



City of Monterey Park 2014-2021 Housing Element

Initial Study and Mitigated Negative Declaration

Lead Agency

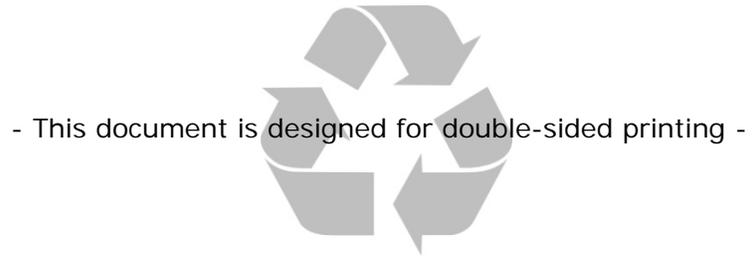
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1 Introduction

The City of Monterey Park (Lead Agency) completed a draft update of its General Plan Housing Element for the 2014-2021 planning period. The Housing Element update constitutes a *project* that is subject to review under the California Environmental Quality Act, or CEQA (Public Resources Code §§ 21000, et seq.) and the CEQA Guidelines (14 California Code of Regulations §§ 15000, et seq.). This Initial Study was prepared to assess the short-term, long-term, and cumulative environmental impacts that could result from adoption and implementation of the proposed 2014-2021 Housing Element.

This document has been prepared to comply with Section 15063 of the CEQA Guidelines, which sets forth the required contents of an Initial Study as follows:

- A description of the project, including the location of the project (See Section 2)
- Identification of the environmental setting (See Section 2.11)
- Identification of environmental effects by use of a checklist, matrix, or other methods, provided that entries on the checklist or other form are briefly explained to indicate that there is some evidence to support the entries (See Section 4)
- Discussion of ways to mitigate significant effects identified, if any (See Section 4)
- Examination of whether the project is compatible with existing zoning, plans, and other applicable land use controls (See Section 4.10)
- The name(s) of the person(s) who prepared or participated in the preparation of the Initial Study (See Section 5)

1.1 – Purpose of CEQA

The body of State law known as CEQA was originally enacted in 1970 and has been amended a number of times since. The legislative intent of CEQA is established in Section 21000 of the Public Resources Code as follows:

The Legislature finds and declares as follows:

- a) The maintenance of a quality environment for the people of this state now and in the future is a matter of statewide concern.
- b) It is necessary to provide a high-quality environment that at all times is healthful and pleasing to the senses and intellect of man.
- c) There is a need to understand the relationship between the maintenance of high-quality ecological systems and the general welfare of the people of the state, including their enjoyment of the natural resources of the state.
- d) The capacity of the environment is limited, and it is the intent of the Legislature that the government of the state take immediate steps to identify any critical thresholds for the health and safety of the people of the state and take all coordinated actions necessary to prevent such thresholds being reached.
- e) Every citizen has a responsibility to contribute to the preservation and enhancement of the environment.
- f) The interrelationship of policies and practices in the management of natural resources and waste disposal requires systematic and concerted efforts by public and private interests to enhance environmental quality and to control environmental pollution.
- g) It is the intent of the Legislature that all agencies of the state government which regulate activities of private individuals, corporations, and public agencies which are found to affect the quality of the environment, must regulate such activities so that major consideration is given to preventing environmental damage, while providing a decent home and satisfying living environment for every Californian.

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The Legislature further finds and declares that it is the policy of the State to:

- a) Develop and maintain a high-quality environment now and in the future, and take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state.
- b) Take all action necessary to provide the people of this state with clean air and water, enjoyment of aesthetic, natural, scenic, and historic environmental qualities, and freedom from excessive noise.
- c) Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history.
- d) Ensure that the long-term protection of the environment, consistent with the provision of a decent home and suitable living environment for every Californian, must be the guiding criterion in public decisions.
- e) Create and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations.
- f) Require governmental agencies at all levels to develop standards and procedures necessary to protect environmental quality.
- g) Require governmental agencies at all levels to consider qualitative factors as well as economic and technical factors and long-term benefits and costs, in addition to short-term benefits and costs and to consider alternatives to proposed actions affecting the environment.

A concise statement of legislative policy with respect to public agency consideration of projects for some form of approval is found in Section 21002 of the Public Resources Code, quoted below:

The Legislature finds and declares that it is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects. The Legislature further finds and declares that in the event specific economic, social, or other conditions make infeasible such project alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.

1.2 – Public Comments

Comments from all agencies and individuals are invited regarding the information contained in this Initial Study. Such comments should explain any perceived deficiencies in the assessment of impacts, identify the information that is purportedly lacking in the Initial Study, or indicate where the information may be found. All comments on the Initial Study are to be submitted to:

Samantha Tewasart, Associate Planner
City of Monterey Park, Planning Division
320 West Newmark Avenue
Monterey Park, California 91754

Following a 30-day period of circulation and review of the Initial Study, all comments will be considered by the City of Monterey Park prior to adoption.

1.3 – Availability of Materials

All materials related to the preparation of this Initial Study are available for public review. To request an appointment to review these materials, please contact:

Samantha Tewasart, Associate Planner
City of Monterey Park, Planning Division
320 West Newmark Avenue
Monterey Park, California 91754
(626) 307-1324
stewasart@montereypark.ca.gov

1.4 – Approach

The environmental analysis contained in this Initial Study is based on the following assumptions:

1. **General Plan Consistency:** The Housing Element is consistent with the land use policies and all other elements of the City of Monterey Park General Plan.
2. **Project Specific Environmental Review:** In the City of Monterey Park, all housing development proposals that are considered “projects” under CEQA are subject to an environmental review process to determine the level of impact and to impose appropriate mitigation measures, if needed, to avoid significant impacts.
3. **Purpose of Housing Element Environmental Review:** This project does not authorize any plans for construction of new homes or redevelopment of any properties to produce new homes. No direct environmental impacts, therefore, would occur. This Initial Study is limited to assessment of potential environmental impacts resulting from the cumulative effects of potential future housing development facilitated by Housing Element policy, in accordance with the City’s residential land use policies set forth in the General Plan. The purpose of the environmental assessment is to determine whether there are any peculiar types of impacts that could occur as an indirect result of the Housing Element strategies.

Introduction

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2 Project Description

2.1 – Project Title

City of Monterey Park 2014-2021 Housing Element

2.2 – Lead Agency Name and Address

City of Monterey Park
Planning Division
320 West Newmark Avenue
Monterey Park, California 91754

2.3 – Contact Person and Phone Number

Samantha Tewasart, Associate Planner
(626) 307-1324

2.4 – Project Location

The City of Monterey Park 2014-2021 Housing Element applies to all properties designated and zoned for residential and mixed-use development within the municipal boundaries of the City of Monterey Park. Located within the San Gabriel Valley within Los Angeles County, the City of Monterey Park is bounded by the cities of Alhambra and San Gabriel to the north, the city of Rosemead to the northeast, the city of Montebello to the south, the city of Los Angeles to the northwest, and areas of unincorporated Los Angeles County. The City's planning area (including its sphere of influence) encompasses approximately 9.12 square miles. Exhibit 1 (Regional Location and Vicinity Map) illustrates the City's location within Los Angeles County and its local context.

2.5 – Project Sponsor's Name and Address

City of Monterey Park
Planning Division
320 West Newmark Avenue
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2.6 – General Plan Land Use Designation

The residential and mixed-use land use designations that support housing development within the City of Monterey Park consist of the following:

Low Density Residential (0.0-8.0 DU/Acre): This category of residential use is primarily intended to provide for the development of traditional single-family subdivisions with one dwelling permitted per lot.

Medium Density Residential (0.0-16.0 DU/Acre): This category of residential use allows for moderate-density housing either as attached or detached single-family or multi-family units that may include private and/or common open space.

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High Density Residential (0.0-25.0 DU/Acre): This category of residential use allows for a broad range of dwelling unit types that may either be attached or detached that typically consist of apartments, condominiums, and townhomes.

Downtown Mixed Use (up to 30 DU/Acre), East Garvey Mixed Use (up to 12 or 30 DU/Acre), and Baltimore Avenue Mixed Use (up to 25 DU/Acre): This category allows for a mix of residential and compatible office and retail service uses integrated as a cohesive development, or such uses developed side by side in a manner that encourages interaction between uses. In the Downtown Mixed Use category, all residential development is not be permitted as a stand-alone development, but would be permitted combined with a commercial development. In the East Garvey Mixed Use category, stand-alone residential development is limited to a maximum density of 12 DU/Acre. Residential development combined with a commercial development is limited to a maximum density of 30 DU/Acre. In the Baltimore Avenue Mixed Use category, residential development may either be stand alone or combine with commercial development and in either scenario is limited to a maximum of 25 DU/Acre.

2.7 – Zoning Districts

The Monterey Park Municipal Code (“MPMC”) presently provides for three residential zoning classifications. Each of the classifications is listed below:

- Single-Family Residential (R-1)
- Medium-Multiple Residential (R-2)
- High-Density Residential (R-3)

The densities of the zones range from eight to 25 units per acre, as well as additional density through affordable and senior housing density bonuses. The City recently amended the MPMC to allow for greater ease of implementation of the existing Land Use Element, in particular regarding mixed use development. The Planned Development Overlay (P-D) applies to the downtown area oriented primarily along Garvey Avenue and portions of Atlantic Boulevard and Garfield Avenue. The P-D overlay allows for greater flexibility in design and implementation of the General Plan’s mixed use designations beyond what is typically allowed by the standard zoning classifications. The P-D overlay applies to properties that have an underlying zoning classification of Single-Family Residential (R-1), Medium-Multiple Residential (R-2), High Density Residential (R-3), Shopping Center (S-C), Central Business District (C-B), Regional Specialty Center (R-S), and Commercial Services (C-S).

2.8 – Project Description

The Housing Element is one of the seven required General Plan elements as set forth in Government Code §§ 65580 to 65589.8. State law requires that the Housing Element consist of “identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, and scheduled programs for the preservation, improvement, and development of housing.” As required by State law, the City of Monterey Park must plan for its share of the region’s new housing needs in the five State-defined income categories by identifying an adequate supply of land zoned at appropriate densities to accommodate needs in each income category. The law does not require the City to construct the identified housing need, but rather to seek to ensure the City has—or plans to add polices, programs and regulations—that will accommodate new housing growth.

The proposed project consists of a General Plan Amendment to establish the City of Monterey Park 2014-2021 Housing Element.

The project is the adoption and implementation of the City of Monterey Park 2014-2021 Housing Element, which represents an update of the 2008-2014 Housing Element. The Housing Element is an integral component of the City's General Plan; addresses existing and future housing needs of all types for persons in all economic segment groups within the City. The Housing Element serves as a tool for decision-makers and the public for understanding and meeting housing needs in Monterey Park. While the law does not require local governments to actually construct housing to meet identified needs, it does require that the community address housing needs in its discretionary planning actions, such as creating opportunities for housing in the land use plan and facilitating development through policies. To meet this goal, the Housing Element identifies existing vacant or underdeveloped areas already designated by the General Plan Land Use Element to accommodate the City's projected housing needs.

Statutory Requirements

State law requires the Housing Element be updated at least every eight years, on a timeline consistent with the Regional Transportation Plan, unless extended by the legislature. Government Code §§ 65580–65589.8 sets forth the legal requirements for a housing element, and encourages affordable and decent housing in suitable living environments for all communities to meet statewide goals. This 2014-2021 Housing Element update is a policy document for the City of Monterey Park regarding its current and projected future housing needs, as identified by the State Department of Housing and Community Development Department (HCD) and the Southern California Association of Governments (SCAG). The element sets forth City goals, policies, and programs to address those identified needs.

Government Code § 65583 requires that housing elements include the following main components:

- An assessment of housing needs (including the needs of special needs groups), analysis of constraints to housing development, and an inventory of resources related to the meeting of these needs.
- A review of the previous Housing Element's goals, policies, programs, and objectives to ascertain the effectiveness of each of these components, as well as the overall effectiveness of the programs in the previous Housing Element.
- A Statement of community goals, quantified objectives, and policies relative to the maintenance, preservation, improvement, and development of housing.
- Actions that the City is undertaking or intends to undertake, in implementing the policies set forth in the Housing Element.

Housing Needs

The Monterey Park 2014-2021 Housing Element profiles community demographics and examines the related housing needs of various groups, including owners versus renters, lower-income households, overcrowded households, elderly households, special needs groups, and homeless persons, among others.

The law requires that each city and county develop local housing programs designed to meet their "fair share" of housing needs for all income groups, based on projected population growth. The HCD Housing Policy Division develops the Regional Housing Needs Assessments (RHNA) for each region of the State, represented by councils of governments, which for Monterey Park is Southern California Association of Governments ("SCAG"). SCAG determines the housing allocation for each city and county within its six-county jurisdiction. SCAG has assigned Monterey Park a

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housing allocation of 815 units for the 2014-2021 planning period. Table 2-1 (Monterey Park RHNA) identifies the total projected housing needs for the 2014-2021 Housing Element.

**Table 2-1
Monterey Park RHNA**

Income Group	% of County AMI	2012 Total Housing Units Allocated	Percent of Units
Very Low	0-50%	205	25%
Low	51-80%	123	15%
Moderate	81-120%	137	17%
Above Moderate	120% and above	350	43%
Total	—	815	100%

Source: Southern California Association of Governments, 2012

State law requires that a community provide an adequate number of sites to allow for and facilitate production of the city's regional share of housing. To determine whether a city has sufficient land to accommodate its share of regional housing needs for all income groups, each city must identify "adequate sites." Under Government Code § 65583(c)(1), adequate sites are those with appropriate zoning and development standards, with services and facilities, needed to facilitate and encourage the development of a variety of housing for all income levels. Land considered suitable for residential development includes the following:

- Vacant residentially zoned sites
- Vacant non-residentially zoned sites that allow residential uses (such as mixed-use)
- Underutilized residentially zoned sites that are capable of being developed at a higher density or with greater intensity
- Non-residential zoned sites that can be redeveloped for, and/or rezoned for, residential use (via program actions)

As the City of Monterey Park is almost entirely built out, the majority of land identified in the Sites Inventory section focuses on underutilized land that could support infill housing and mixed-use development. The inventory of vacant land zoned specifically for residential use totals 28.43 acres. Eighteen acres are designated Low Density Residential (LDR), 8.69 acres High Density Residential (HDR), and 1.74 acres Mixed-Use. Most of the vacant properties in the LDR and HDR designations are topographically constrained, with steep slopes and difficult access. These properties are expected to yield only 25 percent of the maximum permitted dwelling units. Residential properties that are not topographically constrained are estimated to achieve densities equal to 80 percent of the maximum allowed. Mixed-use properties are expected to achieve at least the maximum allowable density of 30 units per acre based on projects that the City has approved and that are under construction. Many mixed-use developments have achieved higher densities than the maximums by taking advantage of density bonus provisions in the MPMC. Projects in the MU-I district that provide additional pedestrian amenities, consistent with MPMC requirements, are permitted to be developed up to 50 units per acre.

Vacant Sites: Using expected densities and taking into consideration topographical constraints, an analysis of available vacant properties identifies the potential for up to 109 new housing units within the incorporated City limits, as shown in Table 2-2 (Vacant Sites Land Inventory).

**Table 2-2
Vacant Sites Land Inventory**

General Plan Designation	Zoning	Affordability Level	Maximum Density	Anticipated Development Capacity	Total Vacant Acreage	Net Dwelling Units ¹
Low Density Residential (LDR)	R-1	Above Moderate	8 du/ac	80%	1.10 ac	7
Low Density Residential (LDR) with topography constraints	R-1	Above Moderate	8 du/ac	25%	16.90 ac	27
High Density Residential (HDR)	R-3	Above Moderate	25 du/ac	80%	1.67 ac	33
High Density Residential (HDR) with topography constraints	R-3	Above Moderate	25 du/ac	25%	7.02 ac	35
Mixed-Use I (MU-I: Downtown Mixed-Use)	C-B/ P-D	Very Low/Low/Moderate	30 du/ac	100%	1.53 ac	See Note 2
Mixed-Use II (MU-II: East Garvey Mixed-Use)	C-S/ P-D	Very Low/Low/Moderate	30 du/ac	100%	0.21 ac	7
Total					28.43 ac	109

Source: MIG | Hogle-Ireland 2012

Note 1: For residential properties, Net Dwelling Units do not reflect straight application of maximum density to vacant land. On a parcel-specific basis, the number of dwelling units has been reduced to reflect expected densities and physical site conditions, such as steep slopes, as indicated in the Anticipated Development Capacity column. However, based on current development patterns within the Mixed-Use districts, maximum densities are expected to be achieved, consistent with the City's experience for approved mixed-use projects (see Table H-36).

Note 2: Two sites in the sites inventory, Atlantic1 and Atlantic 3, contain a vacant parcel designated as Mixed-Use I. To present a realistic overall capacity for these sites, the net dwelling units are included in the underutilized sites inventory, and not in the vacant land inventory.

Underutilized Sites: A total of 28.89 acres of underutilized properties has been identified as suitable for accommodating new housing construction, with nine opportunity sites located within or near the City's downtown area (see Table 2-3 and Exhibits 3 and 4). The sites presented below represent the most realistic opportunities for recycling to higher-density residential uses based on underutilized character of the site, developer interest, ease of access from major roads, size of sites, and location near transit and services. The nine sites have a potential combined capacity for 879 units. .

The opportunity sites (vacant and underutilized) serve as the basis for the environmental impact analysis in this Initial Study. This is based on the fact that specific policies and direction within the proposed Housing Element are guiding these parcels to be developed or recycled and therefore could lead to a future physical change in the environment.

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**Table 2-3
Underutilized Sites Land Inventory**

Mixed-Use Opportunity Site	Acres	Parcels	Zoning	Expected Residential Density(a)	Potential Housing Units
#1: Atlantic 1	1.58	4	R-3, R-S	30 du/ac	61
#2: Atlantic 2	6.37	9	R-3, R-S	30 du/ac	192
#3: Atlantic 3	5.11	6	R-S	30 du/ac	153
#4: Atlantic 4	2.14	4	R-S	30 du/ac	64
#5: Garfield 1	3.93	9	C-B, R-3	30 du/ac	118
#6: Garfield 2	3.81	12	C-B	30 du/ac	112
#7: Garfield 3	3.5	11	C-B	30 du/ac	106
#8: Garvey 1	1.3	1	C-S	30 du/ac	39
#9: Garvey 2	1.15	6	C-B	30 du/ac	34
Total	28.89	62			879

Note:

In mixed-use areas, maximum densities are expected to be achieved based on approved MU projects.

Constraints to Housing Production

The housing constraints section of the Housing Element analyzes barriers that may hinder the City's ability to achieve its housing objectives or to obtain the necessary resources to assist in the production, maintenance, and improvement of the overall housing stock. Governmental, market, infrastructure, and environmental factors may constrain the provision of adequate and affordable housing. The City has established a goal to minimize governmental constraints on housing production and affordability.

Housing Plan

The Housing Plan guides the development and preservation of a balanced inventory of housing to meet the needs of present and future residents. To achieve this goal, the Housing Plan identifies long-term housing goals and shorter-term policies to address the identified housing needs. The goals and policies are then implemented through a series of housing programs. Programs identify specific actions the City plans to undertake toward achieving each goal and policy. The following goals, policies, and implementation programs represent the policy direction of the 2014-2021 Housing Element.

Goal 1: Conserve and improve existing affordable housing in Monterey Park.

Policy 1.1: Encourage the rehabilitation of substandard residential properties by homeowners and landlords.

Policy 1.2: Promote investment of public and private resources to reverse neighborhood deterioration trends where they may occur.

Policy 1.3: Continue to provide rehabilitation and home improvement assistance to low- and moderate-income households.

Policy 1.4: Coordinate with non-profit housing providers in the acquisition and rehabilitation of older apartment complexes as long-term affordable housing.

Policy 1.5: Work to preserve existing affordable low-income housing in the City that is considered at risk of converting to non-low-income use.

Policy 1.6: Pursue initiatives that allow for increased home ownership of single-family residences, townhomes, and condominiums.

Program 1: Housing Rehabilitation Program - This program is designed to assist in maintaining quality single-family housing stock for lower-income families while enhancing the aesthetic quality of individual neighborhoods. The program currently provides grants and deferred interest loans. Eligible repairs include critical repair needs, repairs to eliminate code enforcement violations, and repairs to achieve energy conservation. The program is limited to low-income households. In addition, the value of the assisted property after rehabilitation must not exceed 95 percent of the median purchase price for the Los Angeles County area as determined by HUD.

Program 2: Affordable Housing Incentives Program - The Affordable Housing Incentives Program is designed to assist owners of rental properties that are rented to (or will be renting to) lower-income tenants. The Affordable Housing Incentives Program includes the Acquisition and Rehabilitation Program, which offers financial incentives to developers and property owners for the acquisition, rehabilitation, and/or development of affordable housing units. Incentives may be provided to all types of affordable housing permitted by the federal HOME Program, such as permanent housing, transitional housing, and group homes. The rehabilitated units are then required to remain affordable for a minimum of 15 years.

Program 3: Code Enforcement - Code enforcement is a key component of housing conservation and rehabilitation. The City's current code enforcement approach is both reactive and proactive. Code enforcement efforts tend to focus in several very low- and low-income congested and blighted areas, including:

- Northeast Monterey Park
- A portion south of Newmark Avenue between Lincoln Avenue and McPherrin Avenue
- West of Atlantic Boulevard, east of Monterey Pass Road and south of Garvey Avenue
- West of Atlantic Boulevard, east of Monterey Pass Road and South of Brightwood Street and North of Floral Drive
- A portion in the southwest part of the City, north of the 60 Freeway and west of Bradshaw Avenue

Program 4: Conservation of At-Risk Housing - To meet the housing needs of persons of all economic groups, the City is committed to guarding against the loss of housing units available to lower-income households. Over the next 10 years (2013-2023), two assisted projects in Monterey Park that provide a total of 245 affordable units—Lions Manor and Golden Age Village—have expiring long-term affordability covenants/contracts and are at risk of converting to market rate. However, because the projects are both owned and operated by a non-profit organization, there is a low risk of these properties actually converting to market rate. Even so, the City will continue to monitor all units considered at risk of conversion to market rate and assist property owners in maintaining the affordability of these units.

Goal 2: Remove or reduce governmental constraints on affordable housing development.

Policy 2.1: Continue efforts to streamline administrative procedures for granting approvals and permits. Review residential development standards, regulations, ordinances, review procedures and permitting fees related to the development of housing. Adjust, as appropriate, those that are determined to be a constraint to the development of housing.

Policy 2.2: Encourage the use of density bonuses and provide other regulatory concessions to facilitate affordable housing development.

Policy 2.3: Provide appropriate standards in the MPMC to allow and facilitate the development of housing for lower-income and special needs persons.

Program 5: Efficient Permit Processing - Streamlining the development process, particularly for affordable housing projects, reduces the costs associated with holding on to land until it can be developed. To facilitate residential development, the City provides development review services

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associated with new projects. Monterey Park supports a clear and objective review process for new development.

Program 6: Density Bonuses - Monterey Park offers three different density bonus options to encourage the development of affordable housing, senior housing, and mixed-use projects. Pursuant to State density bonus law, the City offers density bonuses of between 20 and 35 percent for the provision of affordable housing, depending on the amount and type provided. Financial incentives or regulatory concessions are also granted when a developer proposes to construct affordable housing. Monterey Park also offers density bonuses in the mixed-use areas when pedestrian linkages are employed, and additional bonuses in areas zoned for Senior Housing (S-C-H zone).

Program 7: Extremely Low-Income and Special Needs Housing - Extremely low-income households and households with special needs have limited housing options in Monterey Park. Housing types appropriate for these groups include: emergency shelters, transitional housing, supportive housing, and single-room occupancy (SRO) units.

Program 8: Water and Sewer Service Providers - In accordance with Government Code § 65589.7, the City will deliver to all public agencies or private entities that provide water or sewer services to properties within Monterey Park a copy of the 2013-2021 Housing Element immediately following City Council adoption.

Goal 3: Provide adequate housing by location, type of unit, and price to meet existing and future needs of City residents.

Policy 3.1: Encourage a wide range of housing types, prices, and ownership forms.

Policy 3.2: Assist private developers in identifying and preparing vacant land suitable for lower-income and senior citizen housing developments.

Policy 3.3: Provide adequate and accessible community facilities and services to residential neighborhoods.

Policy 3.4: Implement the Land Use Element, and facilitate development of mixed-use residential projects in areas designated for mixed-use near the Central Business District, and along North Atlantic Boulevard, East Garvey Avenue, and Pomona Boulevard.

Policy 3.5: Continue to encourage second units in single-family residential areas and residential units within mixed-use developments.

Program 9: Ensure Adequate Sites to Accommodate Regional Fair Share of Housing Growth - The City has been allocated a RHNA of 815 units for the 2014-2021 Housing Element planning period. The sites inventory capacity analysis conducted for this Element found that existing land use policy can accommodate the RHNA on vacant and underutilized land.

Program 10: Mixed-Use Sites - Mixed-use development will add more residential units in the downtown area. Such development is expected to enhance the market for downtown businesses and provide significant opportunities for affordable housing development. Elderly, less-mobile residents, as well as employees of nearby businesses, will particularly benefit from such opportunities. The sites inventory indicates a potential for 879 residential units in mixed-use areas. The City's development standards encourage the development of mixed-use product in these areas. The success of three recent under-construction or completed mixed-use projects, Atlantic Times Square, Villa Garfield, and Monterey Park Towne Centre, will introduce over 400 new residential units in the City's mixed-use areas.

Program 11: Second Units - Second units offer an additional source of affordable housing to homeowners and the community. The MPMC permits second dwelling units in the R-1, R-2, and R-3 zones on parcels that contain an existing single-family dwelling. Monterey Park's MPMC establishes development standards for second units, which are consistent with State law.

Goal 4: Assist in the provision of housing that meets the needs of all economic segments of the community.

Policy 4.1: Encourage greater development and utilization of federal, State, and local programs to ensure adequate funding of housing programs.

Policy 4.2: Promote the development of new housing units designed for the elderly and disabled persons to be in close proximity to public transportation and community services.

Policy 4.3: Encourage the design of residential developments that are secure, safe, and environmentally sensitive. Support the use of cost-saving and energy-conserving construction techniques.

Policy 4.4: Support favorable home purchasing options for lower- and moderate-income households.

Policy 4.5: Continue to support rental assistance for very low-income households who are overpaying for housing.

Program 12: Affordable Housing Development Incentives - The City addresses the regional need for more affordable housing through support for the development of new housing units, to increase the supply of affordable housing in the City. For-profit and non-profit housing developers play an important role in providing affordable housing. The City provides financial assistance through participation in the HOME and CDBG programs and offers a variety of development incentives to encourage affordable housing development.

Program 13: Section 8 Rental Assistance - Renter overpayment is a significant issue in Monterey Park, as in all of Southern California. The City addresses this need through support for efforts to increase Section 8 Housing Choice Voucher funding. The Housing Choice Voucher Rental Assistance program extends rental subsidies to very low-income households, as well as elderly and disabled persons. The subsidy represents the difference between 30 percent of the monthly income and the allowable rent determined by the Housing Choice Voucher program. The LACCDC Housing Authority coordinates Housing Choice Voucher rental assistance on behalf of the City.

As of 2012, there are 432 households receiving Section 8 Housing Choice Voucher rental assistance in Monterey Park, with an additional 831 Monterey Park residents on the waiting list.

Goal 5: Promote equal housing opportunities for all residents.

Policy 5.1: Prohibit discrimination in the sale or rental of housing with regard to race, ethnic background, religion, handicap, income, sex, age, and household composition.

Policy 5.2: Provide fair housing services to Monterey Park residents, and ensure that residents are aware of their rights and responsibilities regarding fair housing.

Policy 5.3: Support housing construction or alterations that meet the needs of residents with special needs such as the elderly, disabled, and families with children.

Program 14: Fair Housing and Tenant/Landlord Counseling - To achieve fair housing goals, the City works with the Housing Rights Center to provide a variety of fair housing and tenant/landlord services, including mediation, information, investigation, counseling, and referral services.

Program 15: Reasonable Accommodation - The Fair Housing Act requires that cities and counties provide reasonable accommodation to rules, policies, practices, and procedures where such accommodation may be necessary to afford individuals with disabilities equal housing opportunities. Reasonable accommodation provides a means of requesting from the local government flexibility in the application of land use and zoning regulations or, in some instances, even a waiver of certain restrictions or requirements because it is necessary to achieve equal access to housing. Cities and counties are required to consider requests for accommodations related to housing for people with disabilities and provide the accommodation when it is determined to be "reasonable" based on fair

Project Description

housing laws and the case law interpreting the statutes. The City of Monterey Park offers reasonable accommodation through the MPMC.

2.9 – Project Objectives

The goals, policies, and programs in the Housing Plan respond to identified housing needs in the community, identify ways to reduce constraints to housing development, and describe the resources available to address the housing needs. The Plan will guide City housing policy through the 2014-2021 planning period. Monterey Park’s housing goals, policies, and programs as noted above address the following five major areas:

1. Conserve and Improve Existing Housing Stock
2. Remove Barriers to Housing Development
3. Provision of Adequate Housing Sites
4. Assist in the Development of Affordable Housing
5. Promote Fair Housing Practices

2.10 – Surrounding Land Uses

The Opportunity Sites identified in the Housing Element each have specific surrounding land uses that must be noted because those conditions will serve as a portion of the baseline for environmental analysis in this Initial Study. The existing surrounding land uses for each site are summarized in Table 2-4 (Opportunity Sites Surrounding Land Uses).

**Table 2-4
Opportunity Sites: Surrounding Land Uses**

Opportunity Site	North	Northeast	East	Southeast	South	Southwest	West	Northwest
1	Commercial, Multiple Family Residential	Single Family Residential, Multiple Family Residential	Single Family Residential, Multiple Family Residential	Single Family Residential	Multiple Family Residential, Commercial	Commercial	Commercial	Commercial
2	Commercial	Multiple Family Residential	Multiple Family Residential	Commercial	Commercial	Vacant, Commercial	Commercial	Commercial
3	Commercial, Single Family Residential	Single Family Residential	Multiple Family Residential, Commercial	Commercial	Commercial	Commercial	Commercial	Commercial
4	Single Family Residential	Single Family Residential	Multiple Family Residential, Commercial	Commercial	Commercial	Single Family Residential	Single Family Residential, Multiple Family Residential	Single Family Residential
5	Commercial, Multiple Family Residential	Multiple Family Residential	Multiple Family Residential, Commercial	Commercial	Commercial	Commercial	Commercial	Commercial
6	Commercial	Commercial	Commercial, Vacant	Commercial	Commercial, Single Family Residential	Single Family Residential	Commercial	Commercial
7	Single Family Residential, Commercial	Commercial	Commercial	Commercial	Commercial	Commercial	Commercial, Single Family Residential	Single Family Residential
8	Commercial	Commercial	Commercial	Single Family Residential	Single Family Residential	Single Family Residential, Multiple Family Residential	Commercial	Commercial
9	Single Family Residential, Multiple Family Residential	Multiple Family Residential	Commercial	Commercial	Commercial	Commercial	Commercial	Multiple Family Residential

2.11 – Environmental Setting

Monterey Park is located in the San Gabriel Valley region of Los Angeles County, approximately five miles east of downtown Los Angeles. The City is generally bounded by Interstate 10 to the north, Interstate 710 to the west, and State Route 60 to the south. These freeways provide access to the regional highway network. Monterey Park is fully urbanized, with limited vacant land available for development.

The Opportunity Sites identified in the Housing Element each has specific environmental conditions that must be noted because those conditions will serve as the primary baseline for environmental analysis in this Initial Study. The existing environmental settings are summarized in Table 2-5 (Opportunity Sites Existing Conditions).

**Table 2-5
Opportunity Sites: Existing Conditions**

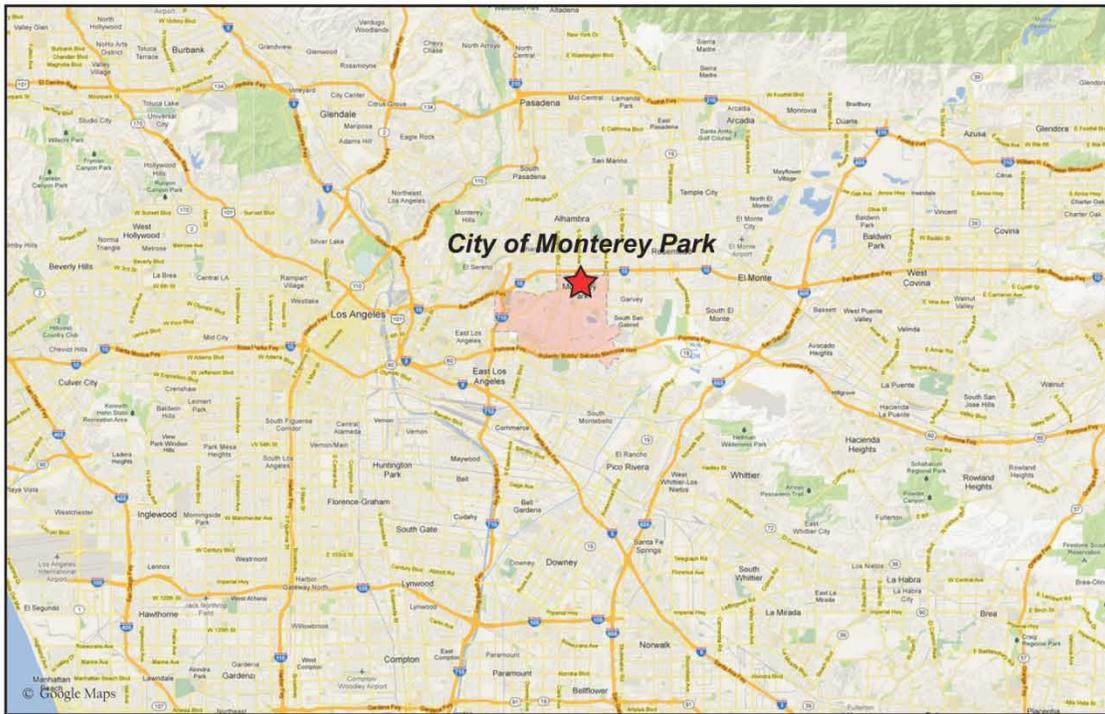
Opportunity Site	Existing Land Use	Zoning Classification	GP Designation
1	automobile dealer, vacant, apartments, motel	R-3, R-S	MU-I
2	shopping center, parking lot, gas station, restaurant, gym, medical office, grocery store	R-3, R-S	MU-I
3	single-family residential, bank, parking lot, vacant, grocery store	R-S	MU-I
4	car wash, restaurant, automobile service	R-S	MU-I
5	shopping center, restaurant, parking lot	C-B, R-3	MU-I
6	parking lot, single-family residential, shopping center, bank	C-B	MU-I
7	shopping center, office, parking lot, grocery store	C-B	MU-II
8	shopping center	C-S	MU-II
9	single family residential, convenience store, shopping center, office, parking lot	C-B	MU-II

2.12 – Required Approvals

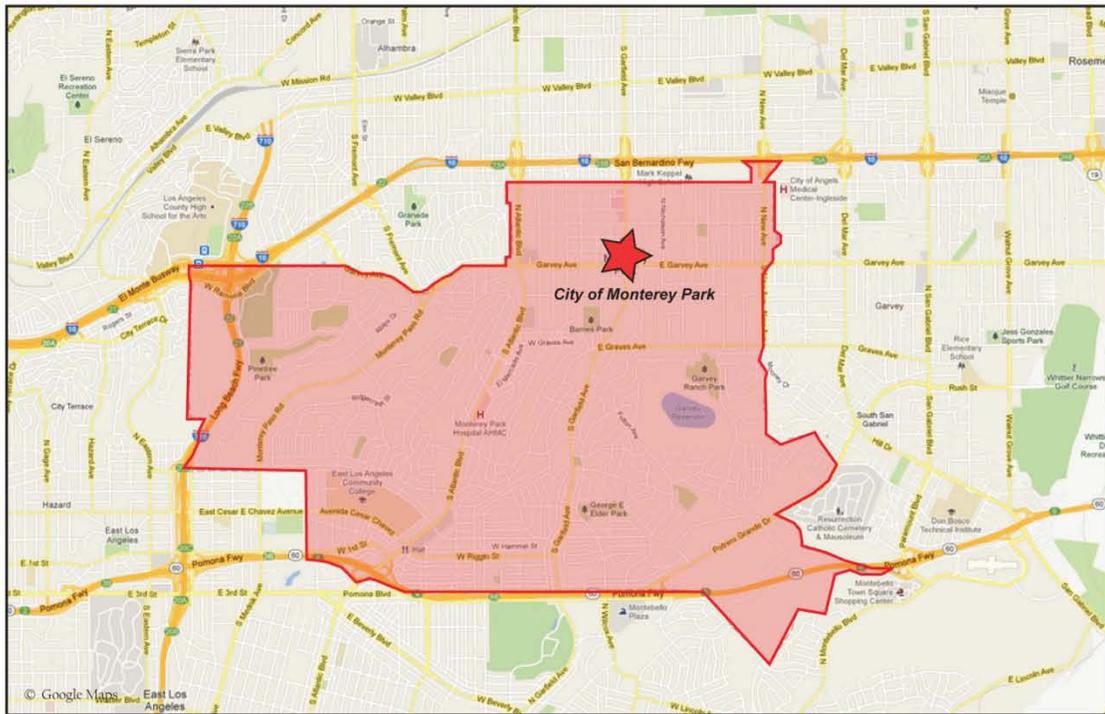
The City Council must approve a General Plan Amendment to effectuate the 2014-2021 Housing Element.

2.13 – Other Public Agency Whose Approval Is Required

The State of California Department of Housing and Community Development will review the Housing Element for compliance with State law.



Regional Context Map



Vicinity Map



Exhibit 1 Regional Context and Vicinity Map

City of Monterey Park Housing Element Initial Study

Project Description



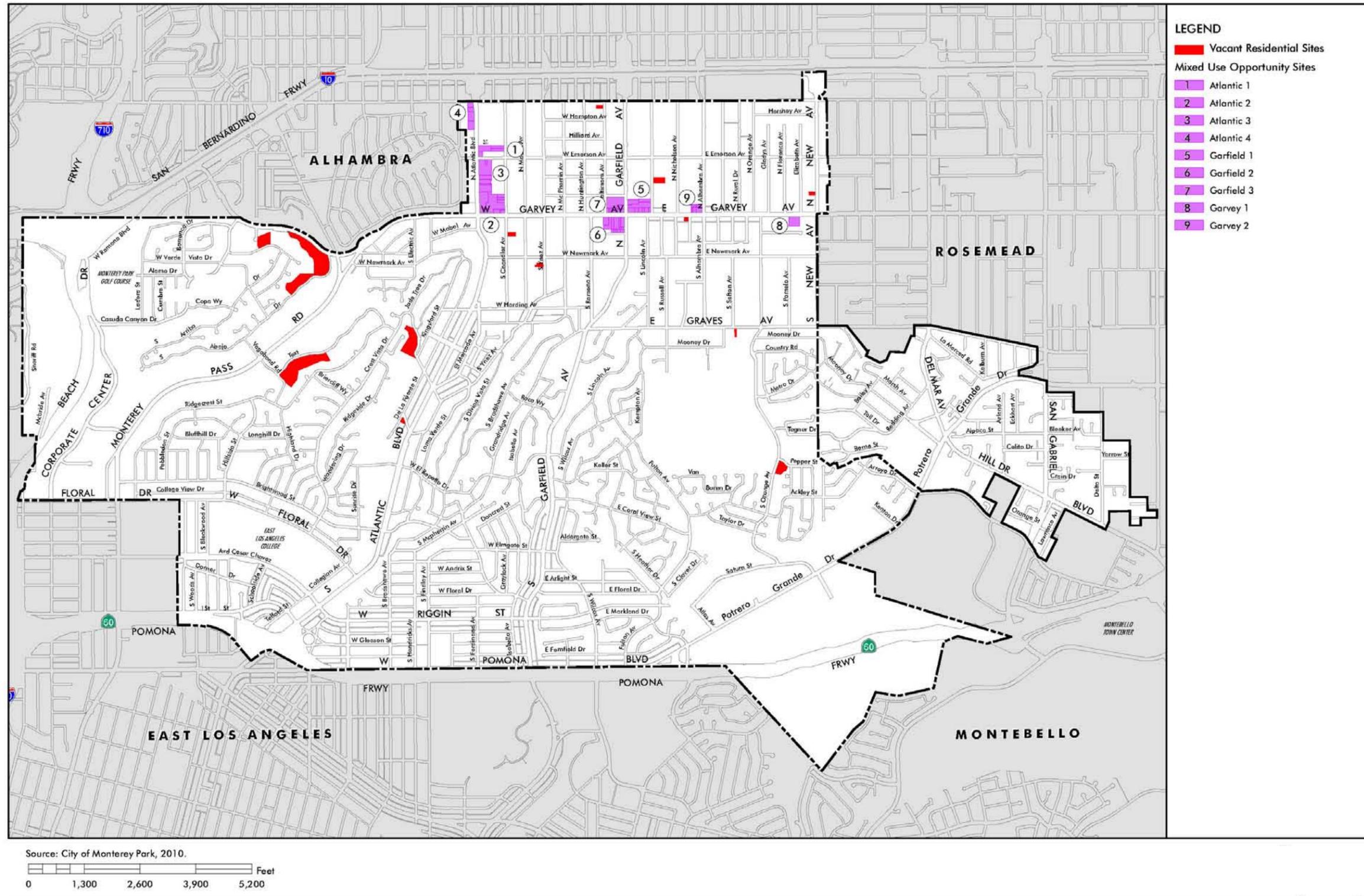


Exhibit 2 Opportunity Sites and Vacant Residential Sites





Exhibit 3 Opportunity Sites 1-4

Project Description



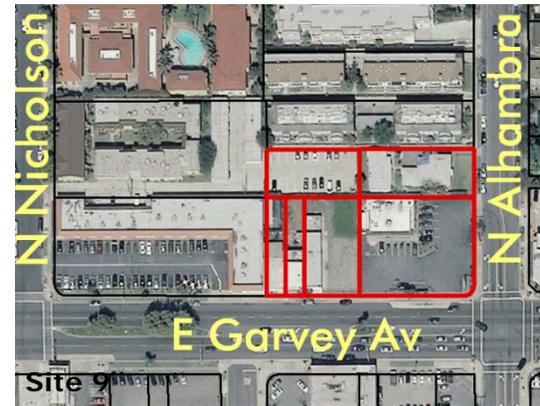
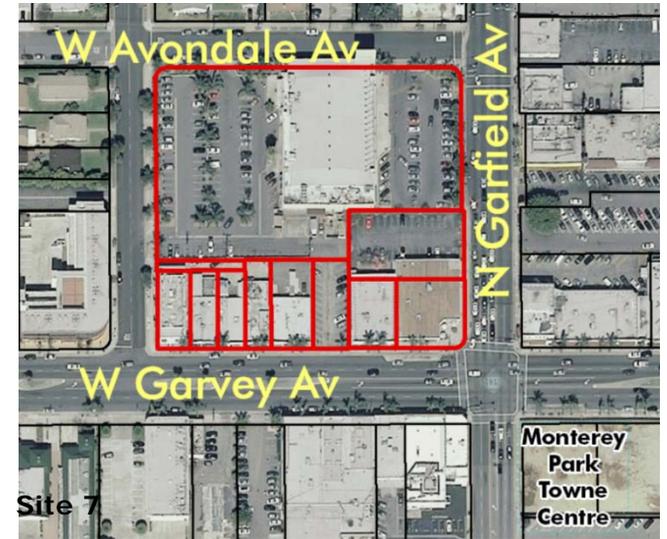
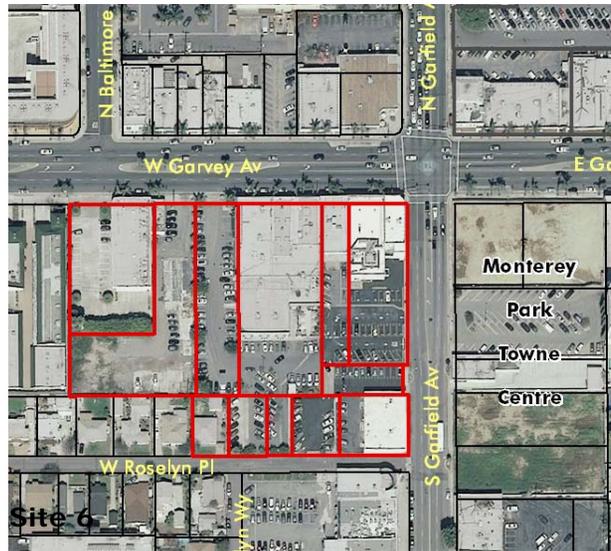


Exhibit 4 Opportunity Sites 5-9

Project Description



3 Determination

3.1 – Environmental Factors Potentially Affected

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

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture Resources	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology /Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards & Hazardous Materials	<input type="checkbox"/>	Hydrology / Water Quality
<input type="checkbox"/>	Land Use / Planning	<input type="checkbox"/>	Mineral Resources	<input type="checkbox"/>	Noise
<input type="checkbox"/>	Population / Housing	<input type="checkbox"/>	Public Services	<input type="checkbox"/>	Recreation
<input type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities / Service Systems	<input type="checkbox"/>	Mandatory Findings of Significance

3.2 – Determination

<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.

Name: Samantha Tesawart, Associate Planner

Date

Determination



4 Evaluation of Environmental Impacts

4.1 – Aesthetics

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view from a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **No Impact.** Scenic vistas can be impacted by development in two ways. First, a structure may be constructed that blocks a view or vista. Second, the vista itself may be altered (i.e., development on a scenic hillside). The primary scenic vistas in Monterey Park are of the San Gabriel Mountains to the north, visible on clear days. These views of the mountainside are generally obstructed by trees, utility poles, and other buildings throughout the San Gabriel Valley. The proposed project would adopt and implement housing policies which could encourage new housing production, especially within the downtown Monterey Park area, on the identified Opportunity Sites. The downtown area is almost entirely developed, and new development would occur primarily on previously developed sites. The Opportunity Sites are all within a fully urbanized area visually dominated by commercial land uses and street features. Downtown is not considered to be within or to comprise a portion of a scenic vista. Replacement of existing buildings with potential future housing developments guided by the policies of the Housing Element update would have no significant effect on a scenic vista.

b) **No Impact.** No designated State scenic highways or eligible State scenic highways, as identified on the California Scenic Highway Mapping System, are located in the City of Monterey Park.¹ No designated scenic highways would be impacted. Therefore, no impact to scenic resources visible from a state scenic highway will occur.

c) **Less Than Significant Impact.** The proposed project could result in a significant impact if it resulted in substantial degradation of the existing visual character or quality of the site and

Evaluation of Environmental Impacts

its surroundings. Degradation of visual character or quality is defined by substantial changes to the existing site appearance through construction of structures such that they are poorly designed or conflict with existing surroundings.

Future housing development could change the on- and off-site visual character of the area in which it is constructed. Development of the proposed Opportunity Sites could potentially change vacant or already developed land to residential or mixed-use development. This type of development and buildings and architecture typically associated are generally similar in character to what currently exists in downtown Monterey Park around Garvey Avenue and adjacent Atlantic Boulevard and Garfield Avenue. The General Plan Land Use Element includes policies for greater intensity and a mix of uses in the downtown area and farther east along Garvey Avenue to enhance the vibrancy and appearance of the area, as is proposed via the Opportunity Sites.² Adherence to these existing General Plan policies would result in a less than significant impact on the visual character and quality of the City.

d) **Less Than Significant Impact.** Future housing development would result in new sources of lighting. Typical light sources from a home would be outdoor security lighting. Multiple-family residential and mixed-use developments would generally include outdoor security lighting and parking lot lights, depending on the type of development. Future housing development will be subject to development review. Light spillover and glare typically are prevented by requiring lights to be designed to prevent light from shining directly onto surrounding property. Compliance with existing City practices, procedures, and policies for lighting will ensure that lighting and glare impacts associated with potential new development are less than significant.

4.2 – Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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 type="checkbox"/>	<input checked="" 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 Public Resources Code 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 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 forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) **No Impact.** The proposed project will be located in a fully developed, commercial, urbanized area that does not contain agriculture or forest uses. The map of Important Farmland in California (2010) prepared by the Department of Conservation does not identify any area within

Evaluation of Environmental Impacts

Monterey Park as being Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.³ In addition, the Monterey Park General Plan does not identify any areas for agriculture use. Therefore, there will be no conversion of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance to a non-agricultural use as a result of this project. No impact will occur.

b) **No Impact.** The California Department of Conservation indicates that no Williamson Act contracts are active for any area within Monterey Park.⁴ The MPMC does not contain any agricultural zones or any zone that principally allows agricultural uses. The proposed Housing Element update does not propose any changes to uses allowed or development standards within the MPMC related to agricultural uses. Therefore, there will be no conflict with existing zoning for agricultural use or a Williamson Act contract. No impact will occur.

c-d) **No Impact.** Public Resources Code Section 12220(g) identifies forest land as *land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.* No area within Monterey Park is currently being managed or used for forest land as identified in Public Resources Code Section 12220(g).

The USDA Forest Service vegetation maps identify most of the City as urban type, indicating that the growing industrial wood tree species is not feasible.⁵ Portions of the City are designated as mixed conifer and hardwood forest/woodland, hardwood forest/woodland, herbaceous, and shrub. These areas of vegetation are primarily located within park, hillside, and other similar areas. No new development opportunities to these areas would be facilitated due to the Housing Element Update. All of the identified Opportunity Sites are located entirely or primarily within urban areas. The sites have already been developed with commercial or residential uses, with no substantial vegetation onsite, with the exception of limited ornamental landscaping. Therefore, this project will have no impact to any timberland zoning or loss of forest land.

e) **No Impact.** There are no agricultural operations or timberland production operations within the City. The project does not propose any changes to land use policies or zoning that protects hillside areas. No impact related to the conversion of agricultural lands or forest land could occur.

4.3 – Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) **No Impact.** The City of Monterey Park is located within the South Coast Air Basin (SCAB) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the SCAB. The AQMP is a series of plans adopted for the purpose of reaching short- and long-term goals for those pollutants the SCAB is designated as a 'nonattainment' area because the District does not meet Federal and/or State Ambient Air Quality Standards (AAQS). To determine consistency between the project and the AQMP, the project must comply with all applicable District rules and regulations, comply with all proposed or adopted control measures, and be consistent with the growth forecasts utilized in preparation of the Plan.⁶

The Housing Element identifies nine mixed-use opportunity sites and several vacant residential sites for future residential development. The Census indicated that the City had a population of 60,051 in 2000 and 60,269 in 2010, which represents less than a 0.1 percent increase. Based on a realistic estimation of density based on location and site conditions (including limitations), the

Evaluation of Environmental Impacts

Opportunity Sites identified in the Housing Element would result in approximately 988 new dwelling units and 3,755 new residents (988 dwelling units at 3.8 persons per household). SCAG provides population projection estimates in five-year increments from 2005 to 2035. According to the latest growth forecast (2012), SCAG estimates that the City would have a population of 77,700 in 2035.⁷ Buildout of the General Plan would result in a population of 72,000 persons, lower than that estimated by SCAG. However, the projected growth is generally consistent. In addition, the proposed Housing Element and opportunity sites are projected to meet the City's allocated RHNA, which is a function of the City's projected long-term growth. Therefore, showing sites capable of achieving with the RHNA, the Housing Element is contributing in the short term toward consistency with long-term growth projections and the 2012 AQMP.

The proposed Housing Element does not propose densities higher than already permitted in the existing General Plan and thus would not result in a greater increase in population and households over those contemplated in the RTP and AQMP. These increases are within the growth assumptions estimated by SCAG and therefore would not result in a substantial conflict with or obstruction of the AQMP. Impacts will be less than significant.

b) **Less than Significant Impact.** Because the proposed Housing Element does not authorize any development project or land altering activity that would involve construction of new or redevelopment housing, it will not result in any direct emissions that could contribute to an existing or potential violation of an air quality standard. The Housing Element update would have no effect on the City's rules and procedures governing assessment or control of air pollutant emissions.

The proposed Housing Element will not directly result in construction of any development or infrastructure; however, future residential development supported by the policies of the updated Housing Element will result in short-term criteria pollutant emissions. Short-term criteria pollutant emissions will occur during site preparation, grading, building construction, paving, and painting activities associated with new development. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of onsite soils (fugitive dust). Pursuant to CEQA, short-term, project specific construction-related emissions will be analyzed as development proposals are submitted. Mitigation will be applied, where necessary, and typically will include requirements for use of low-VOC paints, installation of diesel particulate filters on older construction equipment, and limitations on hauling distances and or daily trips.

To address operational emissions from a typical development project, an air quality modeling analysis is typically performed to determine if a project could regionally or locally cause a violation of any air quality standard. Using the California Emissions Estimator Model (CalEEMod), long-term emissions from the planning area were modeled. The analysis of operational emissions also takes into consideration the reduction of emissions from the demolition of the existing opportunity site uses. The emissions estimated for these were also calculated utilizing CalEEMod. These operational emissions from the uses/buildings to be demolished are then subtracted from the operational emissions for the proposed development, providing a net increase in emissions. Table 4.3-1 (Opportunity Sites Existing Operational Daily Emissions [lbs/day]) summarizes the existing operational emissions of the existing land uses that currently occupy the identified candidate sites. Table 4.3-2 (Opportunity Sites and Vacant Land Proposed Operational Daily Emissions [lbs/day]) summarizes the operational daily emissions that could occur from new development from the identified opportunity sites. Table 4.3-3 (Opportunity Sites and Vacant Land Net Operational Daily Emissions [lbs/day]) summarizes the net operational daily emissions.

**Table 4.3-1
Opportunity Sites Existing Operational Daily Emissions (lbs/day)**

Source	ROG	NO _x	CO	SO ₂	PM ¹⁰	PM ^{2.5}
<i>Summer</i>						
Area Sources	10.98	0.06	4.30	0.01	0.69	0.69
Energy Demand	0.23	2.07	1.71	0.01	0.16	0.16
Mobile Sources	163.08	367.11	1,508.44	2.22	246.08	23.11
Summer Total	174.29	369.24	1,514.45	2.24	246.93	23.96
<i>Winter</i>						
Area Sources	10.98	0.06	4.30	0.01	0.69	0.69
Energy Demand	0.23	2.07	1.71	0.01	0.16	0.16
Mobile Sources	171.31	397.40	1,539.73	2.09	246.28	23.32
Winter Total	182.52	399.53	1,545.74	2.11	247.13	24.17

**Table 4.3-2
Opportunity Sites and Vacant Land Proposed Operational Daily Emissions (lbs/day)**

Source	ROG	NO _x	CO	SO ₂	PM ¹⁰	PM ^{2.5}
<i>Summer</i>						
Area Sources	155.69	5.77	409.69	0.79	52.70	52.69
Energy Demand	0.63	5.43	2.50	0.03	0.44	0.44
Mobile Sources	171.61	390.78	1,482.02	3.93	431.13	25.10
Summer Total	327.93	401.98	1,894.21	4.75	484.27	78.23
<i>Winter</i>						
Area Sources	155.69	5.77	409.69	0.79	52.70	52.69
Energy Demand	0.63	5.43	2.50	0.03	0.44	0.44
Mobile Sources	181.88	411.97	1,482.08	3.69	431.26	25.23
Winter Total	338.20	423.17	1,894.27	4.51	484.40	78.36

**Table 4.3-3
Opportunity Sites and Vacant Land Net Operational Daily Emissions (lbs/day)**

Source	ROG	NO _x	CO	SO ₂	PM ¹⁰	PM ^{2.5}
<i>Summer</i>						
Area Sources	144.71	5.71	405.39	0.78	52.01	52.00
Energy Demand	0.40	3.36	0.79	0.02	0.28	0.28
Mobile Sources	8.53	23.67	-26.42	1.71	185.05	1.99
Summer Total	153.64	32.74	379.76	2.51	237.34	54.27
<i>Winter</i>						
Area Sources	144.71	5.71	405.39	0.78	52.01	52.00
Energy Demand	0.40	3.36	0.79	0.02	0.28	0.28
Mobile Sources	10.57	14.57	-57.65	1.60	184.98	1.91
Winter Total	155.68	23.64	348.53	2.40	237.27	54.19
Threshold	55	55	550	150	150	55
Substantial?	Yes	No	No	No	Yes	No

Based on the modeling data, total operational emissions from new development in the planning area guided by the proposed Housing Element would on average increase reactive organic gases (volatile organic compounds) (ROG/VOC) by 88 percent, oxides of nitrogen (NOX) by 8 percent, carbon monoxide (CO) by 25 percent, sulfur dioxide (SO₂) by 113 percent, coarse particulate matter (PM₁₀) by 96 percent, and fine particulate matter (PM_{2.5}) daily by 226 percent. It should be noted that the daily thresholds are not intended to be applied to the program-level; however, they do provide a guidepost for comparing incremental increases in emissions guided by the program and are considered a worst-case analysis if all sites are developed at the densities allowed within the eight-year time frame.

Any future proposed development project would also be subject to SCAQMD’s rules and regulations. The Monterey Park General Plan includes goals and policies that require coordination with other agencies and the encouragement of pedestrian-oriented design to reduce automobile emissions. Application of SCAQMD rules, General Plan Policies, and other standards and policies will be evaluated on a project-by-project basis through the City’s standard CEQA review process, therefore no new or more significant impacts relative to air quality standards would result from implementation of the Housing Element update than those analyzed in the General Plan EIR.

c) **Less Than Significant Impact.** The SCAQMD has prepared an Air Quality Management Plan to set forth a comprehensive and integrated program that will lead the Basin into compliance with the federal 24-hour PM_{2.5} air quality standard, and to provide an update to the Basin’s commitments toward meeting the federal 8-hour ozone standards. The SCAB is currently in non-attainment for State and federal criteria pollutants ozone, nitrogen dioxide and fine particulate matter (PM_{2.5} and PM₁₀).⁸

New development facilitated by the Housing Element update will be required to comply with SCAQMD rules and regulations aimed at reducing construction-related pollutant emissions, including fugitive dust and other particulates, as well as reactive organic compounds and other ozone precursors found in paints and a variety of coatings. Considering that the proposed Housing Element is consistent with the development projections of the Monterey Park General Plan and the breadth of existing standards and regulations, implementation of the proposed housing policies and implementation programs of the Housing Element update would not change or otherwise interfere with the regional pollutant control strategies of the AQMP. The project’s impact on cumulative levels of regional ozone or particulates is therefore less than significant.

d) **Less Than Significant Impact.** Common sensitive receptors include children under age 14, the elderly over age 65, athletes, and people with cardiovascular and chronic respiratory diseases. The project promotes development of housing for single-parent households as well as the elderly; however, the Housing Element update does not authorize construction or redevelopment of any housing units. Through its standard development review process that includes review pursuant to CEQA statutes and guidelines, the City will ensure that any future housing projects developed pursuant to proposed Housing Element policies and programs provide adequate protection for project residents from any local air pollution sources. Impacts on sensitive receptors would be less than significant.

e) **Less than Significant Impact.** Residential land uses typically do not create objectionable odors. Objectionable odors are typically associated with agricultural and heavy-manufacturing activities. A common potential source of odor from residential development projects comes from outdoor solid waste disposal bins. In accordance with current practices, all residential waste will be disposed of in covered receptacles and routinely removed, thereby limiting the escape of odors to the open air. No new odor sources would result from adoption of the Housing Element because it does not authorize construction of any new housing project or redevelopment of existing housing. Furthermore, the updated element would not authorize any relaxation or elimination of current requirements for proper waste storage and disposal for housing-related development projects. Therefore, the potential for the project to create objectionable odors is considered less than significant.

4.4 – Biological Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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 type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

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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"/>
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a) **No Impact.** The majority of the City of Monterey Park is urbanized. Relatively few natural vegetation communities and habitats for wildlife exist within the City and are primarily located within City parks. The proposed project would not affect any policies related to existing City parks or other potential wildlife areas, nor does it propose any land use changes that could affect any such areas.

Downtown Monterey Park, where most of the proposed Opportunity Sites are located, is currently developed primarily with retail/commercial uses. Limited ornamental landscaping currently exists around buildings, along streets, and in parking lots; however, the ornamental vegetation is not habitat of any species identified as a candidate, sensitive, or special status species. Considering the highly developed nature of Downtown and immediately surrounding areas, the probability of existence of designated species under the federal Endangered Species Act or California Special Concern Species is low. No critical habitat for Threatened and Endangered Species is identified within Monterey Park.⁹ The proposed project would, therefore, not have a substantial adverse effect on any species identified as a candidate, sensitive, or special-status species in local or regional plans or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS). No impacts to wildlife species of concern will occur.

b) **No Impact.** The majority of Monterey Park is urbanized, previously developed, and has landscaping consisting of non-native, ornamental plants. There is no riparian habitat within or near the downtown area or any of the Opportunity Sites. According to the United States Fish and Wildlife Service, no significant wetlands or riparian areas exist within the City.¹⁰ In addition, no land use changes to development allowances or uses are proposed. As such, no impact to riparian habitat or other sensitive natural habitat would occur.

c) **No Impact.** As noted previously, according to the federal National Wetlands Inventory, there are no significant wetlands within the City. There is no vegetation or on-site water features indicative of potential wetlands within or near the downtown area or any of the Opportunity Sites. No housing policies would impact potential wetlands and no impact will occur.

d) **No Impact.** Monterey Park is urbanized with no significant wildlife corridors in the developed parts of the City. No changes are proposed as part of this project to allow new or different development in areas that could serve as wildlife nurseries or movement corridors, since none exist within the City. Areas within Downtown and the Opportunity Sites contain ornamental vegetation, sometimes including mature trees, in the context of a completely urbanized setting. There are no substantial vegetated areas or water bodies located within Downtown. No housing policies proposed would affect the movement of any native resident or migratory fish or wildlife. No impact will occur.

e) **No Impact.** The City of Monterey Park does not have any local policies protecting biological resources, including no tree preservation ordinance. Future housing developed pursuant to Housing Element policy would therefore not conflict with any local policies and no impact would occur.

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f) **No Impact.** No residential or mixed-use areas in Monterey Park are within the planning area of any Habitat Conservation Plan¹¹ or a Natural Community Conservation Plan area,¹² or other approved local, regional or state habitat conservation plan. No impact will occur.

4.5 – Cultural Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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) 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"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a) **No Impact.** The City’s Historical Heritage Commission is appointed to advise the City Council on potential local historical resources. Further, the preservation of the City’s historical resources is supported by Goal 3.0 of the Resources Element of the General Plan. The General Plan indicates that Cascades Park and the Jardin del Encanto complex are listed on the California Register of Historic Resources.¹³ Neither of these resource sites are under consideration for housing. Neither of these sites are located in Downtown or near any of the Opportunity Sites. The project would propose no changes to the historic preservation policies or procedures. As such, the proposed project would not cause an adverse change in the significance of a historical resource, and impacts to historical resources are not anticipated. No impact will occur.

b-d) **Less than Significant Impact with Mitigation Incorporated.** Monterey Park is located in an urbanized area, the vast majority of which has been previously disturbed and heavily affected by past activities, specifically construction of structures. Given that most of the City has been substantially disturbed by previous construction and no changes are proposed to land use policy that would allow development in areas previously undeveloped, it is unlikely that any cultural resources that may have existed at one time would be unearthed or disturbed due to housing production completed pursuant to Housing Element policy. In the unlikely event that archaeological or paleontological materials are uncovered, Mitigation Measure C-1 is incorporated to ensure that uncovered resources are evaluated, left in place if possible, or curated as recommended by a qualified anthropologist or paleontologist. Impacts to buried cultural resources will be less than significant with mitigation incorporated.

No known cemeteries or human burials have been identified in the downtown area or Opportunity Sites. However, it is possible that unknown human remains could be located in the area, and if proper care is not taken during future housing project construction completed pursuant to Housing Element policy, particularly during excavation activities, damage to or destruction of these unknown remains could occur. To ensure that any such materials or human remains, if

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found, are properly identified (and the resource recovered, if necessary), before grading or other earthmoving activities proceed in that immediate area, Mitigation Measure C-1 is included. Mitigation Measure C-1 requires compliance with state law for the notification and recovery of buried remains. Impacts to buried remains will be less than significant with mitigation incorporated.

Mitigation Measure C-1:

In the event that subsurface resources are encountered during the course of grading and/or excavation for projects completed pursuant to Housing Element policy, all development must temporarily cease in these areas until the City of Monterey Park Planning Division is contacted and selects a qualified archaeologist/paleontologist to be brought onto the project site to properly assess the resources and make recommendations for their disposition. In the event that human remains are discovered, human remains must be treated in accordance with the procedures and requirements set forth in Health and Safety Code § 7050.5 and Public Resources Code § 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify those persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains. The applicable project applicant must bear all costs associated with implementing this mitigation measure.

4.6 – Geology and Soils

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<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 (1997), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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a.i) **Less Than Significant Impact.** Although Monterey Park is located in seismically active Southern California, no Alquist-Priolo Earthquake Fault Zones have been identified in the City.¹⁴ There are traces of one known fault within Monterey Park, located at the southwestern corner of the City.¹⁵ However, this fault is not identified as being active and is not located at the ground surface. In addition, this fault is not located near any of the proposed Opportunity Sites. Future housing development constructed pursuant to Housing Element policy would be subject to all applicable City, State, and local building regulations, including the California Building Code (CBC) seismic standards as approved by the Monterey Park Building & Safety Division. Impacts would be less than significant.

a.ii) **Less Than Significant Impact.** Ground shaking can vary greatly due to the variation in earth properties. The City is subject to strong ground shaking, as is the entirety of Southern California. Three blind thrust faults underlie the City: the Puente Hills thrust, the Elysian Park thrust, and the East Los Angeles thrust.¹⁶ These faults, in addition to other regional faults, are likely to produce earthquakes during the life of the project. As discussed above, no Alquist-Priolo Earthquake Fault Zone traverses the City, and no trace of any known active or potentially active fault passes through the identified Opportunity Sites. However, as with all properties in the seismically active southern California region, all future projects would be susceptible to ground shaking during a seismic event and could expose persons and structure to potentially medium to strong seismic ground motion. As such, all future projects could result in a potentially significant impact with respect to strong ground shaking. Nonetheless, as discussed above in Section VI(a)(i), all future projects would be designed and constructed in compliance with all applicable City and State codes and requirements, including those established in California Code of Regulations, Title 24, Part 2, Volume 2, as adopted by the M-MC. The California Building Code (“CBC”) regulations are designed to protect building occupants and limit the damage sustained by buildings during seismic events. Use of these requirements is further supported by Policy 1.1 of the Safety and Community Services element of the General Plan. Application of these codes and policies reduce impacts to residential development due to strong ground shaking to a less-than-significant level.

a.iii) **Less Than Significant Impact.** Liquefaction is a phenomenon that occurs when soil undergoes transformation from a solid state to a liquefied condition due to the effects of increased pore-water pressure. This typically occurs where susceptible soils (particularly the medium sand to silt range) are located over a high groundwater table. Affected soils lose all strength during liquefaction and foundation failure can occur.

Portions of the City are susceptible to possible ground failure due to liquefaction hazards. The City recognizes the potential impacts to housing and therefore has included Policy 3.4 in the Geologic and Seismic Hazards portion of the General Plan. This policy requires liquefaction reports for any development proposed in areas susceptible to liquefaction. Areas subject to liquefaction are noted on Figure SCS-3 (Landslide and Liquefaction Hazards Zones) in the General Plan. The proposed opportunity sites are not located in areas identified by the General Plan as having the potential for liquefaction. However, if analysis on a specific site determines liquefaction may be potential, appropriate measures that reduce the ground-shaking and liquefaction effects of earthquakes are identified in the California Building Code, including specific

provisions for seismic design of structures. The project does not itself involve new construction in any area of the City. All future housing developments will be subject to the City's standard environmental review process for evaluation of liquefaction potential and other geologic hazards. Considering implementation of existing policies and standards, impacts associated with liquefaction or other ground failure will be less than significant.

a.iv) **Less than Significant Impact.** Portions of the City are susceptible to landslides. Landslides have historically occurred during rainstorms and earthquakes, causing steep slopes to fail. Slope failure can cause damage to structures above and below the toe of a slope. Residential development on slopes is subject to Policy 3.2 of the Geologic and Seismic Hazards portion of the General Plan, requiring mitigation for hillside developments. Areas subject to landslides are noted on Figure SCS-3 (Landslide and Liquefaction Hazard Zones) in the General Plan. No land use changes or additional density allowances are proposed by the Housing Element let alone in the hillside areas where landslides are identified as a risk. Implementation of existing California Building Code and City practices and policies related to landslides during the environmental review process will assure that appropriate design measures and mitigation is incorporated where necessary. Implementation of these existing regulations and policies would reduce potential landslide impacts to be less than significant.

b) **Less Than Significant Impact.** Topsoil is used to cover surface areas for the establishment and maintenance of vegetation due to its high concentrations of organic matter and microorganisms. The project does not propose or authorize any particular housing development. Little, if any, native topsoil is likely to occur in the downtown area or at any of the Opportunity Sites since these areas are primarily covered with paving and structures. All future residential projects are subject to environmental and engineering review, including assessment and mitigation of soil erosion. During construction activities of housing proposed pursuant to Housing Element policy, there is the potential to expose surficial soils to wind and water erosion during construction activities. Wind erosion is required to be minimized through soil stabilization measures required by SCAQMD Rule 403 (Fugitive Dust), such as daily watering. Water erosion will be prevented through the City's standard erosion control practices required pursuant to the California Building Code and the National Pollution Discharge Elimination System (NPDES), such as silt fencing or sandbags. Impacts related to soil erosion would be less than significant with implementation of existing regulations.

c) **Less Than Significant Impact.** Impacts related to liquefaction and landslides are discussed above in Section 4.6.a. Lateral spreading is the downslope movement of surface sediment due to liquefaction in a subsurface layer. The downslope movement is due to gravity and earthquake shaking combined. Such movement can occur on slope gradients of as little as one degree. Lateral spreading typically damages pipelines, utilities, bridges, and structures.

As discussed in Section 4.6.a.iii, impacts from liquefaction and other settlement hazards would be less than significant since geotechnical engineering and soils reports for future housing development—with appropriate mitigation—will be required. The CBC includes a requirement that any City-approved recommendations contained in a development's soil report be made conditions of the building permit. Standard engineering techniques are required, as appropriate, to guard against seismic-related hazards. Such techniques include excavation of collapsible soils and import of suitable fill material and foundation design methods that remain stable under settlement conditions. Impacts related to soil instability will be less than significant with the continued implementation of these regulations and practices.

d) **Less Than Significant Impact.** The CBC requires special design considerations for foundations of structures built on soils with expansion indices greater than 20. Presence of such soils, and identification of measures to eliminate this constraint such as removal and replacement

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with suitable engineered materials, will be determined through site-specific geotechnical evaluations to be conducted as part of the City's routine development review procedures. Such routine procedures will apply to all future housing projects. Compliance with CBC requirements would limit hazards related to expansive soil to less than significant, and no mitigation is required.

e) **No Impact.** Monterey Park has been developed with urban uses for many years, and a sewer system has been integrated into the infrastructure of the surrounding area. Any new residential development facilitated by implementation of Housing Element policies will be required to connect to and utilize public sewer systems. Thus, no impact relative to the use of septic tanks or alternative waste water disposal systems will result.

4.7 – Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, 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 type="checkbox"/>	<input checked="" type="checkbox"/>

a) **Less Than Significant Impact.** Climate change is the distinct change in measures of climate for a long period of time. Climate change is the result of numerous, cumulative sources of greenhouse gas emissions all over the world. Natural changes in climate can be caused by indirect processes such as changes in the Earth’s orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of greenhouse gases (GHG) and changes to the planet’s surface. Human activities that produce GHGs are the burning of fossil fuels (coal, oil and natural gas for heating and electricity, gasoline and diesel for transportation); methane from landfill wastes and raising livestock, deforestation activities; and some agricultural practices.¹⁷

Greenhouse gases differ from other emissions in that they contribute to the “greenhouse effect.” The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth’s surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it warms the planet by approximately 60° Fahrenheit. Emissions from human activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth’s temperature. Greenhouse gases occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). Since 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. Emissions of greenhouse gases affect the atmosphere directly by changing its chemical composition while changes to the land surface indirectly affect the atmosphere by changing the way the Earth absorbs gases from the atmosphere.

GHG emissions for the project were quantified utilizing the California Emissions Estimator Model (CalEEMod) version 2011.1.1 to determine if the project could have a cumulatively considerable impact related to greenhouse gas emissions (see Appendix A, Air Quality Modeling Data). A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not officially been adopted by the SCAQMD. Individual projects will

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have prepared a greenhouse gas emissions inventory, to determine if individual projects exceed applicable screening or impact thresholds and would thus potentially contribute substantially to climate change and associated impacts. A summary of short- and long-term emissions and the analysis for each are included below.

Short-Term Emissions

Future development projects will result in short-term greenhouse gas emissions from construction. Greenhouse gas emissions will be released by equipment used for demolition, grading, paving, and other building construction activities. GHG emissions will also result from worker and vendor trips to and from project sites and from demolition and soil hauling trips. Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Because of this difference, SCAQMD recommends in its draft threshold to amortize construction emissions over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions in order to generate a precise project GHG inventory.

Typically, construction-related GHG emissions contribute unacceptably (less than one percent) to a project's annual greenhouse gas emissions inventory and mitigation is not effective in reducing a project's overall contribution to climate change. Implementation of AB32 and SB375 through California Air Resources Board's (ARB) Scoping Plan and SCAG's RTP/SCS are designed to achieve the required reduction in greenhouse gas emissions, as is further discussed in Section 4.7.b. With the cooperation and support of these plans, short-term climate change impacts due to future construction activities will be less than significant.

Long-Term Emissions

Future development projects will result in continuous GHG emissions from mobile, area, and other operational sources. Mobile sources, including vehicle trips to and from development projects, will result primarily in emissions of CO₂, with minor emissions of CH₄ and N₂O. The most significant GHG emission from natural gas usage will be methane. Electricity usage by future development and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO₂ emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas inventory for typical development projects.

Table 4.7.1 (Opportunity Sites Existing Greenhouse Gas Emissions Inventory) summarizes annual operational impacts from existing development on the identified Opportunity Sites. Table 4.7.2 (Opportunity Sites and Vacant Land Proposed Greenhouse Gas Emissions Inventory) summarizes annual operational impacts from the proposed development on the identified Opportunity Sites and vacant residential land. Table 4.7.3 (Net Greenhouse Gas Emissions Inventory) summarizes the net annual operational greenhouse gas emissions from removal of existing operations on the opportunity sites and build-out of the proposed Housing Element Opportunity Sites and the vacant residential land. The emissions inventory does not account for GHG emissions from construction activities that have not been estimated because no actual development is proposed; however, construction-related GHG emissions are short term, cease to emit greenhouse gases upon completion, and do not contribute substantially to a project's overall GHG inventory. Construction emissions will be evaluated on a project-by-project basis consistent with the City's standard environmental review procedures.

**Table 4.7.1
Opportunity Sites Existing Greenhouse Gas Emissions Inventory**

Source	GHG Emissions (MT/YR)			
	CO2	CH4	N2O	TOTAL *
Area	9.34	0.00	0.00	9.49
Energy	2,707.54	0.11	0.05	2,724.44
Mobile	28,572.05	1.48	0.00	28,603.17
Waste	207.12	12.24	0.00	464.17
Water	176.91	1.09	0.03	209.20
GRAND TOTAL	31,672.96	14.92	0.08	32,010.47

Source: MIG|Hogle-Ireland 2013
* MTCO2E/YR

**Table 4.7.2
Opportunity Sites and Vacant Land Proposed Greenhouse Gas Emissions Inventory**

Source	GHG Emissions (MT/YR)			
	CO2	CH4	N2O	TOTAL *
Area	734.52	0.34	0.01	746.26
Energy	6,542.94	0.27	0.11	6,583.74
Mobile	48,809.05	1.88	0.00	48,848.51
Waste	307.08	18.15	0.00	688.19
Water	797.30	4.23	0.12	922.55
GRAND TOTAL	57,190.89	24.87	0.24	57,789.25

Source: MIG|Hogle-Ireland 2013
* MTCO2E/YR

**Table 4.7.3
Net Greenhouse Gas Emissions Inventory**

Source	GHG Emissions (MT/YR)			
	CO2	CH4	N2O	TOTAL *
Area	725.18	0.34	0.01	736.77
Energy	3,835.40	0.16	0.06	3,859.30
Mobile	20,237.00	0.40	0.00	20,245.34
Waste	99.96	5.91	0.00	224.02
Water	620.39	3.14	0.09	713.35
GRAND TOTAL	25,517.93	9.95	0.16	25,778.78

Source: MIG|Hogle-Ireland 2013
* MTCO2E/YR

According to modeled estimates, long-term GHG emissions from potential future development within the Opportunity Sites will *increase* when compared to existing development conditions. This is due to the underutilized and vacant nature of the Opportunity Sites. Future housing and mixed-use development will replace vacant land as well as existing commercial areas with associated parking. Table 4.7.2 does not account for regulatory and project design features required as mitigation that may reduce GHG emissions for each individual project. GHG emissions reducing design requirements identified in the CBC include installation of low-flow fixtures, compliance with State landscape irrigation requirements, and minimum 50 percent recycling during construction and operation. Furthermore, GHG emissions will be evaluated during the City’s standard environmental review process as required by CEQA to determine if GHG emissions from individual projects will require mitigation. Impacts will be less than significant.

b) **No Impact.** Significant impacts would occur if the proposed project conflicted with or interfered with implementation of any existing greenhouse gas reduction plan that is projected to achieve greenhouse gas reduction targets. The two primary reduction plans are California Air

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Resources Board (CARB) Scoping Plan and SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) as discussed below.

California Air Resources Board Scoping Plan (AB32)

The CARB Scoping Plan is the comprehensive plan to reach the GHG reduction targets stipulated in AB32. The key elements of the plan are to expand and strengthen energy efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners in the Western Climate Initiative (includes seven states in the United States and four territories in Canada), establish transportation-related targets, and establish fees.¹⁸ CARB estimates that implementation of these measures will reduce GHG emissions in the state by 136 MMTCO₂E by 2020; therefore, implementation of the Scoping Plan will meet the 2020 reduction target of 80 MMTCO₂E, which is a reduction of 27 percent compared to the projected business as usual 507 MMTCO₂E.

Many of the strategies identified in the Scoping Plan are not applicable at the General Plan or project-level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the project. Finally, while some measures are not directly applicable, the project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

- 1. California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions.** Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California.¹⁹ Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms. These programs involve capping emissions from electricity generation, industrial facilities, and broad scoped fuels. While it is unlikely that a qualifying heavy industrial facility such as these would be located in the City, if one were, it would be subject to these State requirements, and the proposed Housing Element would not interfere with their implementation.
- 2. California Light-Duty Vehicle Greenhouse Gas Standards.** Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals. This is not applicable as this is a statewide measure establishing vehicle emissions standards.
- 3. Energy Efficiency.** Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities). The City's General Plan and proposed Housing Element promotes energy efficient building design, as well as implementation of existing building and other codes regulating minimum energy, water, and waste efficiency consistent with 2011 CALGREEN requirements and would thus be consistent and not interfere with this program.
- 4. Renewables Portfolio Standards.** Achieve 33 percent renewable energy mix statewide by 2020. This establishes the minimum statewide renewable energy mix and is not applicable at a City level or below for implementation. The proposed Housing Element would not interfere with the implementation of this program.

5. **Low Carbon Fuel Standard.** Develop and adopt the Low Carbon Fuel Standard. This is not applicable to a City as this establishes reduced carbon intensity of transportation fuels.
6. **Regional Transportation-Related Greenhouse Gas Targets.** Develop regional greenhouse gas emissions reduction targets for passenger vehicles. As is detailed following, the proposed Housing Element Update would not potentially conflict with and would support the implementation of SCAG's RTP/SCS to achieve the required GHG reduction goals by 2020 and 2035 based on an inconsistency with growth projections. The existing General Plan includes policies to reduce vehicle miles traveled by encouraging mixed-use, infill, and improved jobs-housing balance, and alternative modes of transportation.
7. **Vehicle Efficiency Measures.** Implement light-duty vehicle efficiency measures. This is not applicable to a City as this identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
8. **Goods Movement.** Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities. Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. The proposed Housing Element would not directly result in facilities such as distribution warehouses that are associated with goods movement. In addition, these measures are yet to be implemented and will be voluntary. The proposed Housing Element would not interfere with their eventual implementation.
9. **Million Solar Roofs Program.** Install 3,000 megawatts of solar-electric capacity under California's existing solar programs. Sets goal for use of solar systems throughout the state. The proposed Housing Element would not interfere with but instead would directly support installation of alternative energy sources through General Plan policies and programs.
10. **Medium- and Heavy-Duty Vehicles.** Adopt medium-duty (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010.²⁰ Future, yet to be determined improvements, includes hybridization of MD and HD trucks. The proposed Housing Element would not directly result in development of industrial uses that utilize large MD and HD truck fleets. In addition, this type of development would be required to have their fleet equipment be consistent with the current applicable efficiency measures at the time of operation. The proposed Housing Element would not interfere with implementation of this program.
11. **Industrial Emissions.** Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries. These measures are applicable to large industrial facilities (> 500,000 MTCO₂E/YR) and other intensive uses such as refineries. While it is unlikely that a qualifying heavy industrial facility such as these would be located in the City, if one were, it would be subject to these state requirements; the proposed Housing Element would not interfere with their implementation.

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12. **High Speed Rail.** Support implementation of a high speed rail system. This is not applicable as no high speed rail facilities are planned within Monterey Park.
13. **Green Building Strategy.** Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The existing General Plan and proposed Housing Element promotes energy efficient building design as well as implementation of existing building and other codes regulating minimum energy, water, and waste efficiency consistent with 2011 CALGREEN requirements and would thus be consistent and not interfere with this program.
14. **High Global Warming Potential Gases.** Adopt measures to reduce high global warming potential gases. The proposed Housing Element would not directly result in generation of high global warming potential gases, and would not interfere with implementation of any future changes in air conditioning, fire protection suppressant, and other emission requirements.
15. **Recycling and Waste.** Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling to move toward zero-waste. The proposed Housing Element is consistent since implementing development will be required to recycle a minimum of 50 percent from construction activities per state requirements.
16. **Sustainable Forests.** Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million MTCO₂E/YR. This is not applicable as the City does not contain any areas defined as forest.
17. **Water.** Continue efficiency programs and use cleaner energy sources to move and treat water. The proposed Housing Element is consistent since implementing development will include use of low-flow fixtures and water efficient landscaping per State requirements.
18. **Agriculture.** In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020. The City does not contain any agricultural land use designations, and any policies related to agriculture land uses would not be applicable.

As summarized above, the proposed Housing Element will not potentially conflict with regional transportation-related GHG targets and would not conflict with any of the other provisions of the Scoping Plan. The existing General Plan and proposed Housing Element in fact supports four of the action categories through energy efficiency, green building, recycling/waste, and water conservation through these proposed and current policies:

Regional Transportation Plan/Sustainable Communities Strategy (SB375)

The 2012 Regional Transportation Plan/Sustainable Communities Strategy and the goals, policies, and programs included within it are projected to obtain and exceed applicable GHG reduction targets of eight percent by 2020 and 13 percent by 2035. Projected reductions by the RTP/SCS are nine percent by 2020 and 16 percent by 2035. Ultimately, the RTP/SCS is keyed to implement the requirements of AB32 at the regional level. For a program-level analysis, if the proposed Housing Element is consistent with the assumptions of the RTP/SCS, then long-term development within the planning area will meet regional reduction targets. Furthermore, the long-term development would meet the broader statewide reduction goals of 1990 levels by 2020 and 80 percent beyond that by 2050. The proposed Housing Element would, therefore, not

contribute substantially to climate change impacts if it is consistent with the regional and statewide climate change planning efforts.

As assumed in the RTP/SCS, based on current City boundaries, Monterey Park is forecast to grow to a total population of 67,900 by 2020 and 77,700 by 2035. Buildout of the General Plan would result in a population of 72,000 persons, lower than that estimated by SCAG. The projected growth is generally consistent. In addition, the proposed Housing Element and opportunity sites are projected to meet the City's allocated RHNA, which is a function of the City's projected long-term growth. Therefore, by showing capacity to accommodate the RHNA, the Housing Element is contributing short-term towards consistency with long-term growth projections and the RTP/SCS. Therefore, the existing General Plan and proposed Housing Element is consistent with the population growth forecasts of the RTP/SCS because it does provide the capacity for residential development to accommodate the projected population growth and not direct growth elsewhere, which would interfere with implementation of the RTP/SCS.

The existing General Plan and proposed Housing Element will directly support the implementation of the RTP/SCS in achieving mandated GHG reduction targets through its policies oriented towards improvements in the region's multimodal transportation system and coordinating land use patterns around high quality transit corridors. These policies are intended to reduce reliance on automobile use and improve the jobs housing balance in more suburban communities to reduce vehicle miles traveled, thus reducing greenhouse gas emissions. Therefore, the proposed Housing Element would not conflict with and would actually support the RTP/SCS in achieving its greenhouse gas reduction targets.

In addition to these state and regional plans, the Monterey Park General Plan contains programs related to energy conservation, improving air quality, reducing automobile use, and reduction of greenhouse gases. The Housing Element includes a section discussing potential energy conservation opportunities, including increased residential densities in the downtown area and near commercial centers which would promote walkability and decrease reliance on automobiles. Additionally, Southern California Edison offers various rebate programs for energy efficient appliances and makes available to residents energy efficient kits at no cost. Housing implementation programs include efforts to promote energy efficiency improvements to households, as well as energy efficient housing design and practices in City ordinances. No impact will occur.

4.8 – Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) 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"/>

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) **No Impact.** The Monterey Park 2014-2021 Housing Element is a policy and programmatic document intended to facilitate maintenance of the existing housing stock and production of new housing to meet the targeted housing needs of the community. Residential development does not require and is not expected to require the manufacturing, use, transportation, disposal, or storage of dangerous quantities of hazardous materials. Residential uses do not generate hazardous wastes or emissions, except for very small quantities of typical household cleaning agents, automotive maintenance products, paints, pesticides, and herbicides. The proposed Housing Element update would not conflict with any hazardous materials regulations and would not exempt any future housing from the City's programs to control and safely dispose of hazardous materials and wastes or to reduce the volume of wastes requiring landfill disposal. Thus, no impact will result.

b) **Less Than Significant Impact.** Upon completion of construction, future residential development that may be facilitated by this Housing Element update would not generate hazardous air emissions and would not involve the handling of any acutely hazardous substances or wastes. Thus, the updated Housing Element would not result in impacts related to the presence of any hazardous materials or emissions within a quarter mile of a school.

With regard to construction, due to the City's built-out status, housing development pursuant to Housing Element policy will likely involve demolition of existing structures. SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities) requires work practices that limit asbestos emissions from building demolition and renovation activities, including the removal and disturbance of asbestos containing materials (ACM).²¹ This rule is generally designed to protect uses and persons adjacent to demolition or renovation activity from exposure to asbestos emissions. Rule 1403 requires surveys of any facility being demolished or renovated for the presence of all friable and Class I and Class II non-friable ACM. Rule 1403 also establishes notification procedures, removal procedures, handling operations, and warning label requirements, including HEPA filtration, the *glovebag* method, wetting, and some methods of dry removal that must be implemented when disturbing appreciable amounts of ACM (more than 100 square feet of surface area). All future housing developments will be subject to the City's standard environmental review process for evaluation of hazards. Considering implementation of existing policies and standards, impacts associated with asbestos hazards will be less than significant.

Exposure of construction workers to lead-based paint during demolition activities is also of concern, similar to exposure to asbestos. Exposure of surrounding land uses to lead from demolition activities is generally not a concern because demolition activities do not result in appreciable emissions of lead.²² If lead contamination exists on future housing sites, 8 CCR Section 1532.1 (California Construction Safety Orders for Lead) is applicable to the demolition of all existing structures requiring exposure assessment and compliance measures to keep worker

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exposure below action levels. Future housing development will also be subject to Title 22 requirements for the disposal of solid waste contaminated with excessive levels of lead. Impacts due to lead exposure and contamination will be less than significant with adherence to existing regulations.

c) **Less than Significant Impact.** Nine schools are located within the downtown area or within ¼-mile of the downtown area and Opportunity Sites: Mark Keppel High School, Happy Day School, Ynez Elementary, St. Stephen Martyr School, Top Kids Preschool, Arlene Bitely Elementary School, Richard Garvey Intermediate School, New Avenue School, and Emerson Elementary School. Residential development does not require and is not expected to require the manufacturing, use, transportation, disposal, or storage of dangerous quantities of hazardous materials. As discussed in Section 4.8.b, existing regulations address potential off-site construction-related hazards associated with demolition of the existing onsite structures. Impact would be less than significant with implementation of existing regulations listed in Section 4.8.b.

d) **Less Than Significant Impact.** According to the databases maintained as the "Cortese List" the Opportunity Sites identified in the Housing Element update are not:

- listed as a hazardous waste and substance site by the Department of Toxic Substances Control (DTSC),²³
- listed as an open case leaking underground storage tank (LUST) site by the State Water Resources Control Board (SWRCB),²⁴
- listed as a hazardous solid waste disposal site by the SWRCB and CalEPA,²⁵
- currently subject to a Cease and Desist Order (CDO) or a Cleanup and Abatement Order (CAO) as issued by the SWRCB,²⁶ or
- developed with a hazardous waste facility subject to corrective action by the DTSC.²⁷

However, there is one hazardous waste and substance site (Garfield Medical Center) listed by DTSC within the downtown area that could affect future housing in the downtown area. Existing regulations and monitoring related to the operation of the medical center would diminish any potential impacts. In addition, multiple closed LUST sites, two open LUST sites, and two open Other Cleanup Sites are located within the downtown area. Similarly, since these are open cases, they are already in the process of remediating the existing hazards identified and would diminish any potential impacts to future residential development in the area. SWRCB and CalEPA identify one site located in the far southeastern portion of the City (Operating Industries Landfill) as a solid waste disposal site within the City. This is a Superfund site that has been subject to extensive remediation activities for over 20 years.

Any future housing development will be subject to the City's standard environmental review that will include identification of any contaminated site possibly not already identified and implementation of appropriate cleanup and disposal procedures; therefore, less than significant impacts related to contaminated sites will occur. This is consistent with the policies of the General Plan Safety and Community Services Element and the Housing Element which propose no changes to these safety measures. Impacts would be less than significant.

e-f) **No Impact.** No public airports or private airstrips exist within two miles of Monterey Park. The nearest airport is El Monte Airport located approximately four miles to the east. No impact will occur.

g) **Less Than Significant Impact.** The Housing Element update would not change or interfere with the emergency response plans of the City, and the Element does not propose any alteration to vehicle circulation routes that could interfere with such plans. In accordance with City policies,

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the City will review all development proposals to determine the possible impacts of each development on emergency services. Impacts will be less than significant.

h) **No Impact.** Monterey Park is not located within a Fire Hazard Severity Zone (FHSZ) pursuant to the latest maps prepared by the California Department of Forestry and Fire Protection (CALFIRE).²⁸ There are no wildland conditions in the City and especially no wildland conditions in the downtown area or near the Opportunity Sites. No impact would occur.

4.9 – Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **Less Than Significant Impact.** The project is a policy document that facilitates the production of housing; it does not include any components that would change or conflict with water quality regulations or any waste discharge standards. All new development projects must comply with local procedures to control storm water runoff to prevent violations of regional water quality standards, in accordance with its co-permittee obligations under the countywide municipal storm water permit program, a component of the NPDES program of the federal Clean Water Act. All future residential development must connect to sewer; direct discharges of wastewater to surface or ground waters would not be permitted. No impact will occur.

b) **Less Than Significant Impact.** If the project removed an existing groundwater recharge area or substantially reduced runoff that results in groundwater recharge, a potentially significant impact could occur. The proposed project is composed of policy documents that would not authorize any specific development project, nor would it install any groundwater wells, and would not otherwise directly withdraw any groundwater. Future housing development is not anticipated to substantially interfere with groundwater recharge because the City requires that storm water run-off in excess of existing conditions be directed to retention basins where the water will percolate into the ground, thereby recharging subsurface aquifers. Impacts related to groundwater recharge and depletion will be less than significant.

c) **Less Than Significant Impact.** A significant impact would occur if the proposed project substantially altered the drainage pattern of an existing stream or river so that erosion or siltation would result. No substantial drainages traverse Monterey Park. In particular, there are no streams or rivers within the downtown area or near the Opportunity Sites. The project would propose no changes to any stream, river, or other drainage path. With regard to future development projects proposed pursuant to Housing Element policy, site drainage plans are required by the City and would be reviewed by the City Engineer. The final grading and drainage plans would be approved by the City Engineer during plan check review. Erosion and siltation reduction measures would be required during construction consistent with an approved Stormwater Pollution Prevention Plan (SWPPP) to demonstrate compliance with the City's NPDES

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permit. With the implementation of these existing regulations and practices, impacts will be less than significant to drainage patterns.

d-e) **Less Than Significant Impact.** Most of Monterey Park is occupied by urban uses, with drainage infrastructure well established. No subdivisions are proposed or facilitated through Housing Element policy which could affect existing streams or rivers. Residential development typically does not generate significant water pollutants through point discharges but does contribute to water quality impacts due to community-wide and regional urban runoff. However, all identified Opportunity Sites have primarily been previously developed with predominately impervious materials. As such, surface run-off from new development is not anticipated to substantially increase. In addition, all new housing or redevelopment projects will be required to construct the necessary drainage improvements to adequately accommodate any additional runoff, in compliance with existing City requirements. Impacts will be less than significant.

f) **No Impact.** The project does not propose any uses that will have the potential to otherwise degrade water quality beyond those issues discussed in Section 4.9 herein. The updated Monterey Park Housing Element does not authorize construction or redevelopment of any housing, and would not result in any new or more extensive sources of water pollutants.

g-h) **No Impact.** No portions of the city are subject to 100-year flooding.^{29 30} Therefore, no impacts to housing located within 100-year flood hazard areas or structures which can impede or redirect flood flows will occur

- i) **Less than Significant Impact.** The General Plan indicates that Monterey Park would be subject to inundation flooding if dams at either the Garvey Reservoir or Laguna Basin were to fail.³¹ Inundation from the Laguna Basin would be limited to the interchange of Interstate 710 and Interstate 10 and would thus not impact any habitable structures within the City. The Garvey Reservoir includes a north and south dam. Inundation from the failure of the north dam would cover portions of areas immediately north of the reservoir up to and just beyond Garvey Avenue and continuing east into the City of Rosemead. Inundation from the failure of the south dam would cover portions of areas immediately south and consolidate primarily along Fulton Avenue down to State Route 60. The inundation area from the northern dam would include Opportunity Site 8 located at Garvey Avenue and Elizabeth Avenue, but would exclude all of the other Opportunity Sites and the vast majority of the downtown area.

The Metropolitan Water District, which owns the reservoir, completed a substantial overhaul of the facility in 1999 to address seepage and ensure overall reservoir integrity. The risks associated with dam inundation have affected Monterey Park in these same areas for a number of years. The proposed project does not increase this risk nor does it expose people or structures to any new risks associated with dam failures, since the Opportunity Sites identified for new or increased development are located in previously developed areas, in particular Opportunity Site 8. Since dam failure can have severe consequences, FEMA requires that all dam owners develop Emergency Action Plans (EAP) for warning, evacuation, and post-flood actions. The County of Los Angeles' emergency response plans, as administered by the County of Los Angeles Office of Emergency Management, along with mutual aid from local jurisdictions, would implement their evacuation plans should such a dam inundation threaten the area. In addition, the National Dam Safety Act of 2006 authorized a program to reduce the risks to life and property from dam failure by establishing a safety and maintenance program. The program requires regular inspection of dams to reduce the risks associated with dam failures. Impacts due to risk of loss, injury or death involving flooding, due to dam inundation will be less than significant pursuant to existing regulations on dam safety.

j) **Less than Significant Impact.** Monterey Park is not subject to tsunami due to its elevation and distance (over 15 miles) from the Pacific Ocean. Garvey Reservoir is an open reservoir located in the eastern portion of the City. Although portions of the Downtown area may be subject to dam inundation, due to the distance from the reservoir and the relatively lower amount of water, impacts from potential inundation from seiche at the reservoir would likely not occur.

Mudflows require a slope, water, and unconsolidated soil to occur. The downtown area and Opportunity Sites are not subject to mudflows because the area and their surroundings do not contain steep slopes. The project does not propose any land use changes or any other changes that could increase landslide risks. Impacts from seiche and mudflow would thus be less than significant.

4.10 – Land Use and Planning

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) **No Impact.** A significant impact would occur if the proposed project were sufficiently large or configured in such a way so as to create a physical barrier within an established community. The proposed Downtown Opportunity Sites are surrounded primarily by commercial uses. The scattered sites lie within established residential neighborhoods. The proposed Housing Element, which relies on existing land use designations for high-density residential and mixed-use development, would not create any sort of physical barrier within the community. Rather, the mix of uses may serve to facilitate pedestrian connections throughout Downtown. Furthermore, project implementation would not provide for infrastructure systems such as new roadways or flood control channels that would divide or disrupt neighborhoods or any other established community elements in this previously developed and urbanized area. Therefore, no impact will occur.

b) **Less than Significant Impact.** A significant impact would occur if the proposed project were inconsistent with applicable plans, policies, and zoning designations. The proposed Housing Element update is consistent with existing General Plan goals and policies and the adopted Land Use Plan. In general, the intent of the goals and policies remains the same from the previous Housing Element. As required by California law, the update provides current data on housing in the community and an analysis of the land available to meet the community’s anticipated housing needs, as determined by HCD and SCAG in the RHNA. The update also includes programs for providing housing assistance and facilitating housing development. All sites and intensities identified to meet the RHNA are consistent with the existing Land Use Plan designations and all other pertinent policies of the General Plan. Although a MPMC update is currently in process to more directly implement the General Plan Land Use Plan, existing zoning (in particular the Planned Development Overlay) in the Downtown area would also allow for the proposed Opportunity Sites and their intensities. There will be no significant impact on any plan, policy, or

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regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. Impacts will be less than significant.

c) **No Impact.** As discussed in Checklist Response 4.4.f above, residential and mixed use areas, as well as Downtown, are not part of any habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan. As such, no impact will occur.

4.11 – Mineral Resources

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	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"/>

a-b) **No Impact.** No important mineral resources are delineated in the General Plan or in any other plan.³² The identified Opportunity Sites are located in completely urbanized areas. There are no mineral extractions or process facilities within the City. No mineral resources are known to exist within the City or surrounding area. No impact would occur.

4.12 – Noise

Would the project result in:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Fundamentals of Sound and Environmental Noise

The primary sources of noise affecting Monterey Park are various modes of transportation. Because the City is bordered by three freeways and traversed by several north-south and east-west arterial streets, most areas of the City are affected by traffic noise.

Noise can be defined as unwanted sound. Sound (and therefore noise) consists of energy waves that people receive and interpret. Sound pressure levels are described in logarithmic units of ratios of sound pressures to a reference pressure, squared. These units are called *bel*s. In order

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to provide a finer description of sound, a *bel* is subdivided into ten decibels, abbreviated dB. To account for the range of sound that human hearing perceives, a modified scale is utilized known as the A-weighted decibel (dBA). Since decibels are logarithmic units, sound pressure levels cannot be added or subtracted by ordinary arithmetic means. For example, if one automobile produces a sound pressure level of 70 dBA when it passes an observer, two cars passing simultaneously would not produce 140 dB. In fact, they would combine to produce 73 dBA. This same principle can be applied to other traffic quantities as well. In other words, doubling the traffic volume on a street or the speed of the traffic will increase the traffic noise level by 3 dBA. Conversely, halving the traffic volume or speed will reduce the traffic noise level by 3 dBA. A 3 dBA change in sound is the level where humans generally notice a *barely perceptible* change in sound and a 5 dBA change is generally *readily perceptible*.³³

Noise consists of pitch, loudness, and duration; therefore, a variety of methods for measuring noise has been developed. According to the California General Plan Guidelines for Noise Elements, the following are common metrics for measuring noise:³⁴

L_{EQ} (Equivalent Energy Noise Level): The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over given sample periods. LEQ is typically computed over 1-, 8-, and 24-hour sample periods.

CNEL (Community Noise Equivalent Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7:00 P.M. to 10:00 P.M. and after addition of ten decibels to sound levels in the night from 10:00 P.M. to 7:00 A.M.

L_{DN} (Day-Night Average Level): The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of ten decibels to sound levels in the night after 10:00 P.M. and before 7:00 A.M.

CNEL and L_{DN} are utilized for describing ambient noise levels because they account for all noise sources over an extended period of time and account for the heightened sensitivity of people to noise during the night. L_{EQ} is better utilized for describing specific and consistent sources because of the shorter reference period.

Fundamentals of Environmental Groundborne Vibration

Vibration is sound radiated through the ground. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. The ground motion caused by vibration is measured as particle velocity in inches per second, and in the U.S. is referenced as vibration decibels (VdB).

The background vibration velocity level in residential and educational areas is usually around 50 VdB. The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors causes most perceptible indoor vibration. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity level, and 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. The general human response to different levels of groundborne vibration velocity levels is described in Table 4.12.1 (Human Reaction to Groundborne Vibration).

**Table 4.12.1
Human Response to Groundborne Vibration**

Vibration Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception for many people.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level in unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, May 2006

a) **Less Than Significant Impact.** The primary contributor to ambient noise in the planning area is traffic, particularly from the three freeways that border the City and major roadways. To determine if future housing at the proposed Opportunity Sites will be exposed to ambient noise levels in excess of the noise level standards established in Monterey Park, noise levels from future traffic volumes have been estimated and compared to the City’s noise level standards. As detailed by the City’s General Plan, since a minimal amount of development is possible within the City, a minimal amount of traffic and traffic noise is expected on the City’s major roads that could impact existing or future residential uses or other noise sensitive uses. The Monterey Park General Plan identifies standards for land uses and noise compatibility, as summarized in Table 4.12.2 (Noise and Land Use Compatibility Standards). In addition, Section 9.53.040 of the City’s Municipal Code establishes additional time of day based land use noise standards as shown in Table 4.12.3 (Municipal Code Noise Standards).

The proposed Housing Element will not increase residential densities in areas in excess of those analyzed by the General Plan EIR and therefore will not increase traffic volumes on roadways within the vicinity of those Opportunity Sites. Future housing developments on the proposed Opportunity Sites and in other areas of the city are subject to the policies of the existing General Plan designed to minimize noise impacts to residential properties. The following noise policies of the General Plan will be implemented during the City’s standard environmental review process during the entitlement process for future housing developments. Impacts to residential development related to noise levels in excess of established standards and permanent increases in ambient noise levels will be less than significant with implementation of the noise policies of the General Plan.

Goal 5.0

Minimize the impact of point-source noises and ambient noise levels throughout the community.

Policy 5.1

Continue to enforce the Noise Ordinance to control point-source noise.

Policy 5.2

Incorporate noise impact considerations into the development review process, particularly the relationship of parking and ingress/egress, loading, and refuse collection areas to surrounding residential and other noise-sensitive land uses.

Policy 5.3

Require that new multi-family residential developments incorporate design features and approaches which minimize the intrusion of ambient noise into private and common outdoor spaces.

Policy 5.4

Enforce and revise as necessary City ordinances regulating hours for construction activity.

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Policy 5.5

Direct the Police Department to aggressively enforce State Motor Vehicle Code regulations pertaining to vehicle noise.

Policy 5.6

Support efforts of state and federal agencies to reduce motor vehicle noise in newer-model vehicles.

Policy 5.7

Ensure that City-operated buses are maintained to minimize noise production.

Goal 6.0

Minimize the noise impacts associated with the development of residential uses above or near commercial uses in mixed use developments.

Policy 6.1

Require that mixed use structures be designed to prevent transfer of noise and vibration from the commercial to the residential use.

Policy 6.2

Locate balconies and windows of residential units in mixed use projects away from the primary street and other major noise sources.

**Table 4.12.2
Noise and Land Use Compatibility Standards**

Land Use Category	CNEL Acceptability			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low-Density Single-Family, Duplex, Mobile Homes	50-60	60-65	65-75	75+
Residential - Multi-Family	50-60	60-65	65-75	75+
Commercial - Motels, Hotels, Transient Lodging	50-60	60-70	70-80	80+
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-70	70-80	80+
Amphitheatres, Concert Hall, Auditorium, Meeting Hall	below 50	50-65	N/A	65+
Sports Arenas, Outdoor Spectator Sports	below 50	50-70	N/A	70+
Playgrounds, Neighborhood Parks	50-70	N/A	70-75	75+
Golf Courses, Riding Stables, Water Rec., Cemeteries	50-70	N/A	70-80	80+
Office Buildings, Business Commercial, Professional, and Mixed-Use Developments	50-65	65-75	75+	N/A
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-80	85+	N/A

**Table 4.12.3
Municipal Code Noise Standards**

Noise Zone	Time	Allowable Noise Level— dBA
I. Residential	7 A.M.— 10 P.M.	55
	10 P.M.—7 A.M.	50
II. Commercial	7 A.M.—10 P.M.	65
	10 P.M.—7 A.M.	55
III. Industrial	Anytime	70

b) **Less Than Significant Impact.** Groundborne vibration can result in impacts from minor annoyances to people to major shaking that damages buildings. There are no railways within the City. The primary source of groundborne vibration within the City would be heavy construction activities. According to the Caltrans ‘Transportation- and Construction-Induced Vibration Guidance Manual’, transportation sources are not a significant source of vibration and therefore are not discussed below.

Groundborne vibration generated by construction projects is usually highest during pile driving, rock blasting, soil compacting, jack-hammering, and demolition-related activities. Next to pile driving, grading activity has the greatest potential for vibration impacts if large bulldozers or large trucks are used. Housing does not utilize machinery that would generate substantial amounts of vibration. The construction of future potential housing developments could utilize machinery that would generate substantial amounts of ground vibration because multiple-lot housing developments generally require mass grading. Construction of future development is not likely to require rock blasting considering the built-out character of the area or piling driving because the Opportunity Sites are generally not subject to liquefaction hazards; however, jack hammering will also likely be required for demolition activities. Table 4.12.4 (Common Construction Vibration) summarizes vibration levels from common construction equipment. Impacts to structures can occur from 0.08 PPV to 2.00 PPV depending on the duration of the vibration and the age of the structure. Similarly, human annoyance to vibration can occur from 0.01 PPV to 2.00 PPV depending on the duration.

**Table 4.12.4
Common Construction Vibration**

Equipment	PPV (in/sec at 25 ft.)
Crack-and-Seat Operations	2.400
Vibratory Roller	0.210
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003

Source: California Department of Transportation 2004

Vibration impacts are temporary and rare except in cases where large equipment is used near existing, occupied development. Construction noise and associated vibration will be controlled through the time restrictions currently established in the City’s noise regulations. MPMC § 9.53.070 exempts noise generated by construction activity and equipment maintenance limited to the hours between 7:00 A.M. to 10:00 P.M. from normal noise standards shown in Table 4.12.3. As such construction is exempted from noise standards, construction is typically required to be performed within these hours to not potentially conflict with normal noise standards. Therefore, potential construction related vibration impacts would be minimized to daytime hours. Per

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standard practice and City policy for noise analysis, future development projects that utilize vibration inducing equipment, in particular when located near sensitive uses/buildings, will be analyzed individually for potential vibration impacts. Typical vibration mitigation includes routing and placement of equipment to maximize distance to receptors and use of alternative equipment, such as use of drilled, sonic, or vibratory pile drivers as opposed to impact drivers. Subsurface dampeners can also be utilized to reduce groundborne vibration. With implementation of existing regulations, policies, and practices, impacts related to exposure to groundborne vibration will be less than significant.

c) **Less Than Significant Impact.** Residential land uses do not typically produce excessive noise either individually or cumulatively that could substantially increase existing, ambient noise levels. The future development of the Opportunity Sites will increase ambient noise levels due to increased traffic generation in the project vicinity. Trip generation estimates were based on trip rates defined by the Institute of Transportation Engineers (ITE) *Trip Generation (9th Edition)*. Trip rates for Apartments Low Rise and Single Family Housing were utilized to estimate trips generated by future housing at the identified Opportunity Sites. On sites designated Mixed Use, residential uses are not allowed on the ground floor. Therefore, trip generation rates have been utilized to estimate the trips generated from potential ground floor commercial use. The identified Opportunity Sites and vacant residential areas are anticipated to generate a total of approximately 50,263 daily vehicle trips.³⁵ This is an approximate 41 percent increase over existing daily traffic generated from existing development (35,630 daily vehicle trips) on the Opportunity Sites; therefore, the project would not result in a doubling of traffic and would not result in a *perceptible* change in ambient noise levels. Project specific increases in ambient noise levels due to future development within the downtown area and on each Opportunity Site will be evaluated as development is proposed over the long-term pursuant to existing policies and procedures. With these existing policies and procedures, impacts related to increases in ambient noise levels will be less than significant.

d) **Less Than Significant Impact.** The updated Housing Element does not authorize the development or redevelopment of housing units on any particular site but does include policies that could facilitate development of future housing. Temporary increases in local noise levels would be associated with construction activities to develop new housing. Construction noise will be controlled through the time restrictions currently established in the City's noise control requirements. The updated Housing Element would not result in any new or more severe temporary noise impacts associated with residential construction. Continued enforcement of the City's noise restrictions will reduce temporary noise impacts associated with new housing construction to a less-than-significant level.

e, f) **Less Than Significant Impact.** The City is not located within two miles of any existing public or private airport or within any airport land use plan; therefore, the proposed Opportunity Sites are not anticipated on being affected from noise generated from any airport. No impact would occur.

4.13 – Population and Housing

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a) **Less than Significant Impact.** Adoption and implementation of the Housing Element will not directly result in population growth. Population growth is a complex interaction among immigration, emigration, birth, deaths, and economic factors. The proposed Housing Element is designed to guide and accommodate the inevitable population growth the community will face over the short and long term. The Census reported the City had a population of 60,051 in 2000 and 60,269 as of 2010, which would represent an approximately 0.3% increase. SCAG’s Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) estimated a 2008 population for Monterey Park of 60,100 and projects an estimated population of 67,900 and 77,700 by 2020 and 2035, respectively.

The Opportunity Sites identified in the Housing Element would result in a net increase of approximately 942 new dwelling units and 3,580 new residents (942 dwelling units at 3.8 persons per household). This increase is within the growth assumptions estimated by SCAG and therefore will adequately accommodate future residential growth. In addition, the proposed Housing Element and Opportunity Sites are projected to meet the City’s RHNA, which is correlated with the City’s long-term growth projected by SCAG. Impacts will be less than significant.

b) **Less Than Significant Impact.** The proposed Housing Element is designed to encourage and facilitate housing development and preserve and enhance existing housing stock. Monterey Park is urbanized and is primarily built out. There are few vacant parcels and some underutilized properties that may be recycled for the purpose of new housing and mixed-use development. This natural recycling of land will not result in the loss of housing units because such redevelopment will result in the development of new housing units. The Opportunity Sites identified in the proposed Housing Element are either vacant or developed with aging commercial uses. However, Opportunity Sites 1, 3, 6, and 9 each has either single-family or multi-family development constituting a total of approximately 46 dwelling units. Goal 1 of the Housing Element encourages maintenance and preservation of the existing housing stock; therefore,

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future development and redevelopment of Opportunity Sites and other housing development constructed pursuant to the Housing Element update will have less than significant impacts on the City's existing housing stock.

c) **Less Than Significant Impact.** The proposed Housing Element will not displace any people because the project does not authorize the demolition or conversion of any housing unit. Although housing units do currently exist on the Opportunity Sites, the Housing Element does not authorize the acquisition of any existing residential dwelling unit. New housing, if constructed on these sites, will produce more units than exist today, providing greater opportunities for people to purchase or rent homes in Monterey Park. The impact will be less than significant.

4.14 – 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 Incorporation	Less Than Significant Impact	No Impact
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

a-e) Less Than Significant Impact. The updated Monterey Park Housing Element sets forth policies and programs to encourage housing development consistent with adopted General Plan land use policies. Residential development constructed pursuant to Housing Element policy will incrementally increase the need for fire and police protection, schools, and parks. SCAG estimates that the City’s population will be 77,700 in 2035. The Housing Element’s goal to facilitate 815 very low- to above moderate-income units by 2021 would increase the local housing stock from 20,631 units as of 2010 (2010 Census count) to 21,446 units, and would increase the resident population by approximately 3,097 persons (815 dwelling units at 3.8 persons per household).

The General Plan EIR indicates that buildout of the land use plan would result in less than significant impacts on parks, schools, fire, or police services. The provision of parks is guided by policies in the Resources Element that promote additional smaller parks within and near Downtown to serve the future mixed-use areas, including the proposed Opportunity Sites. Commercial and residential development within the City is subject to development impact fees under Chapter 12.10 (Recreation and Park Development Fee) of the Municipal Code that requires payment of a development fee for acquiring, improving, or maintaining new and current parks. In addition, the following General Plan policies and implementation measures will assist in reducing the impact on parks.

Goal 2.0

Create additional passive recreation opportunities in the City to further enhance the quality of life in all areas of the community.

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Policy 2.1

Encourage future commercial development to incorporate public squares, plazas, or similar spaces.

Policy 2.2

Incorporate pocket parks, parkways, and similar recreation spaces into residential neighborhoods.

Policy 2.3

Incorporate into the development review process a means for new development to contribute to existing recreational facilities and/or to address maintenance and staffing needs.

Policy 2.4

Provide for the expansion of the City Library and other community services as needed to benefit all Monterey Park residents.

The provision of school services is mitigated through the payment of development impact fees pursuant to the Leroy F. Green School Facilities Act. Future potential plans for development and redevelopment will be reviewed by City staff to determine any impacts of development on emergency services and are also subject to review by Monterey Park's Police and Fire Departments for compliance with applicable standards and policies. Future potential plans for development are also subject to the policies of the General Plan Safety and Community Services Element. The Safety and Community Services Element policies are designed to ensure adequate provision of public services in response to long-term growth. Property taxes and other special taxes paid by future property owners will also support the incremental expansion of public services as the population in the City grows. Impacts to public services will be less than significant.

4.15 – Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>

a) **Less Than Significant Impact.** As discussed in Section 4.14.d, the project has the potential to result in the indirect need for recreational facilities if new housing is constructed. However, as discussed in Section 4.14.d, Monterey Park requires payment of a Recreation and Park Development Fee to offset incremental impacts of development on existing parks. Developers of Any future housing projects will be required to pay development impact fees in accordance with this existing regulation; thus, deterioration of existing parks and recreation facilities will be less than significant as a result of future housing development because parks and recreation facilities will be incrementally expanded to meet future residential demand. Also, property taxes generated by new development will contribute to General Fund expenditures for maintenance of existing parks.

b) **Less than Significant Impact.** The updated Housing Element would not result in the direct construction of any recreation facilities. Future potential construction of recreation facilities in response to incremental, long-term population increases will be subject to the City’s standard environmental review process pursuant to CEQA. Impacts related to the potential construction of future recreation facilities will be less than significant.

4.16 – Transportation and Traffic

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a 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 checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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a) **Less than Significant Impact.** Trip generation estimates were based on trip rates defined by the Institute of Transportation Engineers (ITE) *Trip Generation (9th Edition)*. Trip rates for Apartments Low Rise and Single Family Housing were utilized to estimate trips generated by future housing at the identified Opportunity Sites. On sites designated Mixed Use, residential uses are not allowed on the ground floor. Therefore, trip generation rates have been utilized to estimate the trips generated from potential ground floor commercial use. The proposed Opportunity Sites would result in approximately 50,263 daily trips at build-out. The General Plan EIR determined that implementation of mitigation measures would reduce the impact to the extent feasible; however, impacts will remain significant and unavoidable at the local level (specifically the intersections of Atlantic Boulevard/Garvey Avenue and Garfield Avenue/Garvey Avenue).

The proposed Opportunity Sites are an implementation of the General Plan Land Use plan as no land use changes are proposed by the Housing Element. Thus, development of the Opportunity Sites as proposed by the Housing Element would partially contribute to the significant and unavoidable impact already identified in the General Plan EIR. The Housing Element does not propose any specific development or any land use changes that would invalidate this prior finding or further increase traffic levels beyond those analyzed in the General Plan EIR. On an individual development basis, traffic assessments will be required for all future residential development during the City’s standard environmental review process to determine project specific traffic generation, traffic distribution, modal splits, impacted intersections and roadways, project-specific fair-share improvement fees, and applicable regional transportation fees. Impacts related to substantial traffic congestion will be less than significant with implementation of the following General Plan policies.

Goal 2.0

Provide a local street system that accommodates current and future traffic volumes.

Policy 2.1

Implement all circulation improvements pursuant to the Master Circulation Plan shown in Figure C-2 and described in Table C-2.

Policy 2.2

Pursue unique funding sources from regional, state, and federal agencies for future circulation improvements.

Policy 2.3

Require full roadway dedications and improvements (or in-lieu fees - payment of fees in place of physical improvements) at the time of development plan approval.

Policy 2.4

Allow Kern Avenue to be vacated to accommodate well-designed development proposals involving properties adjacent to Kern Avenue.

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Policy 2.5

Implement intelligent transportation system technologies to improve traffic flow.

Policy 2.6

Establish and maintain a Neighborhood Traffic Control Program.

Policy 2.7

Work with regional agencies to pursue innovative strategies for monitoring traffic volumes.

Policy 2.8

Establish and maintain truck routes consistent with Figure C-3.

Goal 3.0

Create a Downtown circulation system that accommodates the needs of commuters and pedestrians.

Policy 3.1

Maintain Garvey Avenue as a functional Minor Arterial roadway during peak weekday travel hours.

Policy 3.2

Prepare a comprehensive strategy for Garvey Avenue that includes traffic-calming improvements.

Policy 3.3

Implement the redesign plan for Garvey Avenue illustrated in Figure LU-8 of the Land Use Element.

b) **Less than Significant Impact.** The project will not directly impact any roadway designated in the Los Angeles County Congestion Management Plan (CMP). The General Plan identified significant and unavoidable impacts at two intersections—Atlantic Boulevard/Garvey Avenue and Garfield Avenue/Garvey Avenue—due to the anticipated increase in freeway trips.³⁶ Under the CMP, projects that generate in excess of 150 trips per day at freeway monitoring locations are subject to additional review. Residential development pursuant to Housing Element policy will be subject to this standard and will be analyzed accordingly. Impacts will be less than significant with continued application of existing practice and programs.

c) **No Impact.** The updated Housing Element is focused on achieving local housing objectives, and does not authorize any construction that would result in the need to redirect or otherwise alter air traffic patterns. Furthermore, the proposed Housing Element will not result in substantial population growth that could significantly increase air traffic. Therefore, the project will have no air traffic impacts.

d) **No Impact.** The project does not involve the construction of any roadway and would have no effect on the City's street and site design standards.

e) **Less than Significant Impact.** The project does not involve any road construction or any development activity, and thus will not obstruct or restrict emergency access to or through the City. Future housing development facilitated by implementation of Housing Element policies will be subject to site plan review. In conjunction with the review and approval of building permits, the Fire Department reviews all plans to ensure compliance with all applicable emergency access and safety requirements. With continued application of project review procedures, impacts involving emergency access will be less than significant.

f) **No Impact.** The project includes programs and policies to encourage the development of new housing units to meet the City's regional fair share of housing, as required by State law; the project does not authorize any design, plans, or projects for construction of new housing. Thus, the project itself will not create a need for additional parking. Individual development projects will be required to provide parking consistent with the MPMC zoning regulations. The project will have no impact on parking.

4.17 – Utilities and Service Systems

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) **No Impact.** Wastewater collection and treatment services in Monterey Park are provided by the City's Public Works Department and regionally by the Sanitation Districts of Los Angeles County (Sanitation Districts). Wastewater discharge requirements are issued by the Los Angeles Regional Water Quality Control Board (RWQCB). These treatment requirements establish pollutant limits for effluent discharges to receiving waters. Future housing development will result in typical wastewater discharges and will not require new methods or equipment for treatment that are not currently permitted for the plants operated by the Sanitation Districts. Furthermore, residential development is not subject to point-source discharge requirements. The project will not impact compliance with RWQCB treatment requirements. Future housing development will not interfere with compliance with RWQCB wastewater treatment requirements, thus no impact will occur.

b) **Less than Significant Impact.** Future housing development will incrementally increase water demand and wastewater discharges. As determined by the City's General Plan EIR, less than significant impacts would occur to existing water and wastewater treatment facilities.³⁷ The City's Water Master Plan addresses older facilities that would require replacement with or without the proposed Housing Element and the Opportunity Sites. In addition, the proposed Housing Element would not alter any land use that could increase development intensity that could potentially create a greater impact than was already analyzed by the General Plan EIR. The City will continue to identify the need for expansion of water and wastewater facilities, such as water and sewer mains, as needed, on a project-by-project basis during its standard environmental review process. Any environmental impacts related to the construction or expansion of water or wastewater facilities will be analyzed and mitigated for at the time of development. Adherence to existing practices and procedures will result in impacts related to the expansion of water and wastewater facilities to be less than significant.

c) **Less than Significant Impact.** The updated Housing Element is focused on achieving local housing objectives and does not authorize any construction that would result in the construction of new storm water drainage facilities or the expansion of existing facilities. Drainage improvements are constructed on a project-by-project basis. This typically involves retaining storm water flows on site to the greatest extent practicable, and then directing flows into an acceptable drainage facility. Construction of drainage devices will be entirely on site and will be subject to standard construction requirements for erosion control and water quality requirements. Future housing development will comply with existing standards and regulations for conveyance of storm water; thus, impact will be less than significant.

d) **Less than Significant Impact.** Monterey Park's Water Utility Division is responsible for the production and distribution of domestic water and maintenance of the overall water system facilities throughout the City. The City's water is supplied exclusively from wells within the Main San Gabriel Basin and for emergency purposes from the Metropolitan Water District (MWD). The General Plan EIR concluded that adequate existing groundwater entitlements and water supply from MWD would be adequate to serve the land uses anticipated by the General Plan land use plan.³⁸ The proposed Housing Element and Opportunity Sites would not alter any land use that could increase development intensity that could potentially create a greater impact than was already analyzed by the General Plan EIR. The proposed Housing Element would not result in any population growth or additional demand on water supplies beyond that already planned and analyzed through the year 2021; therefore, the proposed Housing Element would not result in the need for new or expanded water supplies, and impacts will be less than significant.

e) **Less Than Significant Impact.** Wastewater treatment requirements are established by the Los Angeles RWQCB. The City will review future housing development as part of its standard environmental review process to determine adequate capacity to serve the discharge needs in

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comparison to treatment plant capacity. Impacts related to wastewater treatment capacity are anticipated to be less than significant.

f) **Less Than Significant Impact.** Monterey Park is served by a number of landfills, but the majority of the solid waste disposal is transferred to the Puente Hills Landfill and the Chiquita Canyon Landfill, which handles a relatively smaller amount.³⁹ Puente Hills Landfill is owned and operated by Sanitation Districts of Los Angeles County and is permitted to handle 13,200 tons/day of refuse (4,821,300 tons per year), with a permitted total capacity of 74 million cubic yards and a remaining capacity of 35.2 million cubic yards. This landfill is projected to close in 2013. The Chiquita Canyon Sanitary Landfill, located in Castaic, has a permitted daily capacity of 6,000 tons per day and a total capacity of 63.9 million cubic yards, with a remaining capacity of 29.3 million cubic yards. The Chiquita Canyon Landfill is estimated to close in 2019. Although these existing landfills currently used by Monterey Park are anticipated to close in 2013 and 2019, other regional landfills have remaining capacity. Also, regional plans are underway to transport waste by rail to landfill sites in the desert areas to the east. Compliance with City and County waste reduction programs and policies would reduce the volume of solid waste entering landfills. Individual development projects within the City would be required to comply with applicable State and local regulations, thus reducing the amount of landfill waste by at least 50 percent. Future housing would increase the volume of solid waste generated in the City that is diverted to existing landfills, thus contributing to the acceleration of landfill closures or the use of more distant sites. The City will continue to implement solid waste reduction programs in compliance with Section 40050 et seq. of the California Public Resources Code. Each residential development pursuant to Housing Element policy will be required to comply with federal, State, and local statutes and regulations related to the disposal of solid waste. Impacts will be less than significant.

g) **No Impact.** Residential waste collection in Monterey Park is disposed of in regional landfills, as described above. All new residential development will be required to comply with State mandates and City regulations regarding reduction/recycling of household waste. None of the proposed housing strategies inherent in the proposed Housing Element would have any effect upon or result in any conflicts with solid waste disposal regulations. No impact will occur.

4.18 – Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>

a) **Less Than Significant Impact with Mitigation Incorporation.** The preceding analyses and discussions of responses in the preceding analysis conclude that the proposed project would have no effect upon sensitive biological resources and would not result in significant impacts to historical, archaeological, or paleontological resources with mitigation incorporated. Impacts related to scenic resources will be less than significant. The project is a policy document that will not have any direct environmental impacts. All residential development facilitated by Housing Element policy will occur pursuant to adopted General Plan land use policy and other General Plan policies intended to minimize environmental impacts. Impact would be less than significant with mitigation incorporated.

b) **Less Than Significant Impact with Mitigation Incorporation.** Cumulative impacts can result from the interactions of environmental changes resulting from one proposed project with changes resulting from other past, present, and future projects that affect the same resources, utilities and infrastructure systems, public services, transportation network elements, air basin, watershed, or other physical conditions. Such impacts could be short term and temporary, usually consisting of overlapping construction impacts, as well as long term due to the permanent land use changes involved in the project.

Evaluation of Environmental Impacts

As discussed throughout the Initial Study, potential project-level impacts have been identified. Potential project-level impacts and proposed mitigation measures are presented in the Cultural Resources (Section 4.5) section of this Initial Study. Refer the identified section for further discussion of the specific mitigation measures established to address any identified potential project level impacts. Cumulative impacts on greenhouse gases, an inherently cumulative issue, are discussed in Section 4.7.

Overall, the long-term development of the Housing Opportunity sites is consistent with the growth projections identified in the regional population growth forecast completed by SCAG. As such, the proposed Housing Element update would not result in new or additional cumulative impacts. With the implementation of the mitigation measure prescribed at the project level, the cumulative impacts would be less than significant.

c) **Less Than Significant Impact with Mitigation Incorporation.** Based on the analysis of the impacts in the responses to items 4.1 thru 4.17, there is no indication that this project could result in substantial adverse effects on human beings. The analysis concludes that direct and indirect environmental effects will at worst require mitigation to reduce to less than significant levels. Under each environmental consideration addressed in the preceding analysis, the proposed project is considered to have little or no adverse impacts on people and the environment.

5.1 – List of Preparers

City of Monterey Park (Lead Agency)

Planning Division
320 West Newmark Avenue
Monterey Park, California 91754
626-307-1324

- Robert Quitero, Interim Community Development Director
- Samantha Tewasart, Associate Planner

MIG | Hogle-Ireland (Environmental Analysis)

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- Laura Stetson, AICP, Principal
- Christopher Brown, Director of Environmental Services
- Russell Brady, Project Associate

References



6 Summary of Mitigation Measures

Mitigation Measure C-1:

In the event that subsurface resources are encountered during the course of grading and/or excavation for projects completed pursuant to Housing Element policy, all development must temporarily cease in these areas until the City of Monterey Park Planning Division is contacted and selects a qualified archaeologist/paleontologist to be brought onto the project site to properly assess the resources and make recommendations for their disposition. In the event that human remains are discovered, human remains must be treated in accordance with the procedures and requirements set forth in Health and Safety Code § 7050.5 and Public Resources Code § 5097.98. These code provisions require notification of the County Coroner and the Native American Heritage Commission, who in turn must notify those persons believed to be most likely descended from the deceased Native American for appropriate disposition of the remains. The applicable project applicant must bear all costs associated with implementing this mitigation measure.



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- ¹⁹ California Air Resources Board. California GHG Emissions – Forecast (2002-2020). October 2010
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- ²⁴ California State Water Resources Control Board. GeoTracker. <geotracker.waterboards.ca.gov> [January 31, 2013]
- ²⁵ California State Water Resources Control Board. Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit. <www.calepa.ca.gov/SiteCleanup/CorteseList/CurrentList.pdf> [Accessed January 31, 2013]
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Appendix A

Air Quality Modeling Data

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Monterey Park HE - Opportunity Sites - Existing Conditions
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Bank (with Drive-Through)	25.3	1000sqft
General Office Building	19.4	1000sqft
Medical Office Building	1.8	1000sqft
Health Club	6.2	1000sqft
High Turnover (Sit Down Restaurant)	15.63	1000sqft
Motel	33	Room
Apartments Low Rise	10	Dwelling Unit
Single Family Housing	3	Dwelling Unit
Automobile Care Center	6.28	1000sqft
Convenience Market (24 Hour)	4.78	1000sqft
Free-Standing Discount Store	1.2	1000sqft
Gasoline/Service Station	10	Pump
Regional Shopping Center	168.6	1000sqft
Supermarket	81.85	1000sqft
User Defined Retail	6.08	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	33		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Actual Acreages
 Construction Phase - No construction due to analysis reflecting existing conditions
 Off-road Equipment - No construction due to analysis reflecting existing conditions
 Vehicle Trips - Car wash trip rate per San Diego Assoc. of Govts
 Energy Use - Car Wash Energy Use same as Automobile Care Center
 Water And Wastewater - Car Wash Indoor Water Use per International Carwash Association report (43.8 gal/veh)
 Gas/Water Outdoor/Water Use same as Automobile Care Center
 Solid Waste - Car wash solid waste same as Automobile Care Center

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.98	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Energy	0.23	2.07	1.71	0.01		0.00	0.16		0.00	0.16		2,495.51		0.05	0.05	2,510.70
Mobile	163.08	367.11	1,508.44	2.22	230.92	15.15	246.08	7.96	15.15	23.11		228,508.48		12.61		228,773.27
Total	174.29	369.24	1,514.45	2.24	230.92	15.15	246.93	7.96	15.15	23.96	91.74	231,237.99		13.02	0.06	231,619.07

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.98	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Energy	0.23	2.07	1.71	0.01		0.00	0.16		0.00	0.16		2,495.51		0.05	0.05	2,510.70
Mobile	163.08	367.11	1,508.44	2.22	230.92	15.15	246.08	7.96	15.15	23.11		228,508.48		12.61		228,773.27
Total	174.29	369.24	1,514.45	2.24	230.92	15.15	246.93	7.96	15.15	23.96	91.74	231,237.99		13.02	0.06	231,619.07

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00				0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	163.08	367.11	1,508.44	2.22	230.92	15.15	246.08	7.96	15.15	23.11		228,508.48		12.61		228,773.27
Unmitigated	163.08	367.11	1,508.44	2.22	230.92	15.15	246.08	7.96	15.15	23.11		228,508.48		12.61		228,773.27
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	65.90	71.60	60.70	219,723	219,723
Automobile Care Center	389.36	389.36	389.36	517,072	517,072
Bank (with Drive-Through)	3,748.20	2,183.90	807.07	4,553,785	4,553,785
Convenience Market (24 Hour)	3,527.59	4,125.62	3625.39	4,527,959	4,527,959
Free-Standing Discount Store	68.69	85.28	67.63	169,841	169,841
Gasoline/Service Station	1,627.80	1,627.80	1,627.80	1,521,520	1,521,520
General Office Building	213.59	45.88	18.01	516,871	516,871
Health Club	204.17	129.39	165.73	483,820	483,820
High Turnover (Sit Down Restaurant)	1,987.35	2,475.32	2,060.66	3,763,744	3,763,744
Medical Office Building	65.03	16.13	2.79	131,541	131,541
Motel	185.79	185.79	185.79	518,063	518,063
Regional Shopping Center	7,239.68	8,424.94	4,255.46	18,308,568	18,308,568
Single Family Housing	28.71	30.24	26.31	95,207	95,207
Supermarket	8,368.34	14,535.74	13623.11	18,096,755	18,096,755
User Defined Retail	1,302.94	1,302.94	1,302.94	1,730,315	1,730,315
Total	29,023.16	35,630.04	28,219.76	55,154,782	55,154,782

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Automobile Care Center	8.90	13.30	7.40	33.00	48.00	19.00
Bank (with Drive-Through)	8.90	13.30	7.40	6.60	74.40	19.00
Convenience Market (24 Hour)	8.90	13.30	7.40	0.90	80.10	19.00
Free-Standing Discount Store	8.90	13.30	7.40	12.20	68.80	19.00
Gasoline/Service Station	8.90	13.30	7.40	2.00	79.00	19.00
General Office Building	8.90	13.30	7.40	33.00	48.00	19.00
Health Club	8.90	13.30	7.40	16.90	64.10	19.00
High Turnover (Sit Down Restaurant)	8.90	13.30	7.40	8.50	72.50	19.00
Medical Office Building	8.90	13.30	7.40	23.60	51.40	19.00
Motel	8.90	13.30	7.40	19.00	62.00	19.00
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Supermarket	8.90	13.30	7.40	6.50	74.50	19.00
User Defined Retail	8.90	13.30	7.40	33.00	48.00	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
NaturalGas Mitigated	0.23	2.07	1.71	0.01		0.00	0.16		0.00	0.16		2,495.51		0.05	0.05	2,510.70
NaturalGas Unmitigated	0.23	2.07	1.71	0.01		0.00	0.16		0.00	0.16		2,495.51		0.05	0.05	2,510.70
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use kBtu	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Apartments Low Rise	559,922	0.01	0.05	0.02	0.00		0.00	0.00		0.00	0.00		65.87		0.00	0.00	66.27
Automobile Care Center	340,397	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		40.05		0.00	0.00	40.29
Bank (with Drive-Through)	1372.44	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		161.46		0.00	0.00	162.45
Convenience Market (24 Hour)	23,8295	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.80		0.00	0.00	2.82
Free-Standing Discount Store	6,00351	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.71		0.00	0.00	0.71
Gasoline/Service Station	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	661,195	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00		77.79		0.00	0.00	78.26
Health Club	336,369	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		39.57		0.00	0.00	39.81
High Turnover (Sit Down Restaurant)	10032.1	0.11	0.98	0.83	0.01		0.00	0.07		0.00	0.07		1,180.25		0.02	0.02	1,187.43
Medical Office Building	61,3479	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		7.22		0.00	0.00	7.26
Motel	1048.16	0.01	0.10	0.09	0.00		0.00	0.01		0.00	0.01		123.31		0.00	0.00	124.06
Regional Shopping Center	840.69	0.01	0.06	0.07	0.00		0.00	0.01		0.00	0.01		98.90		0.00	0.00	99.51
Single Family Housing	372,679	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00		43.84		0.00	0.00	44.11
Supermarket	5227.19	0.06	0.51	0.43	0.00		0.00	0.04		0.00	0.04		614.96		0.01	0.01	618.71
User Defined Retail	329,546	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		36.77		0.00	0.00	39.01
Total		0.22	2.04	1.71	0.01		0.00	0.14		0.00	0.14		2,495.50		0.03	0.03	2,510.70

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
Apartments Low Rise	0.559922	0.01	0.05	0.02	0.00		0.00	0.00		0.00	0.00		65.87		0.00	0.00	66.27
Automobile Care Center	0.346397	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		40.05		0.00	0.00	40.29
Bank (with Drive-Through)	1.37244	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01		161.46		0.00	0.00	162.45
Convenience Market (24 Hour)	0.0238295	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		2.80		0.00	0.00	2.82
Free-Standing Discount Store	0.00600351	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.71		0.00	0.00	0.71
Gasoline/Service Station	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	0.661195	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00		77.79		0.00	0.00	78.26
Health Club	0.336329	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		39.57		0.00	0.00	39.81
High Turnover (Sit Down Restaurant)	0.103251	0.11	0.98	0.83	0.01		0.00	0.07		0.00	0.07		1,190.25		0.02	0.02	1,187.43
Medical Office Building	0.0613479	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		7.22		0.00	0.00	7.26
Motel	1.04816	0.01	0.10	0.09	0.00		0.00	0.01		0.00	0.01		123.31		0.00	0.00	124.06
Regional Shopping Center	0.84089	0.01	0.08	0.07	0.00		0.00	0.01		0.00	0.01		98.90		0.00	0.00	99.51
Single Family Housing	0.372670	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00		43.84		0.00	0.00	44.11
Supermarket	5.22719	0.06	0.51	0.43	0.00		0.00	0.04		0.00	0.04		614.96		0.01	0.01	618.71
User Defined Retail	0.329548	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00		38.77		0.00	0.00	39.01
Total		0.22	2.04	1.71	0.01		0.00	0.14		0.00	0.14		2,495.50		0.03	0.03	2,510.70

6.0 Area Detail

6.1 Mitigation Measures Area

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Mitigated	10.98	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Unmitigated	10.98	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Architectural Coating	2.27					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.32					0.00	0.00		0.00	0.00						0.00
Hearth	1.38	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Landscaping						0.00	0.00		0.00	0.00						0.00
Total	10.97	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	2.27					0.00	0.00		0.00	0.00							0.00
Consumer Products	7.32					0.00	0.00		0.00	0.00							0.00
Hearth	1.38	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01		335.10
Landscaping						0.00	0.00		0.00	0.00							0.00
Total	10.97	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01		335.10

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Monterey Park HE - Opportunity Sites - Existing Conditions
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Bank (with Drive-Through)	25.3	1000sqft
General Office Building	19.4	1000sqft
Medical Office Building	1.8	1000sqft
Health Club	6.2	1000sqft
High Turnover (Sit Down Restaurant)	15.63	1000sqft
Motel	33	Room
Apartments Low Rise	10	Dwelling Unit
Single Family Housing	3	Dwelling Unit
Automobile Care Center	6.28	1000sqft
Convenience Market (24 Hour)	4.78	1000sqft
Free-Standing Discount Store	1.2	1000sqft
Gasoline/Service Station	10	Pump
Regional Shopping Center	168.6	1000sqft
Supermarket	81.85	1000sqft
User Defined Retail	6.08	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	33		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Actual Acreages
 Construction Phase - No construction due to analysis reflecting existing conditions
 Off-road Equipment - No construction due to analysis reflecting existing conditions
 Vehicle Trips - Car wash trip rate per San Diego Assoc. of Govts
 Energy Use - Car Wash Energy Use same as Automobile Care Center
 Water And Wastewater - Car Wash Indoor Water Use per International Carwash Association report (43.8 gal/veh)
~~Sanitary Sewer Water Use same as Automobile Care Center~~
 Solid Waste - Car wash solid waste same as Automobile Care Center

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.98	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Energy	0.23	2.07	1.71	0.01		0.00	0.16		0.00	0.16		2,495.51		0.05	0.05	2,510.70
Mobile	171.31	397.40	1,539.73	2.09	230.92	15.36	246.28	7.96	15.36	23.32		214,640.82		11.36		214,879.42
Total	182.52	399.53	1,545.74	2.11	230.92	15.36	247.13	7.96	15.36	24.17	91.74	217,370.33		11.77	0.06	217,725.22

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	10.98	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Energy	0.23	2.07	1.71	0.01		0.00	0.16		0.00	0.16		2,495.51		0.05	0.05	2,510.70
Mobile	171.31	397.40	1,539.73	2.09	230.92	15.36	246.28	7.96	15.36	23.32		214,640.82		11.36		214,879.42
Total	182.52	399.53	1,545.74	2.11	230.92	15.36	247.13	7.96	15.36	24.17	91.74	217,370.33		11.77	0.06	217,725.22

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00						0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00		0.00		0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	171.31	397.40	1,539.73	2.09	230.92	15.36	246.28	7.96	15.36	23.32			214,640.82		11.36	214,879.42
Unmitigated	171.31	397.40	1,539.73	2.09	230.92	15.36	246.28	7.96	15.36	23.32			214,640.82		11.36	214,879.42
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Apartments Low Rise	65.90	71.60	60.70	219,723	219,723
Automobile Care Center	389.36	389.36	389.36	517,072	517,072
Bank (with Drive-Through)	3,748.20	2,183.90	807.07	4,553,785	4,553,785
Convenience Market (24 Hour)	3,527.59	4,125.62	3625.39	4,527,959	4,527,959
Free-Standing Discount Store	68.69	85.28	67.63	169,841	169,841
Gasoline/Service Station	1,627.80	1,627.80	1,627.80	1,521,520	1,521,520
General Office Building	213.59	45.98	19.01	516,871	516,871
Health Club	204.17	129.39	165.73	483,820	483,820
High Turnover (Sit Down Restaurant)	1,987.35	2,475.32	2060.66	3,763,744	3,763,744
Medical Office Building	65.03	16.13	2.79	131,541	131,541
Motel	185.79	185.79	185.79	518,063	518,063
Regional Shopping Center	7,239.68	8,424.94	4255.46	18,308,568	18,308,568
Single Family Housing	28.71	30.24	26.31	95,207	95,207
Supermarket	8,368.34	14,535.74	13623.11	18,096,755	18,096,755
User Defined Retail	1,302.94	1,302.94	1302.94	1,730,315	1,730,315
Total	29,023.16	35,630.04	28,219.76	55,154,782	55,154,782

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Automobile Care Center	8.90	13.30	7.40	33.00	48.00	19.00
Bank (with Drive-Through)	8.90	13.30	7.40	6.60	74.40	19.00
Convenience Market (24 Hour)	8.90	13.30	7.40	0.90	80.10	19.00
Free-Standing Discount Store	8.90	13.30	7.40	12.20	68.80	19.00
Gasoline/Service Station	8.90	13.30	7.40	2.00	79.00	19.00
General Office Building	8.90	13.30	7.40	33.00	48.00	19.00
Health Club	8.90	13.30	7.40	16.90	64.10	19.00
High Turnover (Sit Down Restaurant)	8.90	13.30	7.40	8.50	72.50	19.00
Medical Office Building	8.90	13.30	7.40	29.60	51.40	19.00
Motel	8.90	13.30	7.40	19.00	62.00	19.00
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Supermarket	8.90	13.30	7.40	6.50	74.50	19.00
User Defined Retail	8.90	13.30	7.40	33.00	48.00	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Natural Gas Mitigated	0.23	2.07	1.71	0.01		0.00	0.16		0.00	0.16		2,495.51		0.05	0.05	2,510.70
Natural Gas Unmitigated	0.23	2.07	1.71	0.01		0.00	0.16		0.00	0.16		2,495.51		0.05	0.05	2,510.70
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day										lb/day						
Apartments Low Rise	559.922	0.01	0.05	0.02	0.00		0.00	0.00		0.00	0.00			65.87		0.00	0.00	66.27
Automobile Care Center	340.397	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00			40.05		0.00	0.00	40.29
Bank (with Drive-Through)	1372.44	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01			161.46		0.00	0.00	162.45
Convenience Market (24 Hour)	23.8295	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			2.80		0.00	0.00	2.82
Free-Standing Discount Store	6.00351	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.71		0.00	0.00	0.71
Gasoline/Service Station	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.00		0.00	0.00	0.00
General Office Building	661.195	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00			77.79		0.00	0.00	78.26
Health Club	336.329	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00			39.57		0.00	0.00	39.81
High Turnover (Sit Down Restaurant)	10032.1	0.11	0.98	0.83	0.01		0.00	0.07		0.00	0.07			1,180.25		0.02	0.02	1,187.43
Medical Office Building	61.3479	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00			7.22		0.00	0.00	7.26
Motel	1048.16	0.01	0.10	0.09	0.00		0.00	0.01		0.00	0.01			123.31		0.00	0.00	124.06
Regional Shopping Center	840.69	0.01	0.08	0.07	0.00		0.00	0.01		0.00	0.01			98.90		0.00	0.00	99.51
Single Family Housing	372.679	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00			43.84		0.00	0.00	44.11
Supermarket	5227.19	0.06	0.51	0.43	0.00		0.00	0.04		0.00	0.04			614.96		0.01	0.01	618.71
User Defined Retail	323.548	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00			38.77		0.00	0.00	39.01
Total		0.22	2.04	1.71	0.01		0.00	0.14		0.00	0.14			2,495.50		0.03	0.03	2,510.70

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU	lb/day										lb/day						
Apartments Low Rise	0.559922	0.01	0.05	0.02	0.00		0.00	0.00		0.00	0.00			65.87		0.00	0.00	66.27
Automobile Care Center	0.340397	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00			40.05		0.00	0.00	40.29
Bank (with Drive-Through)	1.37244	0.01	0.13	0.11	0.00		0.00	0.01		0.00	0.01			161.46		0.00	0.00	162.45
Convenience Market (24 Hour)	0.0238295	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			2.80		0.00	0.00	2.82
Free-Standing Discount Store	0.00600351	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.71		0.00	0.00	0.71
Gasoline/Service Station	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00			0.00		0.00	0.00	0.00
General Office Building	0.661195	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00			77.79		0.00	0.00	78.26
Health Club	0.336329	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00			39.57		0.00	0.00	39.81
High Turnover (Sit Down Restaurant)	10.0321	0.11	0.98	0.83	0.01		0.00	0.07		0.00	0.07			1,180.25		0.02	0.02	1,187.43
Medical Office Building	0.0613479	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00			7.22		0.00	0.00	7.26
Motel	1.04816	0.01	0.10	0.09	0.00		0.00	0.01		0.00	0.01			123.31		0.00	0.00	124.06
Regional Shopping Center	0.84069	0.01	0.08	0.07	0.00		0.00	0.01		0.00	0.01			98.90		0.00	0.00	99.51
Single Family Housing	0.372679	0.00	0.03	0.01	0.00		0.00	0.00		0.00	0.00			43.84		0.00	0.00	44.11
Supermarket	5.22719	0.06	0.51	0.43	0.00		0.00	0.04		0.00	0.04			614.96		0.01	0.01	618.71
User Defined Retail	0.323548	0.00	0.03	0.03	0.00		0.00	0.00		0.00	0.00			38.77		0.00	0.00	39.01
Total		0.22	2.04	1.71	0.01		0.00	0.14		0.00	0.14			2,495.50		0.03	0.03	2,510.70

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.98	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Unmitigated	10.98	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.27					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.32					0.00	0.00		0.00	0.00						0.00
Hearth	1.38	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Landscaping						0.00	0.00		0.00	0.00						0.00
Total	10.97	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.27					0.00	0.00		0.00	0.00						0.00
Consumer Products	7.32					0.00	0.00		0.00	0.00						0.00
Hearth	1.38	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10
Landscaping						0.00	0.00		0.00	0.00						0.00
Total	10.97	0.06	4.30	0.01		0.00	0.69		0.00	0.69	91.74	234.00		0.36	0.01	335.10

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

**Monterey Park HE - Opportunity Sites - Existing Conditions
Los Angeles-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Bank (with Drive-Through)	25.3	1000sqft
General Office Building	19.4	1000sqft
Medical Office Building	1.8	1000sqft
Health Club	6.2	1000sqft
High Turnover (Sit Down Restaurant)	15.63	1000sqft
Motel	33	Room
Apartments Low Rise	10	Dwelling Unit
Single Family Housing	3	Dwelling Unit
Automobile Care Center	6.28	1000sqft
Convenience Market (24 Hour)	4.78	1000sqft
Free-Standing Discount Store	1.2	1000sqft
Gasoline/Service Station	10	Pump
Regional Shopping Center	168.6	1000sqft
Supermarket	81.85	1000sqft
User Defined Retail	6.08	User Defined Unit

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	33		

1.3 User Entered Comments

Project Characteristics -
 Land Use - Actual Acreages
 Construction Phase - No construction due to analysis reflecting existing conditions
 Off-road Equipment - No construction due to analysis reflecting existing conditions
 Vehicle Trips - Car wash trip rate per San Diego Assoc. of Govts
 Energy Use - Car Wash Energy Use same as Automobile Care Center
 Water And Wastewater - Car Wash Indoor Water Use per International Carwash Association report (43.8 gal/veh)
 Solid Waste - Car wash solid waste same as Automobile Care Center

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										M/yr					
2011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Area	1.79	0.00	0.08	0.00		0.00	0.01		0.00	0.01	1.38	7.96	9.34	0.00	0.00	9.49
Energy	0.04	0.38	0.31	0.00		0.00	0.03		0.00	0.03	0.00	2,707.54	2,707.54	0.11	0.05	2,724.44
Mobile	23.32	53.92	222.50	0.31	29.75	2.19	31.94	1.15	2.19	3.34	0.00	28,572.05	28,572.05	1.48	0.00	28,603.17
Waste						0.00	0.00		0.00	0.00	207.12	0.00	207.12	12.24	0.00	464.17
Water						0.00	0.00		0.00	0.00	0.00	176.91	176.91	1.09	0.03	209.20
Total	25.15	54.30	222.89	0.31	29.75	2.19	31.98	1.15	2.19	3.38	208.50	31,464.46	31,672.96	14.92	0.08	32,010.47

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Area	1.79	0.00	0.08	0.00		0.00	0.01		0.00	0.01	1.38	7.96	9.34	0.00	0.00	9.49
Energy	0.04	0.38	0.31	0.00		0.00	0.03		0.00	0.03	0.00	2,707.54	2,707.54	0.11	0.05	2,724.44
Mobile	23.32	53.92	222.50	0.31	29.75	2.19	31.94	1.15	2.19	3.34	0.00	28,572.05	28,572.05	1.48	0.00	28,603.17
Waste						0.00	0.00		0.00	0.00	207.12	0.00	207.12	12.24	0.00	464.17
Water						0.00	0.00		0.00	0.00	0.00	176.91	176.91	1.09	0.03	209.20
Total	25.15	54.30	222.89	0.31	29.75	2.19	31.98	1.15	2.19	3.38	208.50	31,464.46	31,672.96	14.92	0.08	32,010.47

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2011

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Mitigated	23.32	53.92	222.50	0.31	29.75	2.19	31.94	1.15	2.19	3.34	0.00	28,572.05	28,572.05	1.48	0.00	28,603.17
Unmitigated	23.32	53.92	222.50	0.31	29.75	2.19	31.94	1.15	2.19	3.34	0.00	28,572.05	28,572.05	1.48	0.00	28,603.17
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	65.90	71.60	60.70	219,723	219,723
Automobile Care Center	389.36	389.36	389.36	517,072	517,072
Bank (with Drive-Through)	3,748.20	2,183.90	807.07	4,553,785	4,553,785
Convenience Market (24 Hour)	3,527.59	4,125.62	3625.39	4,527,959	4,527,959
Free-Standing Discount Store	68.69	85.28	67.63	169,841	169,841
Gasoline/Service Station	1,627.80	1,627.80	1,627.80	1,521,520	1,521,520
General Office Building	213.59	45.98	19.01	516,871	516,871
Health Club	204.17	129.39	165.73	483,820	483,820
High Turnover (Sit Down Restaurant)	1,987.35	2,475.32	2060.66	3,763,744	3,763,744
Medical Office Building	65.03	16.13	2.79	131,541	131,541
Motel	185.79	185.79	185.79	518,063	518,063
Regional Shopping Center	7,239.68	8,424.94	4255.46	18,308,568	18,308,568
Single Family Housing	28.71	30.24	26.31	95,207	95,207
Supermarket	8,368.34	14,535.74	13623.11	18,096,755	18,096,755
User Defined Retail	1,302.94	1,302.94	1302.94	1,730,315	1,730,315
Total	29,023.16	35,630.04	28,219.76	55,154,782	55,154,782

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Automobile Care Center	8.90	13.30	7.40	33.00	48.00	19.00
Bank (with Drive-Through)	8.90	13.30	7.40	6.60	74.40	19.00
Convenience Market (24 Hour)	8.90	13.30	7.40	0.90	80.10	19.00
Free-Standing Discount Store	8.90	13.30	7.40	12.20	68.80	19.00
Gasoline/Service Station	8.90	13.30	7.40	2.00	79.00	19.00
General Office Building	8.90	13.30	7.40	33.00	48.00	19.00
Health Club	8.90	13.30	7.40	16.90	64.10	19.00
High Turnover (Sit Down Restaurant)	8.90	13.30	7.40	8.50	72.50	19.00
Medical Office Building	8.90	13.30	7.40	29.60	51.40	19.00
Motel	8.90	13.30	7.40	19.00	62.00	19.00
Regional Shopping Center	8.90	13.30	7.40	16.30	64.70	19.00
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Supermarket	8.90	13.30	7.40	6.50	74.50	19.00
User Defined Retail	8.90	13.30	7.40	33.00	48.00	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	2,294.38	2,294.38	0.10	0.04	2,308.76
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	2,294.38	2,294.38	0.10	0.04	2,308.76
NaturalGas Mitigated	0.04	0.38	0.31	0.00		0.00	0.03		0.00	0.03	0.00	413.16	413.16	0.01	0.01	415.67
NaturalGas Unmitigated	0.04	0.38	0.31	0.00		0.00	0.03		0.00	0.03	0.00	413.16	413.16	0.01	0.01	415.67
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU	tons/yr										MT/yr					
Apartments Low Rise	204372	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	10.91	10.91	0.00	0.00	10.97
Automobile Care Center	124245	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	6.63	6.63	0.00	0.00	6.67
Bank (with Drive-Through)	500940	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00	0.00	26.73	26.73	0.00	0.00	26.89
Convenience Market (24 Hour)	8697.78	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.47
Free-Standing Discount Store	2191.28	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.12
Gasoline/Service Station	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	241336	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	12.88	12.88	0.00	0.00	12.96
Health Club	122760	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	6.55	6.55	0.00	0.00	6.59
High Turnover (Sit Down Restaurant)	3.66172e+006	0.02	0.18	0.15	0.00		0.00	0.01		0.00	0.01	0.00	195.40	195.40	0.00	0.00	196.59
Medical Office Building	22392	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.19	1.19	0.00	0.00	1.20
Motel	382580	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00	0.00	20.42	20.42	0.00	0.00	20.54
Regional Shopping Center	306852	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	16.37	16.37	0.00	0.00	16.47
Single Family Housing	136028	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	7.26	7.26	0.00	0.00	7.30
Supermarket	1.90792e+006	0.01	0.09	0.08	0.00		0.00	0.01		0.00	0.01	0.00	101.81	101.81	0.00	0.00	102.43
User Defined Retail	120285	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	6.42	6.42	0.00	0.00	6.46
Total		0.03	0.39	0.31	0.00		0.00	0.02		0.00	0.02	0.00	413.15	413.15	0.00	0.00	415.66

Mitigated

Land Use	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	Nbio-CO2	Total CO2	CH4	N2O	CO2e
	kBTU	tons/yr							Mt/yr								
Apartments Low Rise	204372	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	10.91	10.91	0.00	0.00	10.97
Automobile Care Center	124245	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	6.63	6.63	0.00	0.00	6.67
Bank (with Drive-Through)	500940	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00	0.00	26.73	26.73	0.00	0.00	26.89
Convenience Market (24 Hour)	8697.78	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.46	0.46	0.00	0.00	0.47
Free-Standing Discount Store	2191.28	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.12	0.12	0.00	0.00	0.12
Gasoline/Service Station	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	241536	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	12.88	12.88	0.00	0.00	12.98
Health Club	122760	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	6.55	6.55	0.00	0.00	6.59
High Turnover (Sit Down Restaurant)	3.66172e+006	0.02	0.18	0.15	0.00		0.00	0.01		0.00	0.01	0.00	195.40	195.40	0.00	0.00	196.59
Medical Office Building	22392	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.19	1.19	0.00	0.00	1.20
Motel	382580	0.00	0.02	0.02	0.00		0.00	0.00		0.00	0.00	0.00	20.42	20.42	0.00	0.00	20.54
Regional Shopping Center	306852	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	16.37	16.37	0.00	0.00	16.47
Single Family Housing	136928	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	7.26	7.26	0.00	0.00	7.30
Supermarket	1.90792e+006	0.01	0.09	0.08	0.00		0.00	0.01		0.00	0.01	0.00	101.81	101.81	0.00	0.00	102.43
User Defined Retail	120285	0.00	0.01	0.00	0.00		0.00	0.00		0.00	0.00	0.00	6.42	6.42	0.00	0.00	6.46
Total		0.03	0.39	0.31	0.00		0.00	0.02		0.00	0.02	0.00	413.15	413.15	0.00	0.00	415.66

5.3 Energy by Land Use - Electricity

Unmitigated

Land Use	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	kWh	tons/yr				Mt/yr			
Apartments Low Rise	36301.7					10.56	0.00	0.00	10.63
Automobile Care Center	78688.5					22.89	0.00	0.00	23.03
Bank (with Drive-Through)	317262					92.28	0.00	0.00	92.86
Convenience Market (24 Hour)	76272.8					22.19	0.00	0.00	22.32
Free-Standing Discount Store	19215.8					5.59	0.00	0.00	5.62
Gasoline/Service Station	0					0.00	0.00	0.00	0.00
General Office Building	295656					86.00	0.00	0.00	86.54
Health Club	77748					22.61	0.00	0.00	22.76
High Turnover (Sit Down Restaurant)	755000					219.61	0.01	0.00	220.98
Medical Office Building	27432					7.98	0.00	0.00	8.03
Motel	134088					39.00	0.00	0.00	39.25
Regional Shopping Center	2.69086e+006					782.69	0.04	0.01	787.60
Single Family Housing	21093.3					6.14	0.00	0.00	6.17
Supermarket	3.28218e+006					954.69	0.04	0.02	960.67
User Defined Retail	76180.5					22.16	0.00	0.00	22.30
Total						2,294.39	0.09	0.03	2,308.76

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Low Rise	36301.7					10.56	0.00	0.00	10.63
Automobile Care Center	78688.5					22.89	0.00	0.00	23.03
Bank (with Drive-Through)	317262					92.28	0.00	0.00	92.86
Convenience Market (24 Hour)	76272.8					22.19	0.00	0.00	22.32
Free-Standing Discount Store	19215.8					5.59	0.00	0.00	5.62
Gasoline/Service Station	0					0.00	0.00	0.00	0.00
General Office Building	299656					86.00	0.00	0.00	86.54
Health Club	77748					22.61	0.00	0.00	22.76
High Turnover (Sit Down Restaurant)	755000					219.61	0.01	0.00	220.98
Medical Office Building	27432					7.98	0.00	0.00	8.03
Motel	134088					39.00	0.00	0.00	39.25
Regional Shopping Center	2.69086e+006					782.69	0.04	0.01	787.60
Single Family Housing	21093.3					6.14	0.00	0.00	6.17
Supermarket	3.28218e+006					954.69	0.04	0.02	960.67
User Defined Retail	76180.5					22.16	0.00	0.00	22.30
Total						2,294.39	0.09	0.03	2,308.76

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.79	0.00	0.08	0.00		0.00	0.01		0.00	0.01	1.38	7.96	9.34	0.00	0.00	9.49
Unmitigated	1.79	0.00	0.08	0.00		0.00	0.01		0.00	0.01	1.38	7.96	9.34	0.00	0.00	9.49
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.41					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.34					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.04	0.00	0.08	0.00		0.00	0.01		0.00	0.01	1.38	7.96	9.34	0.00	0.00	9.49
Landscaping						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.79	0.00	0.08	0.00		0.00	0.01		0.00	0.01	1.38	7.96	9.34	0.00	0.00	9.49

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.41					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	1.34					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.04	0.00	0.08	0.00		0.00	0.01		0.00	0.01	1.38	7.96	9.34	0.00	0.00	9.49
Landscaping						0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.79	0.00	0.08	0.00		0.00	0.01		0.00	0.01	1.38	7.96	9.34	0.00	0.00	9.49

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					176.91	1.09	0.03	209.20
Unmitigated					176.91	1.09	0.03	209.20
Total	NA							

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Low Rise	0.65154 / 0.410754					3.80	0.02	0.00	4.40
Automobile Care Center	0.559829 / 0.362121					3.41	0.02	0.00	3.95
Bank (with Drive-Through)	1.00246 / 0.614411					5.79	0.03	0.00	6.71
Convenience Market (24 Hour)	0.354067 / 0.217009					2.05	0.01	0.00	2.37
Free-Standing Discount Store	0.058887 / 0.0544791					0.51	0.00	0.00	0.59
Gasoline/Service Station	0 / 0					0.00	0.00	0.00	0.00
General Office Building	3.44803 / 2.11331					19.93	0.11	0.00	23.07
Health Club	0.365657 / 0.224744					2.12	0.01	0.00	2.45
High Turnover (Sit Down Restaurant)	4.74423 / 0.437923					19.00	0.15	0.00	23.27
Medical Office Building	0.223865 / 0.0430219					1.00	0.01	0.00	1.20
Motel	0.837103 / 0.0930115					3.48	0.03	0.00	4.24
Regional Shopping Center	12.4886 / 7.55432					72.18	0.38	0.01	83.56
Single Family Housing	0.135462 / 0.123226					1.14	0.01	0.00	1.32
Supermarket	10.0895 / 0.312047					39.33	0.31	0.01	48.42
User Defined Retail	0.525888 / 0.362121					3.17	0.02	0.00	3.65
Total						176.91	1.11	0.02	209.20

Mitigated

Land Use	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	Mgal	tons/yr				MT/yr			
Apartments Low Rise	0.65154 / 0.410754					3.80	0.02	0.00	4.40
Automobile Care Center	0.590829 / 0.362121					3.41	0.02	0.00	3.95
Bank (with Drive-Through)	1.00246 / 0.514411					5.79	0.03	0.00	6.71
Convenience Market (24 Hour)	0.354067 / 0.217009					2.05	0.01	0.00	2.37
Free-Standing Discount Store	0.088987 / 0.0544791					0.51	0.00	0.00	0.59
Gasoline/Service Station	0 / 0					0.00	0.00	0.00	0.00
General Office Building	3.44893 / 2.11331					19.93	0.11	0.00	23.07
Health Club	0.366687 / 0.224744					2.12	0.01	0.00	2.45
High Turnover (Sit Down Restaurant)	4.74423 / 0.332923					19.00	0.15	0.00	23.27
Medical Office Building	0.225855 / 0.0430219					1.00	0.01	0.00	1.20
Motel	0.837103 / 0.0930115					3.48	0.03	0.00	4.24
Regional Shopping Center	12.4886 / 0.55425					72.18	0.38	0.01	83.56
Single Family Housing	0.195462 / 0.123226					1.14	0.01	0.00	1.32
Supermarket	10.0895 / 0.312047					39.33	0.31	0.01	48.42
User Defined Retail	0.525888 / 0.362121					3.17	0.02	0.00	3.65
Total						176.91	1.11	0.02	209.20

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					207.12	12.24	0.00	464.17
Unmitigated					207.12	12.24	0.00	464.17
Total	NA							

8.2 Waste by Land Use

Unmitigated

Land Use	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons	tons/yr				MT/yr			
Apartments Low Rise	4.6					0.93	0.06	0.00	2.09
Automobile Care Center	23.99					4.87	0.29	0.00	10.91
Bank (with Drive-Through)	23.6					4.79	0.28	0.00	10.74
Convenience Market (24 Hour)	14.37					2.92	0.17	0.00	6.54
Free-Standing Discount Store	5.16					1.05	0.06	0.00	2.35
Gasoline/Service Station	5.99					1.09	0.06	0.00	2.45
General Office Building	18.04					3.66	0.22	0.00	8.21
Health Club	35.34					7.17	0.42	0.00	16.08
High Turnover (Sit Down Restaurant)	186					37.76	2.23	0.00	94.61
Medical Office Building	19.44					3.95	0.23	0.00	8.84
Motel	18.07					3.67	0.22	0.00	8.22
Regional Shopping Center	177.03					35.94	2.12	0.00	90.53
Single Family Housing	3.69					0.75	0.04	0.00	1.68
Supermarket	461.63					93.71	5.54	0.00	210.00
User Defined Retail	23.99					4.87	0.29	0.00	10.91
Total						207.13	12.23	0.00	464.16

Mitigated

Land Use	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons	tons/yr				Mt/yr			
Apartments Low Rise	4.6					0.93	0.06	0.00	2.09
Automobile Care Center	23.99					4.87	0.29	0.00	10.91
Bank (with Drive-Through)	23.6					4.79	0.28	0.00	10.74
Convenience Market (24 Hour)	14.37					2.92	0.17	0.00	6.54
Free-Standing Discount Store	5.16					1.05	0.06	0.00	2.35
Gasoline/Service Station	5.39					1.09	0.06	0.00	2.45
General Office Building	18.04					3.66	0.22	0.00	8.21
Health Club	35.34					7.17	0.42	0.00	16.08
High Turnover (Sit Down Restaurant)	186					37.76	2.23	0.00	84.61
Medical Office Building	19.44					3.95	0.23	0.00	8.84
Motel	18.07					3.67	0.22	0.00	8.22
Regional Shopping Center	177.03					35.94	2.12	0.00	80.53
Single Family Housing	3.69					0.75	0.04	0.00	1.68
Supermarket	461.63					93.71	5.54	0.00	210.00
User Defined Retail	23.99					4.87	0.29	0.00	10.91
Total						207.13	12.23	0.00	464.16

9.0 Vegetation

Monterey Park HE - Opportunity Sites - Proposed
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	34	Dwelling Unit
Apartments Low Rise	954	Dwelling Unit
Strip Mall	984,922	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	33		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Actual Acreage
- Construction Phase -
- Off-road Equipment -
- Vehicle Trips -
- Energy Use -
- Water And Wastewater -
- Solid Waste -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
2014	15.01	90.77	122.59	0.25	18.34	4.19	22.09	9.94	4.19	13.56	0.00	24,262.41	0.00	1.35	0.00	24,290.77
2015	13.80	72.05	114.05	0.25	18.05	3.65	21.71	0.77	3.65	4.43	0.00	24,023.45	0.00	1.25	0.00	24,049.68
2016	12.79	66.29	107.23	0.25	18.05	3.34	21.40	0.77	3.34	4.12	0.00	23,856.85	0.00	1.16	0.00	23,881.27
2017	11.83	60.86	100.60	0.25	18.05	3.04	21.09	0.77	3.04	3.81	0.00	23,624.94	0.00	1.08	0.00	23,647.61
2018	10.96	55.97	94.65	0.25	18.05	2.76	20.82	0.27	2.64	2.92	0.00	23,400.58	0.00	1.00	0.00	23,421.65
2019	411.05	51.72	89.81	0.25	18.05	2.52	20.57	0.27	2.40	2.67	0.00	23,188.85	0.00	0.94	0.00	23,208.51
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2014	15.01	90.77	122.59	0.25	18.08	4.19	21.69	9.94	4.19	13.56	0.00	24,262.41	0.00	1.35	0.00	24,290.77
2015	13.80	72.05	114.05	0.25	0.77	3.65	4.43	0.77	3.65	4.43	0.00	24,023.45	0.00	1.25	0.00	24,049.68
2016	12.79	66.29	107.23	0.25	0.77	3.34	4.12	0.77	3.34	4.12	0.00	23,856.85	0.00	1.16	0.00	23,881.27
2017	11.83	60.86	100.60	0.25	0.77	3.04	3.81	0.77	3.04	3.81	0.00	23,624.94	0.00	1.08	0.00	23,647.61
2018	10.96	55.97	94.65	0.25	0.77	2.76	3.54	0.27	2.64	2.92	0.00	23,400.58	0.00	1.00	0.00	23,421.65
2019	411.05	51.72	89.81	0.25	0.77	2.52	3.29	0.27	2.40	2.67	0.00	23,188.85	0.00	0.94	0.00	23,208.51
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Area	155.69	5.77	409.69	0.79		0.00	52.70		0.00	52.69	6,972.05	17,932.55		27.74	0.43	25,619.49
Energy	0.63	5.43	2.50	0.03		0.00	0.44		0.00	0.44		6,897.13		0.13	0.13	6,939.10
Mobile	171.61	390.78	1,482.02	3.93	411.17	19.96	431.13	5.84	19.26	25.10		336,179.15		12.23		336,435.95
Total	327.93	401.98	1,894.21	4.75	411.17	19.96	484.27	5.84	19.26	78.23	6,972.05	361,008.83		40.10	0.56	368,994.54

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Area	155.69	5.77	409.69	0.79		0.00	52.70		0.00	52.69	6,972.05	17,932.55		27.74	0.43	25,619.49
Energy	0.63	5.43	2.50	0.03		0.00	0.44		0.00	0.44		6,897.13		0.13	0.13	6,939.10
Mobile	171.61	390.78	1,482.02	3.93	411.17	19.96	431.13	5.84	19.26	25.10		336,179.15		12.23		336,435.95
Total	327.93	401.98	1,894.21	4.75	411.17	19.96	484.27	5.84	19.26	78.23	6,972.05	361,008.83		40.10	0.56	368,994.54

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
Off-Road	8.39	66.18	41.03	0.07		3.21	3.21		3.21	3.21		7,510.81		0.75		7,526.57
Total	8.39	66.18	41.03	0.07		3.21	3.21		3.21	3.21		7,510.81		0.75		7,526.57

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.09	0.09	1.08	0.00	0.23	0.01	0.24	0.01	0.01	0.02		189.61		0.01		189.84
Total	0.09	0.09	1.08	0.00	0.23	0.01	0.24	0.01	0.01	0.02		189.61		0.01		189.84

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
Off-Road	8.39	66.18	41.03	0.07		3.21	3.21		3.21	3.21	0.00	7,510.81		0.75		7,526.57
Total	8.39	66.18	41.03	0.07		3.21	3.21		3.21	3.21	0.00	7,510.81		0.75		7,526.57

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.09	0.09	1.08	0.00	0.01	0.01	0.02	0.01	0.01	0.02		189.61		0.01		189.84
Total	0.09	0.09	1.08	0.00	0.01	0.01	0.02	0.01	0.01	0.02		189.61		0.01		189.84

3.3 Site Preparation - 2014

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61		7,997.69		0.84		8,015.31
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54		7,997.69		0.84		8,015.31

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.11	0.11	1.29	0.00	0.28	0.01	0.29	0.01	0.01	0.02		227.54		0.01		227.81
Total	0.11	0.11	1.29	0.00	0.28	0.01	0.29	0.01	0.01	0.02		227.54		0.01		227.81

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61	0.00	7,997.69		0.84		8,015.31
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54	0.00	7,997.69		0.84		8,015.31

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.11	0.11	1.29	0.00	0.01	0.01	0.02	0.01	0.01	0.02		227.54		0.01		227.81
Total	0.11	0.11	1.29	0.00	0.01	0.01	0.02	0.01	0.01	0.02		227.54		0.01		227.81

3.4 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18		10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49		10,856.65		1.00		10,877.72

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.12	0.12	1.44	0.00	0.31	0.01	0.32	0.01	0.01	0.02		252.82		0.01		253.12
Total	0.12	0.12	1.44	0.00	0.31	0.01	0.32	0.01	0.01	0.02		252.82		0.01		253.12

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18	0.00	10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49	0.00	10,856.65		1.00		10,877.72

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.12	0.12	1.44	0.00	0.01	0.01	0.02	0.01	0.01	0.02		252.82		0.01		253.12
Total	0.12	0.12	1.44	0.00	0.01	0.01	0.02	0.01	0.01	0.02		252.82		0.01		253.12

3.5 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.94	41.06	26.54	0.07	2.49	1.47	3.96	0.19	1.47	1.66		7,403.98		0.20		7,408.09
Worker	6.34	6.13	72.85	0.13	15.56	0.55	16.11	0.58	0.55	1.13		12,817.81		0.73		12,833.17
Total	10.28	47.19	99.39	0.20	18.05	2.02	20.07	0.77	2.02	2.79		20,221.79		0.93		20,241.28

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.94	41.06	26.54	0.07	0.19	1.47	1.66	0.19	1.47	1.66		7,403.98		0.20		7,408.09
Worker	6.34	6.13	72.85	0.13	0.58	0.55	1.13	0.58	0.55	1.13		12,817.81		0.73		12,833.17
Total	10.28	47.19	99.39	0.20	0.77	2.02	2.79	0.77	2.02	2.79		20,221.79		0.93		20,241.28

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80		4,040.61		0.39		4,048.81

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.55	37.29	23.99	0.07	2.49	1.30	3.79	0.19	1.30	1.50		7,422.26		0.18		7,425.95
Worker	5.90	5.61	67.08	0.13	15.56	0.56	16.12	0.58	0.56	1.14		12,560.57		0.68		12,574.91
Total	9.45	42.90	91.07	0.20	18.05	1.86	19.91	0.77	1.86	2.64		19,982.83		0.86		20,000.88

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.55	37.29	23.99	0.07	0.19	1.30	1.50	0.19	1.30	1.50		7,422.26		0.18		7,425.95
Worker	5.90	5.61	67.08	0.13	0.58	0.56	1.14	0.58	0.56	1.14		12,560.57		0.68		12,574.91
Total	9.45	42.90	91.07	0.20	0.77	1.86	2.64	0.77	1.86	2.64		19,982.83		0.86		20,000.88

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.25	34.60	22.04	0.07	2.49	1.19	3.68	0.19	1.19	1.38		7,438.05		0.16		7,441.42
Worker	5.56	5.17	62.39	0.13	15.56	0.57	16.14	0.58	0.57	1.15		12,378.19		0.65		12,391.76
Total	8.81	39.77	84.43	0.20	18.05	1.76	19.82	0.77	1.76	2.53		19,816.24		0.81		19,833.18

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.25	34.60	22.04	0.07	0.19	1.19	1.38	0.19	1.19	1.38		7,438.05		0.16		7,441.42
Worker	5.56	5.17	62.39	0.13	0.58	0.57	1.15	0.58	0.57	1.15		12,378.19		0.65		12,391.76
Total	8.81	39.77	84.43	0.20	0.77	1.76	2.53	0.77	1.76	2.53		19,816.24		0.81		19,833.18

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39		4,040.61		0.33		4,047.45
Total	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39		4,040.61		0.33		4,047.45

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.98	32.04	20.32	0.07	2.49	1.08	3.57	0.19	1.08	1.27		7,453.16		0.15		7,456.25
Worker	5.19	4.74	57.64	0.13	15.56	0.58	16.14	0.58	0.58	1.16		12,131.17		0.61		12,143.91
Total	8.17	36.78	77.96	0.20	18.05	1.66	19.71	0.77	1.66	2.43		19,584.33		0.76		19,600.16

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39	0.00	4,040.61		0.33		4,047.45
Total	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39	0.00	4,040.61		0.33		4,047.45

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.98	32.04	20.32	0.07	0.19	1.08	1.27	0.19	1.08	1.27		7,453.16		0.15		7,456.25
Worker	5.19	4.74	57.64	0.13	0.58	0.58	1.16	0.58	0.58	1.16		12,131.17		0.61		12,143.91
Total	8.17	36.78	77.96	0.20	0.77	1.66	2.43	0.77	1.66	2.43		19,584.33		0.76		19,600.16

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.34	21.78	22.50	0.04		1.20	1.20		1.20	1.20		4,040.62		0.30		4,046.87
Total	3.34	21.78	22.50	0.04		1.20	1.20		1.20	1.20		4,040.62		0.30		4,046.87

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.76	29.85	18.89	0.07	2.49	0.98	3.47	0.06	0.90	0.97		7,467.19		0.14		7,470.04
Worker	4.86	4.34	53.27	0.13	15.56	0.58	16.15	0.21	0.54	0.75		11,892.77		0.57		11,904.74
Total	7.62	34.19	72.16	0.20	18.05	1.56	19.62	0.27	1.44	1.72		19,359.96		0.71		19,374.78

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.34	21.78	22.50	0.04		1.20	1.20		1.20	1.20	0.00	4,040.62		0.30		4,046.87
Total	3.34	21.78	22.50	0.04		1.20	1.20		1.20	1.20	0.00	4,040.62		0.30		4,046.87

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.76	29.85	18.89	0.07	0.19	0.98	1.17	0.06	0.90	0.97		7,467.19		0.14		7,470.04
Worker	4.86	4.34	53.27	0.13	0.58	0.58	1.17	0.21	0.54	0.75		11,892.77		0.57		11,904.74
Total	7.62	34.19	72.16	0.20	0.77	1.56	2.34	0.27	1.44	1.72		19,359.96		0.71		19,374.78

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.05	19.73	22.36	0.04		1.03	1.03		1.03	1.03		4,040.62		0.27		4,046.36
Total	3.05	19.73	22.36	0.04		1.03	1.03		1.03	1.03		4,040.62		0.27		4,046.36

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.57	27.98	17.72	0.07	2.49	0.90	3.39	0.06	0.83	0.89		7,480.58		0.13		7,483.22
Worker	4.62	4.01	49.73	0.13	15.56	0.59	16.15	0.21	0.55	0.76		11,667.66		0.54		11,678.93
Total	7.19	31.99	67.45	0.20	18.05	1.49	19.54	0.27	1.38	1.65		19,148.24		0.67		19,162.15

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.05	19.73	22.36	0.04		1.03	1.03		1.03	1.03	0.00	4,040.62		0.27		4,046.36
Total	3.05	19.73	22.36	0.04		1.03	1.03		1.03	1.03	0.00	4,040.62		0.27		4,046.36

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.57	27.98	17.72	0.07	0.19	0.90	1.09	0.06	0.83	0.89		7,480.58		0.13		7,483.22
Worker	4.62	4.01	49.73	0.13	0.58	0.59	1.17	0.21	0.55	0.76		11,667.66		0.54		11,678.93
Total	7.19	31.99	67.45	0.20	0.77	1.49	2.26	0.27	1.38	1.65		19,148.24		0.67		19,162.15

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	23.14	19.98	0.03		1.82	1.82		1.82	1.82		2,917.64		0.34		2,924.71
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	3.75	23.14	19.98	0.03		1.82	1.82		1.82	1.82		2,917.64		0.34		2,924.71

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.07	0.06	0.74	0.00	0.23	0.01	0.24	0.00	0.01	0.01		172.60		0.01		172.77
Total	0.07	0.06	0.74	0.00	0.23	0.01	0.24	0.00	0.01	0.01		172.60		0.01		172.77

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	23.14	19.98	0.03		1.82	1.82		1.82	1.82	0.00	2,917.64		0.34		2,924.71
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	3.75	23.14	19.98	0.03		1.82	1.82		1.82	1.82	0.00	2,917.64		0.34		2,924.71

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.07	0.06	0.74	0.00	0.01	0.01	0.02	0.00	0.01	0.01		172.60		0.01		172.77
Total	0.07	0.06	0.74	0.00	0.01	0.01	0.02	0.00	0.01	0.01		172.60		0.01		172.77

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	409.86					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69
Total	410.13	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.93	0.80	9.96	0.03	3.12	0.12	3.23	0.04	0.11	0.15		2,335.83		0.11		2,338.09
Total	0.93	0.80	9.96	0.03	3.12	0.12	3.23	0.04	0.11	0.15		2,335.83		0.11		2,338.09

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	409.86					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.83	1.84	0.00		0.13	0.13		0.13	0.13	0.00	281.19		0.02		281.69
Total	410.13	1.83	1.84	0.00		0.13	0.13		0.13	0.13	0.00	281.19		0.02		281.69

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.93	0.80	9.96	0.03	0.12	0.12	0.23	0.04	0.11	0.15		2,335.83		0.11		2,338.09
Total	0.93	0.80	9.96	0.03	0.12	0.12	0.23	0.04	0.11	0.15		2,335.83		0.11		2,338.09

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	171.61	390.78	1,482.02	3.93	411.17	19.96	431.13	5.84	19.26	25.10		336,179.15		12.23		336,435.95
Unmitigated	171.61	390.78	1,482.02	3.93	411.17	19.96	431.13	5.84	19.26	25.10		336,179.15		12.23		336,435.95
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Apartments Low Rise	6,286.86	6,830.64	5,790.78	20,961,551	20,961,551
Single Family Housing	325.38	342.72	298.18	1,079,011	1,079,011
Strip Mall	43,651.74	41,406.12	20,121.96	91,828,812	91,828,812
Total	50,263.98	48,579.48	26,210.92	113,869,374	113,869,374

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.63	5.43	2.50	0.03		0.00	0.44		0.00	0.44		6,897.13		0.13	0.13	6,939.10
Natural Gas Unmitigated	0.63	5.43	2.50	0.03		0.00	0.44		0.00	0.44		6,897.13		0.13	0.13	6,939.10
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBtU	lb/day															
Apartments Low Rise	50181.7	0.54	4.62	1.97	0.03		0.00	0.37		0.00	0.37		5,903.72		0.11	0.11	5,939.65
Single Family Housing	3856.62	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03		453.72		0.01	0.01	456.48
Strip Mall	4587.31	0.05	0.45	0.38	0.00		0.00	0.03		0.00	0.03		539.68		0.01	0.01	542.97
Total		0.63	5.43	2.50	0.03		0.00	0.43		0.00	0.43		6,897.12		0.13	0.13	6,939.10

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBtU	lb/day															
Apartments Low Rise	50.1817	0.54	4.62	1.97	0.03		0.00	0.37		0.00	0.37		5,903.72		0.11	0.11	5,939.65
Single Family Housing	3.85662	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03		453.72		0.01	0.01	456.48
Strip Mall	4.58731	0.05	0.45	0.38	0.00		0.00	0.03		0.00	0.03		539.68		0.01	0.01	542.97
Total		0.63	5.43	2.50	0.03		0.00	0.43		0.00	0.43		6,897.12		0.13	0.13	6,939.10

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Mitigated	155.69	5.77	409.69	0.79		0.00	52.70		0.00	52.69	6,972.05	17,932.55		27.74	0.43	25,619.49
Unmitigated	155.69	5.77	409.69	0.79		0.00	52.70		0.00	52.69	6,972.05	17,932.55		27.74	0.43	25,619.49
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day															
Architectural Coating	8.42					0.00	0.00		0.00	0.00						0.00
Consumer Products	39.60					0.00	0.00		0.00	0.00						0.00
Hearth	105.16	4.82	327.04	0.79		0.00	52.24		0.00	52.23	6,972.05	17,784.00		27.60	0.43	25,467.91
Landscaping	2.50	0.95	82.65	0.00		0.00	0.45		0.00	0.45		148.55		0.14		151.57
Total	155.68	5.77	409.69	0.79		0.00	52.69		0.00	52.68	6,972.05	17,932.55		27.74	0.43	25,619.48

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day															
Architectural Coating	8.42					0.00	0.00		0.00	0.00						0.00
Consumer Products	39.60					0.00	0.00		0.00	0.00						0.00
Hearth	105.16	4.82	327.04	0.79		0.00	52.24		0.00	52.23	6,972.05	17,784.00		27.60	0.43	25,467.91
Landscaping	2.50	0.95	82.65	0.00		0.00	0.45		0.00	0.45		148.55		0.14		151.57
Total	155.68	5.77	409.69	0.79		0.00	52.69		0.00	52.68	6,972.05	17,932.55		27.74	0.43	25,619.48

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

**Monterey Park HE - Opportunity Sites - Proposed
Los Angeles-South Coast County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	34	Dwelling Unit
Apartments Low Rise	954	Dwelling Unit
Strip Mall	984,922	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	33		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Actual Acreage
- Construction Phase -
- Off-road Equipment -
- Vehicle Trips -
- Energy Use -
- Water And Wastewater -
- Solid Waste -

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

Year	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2014	15.75	90.79	122.17	0.23	18.34	4.19	22.12	9.94	4.19	13.56	0.00	23,265.53	0.00	1.33	0.00	23,293.48
2015	14.48	74.47	113.68	0.23	18.05	3.68	21.73	0.77	3.68	4.45	0.00	23,042.83	0.00	1.23	0.00	23,068.69
2016	13.43	68.40	106.89	0.24	18.05	3.37	21.42	0.77	3.37	4.14	0.00	22,888.44	0.00	1.14	0.00	22,912.46
2017	12.43	62.69	100.30	0.24	18.05	3.06	21.11	0.77	3.06	3.83	0.00	22,671.97	0.00	1.06	0.00	22,694.21
2018	11.53	57.54	94.41	0.23	18.05	2.78	20.84	0.27	2.66	2.93	0.00	22,462.21	0.00	0.98	0.00	22,482.83
2019	411.13	53.07	89.66	0.23	18.05	2.53	20.59	0.27	2.42	2.69	0.00	22,264.18	0.00	0.91	0.00	22,283.37
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2014	15.75	90.79	122.17	0.23	18.08	4.19	21.69	9.94	4.19	13.56	0.00	23,285.53	0.00	1.33	0.00	23,293.48
2015	14.48	74.47	113.68	0.23	0.77	3.68	4.45	0.77	3.68	4.45	0.00	23,042.83	0.00	1.23	0.00	23,068.69
2016	13.43	68.40	106.89	0.24	0.77	3.37	4.14	0.77	3.37	4.14	0.00	22,888.44	0.00	1.14	0.00	22,912.46
2017	12.43	62.69	100.30	0.24	0.77	3.06	3.83	0.77	3.06	3.83	0.00	22,671.97	0.00	1.06	0.00	22,694.21
2018	11.53	57.54	94.41	0.23	0.77	2.78	3.55	0.27	2.66	2.93	0.00	22,462.21	0.00	0.98	0.00	22,482.83
2019	411.13	53.07	89.66	0.23	0.77	2.53	3.31	0.27	2.42	2.69	0.00	22,264.18	0.00	0.91	0.00	22,283.37
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	155.69	5.77	409.69	0.79		0.00	52.70		0.00	52.69	6,972.05	17,932.55		27.74	0.43	25,619.49
Energy	0.63	5.43	2.50	0.03		0.00	0.44		0.00	0.44		6,897.13		0.13	0.13	6,939.10
Mobile	181.88	411.97	1,482.08	3.69	411.17	20.09	431.26	5.84	19.39	25.23		316,421.65		12.58		316,685.73
Total	338.20	423.17	1,894.27	4.51	411.17	20.09	484.40	5.84	19.39	78.36	6,972.05	341,251.33		40.45	0.56	349,244.32

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	155.69	5.77	409.69	0.79		0.00	52.70		0.00	52.69	6,972.05	17,932.55		27.74	0.43	25,619.49
Energy	0.63	5.43	2.50	0.03		0.00	0.44		0.00	0.44		6,897.13		0.13	0.13	6,939.10
Mobile	181.88	411.97	1,482.08	3.69	411.17	20.09	431.26	5.84	19.39	25.23		316,421.65		12.58		316,685.73
Total	338.20	423.17	1,894.27	4.51	411.17	20.09	484.40	5.84	19.39	78.36	6,972.05	341,251.33		40.45	0.56	349,244.32

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	8.39	66.18	41.03	0.07		3.21	3.21		3.21	3.21		7,510.81		0.75		7,526.57
Total	8.39	66.18	41.03	0.07		3.21	3.21		3.21	3.21		7,510.81		0.75		7,526.57

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.10	0.11	1.02	0.00	0.23	0.01	0.24	0.01	0.01	0.02			175.66	0.01		175.88
Total	0.10	0.11	1.02	0.00	0.23	0.01	0.24	0.01	0.01	0.02			175.66	0.01		175.88

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	8.39	66.18	41.03	0.07		3.21	3.21		3.21	3.21	0.00	7,510.81		0.75		7,526.57
Total	8.39	66.18	41.03	0.07		3.21	3.21		3.21	3.21	0.00	7,510.81		0.75		7,526.57

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.10	0.11	1.02	0.00	0.01	0.01	0.02	0.01	0.01	0.02			175.66	0.01		175.88
Total	0.10	0.11	1.02	0.00	0.01	0.01	0.02	0.01	0.01	0.02			175.66	0.01		175.88

3.3 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61	0.00	7,997.69		0.84		8,015.31
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54		7,997.69		0.84		8,015.31

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.12	0.13	1.22	0.00	0.28	0.01	0.29	0.01	0.01	0.02			210.79	0.01		211.06
Total	0.12	0.13	1.22	0.00	0.28	0.01	0.29	0.01	0.01	0.02			210.79	0.01		211.06

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	9.37	74.88	43.05	0.07		3.61	3.61		3.61	3.61	0.00	7,997.69		0.84		8,015.31
Total	9.37	74.88	43.05	0.07	18.07	3.61	21.68	9.93	3.61	13.54	0.00	7,997.69		0.84		8,015.31

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.12	0.13	1.22	0.00	0.01	0.01	0.02	0.01	0.01	0.02		210.79		0.01		211.06
Total	0.12	0.13	1.22	0.00	0.01	0.01	0.02	0.01	0.01	0.02		210.79		0.01		211.06

3.4 Grading - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18		10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49		10,856.65		1.00		10,877.72

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.14	0.14	1.36	0.00	0.31	0.01	0.32	0.01	0.01	0.02		234.22		0.01		234.51
Total	0.14	0.14	1.36	0.00	0.31	0.01	0.32	0.01	0.01	0.02		234.22		0.01		234.51

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.67	0.00	8.67	3.31	0.00	3.31						0.00
Off-Road	11.22	90.65	50.83	0.10		4.18	4.18		4.18	4.18	0.00	10,856.65		1.00		10,877.72
Total	11.22	90.65	50.83	0.10	8.67	4.18	12.85	3.31	4.18	7.49	0.00	10,856.65		1.00		10,877.72

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.14	0.14	1.36	0.00	0.01	0.01	0.02	0.01	0.01	0.02		234.22		0.01		234.51
Total	0.14	0.14	1.36	0.00	0.01	0.01	0.02	0.01	0.01	0.02		234.22		0.01		234.51

3.5 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02		4,040.61		0.42		4,049.51

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Vendor	4.14	42.88	30.10	0.07	2.49	1.49	3.98	0.19	1.49	1.68		7,350.19		0.21		7,354.51
Worker	6.87	7.13	68.87	0.12	15.56	0.55	16.11	0.58	0.55	1.13		11,874.72		0.70		11,889.47
Total	11.01	50.01	98.97	0.19	18.05	2.04	20.09	0.77	2.04	2.81		19,224.91		0.91		19,243.98

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51
Total	4.74	32.06	23.20	0.04		2.02	2.02		2.02	2.02	0.00	4,040.61		0.42		4,049.51

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Vendor	4.14	42.88	30.10	0.07	0.19	1.49	1.68	0.19	1.49	1.68		7,350.19		0.21		7,354.51
Worker	6.87	7.13	68.87	0.12	0.58	0.55	1.13	0.58	0.55	1.13		11,874.72		0.70		11,889.47
Total	11.01	50.01	98.97	0.19	0.77	2.04	2.81	0.77	2.04	2.81		19,224.91		0.91		19,243.98

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Vendor	3.74	38.79	27.50	0.07	2.49	1.33	3.82	0.19	1.33	1.52		7,366.85		0.18		7,370.74
Worker	6.39	6.52	63.20	0.12	15.56	0.56	16.12	0.58	0.56	1.14		11,635.37		0.66		11,649.14
Total	10.13	45.31	90.70	0.19	18.05	1.89	19.94	0.77	1.89	2.66		19,002.22		0.84		19,019.88

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81
Total	4.34	29.16	22.98	0.04		1.80	1.80		1.80	1.80	0.00	4,040.61		0.39		4,048.81

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.74	38.79	27.50	0.07	0.19	1.33	1.52	0.19	1.33	1.52		7,366.85		0.19		7,370.74
Worker	6.39	6.52	63.20	0.12	0.58	0.56	1.14	0.58	0.56	1.14		11,635.37		0.66		11,649.14
Total	10.13	45.31	90.70	0.19	0.77	1.89	2.66	0.77	1.89	2.66		19,002.22		0.84		19,019.88

3.5 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58		4,040.61		0.36		4,048.10

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.43	35.87	25.50	0.07	2.49	1.21	3.70	0.19	1.21	1.40		7,381.11		0.17		7,384.66
Worker	6.02	6.01	58.58	0.12	15.56	0.57	16.14	0.58	0.57	1.15		11,466.71		0.62		11,479.70
Total	9.45	41.88	84.08	0.19	18.05	1.78	19.84	0.77	1.78	2.55		18,847.82		0.79		18,864.36

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10
Total	3.99	26.52	22.80	0.04		1.58	1.58		1.58	1.58	0.00	4,040.61		0.36		4,048.10

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.43	35.87	25.50	0.07	0.19	1.21	1.40	0.19	1.21	1.40		7,381.11		0.17		7,384.66
Worker	6.02	6.01	58.58	0.12	0.58	0.57	1.15	0.58	0.57	1.15		11,466.71		0.62		11,479.70
Total	9.45	41.88	84.08	0.19	0.77	1.78	2.55	0.77	1.78	2.55		18,847.82		0.79		18,864.36

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39		4,040.61		0.33		4,047.45
Total	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39		4,040.61		0.33		4,047.45

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.15	33.09	23.73	0.07	2.49	1.10	3.59	0.19	1.10	1.29		7,394.83		0.16		7,398.08
Worker	5.63	5.51	53.93	0.12	15.56	0.58	16.14	0.58	0.58	1.16		11,236.53		0.58		11,248.67
Total	8.78	38.60	77.66	0.19	18.05	1.68	19.73	0.77	1.68	2.45		18,631.36		0.74		18,646.75

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39	0.00	4,040.61		0.33		4,047.45
Total	3.66	24.08	22.64	0.04		1.39	1.39		1.39	1.39	0.00	4,040.61		0.33		4,047.45

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	3.15	33.09	23.73	0.07	0.19	1.10	1.29	0.19	1.10	1.29		7,394.83		0.16		7,398.08
Worker	5.63	5.51	53.93	0.12	0.58	0.58	1.16	0.58	0.58	1.16		11,236.53		0.58		11,248.67
Total	8.78	38.60	77.66	0.19	0.77	1.68	2.45	0.77	1.68	2.45		18,631.36		0.74		18,646.75

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.34	21.78	22.50	0.04		1.20	1.20		1.20	1.20		4,040.62		0.30		4,046.87
Total	3.34	21.78	22.50	0.04		1.20	1.20		1.20	1.20		4,040.62		0.30		4,046.87

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.92	30.71	22.24	0.07	2.49	1.00	3.49	0.06	0.92	0.98		7,407.52		0.14		7,410.52
Worker	5.27	5.05	49.67	0.12	15.56	0.58	16.15	0.21	0.54	0.75		11,014.07		0.54		11,025.44
Total	8.19	35.76	71.91	0.19	18.05	1.58	19.64	0.27	1.46	1.73		18,421.59		0.68		18,435.96

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.34	21.78	22.50	0.04		1.20	1.20		1.20	1.20	0.00	4,040.62		0.30		4,046.87
Total	3.34	21.78	22.50	0.04		1.20	1.20		1.20	1.20	0.00	4,040.62		0.30		4,046.87

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.92	30.71	22.24	0.07	0.19	1.00	1.19	0.06	0.92	0.98		7,407.52		0.14		7,410.52
Worker	5.27	5.05	49.67	0.12	0.58	0.58	1.17	0.21	0.54	0.75		11,014.07		0.54		11,025.44
Total	8.19	35.76	71.91	0.19	0.77	1.58	2.36	0.27	1.46	1.73		18,421.59		0.68		18,435.96

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.05	19.73	22.36	0.04		1.03	1.03		1.03	1.03		4,040.62		0.27		4,046.36
Total	3.05	19.73	22.36	0.04		1.03	1.03		1.03	1.03		4,040.62		0.27		4,046.36

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.72	28.67	21.03	0.07	2.49	0.91	3.40	0.06	0.84	0.90		7,419.57		0.13		7,422.36
Worker	5.01	4.66	46.28	0.12	15.56	0.59	16.15	0.21	0.55	0.76		10,803.99		0.51		10,814.65
Total	7.73	33.33	67.31	0.19	18.05	1.50	19.55	0.27	1.39	1.66		18,223.56		0.64		18,237.01

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.05	19.73	22.36	0.04		1.03	1.03		1.03	1.03	0.00	4,040.62		0.27		4,046.36
Total	3.05	19.73	22.36	0.04		1.03	1.03		1.03	1.03	0.00	4,040.62		0.27		4,046.36

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	2.72	28.67	21.03	0.07	0.19	0.91	1.11	0.06	0.84	0.90		7,419.57		0.13		7,422.36
Worker	5.01	4.66	46.28	0.12	0.58	0.59	1.17	0.21	0.55	0.76		10,803.99		0.51		10,814.65
Total	7.73	33.33	67.31	0.19	0.77	1.50	2.28	0.27	1.39	1.66		18,223.56		0.64		18,237.01

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.75	23.14	19.98	0.03		1.82	1.82		1.82	1.82		2,917.64		0.34		2,924.71
Paving	0.00					0.00	0.00		0.00	0.00						0.00
Total	3.75	23.14	19.98	0.03		1.82	1.82		1.82	1.82		2,917.64		0.34		2,924.71

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00			0.00
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
Worker	0.07	0.07	0.68	0.00	0.23	0.01	0.24	0.00	0.01	0.01		159.82		0.01			159.98
Total	0.07	0.07	0.68	0.00	0.23	0.01	0.24	0.00	0.01	0.01		159.82		0.01			159.98

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	3.75	23.14	19.98	0.03		1.82	1.82		1.82	1.82	0.00	2,917.64		0.34		2,924.71	
Paving	0.00					0.00	0.00		0.00	0.00							0.00
Total	3.75	23.14	19.98	0.03		1.82	1.82		1.82	1.82	0.00	2,917.64		0.34		2,924.71	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	0.07	0.07	0.68	0.00	0.01	0.01	0.02	0.00	0.01	0.01		159.82		0.01		159.98
Total	0.07	0.07	0.68	0.00	0.01	0.01	0.02	0.00	0.01	0.01		159.82		0.01		159.98

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	409.86					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69
Total	410.13	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	1.00	0.93	9.26	0.02	3.12	0.12	3.23	0.04	0.11	0.15		2,162.93		0.10		2,165.06
Total	1.00	0.93	9.26	0.02	3.12	0.12	3.23	0.04	0.11	0.15		2,162.93		0.10		2,165.06

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	409.86					0.00	0.00		0.00	0.00						0.00
Off-Road	0.27	1.83	1.84	0.00		0.13	0.13		0.13	0.13		281.19		0.02		281.69
Total	410.13	1.83	1.84	0.00		0.13	0.13		0.13	0.13	0.00	281.19		0.02		281.69

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
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
Worker	1.00	0.93	9.26	0.02	0.12	0.12	0.23	0.04	0.11	0.15		2,162.93		0.10		2,165.06
Total	1.00	0.93	9.26	0.02	0.12	0.12	0.23	0.04	0.11	0.15		2,162.93		0.10		2,165.06

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	181.88	411.97	1,482.08	3.69	411.17	20.09	431.26	5.84	19.39	25.23		316,421.65		12.58		316,685.73
Unmitigated	181.88	411.97	1,482.08	3.69	411.17	20.09	431.26	5.84	19.39	25.23		316,421.65		12.58		316,685.73
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Apartments Low Rise	6,286.86	6,830.64	5,790.78	20,961,551	20,961,551
Single Family Housing	325.38	342.72	298.18	1,079,011	1,079,011
Strip Mall	43,651.74	41,406.12	20,121.96	91,828,812	91,828,812
Total	50,263.98	48,579.48	26,210.92	113,869,374	113,869,374

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.63	5.43	2.50	0.03		0.00	0.44		0.00	0.44		6,897.13		0.13	0.13	6,939.10
Natural Gas Unmitigated	0.63	5.43	2.50	0.03		0.00	0.44		0.00	0.44		6,897.13		0.13	0.13	6,939.10
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBtU	lb/day															
Apartments Low Rise	50181.7	0.54	4.62	1.97	0.03		0.00	0.37		0.00	0.37		5,903.72		0.11	0.11	5,939.65
Single Family Housing	3856.62	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03		453.72		0.01	0.01	456.48
Strip Mall	4587.31	0.05	0.45	0.38	0.00		0.00	0.03		0.00	0.03		539.68		0.01	0.01	542.97
Total		0.63	5.43	2.50	0.03		0.00	0.43		0.00	0.43		6,897.12		0.13	0.13	6,939.10

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBtU	lb/day															
Apartments Low Rise	50.1817	0.54	4.62	1.97	0.03		0.00	0.37		0.00	0.37		5,903.72		0.11	0.11	5,939.65
Single Family Housing	3.85662	0.04	0.36	0.15	0.00		0.00	0.03		0.00	0.03		453.72		0.01	0.01	456.48
Strip Mall	4.58731	0.05	0.45	0.38	0.00		0.00	0.03		0.00	0.03		539.68		0.01	0.01	542.97
Total		0.63	5.43	2.50	0.03		0.00	0.43		0.00	0.43		6,897.12		0.13	0.13	6,939.10

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Mitigated	155.69	5.77	409.69	0.79	0.00	52.70		0.00	52.69	6,972.05	17,932.55		27.74	0.43	25,619.49	
Unmitigated	155.69	5.77	409.69	0.79	0.00	52.70		0.00	52.69	6,972.05	17,932.55		27.74	0.43	25,619.49	
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day															
Architectural Coating	8.42				0.00	0.00		0.00	0.00							0.00
Consumer Products	39.60				0.00	0.00		0.00	0.00							0.00
Hearth	105.16	4.82	327.04	0.79	0.00	52.24		0.00	52.23	6,972.05	17,784.00		27.60	0.43	25,467.91	
Landscaping	2.50	0.95	82.65	0.00	0.00	0.45		0.00	0.45		148.55		0.14		151.57	
Total	155.68	5.77	409.69	0.79	0.00	52.69		0.00	52.68	6,972.05	17,932.55		27.74	0.43	25,619.48	

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	lb/day										lb/day						
Architectural Coating	8.42					0.00	0.00		0.00	0.00							0.00
Consumer Products	39.60					0.00	0.00		0.00	0.00							0.00
Hearth	105.16	4.82	327.04	0.79		0.00	52.24		0.00	52.23	6,972.05	17,784.00		27.60	0.43		25,467.91
Landscaping	2.50	0.95	82.65	0.00		0.00	0.45		0.00	0.45		148.55		0.14			151.57
Total	155.68	5.77	409.69	0.79		0.00	52.69		0.00	52.68	6,972.05	17,932.55		27.74	0.43		25,619.48

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

**Monterey Park HE - Opportunity Sites - Proposed
Los Angeles-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
Single Family Housing	34	Dwelling Unit
Apartments Low Rise	954	Dwelling Unit
Strip Mall	984,922	1000sqft

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Utility Company	Southern California Edison
Climate Zone	9	Precipitation Freq (Days)	33		

1.3 User Entered Comments

- Project Characteristics -
- Land Use - Actual Acreage
- Construction Phase -
- Off-road Equipment -
- Vehicle Trips -
- Energy Use -
- Water And Wastewater -
- Solid Waste -

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										Mt/yr					
2014	1.42	10.44	7.74	0.01	1.20	0.50	1.70	0.41	0.50	0.91	0.00	1,385.08	1,385.08	0.12	0.00	1,387.49
2015	1.81	9.42	14.86	0.03	2.11	0.48	2.59	0.10	0.48	0.58	0.00	2,764.28	2,764.28	0.15	0.00	2,767.36
2016	1.68	8.66	13.96	0.03	2.11	0.44	2.55	0.10	0.44	0.54	0.00	2,745.60	2,745.60	0.14	0.00	2,748.46
2017	1.55	7.92	13.05	0.03	2.10	0.40	2.50	0.10	0.40	0.50	0.00	2,709.06	2,709.06	0.13	0.00	2,711.69
2018	1.44	7.31	12.32	0.03	2.11	0.36	2.47	0.04	0.35	0.38	0.00	2,694.18	2,694.18	0.12	0.00	2,696.63
2019	15.69	1.64	2.36	0.01	0.32	0.11	0.43	0.01	0.11	0.11	0.00	455.70	455.70	0.03	0.00	456.26
Total	23.59	45.39	64.29	0.14	9.95	2.29	12.24	0.76	2.28	3.02	0.00	12,753.90	12,753.90	0.69	0.00	12,767.89

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2014	1.42	10.44	7.74	0.01	0.86	0.50	1.35	0.41	0.50	0.91	0.00	1,385.08	1,385.08	0.12	0.00	1,387.48
2015	1.81	9.42	14.86	0.03	0.10	0.48	0.58	0.10	0.48	0.58	0.00	2,764.28	2,764.28	0.15	0.00	2,767.36
2016	1.88	8.66	13.96	0.03	0.10	0.44	0.54	0.10	0.44	0.54	0.00	2,745.60	2,745.60	0.14	0.00	2,748.46
2017	1.55	7.92	13.05	0.03	0.10	0.40	0.50	0.10	0.40	0.50	0.00	2,709.06	2,709.06	0.13	0.00	2,711.89
2018	1.44	7.31	12.32	0.03	0.10	0.36	0.46	0.04	0.35	0.38	0.00	2,694.18	2,694.18	0.12	0.00	2,696.63
2019	15.69	1.64	2.36	0.01	0.01	0.11	0.13	0.01	0.11	0.11	0.00	455.70	455.70	0.03	0.00	456.26
Total	23.59	45.39	64.29	0.14	1.27	2.29	3.58	0.76	2.28	3.02	0.00	12,753.90	12,753.90	0.69	0.00	12,767.89

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.50	0.26	21.28	0.01		0.00	1.05		0.00	1.05	104.94	629.58	734.52	0.34	0.01	746.26
Energy	0.12	0.99	0.46	0.01		0.00	0.08		0.00	0.08	0.00	6,542.94	6,542.94	0.27	0.11	6,583.74
Mobile	28.48	65.40	248.67	0.63	61.43	3.34	64.77	0.97	3.22	4.20	0.00	48,809.05	48,809.05	1.88	0.00	48,848.51
Waste						0.00	0.00		0.00	0.00	307.08	0.00	307.08	18.15	0.00	688.19
Water						0.00	0.00		0.00	0.00	0.00	797.30	797.30	4.23	0.12	922.55
Total	41.10	66.65	270.41	0.65	61.43	3.34	65.90	0.97	3.22	5.33	412.02	56,778.87	57,190.89	24.87	0.24	57,789.25

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.50	0.26	21.28	0.01		0.00	1.05		0.00	1.05	104.94	629.58	734.52	0.34	0.01	746.26
Energy	0.12	0.99	0.46	0.01		0.00	0.08		0.00	0.08	0.00	6,542.94	6,542.94	0.27	0.11	6,583.74
Mobile	28.48	65.40	248.67	0.63	61.43	3.34	64.77	0.97	3.22	4.20	0.00	48,809.05	48,809.05	1.88	0.00	48,848.51
Waste						0.00	0.00		0.00	0.00	307.08	0.00	307.08	18.15	0.00	688.19
Water						0.00	0.00		0.00	0.00	0.00	797.30	797.30	4.23	0.12	922.55
Total	41.10	66.65	270.41	0.65	61.43	3.34	65.90	0.97	3.22	5.33	412.02	56,778.87	57,190.89	24.87	0.24	57,789.25

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Demolition - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	t/ons/yr										Mt/yr					
Off-Road	0.29	2.32	1.44	0.00		0.11	0.11		0.11	0.11	0.00	238.41	238.41	0.02	0.00	238.91
Total	0.29	2.32	1.44	0.00		0.11	0.11		0.11	0.11	0.00	238.41	238.41	0.02	0.00	238.91

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	t/ons/yr										Mt/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.71	5.71	0.00	0.00	5.72
Total	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.71	5.71	0.00	0.00	5.72

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	t/ons/yr										Mt/yr					
Off-Road	0.29	2.32	1.44	0.00		0.11	0.11		0.11	0.11	0.00	238.41	238.41	0.02	0.00	238.91
Total	0.29	2.32	1.44	0.00		0.11	0.11		0.11	0.11	0.00	238.41	238.41	0.02	0.00	238.91

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	t/ons/yr										Mt/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.71	5.71	0.00	0.00	5.72
Total	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.71	5.71	0.00	0.00	5.72

3.3 Site Preparation - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	t/ons/yr										Mt/yr					
Fugitive Dust					0.36	0.00	0.36	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.19	1.50	0.86	0.00		0.07	0.07		0.07	0.07	0.00	145.07	145.07	0.02	0.00	145.39
Total	0.19	1.50	0.86	0.00	0.36	0.07	0.43	0.20	0.07	0.27	0.00	145.07	145.07	0.02	0.00	145.39

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	3.91	3.91	0.00	0.00	3.92
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	3.91	3.91	0.00	0.00	3.92

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Fugitive Dust					0.36	0.00	0.36	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.19	1.50	0.86	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.00	145.07	145.07	0.02	0.00	145.39
Total	0.19	1.50	0.86	0.00	0.36	0.07	0.43	0.20	0.07	0.27	0.00	145.07	145.07	0.02	0.00	145.39

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.91	3.91	0.00	0.00	3.92
Total	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.91	3.91	0.00	0.00	3.92

3.4 Grading - 2014

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Fugitive Dust					0.48	0.00	0.48	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.62	4.98	2.80	0.01	0.23	0.23	0.23	0.23	0.23	0.23	0.00	541.55	541.55	0.05	0.00	542.60
Total	0.62	4.98	2.80	0.01	0.48	0.23	0.71	0.20	0.23	0.43	0.00	541.55	541.55	0.05	0.00	542.60

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	11.96	11.96	0.00	0.00	11.98
Total	0.01	0.01	0.08	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	11.96	11.96	0.00	0.00	11.98

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Fugitive Dust					0.48	0.00	0.48	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.62	4.98	2.80	0.01	0.23	0.23	0.23	0.23	0.23	0.23	0.00	541.55	541.55	0.05	0.00	542.60
Total	0.62	4.98	2.80	0.01	0.48	0.23	0.71	0.20	0.23	0.43	0.00	541.55	541.55	0.05	0.00	542.60

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.01	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.96	11.96	0.00	0.00	11.98
Total	0.01	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.96	11.96	0.00	0.00	11.98

3.5 Building Construction - 2014

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.10	0.66	0.48	0.00		0.04	0.04		0.04	0.04	0.00	75.12	75.12	0.01	0.00	75.29
Total	0.10	0.66	0.48	0.00		0.04	0.04		0.04	0.04	0.00	75.12	75.12	0.01	0.00	75.29

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.08	0.84	0.59	0.00	0.05	0.03	0.08	0.00	0.03	0.03	0.00	137.28	137.28	0.00	0.00	137.36
Worker	0.13	0.13	1.44	0.00	0.29	0.01	0.30	0.01	0.01	0.02	0.00	226.06	226.06	0.01	0.00	226.34
Total	0.21	0.97	2.03	0.00	0.34	0.04	0.38	0.01	0.04	0.05	0.00	363.34	363.34	0.01	0.00	363.70

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.10	0.66	0.48	0.00		0.04	0.04		0.04	0.04	0.00	75.12	75.12	0.01	0.00	75.29
Total	0.10	0.66	0.48	0.00		0.04	0.04		0.04	0.04	0.00	75.12	75.12	0.01	0.00	75.29

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.08	0.84	0.59	0.00	0.00	0.03	0.03	0.00	0.03	0.03	0.00	137.28	137.28	0.00	0.00	137.36
Worker	0.13	0.13	1.44	0.00	0.01	0.01	0.02	0.01	0.01	0.02	0.00	226.06	226.06	0.01	0.00	226.34
Total	0.21	0.97	2.03	0.00	0.01	0.04	0.05	0.01	0.04	0.05	0.00	363.34	363.34	0.01	0.00	363.70

3.5 Building Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.48	4.85	3.43	0.01	0.29	0.17	0.46	0.02	0.17	0.20	0.00	875.97	875.97	0.02	0.00	876.42
Worker	0.77	0.77	8.43	0.02	1.82	0.07	1.89	0.08	0.07	0.15	0.00	1,410.08	1,410.08	0.08	0.00	1,411.73
Total	1.25	5.62	11.86	0.03	2.11	0.24	2.35	0.10	0.24	0.35	0.00	2,286.05	2,286.05	0.10	0.00	2,288.15

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Off-Road	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20
Total	0.57	3.80	3.00	0.01		0.23	0.23		0.23	0.23	0.00	478.23	478.23	0.05	0.00	479.20

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.48	4.85	3.43	0.01	0.02	0.17	0.20	0.02	0.17	0.20	0.00	875.97	875.97	0.02	0.00	876.42
Worker	0.77	0.77	8.43	0.02	0.08	0.07	0.15	0.08	0.07	0.15	0.00	1,410.08	1,410.08	0.08	0.00	1,411.73
Total	1.25	5.62	11.86	0.03	0.10	0.24	0.35	0.10	0.24	0.35	0.00	2,286.05	2,286.05	0.10	0.00	2,288.15

3.5 Building Construction - 2016

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Off-Road	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.44	4.49	3.17	0.01	0.29	0.16	0.45	0.02	0.16	0.18	0.00	877.76	877.76	0.02	0.00	878.18
Worker	0.72	0.71	7.82	0.02	1.82	0.07	1.89	0.08	0.07	0.15	0.00	1,389.61	1,389.61	0.07	0.00	1,391.17
Total	1.16	5.20	10.99	0.03	2.11	0.23	2.34	0.10	0.23	0.33	0.00	2,267.37	2,267.37	0.09	0.00	2,269.35

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Off-Road	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11
Total	0.52	3.46	2.97	0.01		0.21	0.21		0.21	0.21	0.00	478.23	478.23	0.04	0.00	479.11

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.44	4.49	3.17	0.01	0.02	0.16	0.16	0.02	0.16	0.18	0.00	877.76	877.76	0.02	0.00	878.18
Worker	0.72	0.71	7.82	0.02	0.08	0.07	0.15	0.08	0.07	0.15	0.00	1,389.61	1,389.61	0.07	0.00	1,391.17
Total	1.16	5.20	10.99	0.03	0.10	0.23	0.33	0.10	0.23	0.33	0.00	2,267.37	2,267.37	0.09	0.00	2,269.35

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.40	4.14	2.93	0.01	0.29	0.14	0.43	0.02	0.14	0.17	0.00	876.11	876.11	0.02	0.00	876.49
Worker	0.67	0.65	7.18	0.02	1.81	0.08	1.89	0.08	0.08	0.15	0.00	1,356.55	1,356.55	0.07	0.00	1,358.00
Total	1.07	4.79	10.11	0.03	2.10	0.22	2.32	0.10	0.22	0.32	0.00	2,232.66	2,232.66	0.09	0.00	2,234.49

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20
Total	0.48	3.13	2.94	0.01		0.18	0.18		0.18	0.18	0.00	476.40	476.40	0.04	0.00	477.20

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.40	4.14	2.93	0.01	0.02	0.14	0.17	0.02	0.14	0.17	0.00	876.11	876.11	0.02	0.00	876.49
Worker	0.67	0.65	7.18	0.02	0.08	0.08	0.15	0.08	0.08	0.15	0.00	1,356.55	1,356.55	0.07	0.00	1,358.00
Total	1.07	4.79	10.11	0.03	0.10	0.22	0.32	0.10	0.22	0.32	0.00	2,232.66	2,232.66	0.09	0.00	2,234.49

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.37	3.87	2.74	0.01	0.29	0.13	0.42	0.01	0.12	0.13	0.00	881.08	881.08	0.02	0.00	881.43
Worker	0.63	0.60	6.64	0.02	1.82	0.08	1.90	0.03	0.07	0.10	0.00	1,334.87	1,334.87	0.07	0.00	1,336.23
Total	1.00	4.47	9.38	0.03	2.11	0.21	2.32	0.04	0.19	0.23	0.00	2,215.95	2,215.95	0.09	0.00	2,217.66

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97
Total	0.44	2.84	2.93	0.01		0.16	0.16		0.16	0.16	0.00	478.23	478.23	0.04	0.00	478.97

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.37	3.87	2.74	0.01	0.03	0.13	0.15	0.01	0.12	0.13	0.00	881.08	881.08	0.02	0.00	881.43
Worker	0.63	0.60	6.64	0.02	0.08	0.08	0.15	0.03	0.07	0.10	0.00	1,334.87	1,334.87	0.07	0.00	1,336.23
Total	1.00	4.47	9.38	0.03	0.11	0.21	0.30	0.04	0.19	0.23	0.00	2,215.95	2,215.95	0.09	0.00	2,217.66

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.04	0.26	0.29	0.00		0.01	0.01		0.01	0.01	0.00	47.64	47.64	0.00	0.00	47.71
Total	0.04	0.26	0.29	0.00		0.01	0.01		0.01	0.01	0.00	47.64	47.64	0.00	0.00	47.71

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.36	0.26	0.00	0.03	0.01	0.04	0.00	0.01	0.01	0.00	87.92	87.92	0.00	0.00	87.95
Worker	0.06	0.06	0.62	0.00	0.18	0.01	0.19	0.00	0.01	0.01	0.00	130.45	130.45	0.01	0.00	130.57
Total	0.09	0.42	0.88	0.00	0.21	0.02	0.23	0.00	0.02	0.02	0.00	218.37	218.37	0.01	0.00	218.52

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.04	0.26	0.29	0.00		0.01	0.01		0.01	0.01	0.00	47.64	47.64	0.00	0.00	47.71
Total	0.04	0.26	0.29	0.00		0.01	0.01		0.01	0.01	0.00	47.64	47.64	0.00	0.00	47.71

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.36	0.26	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	87.92	87.92	0.00	0.00	87.95
Worker	0.06	0.06	0.62	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	130.45	130.45	0.01	0.00	130.57
Total	0.09	0.42	0.88	0.00	0.01	0.02	0.03	0.00	0.02	0.02	0.00	218.37	218.37	0.01	0.00	218.52

3.6 Paving - 2019

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Off-Road	0.14	0.87	0.75	0.00		0.07	0.07		0.07	0.07	0.00	99.23	99.23	0.01	0.00	99.47
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.14	0.87	0.75	0.00		0.07	0.07		0.07	0.07	0.00	99.23	99.23	0.01	0.00	99.47

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.57	5.57	0.00	0.00	5.57
Total	0.00	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	5.57	5.57	0.00	0.00	5.57

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Off-Road	0.14	0.87	0.75	0.00		0.07	0.07		0.07	0.07	0.00	99.23	99.23	0.01	0.00	99.47
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.14	0.87	0.75	0.00		0.07	0.07		0.07	0.07	0.00	99.23	99.23	0.01	0.00	99.47

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	5.57	0.00	0.00	5.57
Total	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	5.57	0.00	0.00	5.57

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Archit. Coating	15.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.07	0.07	0.00		0.00	0.00		0.00	0.00	0.00	9.56	9.56	0.00	0.00	9.58
Total	15.38	0.07	0.07	0.00		0.00	0.00		0.00	0.00	0.00	9.56	9.56	0.00	0.00	9.58

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.03	0.03	0.36	0.00	0.10	0.00	0.11	0.00	0.00	0.01	0.00	75.33	75.33	0.00	0.00	75.40
Total	0.03	0.03	0.36	0.00	0.10	0.00	0.11	0.00	0.00	0.01	0.00	75.33	75.33	0.00	0.00	75.40

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Archit. Coating	15.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.07	0.07	0.00		0.00	0.00		0.00	0.00	0.00	9.56	9.56	0.00	0.00	9.58
Total	15.38	0.07	0.07	0.00		0.00	0.00		0.00	0.00	0.00	9.56	9.56	0.00	0.00	9.58

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.03	0.03	0.36	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	75.33	75.33	0.00	0.00	75.40
Total	0.03	0.03	0.36	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	75.33	75.33	0.00	0.00	75.40

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M1/yr					
Mitigated	28.48	65.40	248.67	0.63	61.43	3.34	64.77	0.97	3.22	4.20	0.00	48,809.05	48,809.05	1.88	0.00	48,848.51
Unmitigated	28.48	65.40	248.67	0.63	61.43	3.34	64.77	0.97	3.22	4.20	0.00	48,809.05	48,809.05	1.88	0.00	48,848.51
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	6,286.86	6,830.64	5,790.78	20,961,551	20,961,551
Single Family Housing	325.38	342.72	298.18	1,079,011	1,079,011
Strip Mall	43,651.74	41,406.12	20,121.96	91,828,812	91,828,812
Total	50,263.98	48,579.48	26,210.92	113,869,374	113,869,374

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Apartments Low Rise	12.70	7.00	9.50	40.20	19.20	40.60
Single Family Housing	12.70	7.00	9.50	40.20	19.20	40.60
Strip Mall	8.90	13.30	7.40	16.60	64.40	19.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	5,401.04	5,401.04	0.24	0.09	5,434.89
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	5,401.04	5,401.04	0.24	0.09	5,434.89
NaturalGas Mitigated	0.12	0.99	0.46	0.01		0.00	0.08		0.00	0.08	0.00	1,141.90	1,141.90	0.02	0.02	1,148.85
NaturalGas Unmitigated	0.12	0.99	0.46	0.01		0.00	0.08		0.00	0.08	0.00	1,141.90	1,141.90	0.02	0.02	1,148.85
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU	tons/yr										MT/yr					
Apartments Low Rise	1.83163e+007	0.10	0.84	0.36	0.01		0.00	0.07		0.00	0.07	0.00	977.43	977.43	0.02	0.02	983.38
Single Family Housing	1.40767e+006	0.01	0.06	0.03	0.00		0.00	0.01		0.00	0.01	0.00	75.12	75.12	0.00	0.00	75.58
Strip Mall	1.67437e+006	0.01	0.08	0.07	0.00		0.00	0.01		0.00	0.01	0.00	89.35	89.35	0.00	0.00	89.89
Total		0.12	0.98	0.46	0.01		0.00	0.09		0.00	0.09	0.00	1,141.90	1,141.90	0.02	0.02	1,148.85

Mitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	kBTU	tons/yr										MT/yr					
Apartments Low Rise	1.83163e+007	0.10	0.84	0.36	0.01		0.00	0.07		0.00	0.07	0.00	977.43	977.43	0.02	0.02	983.38
Single Family Housing	1.40767e+006	0.01	0.06	0.03	0.00		0.00	0.01		0.00	0.01	0.00	75.12	75.12	0.00	0.00	75.58
Strip Mall	1.67437e+006	0.01	0.08	0.07	0.00		0.00	0.01		0.00	0.01	0.00	89.35	89.35	0.00	0.00	89.89
Total		0.12	0.98	0.46	0.01		0.00	0.09		0.00	0.09	0.00	1,141.90	1,141.90	0.02	0.02	1,148.85

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				M/yr			
Apartments Low Rise	3.39652e+006					987.95	0.04	0.02	994.14
Single Family Housing	230750					67.12	0.00	0.00	67.54
Strip Mall	1.43413e+007					4,345.98	0.20	0.07	4,373.21
Total						5,401.05	0.24	0.09	5,434.89

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				M/yr			
Apartments Low Rise	3.39652e+006					987.95	0.04	0.02	994.14
Single Family Housing	230750					67.12	0.00	0.00	67.54
Strip Mall	1.43413e+007					4,345.98	0.20	0.07	4,373.21
Total						5,401.05	0.24	0.09	5,434.89

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										M/yr					
Mitigated	12.50	0.26	21.28	0.01		0.00	1.05		0.00	1.05	104.94	629.58	734.52	0.34	0.01	746.26
Unmitigated	12.50	0.26	21.28	0.01		0.00	1.05		0.00	1.05	104.94	629.58	734.52	0.34	0.01	746.26
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										M/yr					
Architectural Coating	1.54					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	7.23					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	3.28	0.08	6.21	0.01		0.00	0.97		0.00	0.97	104.94	605.00	709.95	0.32	0.01	721.18
Landscaping	0.46	0.17	15.07	0.00		0.00	0.08		0.00	0.08	0.00	24.58	24.58	0.02	0.00	25.07
Total	12.51	0.25	21.28	0.01		0.00	1.05		0.00	1.05	104.94	629.58	734.53	0.34	0.01	746.25

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										M/yr					
Architectural Coating	1.54					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	7.23					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	3.28	0.08	6.21	0.01		0.00	0.97		0.00	0.97	104.94	605.00	709.95	0.32	0.01	721.18
Landscaping	0.46	0.17	15.07	0.00		0.00	0.08		0.00	0.08	0.00	24.58	24.58	0.02	0.00	25.07
Total	12.51	0.25	21.28	0.01		0.00	1.05		0.00	1.05	104.94	629.58	734.53	0.34	0.01	746.25

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					797.30	4.23	0.12	922.55
Unmitigated					797.30	4.23	0.12	922.55
Total	NA							

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr			MT/yr				
Apartments Low Rise	62.1569 / 33.1859					362.74	1.91	0.05	419.44
Single Family Housing	2.21524 / 1.39656					12.93	0.07	0.00	14.95
Strip Mall	72.9555 / 44.7147					421.63	2.25	0.06	488.15
Total						797.30	4.23	0.11	922.54

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr			MT/yr				
Apartments Low Rise	62.1569 / 33.1859					362.74	1.91	0.05	419.44
Single Family Housing	2.21524 / 1.39656					12.93	0.07	0.00	14.95
Strip Mall	72.9555 / 44.7147					421.63	2.25	0.06	488.15
Total						797.30	4.23	0.11	922.54

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					307.08	18.15	0.00	688.19
Unmitigated					307.08	18.15	0.00	688.19
Total	NA							

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr			MT/yr				
Apartments Low Rise	438.84					89.08	5.26	0.00	199.64
Single Family Housing	39.77					8.07	0.48	0.00	18.09
Strip Mall	1034.17					209.93	12.41	0.00	470.46
Total						307.08	18.15	0.00	688.19

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				M/yr			
Apartments Low Rise	438.84					89.08	5.26	0.00	199.64
Single Family Housing	39.77					8.07	0.48	0.00	18.09
Strip Mall	1034.17					209.93	12.41	0.00	470.46
Total						307.08	18.15	0.00	688.19

9.0 Vegetation
