashley Dr Subdivison Colusa. We appreciate your effort to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area and would like to continue to receive updates on the project.

Should you have any questions, please contact:

CRD Administrative Staff
Yocha Dehe Wintun Nation
Office: (530) 796-3400
Email: THPO@yochadehe.gov

Please refer to identification number YD – 02082022-06 in any correspondence concerning this project.

Thank you for providing us the opportunity to comment.

Sincerely,

DocuSigned by:

8DD0BD089ED6438...

Tribal Historic Preservation Officer