

Initial Study

Butterfield Park

Prepared by



CITY OF MORGAN HILL

In Consultation with



DAVID J. POWERS
& ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS & PLANNERS

July 2019

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

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

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

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

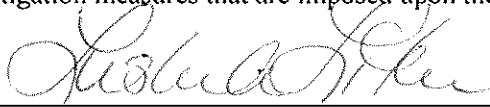
☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Signature

7-12-19
Date

TABLE OF CONTENTS

Section 1.0	Introduction and Purpose	1
1.1	Purpose of the Initial Study	1
1.2	Public Review Period	1
1.3	Consideration of the Initial Study and Project.....	1
1.4	Notice of Determination	1
Section 2.0	Project Information	2
2.1	Project Title	2
2.2	Lead Agency Contact	2
2.3	Project Applicant	2
2.4	Project Location.....	2
2.5	Assessor’s Parcel Numbers.....	2
2.6	General Plan Designation and Zoning District.....	2
2.7	Habitat Plan Designation	2
2.8	Project-Related Approvals, Agreements, and Permits.....	2
Section 3.0	Project Description.....	6
3.1	Project Overview	6
3.1	Existing Setting.....	6
3.2	Proposed Development.....	6
Section 4.0	Environmental Setting, Checklist, and Impact Discussion	9
4.1	Aesthetics.....	10
4.2	Agriculture and Forestry Resources	16
4.3	Air Quality	19
4.4	Biological Resources	28
4.5	Cultural Resources.....	38
4.6	Energy.....	44
4.7	Geology and Soils.....	50
4.8	Greenhouse Gas Emissions.....	58
4.9	Hazards and Hazardous Materials	62
4.10	Hydrology and Water Quality	67
4.11	Land Use and Planning.....	75
4.12	Mineral Resources	78
4.13	Noise and Vibration.....	80
4.14	Population and Housing.....	95

4.15	Public Services	98
4.16	Recreation.....	103
4.17	Transportation.....	106
4.18	Tribal Cultural Resources	116
4.19	Utilities and Service Systems	120
4.20	Wildfire.....	126
4.21	Mandatory Findings of Significance)	127
Section 5.0	References.....	134
Section 6.0	Lead Agency and Consultants.....	139
6.1	Lead Agency.....	139
6.2	Consultants	139
Section 7.0	Acronyms and Abbreviations.....	140

Figures

Figure 2.4-1: Regional Map	3
Figure 2.4-2: Vicinity Map	4
Figure 2.4-3: Aerial Map	5
Figure 3.2-1: Conceptual Site Plan	7
Figure 4.13-1: Project Site Noise Measurement Locations	87

Photos

Photo 1: View of the project site from the corner of Monterey Road and Butterfield Boulevard looking southeast.	11
Photo 2: View of the stormwater detention basin located at the west end of the site looking east.	11
Photo 3: View of the two-story townhomes being constructed on the corner of Monterey Road and Butterfield Blvd looking northwest.....	12
Photo 4: View of El Toro Mountain looking northwest from the project site.	12

Tables

Table 4.3-1:Health Effects of Air Pollutants	19
Table 4.3-2: BAAQMD Air Quality Significance Thresholds	24
Table 4.3-3: Project Construction Community Risk at the offsite MEI	26
Table 4.3-4: Impacts from Combined Sources at Off-Site MEI	27
Table 4.7-1: Active Faults Near the Project Site	52
Table 4.13-1: Groundborne Vibration Impact Criteria	81
Table 4.13-2: Maximum Noise Level at Adjacent Land Uses.....	81
Table 4.13-3: Noise Measurement Locations at the Project Site	88
Table 4.17-1: Project Trip Generation Estimates.....	113
Table 4.17-2 : Study Intersections Level of Service – Existing Plus Project Conditions.....	112

Appendices

Appendix A: Air Quality Assessment

Appendix B: Biological Resources Assessment

Appendix C: Historic Resources Evaluation Update & Rehabilitation Project Assessment

Appendix D: Geotechnical and Foundation Investigation

Appendix E: Phase II Environmental Site Assessment

Appendix F: Noise and Vibration Assessment

Appendix G: Transportation Analysis

SECTION 1.0 INTRODUCTION AND PURPOSE

1.1 PURPOSE OF THE INITIAL STUDY

The City of Morgan Hill, as the Lead Agency, has prepared this Initial Study for the Butterfield Park Project in compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 et. seq.) and the regulations and policies of the City of Morgan Hill, California.

The project proposes to construct a new public park. This Initial Study evaluates the environmental impacts that might reasonably be anticipated to result from implementation of the proposed project.

1.2 PUBLIC REVIEW PERIOD

Publication of this Initial Study marks the beginning of a 20-day public review and comment period. During this period, the Initial Study will be available to local, state, and federal agencies and to interested organizations and individuals for review. Written comments concerning the environmental review contained in this Initial Study during the 20-day public review period should be sent to:

Jennifer Carman, Community Development Director
City of Morgan Hill
Community Development Department
17575 Peak Avenue
Morgan Hill, CA 95037

1.3 CONSIDERATION OF THE INITIAL STUDY AND PROJECT

Following the conclusion of the public review period, the Development Services Director of the City of Morgan Hill will consider the adoption of the Initial Study/Mitigated Negative Declaration (MND) together with any comments received during the public review process. Upon adoption of the MND, the City may proceed with project approval actions.

1.4 NOTICE OF DETERMINATION

If the project is approved, the City of Morgan Hill will file a Notice of Determination (NOD), which will be available for public inspection and posted within 24 hours of receipt at the County Clerk's Office for 30 days. The filing of the NOD starts a 30-day statute of limitations on court challenges to the approval under CEQA (CEQA Guidelines Section 15075(g)).

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Butterfield Public Park

2.2 LEAD AGENCY CONTACT

Jennifer Carman, Community Development Director
City of Morgan Hill, Community Development Department
17575 Peak Avenue
Morgan Hill, CA 95037
Phone: (408) 778-6480

2.3 PROJECT APPLICANT

Anthony Eulo, Program Administrator
City of Morgan Hill, Community Services Department
17575 Peak Avenue
Morgan Hill, CA 95037
Phone: 408-310-4179
Email: anthony.eulo@morganhill.ca.gov

2.4 PROJECT LOCATION

The project site is located on a 9.5-acre site on two parcels (APNs 817-06-064 and 817-06-002) on the south side of Butterfield Boulevard between Monterey Road and the Union Pacific Railroad (UPRR)/CalTrain tracks. Refer to Figure 2.4-1, Figure 2.4-2 and Figure 2.4-3.

2.5 ASSESSOR'S PARCEL NUMBERS

817-06-002, 817-06-064

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

General Plan: Industrial
Zoning: Light Industrial (IL)

2.7 HABITAT PLAN DESIGNATION

Land Cover: Grain, Row-crop, Hay and Pasture, Disked/Shot-term Fallowed
Land Cover Fee Zones: Fee Zone B (Agricultural and Valley Floor Lands)

2.8 PROJECT-RELATED APPROVALS, AGREEMENTS, AND PERMITS

- General Plan Amendment
- Site and Architectural Review
- Grading Permit



REGIONAL MAP

FIGURE 2.4-1



VICINITY MAP

FIGURE 2.4-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.4-3

SECTION 3.0 PROJECT DESCRIPTION

3.1 PROJECT OVERVIEW

The City of Morgan Hill's Bikeways, Trails, Parks and Recreation Master Plan (Master Plan) guides the improvement and future development of the City's bikeways, trail, parks and recreation system in Morgan Hill.¹ The Master Plan identifies and prioritizes improvements and investments within the City and includes goals and programs to improve connectivity and recreation options.

This Initial Study provides a project-level CEQA analysis for the construction of a new public park on City-owned land on the south side of Butterfield Boulevard east of Monterey Road, consistent with the Master Plan.

3.1 EXISTING SETTING

The proposed site includes a stormwater detention basin and vacant land. The site is surrounded by the Little Llagas Creek culvert and channel, Butterfield Boulevard, railroad tracks, and vacant land. A mix of residential and light industrial uses are located in the project vicinity.

3.2 PROPOSED DEVELOPMENT

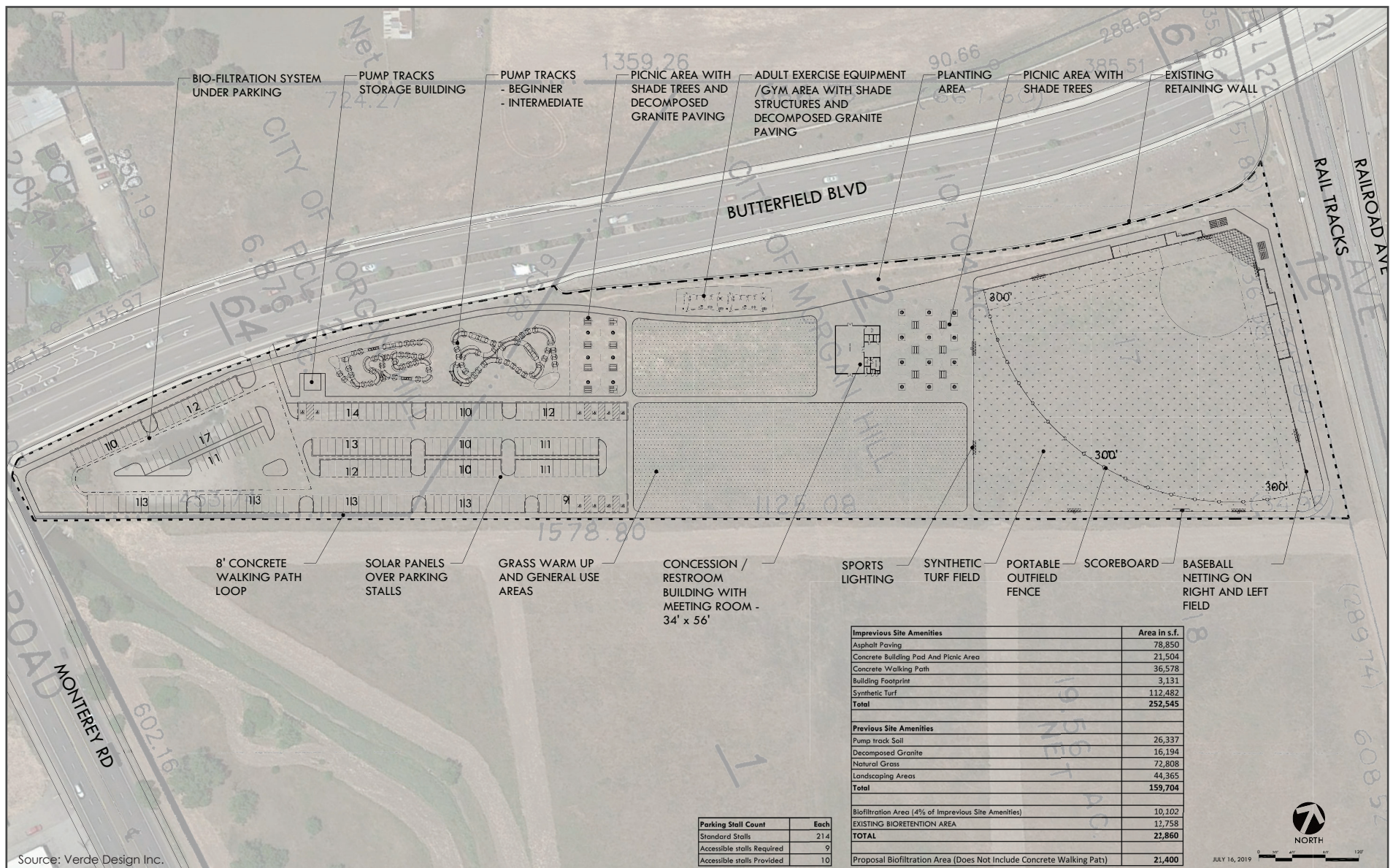
The proposed project is the construction of a new public park on a 9.5-acre site owned by the City of Morgan Hill. The park would be constructed on two parcels south of Butterfield Boulevard between Monterey Road and the UPRR tracks.

The project plans are currently conceptual, as the project is in the early stages of design as it seeks to qualify for state grant funding. The City will complete supplemental environmental review as more project details become available prior to approval of a contract to construct the park. Therefore, this Initial Study discusses the park at the level of detail that currently exists.

The park would include bicycle pump tracks, adult exercise equipment, a baseball field, picnic areas, a building with a public meeting room, concessions and restrooms, grass lawns, a walking path, a surface parking lot and a bio-filtration system installed under the parking lot, as shown in Figure 3.3 1.

The bicycle pump track area would include two pump tracks, one for beginners and one for intermediate skill levels. A small storage building would be located adjacent to the pump track. Picnic tables surrounded by shade trees would be installed adjacent to the pump track area and the restroom/concessions building. The one-story building would be approximately 1,900 square feet in size. In addition to the public meeting room space, concessions and restrooms, the building would include field equipment storage, meeting room storage, a utility room, and a janitor room. Two grass turf fields would be located between the parking lot and the baseball field. The baseball field would utilize synthetic turf and would include baseball netting in the right and left fields. The netting would be 30 feet tall from the backstop along the left and right sidelines. The netting is expected to be galvanized chain link, black clad chain link, or eight foot chain link with black nylon netting to 30 feet, with the City making a selection as part of the approval of a contract to construct the park.

¹ City of Morgan Hill. *Bikeways, Trails, Parks and Recreation Master Plan*. Adopted July 20, 2017.



CONCEPTUAL SITE PLAN

FIGURE 3.2-1

The lit fields would be available for use until 10:00 pm with field lighting shutoff at 11:00 pm. It is expected that site safety lighting the site would be in place throughout the night hours. An eight-foot wide paved walking path would be installed around the perimeter of the site.

The parking lot would contain 217 surface parking spaces including nine accessible spaces. Solar panels would be installed over most of the parking stalls. Vehicle access would be via a new driveway on Butterfield Boulevard. The driveway would be a right turn in and right turn out onto eastbound Butterfield Boulevard.

Pedestrian access would be from the entrance at the corner of Monterey Road and Butterfield Boulevard and from the Butterfield Boulevard driveway entrance.

There is an existing detention basin located on the western end of the project site. Currently, the detention basin accepts runoff from Butterfield Boulevard. The project proposes to convert this basin to a parking lot. In place of the basin, an underground detention rain tank system would be constructed beneath the parking lot. The underground system would be expected to handle the existing flow, as well as the additional flow from the added impervious surface areas that would go into underground treatment units.

The proposed public park would require approximately 12 months to construct, possibly starting in January 2021 and concluding in December 2021.

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND IMPACT DISCUSSION

This section presents the discussion of impacts related to the following environmental subjects in their respective subsections:

4.1	Aesthetics	4.12	Mineral Resources
4.2	Agriculture and Forestry Resources	4.13	Noise and Vibration
4.3	Air Quality	4.14	Population and Housing
4.4	Biological Resources	4.15	Public Services
4.5	Cultural Resources	4.16	Recreation
4.6	Energy	4.17	Transportation
4.7	Geology and Soils	4.18	Tribal Cultural Resources
4.8	Greenhouse Gas Emissions	4.19	Utilities and Service Systems
4.9	Hazards and Hazardous Materials	4.20	Wildfire
4.10	Hydrology and Water Quality	4.21	Mandatory Findings of Significance
4.11	Land Use and Planning		

The discussion for each environmental subject includes the following subsections:

- **Environmental Setting** – This subsection 1) provides a brief overview of relevant plans, policies, and regulations that compose the regulatory framework for the project and 2) describes the existing, physical environmental conditions at the project site and in the surrounding area, as relevant.
- **Impact Discussion** – This subsection 1) includes the recommended checklist questions from Appendix G of the CEQA Guidelines to assess impacts and 2) discusses the project’s impact on the environmental subject as related to the checklist questions. For significant impacts, feasible mitigation measures are identified. “Mitigation measures” are measures that will minimize, avoid, or eliminate a significant impact (CEQA Guidelines Section 15370). Each impact is numbered to correspond to the checklist question being answered. For example, Impact BIO-1 answers the first checklist question in the Biological Resources section. Mitigation measures are also numbered to correspond to the impact they address. For example, MM BIO-1.3 refers to the third mitigation measure for the first impact in the Biological Resources section.

4.1 AESTHETICS

4.1.1 Environmental Setting

4.1.1.1 *Regulatory Framework*

State

Scenic Highways Program

The California Scenic Highway Program is managed by the California Department of Transportation (Caltrans). The program is intended to protect and enhance the natural scenic beauty of California highways and adjacent corridors through special conservation treatment. State laws governing the Scenic Highway Program are found in the Streets and Highway Code, Sections 260 through 263. There are no state-designated scenic highways in Morgan Hill. In Santa Clara County, the one state-designated scenic highway is State Route (SR) 9 from the Santa Cruz County line to the Los Gatos City Limit.

Local

Morgan Hill 2035 General Plan

CNF-11.28 Creating attractive connections through landscaping, lighting, benches, other amenities to create safe and visually interesting spaces.

4.1.1.2 *Existing Conditions*

The proposed site includes a stormwater detention basin and vacant land. The site is primarily flat and is mostly covered with non-native grasses and invasive weeds (refer to Photo 1). Steel wire fencing surrounds the northern and eastern boundary of the site. A stormwater detention basin is located at the west end of the site (refer to Photo 2). Adjacent to the basin is the culvert for West Little Llagas Creek channel. An undeveloped area with non-native grasses is located to the south of the site.

4.1.1.3 *Surrounding Visual Character*

The project site includes a mix of developed and undeveloped land. Immediately north of the site is Butterfield Boulevard which elevates to an overcrossing of the UPRR tracks. There are four established one-story single-family residences with ancillary structures and surrounding wood fencing to the north of Butterfield Boulevard and east of Monterey Road. Across Monterey Road, two-story townhomes are currently under construction northwest of the project site (refer to Photo 3). West of Monterey Road is a vacant parcel consisting of non-native grasses and scrubs and a small daylighted portion of the West Little Llagas Creek channel. South of the project site is undeveloped land with non-native grasses and further south is the Maple Leaf Recreational Vehicle (RV) Park.



Photo 1: View of the project site from the corner of Monterey Road and Butterfield Boulevard looking southeast.



Photo 2: View of the stormwater detention basin located at the west end of the site looking east.



Photo 3: View of the two-story townhomes being constructed on the corner of Monterey Road and Butterfield Blvd looking northwest.



Photo 4: View of El Toro Mountain looking northwest from the project site.

4.1.1.4 *Scenic Vistas and Resources*

Due to the flat topography, existing development, and landscaping in the project site, views of the project site are limited to the immediate vicinity. The site is not located within a designated scenic view corridor or visible from a designated scenic highway. The nearest state-designated scenic highway is State Route (SR) 9, approximately 27 miles northwest of the site (at the SR 17 interchange).²

There are no state- or City-officially designated scenic vistas or corridors. Hillsides including views of the Diablo Range to the east, Santa Cruz Mountain to the west, and El Toro Mountain (a landmark natural feature), however, are considered important views in the City (refer to Photo 4). Views of hillsides to the northeast, east, and west are partially visible from the project site.

4.1.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
3) Substantially degrade the existing visual character or quality of public views ³ of the site and its surroundings? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

² California Department of Transportation. "California Scenic Highway Mapping System: Santa Clara County." Accessed June 4, 2019. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.

³ Public views are those that are experienced from publicly accessible vantage points.

Impact AES-1: The project would not have a substantial adverse effect on a scenic vista. **(No Impact)**

There are no scenic corridors, highways or vistas in Morgan Hill that are designated by the state or the City. The project site would not block views of hillsides, since the project proposes to build a park with low structures that would not block views. Proposed netting would be open grid to allow for filtered views through the material. Views of hillsides, from the residences to the north of the project site, are partially visible to the east and west of the residences. The project would not block views of scenic vistas from the residences. Given the distance of the site and existing development and landscaping that obstructs views, the project would not block any views of scenic vistas. **(No Impact)**

Impact AES-2: The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **(No Impact)**

There are no rock outcroppings at the project site. The project site is not be located within or adjacent to a state-designated scenic highway. The nearest state-designated scenic highway is 26.5 miles northwest of the site. Therefore, the project would not impact historic buildings within a scenic highway. For these reasons, the project would not result in substantial damage to scenic resources. **(No Impact)**

Impact AES-3: The project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project is not in an urbanized area. The project would not conflict with applicable zoning and other regulations governing scenic quality. **(Less than Significant Impact)**

The project would construct a new public park on vacant land changing the existing visual character of the site, however, the project site would not constitute a significant adverse change to the local aesthetic environment. The new play fields, baseball netting, parking lot and public facility would not cause substantial adverse visual effects to the surrounding area. The proposed modifications and park improvements to the site would not conflict with applicable zoning or other regulations and is consistent with the Master Plan and General Plan policies related to scenic resources. **(Less than Significant Impact)**

Impact AES-4: The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

The proposed project would incrementally increase light and glare in the project site, due to the new reflective surfaces and outdoor lighting proposed on the vacant site. As the park design is further refined, building design, landscaping and outdoor lighting would be subject to review by the City of Morgan Hill Design Permit process for conformance with City standards. For these reasons, development on the site under the proposed project would not result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area. **(Less than Significant Impact)**

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Environmental Setting

4.2.1.1 *Regulatory Framework*

State

Farmland Mapping and Monitoring Program

The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) assesses the location, quality, and quantity of agricultural land and conversion of these lands over time. Agricultural land is rated according to soil quality and irrigation status. The best quality land is called Prime Farmland. In CEQA analyses, the FMMP classifications and published county maps are used, in part, to identify whether agricultural resources that could be affected are present on-site or in the project site.⁴

California Land Conservation Act

The California Land Conservation Act (Williamson Act) enables local governments to enter into contracts with private landowners to restrict parcels of land to agricultural or related open space uses. In return, landowners receive lower property tax assessments. In CEQA analyses, identification of properties that are under a Williamson Act contract is used to also identify sites that may contain agricultural resources or are zoned for agricultural uses.⁵

Forest Land, Timberland, and Timberland Production

The California Department of Forestry and Fire Protection (Cal Fire) identifies forest land, timberland, and lands zoned for timberland production that can (or do) support forestry resources.⁶ Programs such as Cal Fire's Fire and Resource Assessment Program (FRAP) are used to identify whether forest land, timberland, or timberland production areas that could be effected are located on or adjacent to a project site.⁷

⁴ California Department of Conservation. "Farmland Mapping and Monitoring Program."

<http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx>.

⁵ California Department of Conservation. "Williamson Act." <http://www.conservation.ca.gov/dlrp/lca>.

⁶ *Forest land* is land that can support 10 percent native tree cover and allows for management of one or more forest resources, including timber, fish, wildlife, and biodiversity (California Public Resources Code Section 12220(g)); *Timberland* is land not owned by the federal government or designated as experimental forest land that is available for, and capable of, growing a crop of trees used to produce lumber and other forest products, including Christmas trees (California Public Resources Code Section 4526); and *Timberland Production* is land devoted to and used for growing and harvesting timber and other compatible uses (Government Code Section 51104(g)).

⁷ Cal Fire. "FRAP." <http://frap.fire.ca.gov/>

4.2.1.2 Existing Conditions

The project site is not used for agricultural purposes and is not the subject of a Williamson Act contract.⁸ No land adjacent to the project site is used for agricultural production. The City of Morgan Hill General Plan Land Use Diagram designates the project site as Industrial, and the Zoning Map designates the project site as Light Industrial zoning district. The land in the project vicinity is also designated and zoned for research, warehouse, manufacturing, service commercial, and other job-generating uses. In the Master Plan however, the project site is designated as *New Neighborhood Park Research Area*. The land on and adjacent to the site is not forest land, or zoned for timberland production.

There are four farmland categories in the California Department of Conservation Farmland Mapping Program: *Prime Farmland*, *Farmland of Statewide Importance*, *Unique Farmland* and *Farmland of Local Importance*. According to the Santa Clara County Important Farmland 2016 Map, the project site is *Grazing Land*, which is defined as land in which the existing vegetation is suited to the grazing of livestock.⁹

4.2.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) 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?	☐	☐	☐	☒
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
3) 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))?	☐	☐	☐	☒
4) Result in a loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
5) 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?	☐	☐	☐	☒

⁸ City of Morgan Hill. *Morgan Hill 2035 DEIR. Figure 4.2-2: Williamson Act Contracts*. January 2016.

⁹ California Department of Conservation. *Santa Clara County Important Farmland 2016 Map*. September 2018.

Impact AG-1: The project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. **(No Impact)**

The project proposes to construct a 9.5-acre public park at the project site. The site is designated by the California Resources Agency Farmland Mapping and Monitoring Program as *Grazing Land*, and therefore, would not convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance to a non-agricultural use. **(No Impact)**

Impact AG-2: The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. **(No Impact)**

The project site is within the Light Industrial zoning district and it is not zoned for agricultural use. The project site is not subject to the Williamson Act contract. The project would, therefore, not conflict with existing zoning for agricultural use or a Williamson Act contract. **(No Impact)**

Impact AG-3: The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

The project site is not zoned for forest land or timberland. For this reason, the project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. **(No Impact)**

Impact AG-4: The project would not result in a loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

The project site is not designated as forest land. For this reason, the project would not result in the loss of forest land or conversion of forest land to non-forest use. **(No Impact)**

Impact AG-5: The project would not 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. **(No Impact)**

The project site is not designated agricultural or forest land and is located within a light industrial area with no agricultural or forestry land nearby. As a result, implementation of the proposed project would not result in the conversion of farmland to non-agricultural use or forest land to non-forest uses. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based in part on an air quality assessment prepared by Illingworth & Rodkin, Inc. on June 27, 2019. A copy of this report is included in Appendix A.

4.3.1 Environmental Setting

4.3.1.1 *Background Information*

Criteria Pollutants

Air quality in the Bay Area is assessed related to six common air pollutants (referred to as criteria pollutants), including ground-level ozone (O₃), nitrogen oxides (NO_x), particulate matter (PM), carbon monoxide (CO), sulfur oxides (SO_x), and lead.¹⁰ Criteria pollutants are regulated because they result in health effects. An overview of the sources of criteria pollutants and their associated health are summarized in Table 4.3.1. The most commonly regulated criteria pollutants in the Bay Area are discussed further below.

Table 4.3-1: Health Effects of Air Pollutants		
Pollutants	Sources	Primary Effects
O ₃	Atmospheric reaction of organic gases with nitrogen oxides in sunlight	• Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Cardiopulmonary function impairment
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust, high temperature stationary combustion, atmospheric reactions	• Aggravation of respiratory illness • Reduced visibility
Fine Particulate Matter (PM _{2.5}) and Coarse Particulate Matter (PM ₁₀)	Stationary combustion of solid fuels, construction activities, industrial processes, atmospheric chemical reactions	• Reduced lung function, especially in children • Aggravation of respiratory and cardiorespiratory diseases • Increased cough and chest discomfort • Reduced visibility
Toxic Air Contaminants (TACs)	Cars and trucks, especially diesel-fueled; industrial sources, such as chrome platers; dry cleaners and service stations; building materials and products	• Cancer • Chronic eye, lung, or skin irritation • Neurological and reproductive disorders

¹⁰ The area has attained both state and federal ambient air quality standards for CO. The project does not include substantial new emissions of sulfur dioxide or lead. These criteria pollutants are not discussed further.

High O₃ levels are caused by the cumulative emissions of reactive organic gases (ROG) and NO_x. These precursor pollutants react under certain meteorological conditions to form high O₃ levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce O₃ levels. The highest O₃ levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources.

PM is a problematic air pollutant of the Bay Area. PM is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide emissions and localized emissions.

Toxic Air Contaminants

TACs are a broad class of compounds known to have health effects. They include but are not limited to criteria pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, diesel fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway).

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs. Diesel exhaust is a complex mixture of gases, vapors, and fine particles. Medium- and heavy-duty diesel trucks represent the bulk of DPM emissions from California highways. The majority of DPM is small enough to be inhaled into the lungs. Most inhaled particles are subsequently exhaled, but some deposit on the lung surface or are deposited in the deepest regions of the lungs (most susceptible to injury).¹¹ Chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the California Air Resources Board (CARB).

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools.

¹¹ California Air Resources Board. "Overview: Diesel Exhaust and Health." Accessed June 16, 2018. <https://www.arb.ca.gov/research/diesel/diesel-health.htm>.

4.3.1.2 Regulatory Framework

Federal and State

Clean Air Act

At the federal level, the United States Environmental Protection Agency (EPA) is responsible for overseeing implementation of the Clean Air Act and its subsequent amendments. The federal Clean Air Act requires the EPA to set national ambient air quality standards for the six common criteria pollutants (discussed previously), including PM, O₃, CO, SO_x, NO_x, and lead.

CARB is the state agency that regulates mobile sources throughout the state and oversees implementation of the state air quality laws and regulations, including the California Clean Air Act. The EPA and the CARB have adopted ambient air quality standards establishing permissible levels of these pollutants to protect public health and the climate. Violations of ambient air quality standards are based on air pollutant monitoring data and are determined for each air pollutant. Attainment status for a pollutant means that a given air district meets the standard set by the EPA and/or CARB.

Risk Reduction Plan

To address the issue of diesel emissions in the state, CARB developed the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. In addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines to reduce particulate matter emissions by 90 percent, the plan involves application of emission control strategies to existing diesel vehicles and equipment to reduce DPM (in addition to other pollutants). Implementation of this plan, in conjunction with stringent federal and CARB-adopted emission limits for diesel fueled vehicles and equipment (including off-road equipment), will significantly reduce emissions of DPM and NO_x.

Regional

2017 Clean Air Plan

The Bay Area Air Quality Management District (BAAQMD) is the agency primarily responsible for assuring that the federal and state ambient air quality standards are maintained in the San Francisco Bay Area. Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards will be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect public health, the 2017 CAP describes how BAAQMD will continue its progress toward attaining state and federal air quality standards and eliminating health risk disparities from exposure to air pollution among Bay Area communities. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-greenhouse gases (GHGs) that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.¹²

¹² BAAQMD. *Final 2017 Clean Air Plan*. April 19, 2017. <http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans>.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing air quality impacts developed by BAAQMD within their CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

City of Morgan Hill 2035 General Plan

Adopted July 27, 2016, the *Morgan Hill 2035 General Plan* includes goals and policies to improve air quality issues facing the City of Morgan Hill.¹³ The following goals, policies, and actions are applicable to the proposed project:

Goal NRE-11: Minimized exposure of people to toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

Policy NRE-11.3: **Health Risk Assessments.** For proposed development that emits toxic air contaminants, require project proponents to prepare health risk assessments in accordance with Bay Area Air Quality Management District procedures as part of environmental review and implement effective mitigation measures to reduce potential health risks to less-than-significant levels. Alternatively, require these projects to be located an adequate distance from residences and other sensitive receptors to avoid health risks. Consult with the Bay Area Air Quality Management District to identify stationary and mobile toxic air contaminant sources and determine the need for and requirements of a health risk assessment for proposed developments

Goal NRE-12: Minimized air pollutant emissions from demolition and construction activities

Policy NRE-12.1: **Best Practices.** Requirement that development projects implement best management practices to reduce air pollutant emissions associated with construction and operation of the project.

4.3.1.3 Existing Conditions

The Bay Area is considered a non-attainment area for ground-level O₃ and PM_{2.5} under both the federal Clean Air Act and state Clean Air Act. The area is also considered nonattainment for PM₁₀ under the state act, but not the federal act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O₃ and PM₁₀, BAAQMD has established thresholds of significance for these air pollutants and their

¹³ City of Morgan Hill. *City of Morgan Hill 2035 General Plan. Chapter 8 Natural Resources and Environment*. Adopted July 27, 2016. Accessed May 21, 2019. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>

precursors. These thresholds are for O₃ precursor pollutants (ROG and NO_x), PM₁₀, and PM_{2.5}, and apply to both construction period and operational period impacts.

The project site is located at the south end of the Santa Clara Valley, within the San Francisco Bay Area Air Basin. The region typically has moderate ventilation and frequent inversions that restrict vertical dilution. The Santa Cruz Mountains and Diablo Range, located on either side of the Santa Clara Valley, restrict horizontal dilution. The surrounding terrain results in a prevailing wind that follows along the valley's northwest-southeast axis. The combined effects of these geographical and meteorological factors make air pollution potential in the Santa Clara Valley quite high. The San Francisco Bay Area, however, is considered to be one of the cleanest metropolitan areas in the country, with respect to air quality.

The vacant project site generates no air pollutant emissions, except for dust from wind blowing across un-vegetated areas of the site. A small number of vehicles traveling to and from the site also emit air pollutants.

Odors

Common sources of odors and odor complaints include wastewater treatment plants, transfer stations, coffee roasters, painting/coating operations, and landfills. Significant sources of offending odors are typically identified based on complaint histories received and compiled by BAAQMD. Typical large sources of odors that result in complaints are wastewater treatment facilities, landfills including composting operations, food processing facilities, and chemical plants. Other sources, such as restaurants, paint or body shops, and coffee roasters typically result in localized sources of odors. The single-family residences to the north and residential housing to the east of the site do not produce substantial odors.

4.3.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
2) 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?	☐	☐	☒	☐
3) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
4) Result in substantial emissions (such as odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

As discussed in CEQA Guidelines Section 15064(b), the determination of whether a project may have a significant effect on the environment calls for judgment on the part of the lead agency and must be based to the extent possible on scientific and factual data. The City of Morgan Hill has considered the air quality thresholds updated by BAAQMD in May 2017 and regards these thresholds to be based on the best information available for the San Francisco Bay Area Air Basin and conservative in terms of the assessment of health effects associated with TACs and PM_{2.5}. The BAAQMD CEQA Air Quality thresholds referenced in this analysis are identified in Table 4.3-2.

Table 4.3-2: BAAQMD Air Quality Significance Thresholds			
Pollutant	Construction Thresholds	Operation Thresholds	
	Average Daily Emissions (pounds/day)	Annual Daily Emissions (pounds/year)	Annual Average Emissions (tons/year)
Criteria Air Pollutants			
ROG, NO _x	54	54	10
PM ₁₀	82 (exhaust)	82	15
PM _{2.5}	54 (exhaust)	54	10
CO	Not Applicable	9.0 ppm (eight-hour) or 20.0 ppm (one-hour)	
Fugitive Dust	Dust-Control Measures/Best Management Practices	Not Applicable	
Health Risks and Hazards for New Sources (within a 1,000-foot Zone of Influence)			
Health Hazard	Single Source	Combined Cumulative Sources	
Excess Cancer Risk	10 per one million	0.3 µg/m ³	
Hazard Index	1.0	10.0	
Incremental Annual PM _{2.5}	0.3 µg/m ³	0.8 µg/m3 (average)	
Notes: ROG = reactive organic gases, NO _x = nitrogen oxides, PM ₁₀ = course particulate matter with a diameter of 10 micrometers (µm) or less, and PM _{2.5} = fine particulate matter with a diameter of 2.5 µm or less.			

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan. **(No Impact)**

In the BAAQMD 2017 CEQA Air Quality Guidelines, BAAQMD identifies screening criteria for the sizes of land use projects that could result in significant air pollutant emissions. Projects that do not exceed the screening size would not generate emission that exceed the BAAQMD significant thresholds for criteria air pollutants. For construction-related impacts, the screening size is identified as 67 acres for city parks. Since the project proposes to develop on 9.5 acres, it is concluded that emissions would be below the BAAQMD significant thresholds for construction criteria air pollutants. For operation-related impacts, the screening size is identified as 2,613 acres for city parks. Since the project proposes to develop on 9.5 acres, it is concluded that emissions would be below the BAAQMD significant thresholds for operational criteria air pollutants. Thus, the project is not

required to incorporate project-specific control measures listed in the 2017 CAP. Further, implementation of the project would not inhibit BAAQMD or partner agencies from continuing progress toward attaining state and federal air quality standards and eliminating health-risk disparities from exposure to air pollution among Bay Area communities, as described within the 2017 CAP. **(No Impact)**

Impact AIR-2: The project would not 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. **(Less than Significant Impact)**

As discussed in Impact AIR-1, the proposed project would generate operational and criteria pollutants below the BAAQMD thresholds. Because the project would have less than significant criteria pollutant impact, the project would not result in a cumulatively considerable contribution to any criteria pollutants for which the region is in non-attainment. **(Less than Significant Impact)**

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations. **(Less than Significant Impact)**

Construction Community Health Risk Impacts

Construction equipment and associated heavy-duty truck traffic generates diesel exhaust, which is a known TAC. These exhaust air pollutant emissions would not be considered to contribute substantially to existing or projected air quality violations. Construction exhaust emissions may still pose health risks for sensitive receptors such as surrounding residents. The primary community risk impact issues associated with construction emissions are cancer risk and exposure to PM_{2.5}. Diesel exhaust poses both a potential health and nuisance impact to nearby receptors. A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and PM_{2.5}.¹⁴

The maximum increased cancer risks were calculated using BAAQMD recommended methods and exposure parameters described in *Appendix A*. Non-cancer health hazards and maximum PM_{2.5} concentrations were also calculated and identified. *Appendix A* includes the emission calculations used for the construction area source modeling and the cancer risk calculations.

Results of this assessment indicated that the residential maximally exposed individuals (MEI) during construction are located at a single-family residence northwest of the project site. Table 4.3-3 summarizes the maximum cancer risks, PM_{2.5} concentrations, and health hazard indexes for project related construction activities affecting the residential MEI. As seen in Table 4.3-3, the construction risk impacts do not exceed the BAAQMD single-source thresholds for cancer risk, PM_{2.5} concentrations, or Hazard Index (HI). **(Less than Significant Impact)**

¹⁴ DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

Table 4.3-3: Project Construction Community Risk at the offsite MEI			
Source	Maximum Cancer Risk (per million)	PM_{2.5} concentration (µg/m³)	Hazard Index
Project Construction	7.2	0.07	0.01
<i>BAAQMD Threshold – Single Source</i>	<i>>10.0</i>	<i>>0.3</i>	<i>>1.0</i>
Exceed Threshold?	No	No	No

Cumulative Impact on Off-Site MEI

Community health risk assessments typically look at all substantial sources of TACs located within 1,000 feet of project sites. These sources include highways, busy surface streets, and stationary sources identified by BAAQMD. A review of the area shows that Monterey Road and Butterfield Boulevard may have traffic that exceeds 10,000 vehicles per day. All other nearby streets are assumed to have less than 10,000 vehicles per day. A review of BAAQMD's stationary source Google Earth map tool identified three sources with the potential to affect the project site. The project is also near a rail line. The three sources are the local roadways (Monterey Road and Butterfield Boulevard), stationary resources were identified as a gas dispensing facility, generator, and unknown generic source with a PM_{2.5} concentration, and railroad emissions from the Union Pacific Rail Road (UPRR) line runs immediately adjacent to the site on the east side and there are also two Amtrak-Coast Starlight daily passenger trains using this line.

However, the calculated cancer risk of the off-site MEI is approximately 900 feet away from the rail line calculating the cancer risk to be less than 10.6 per million. The PM_{2.5} and HI would be less than 0.01 µg/m³ and 0.03.

Cumulative Health Risk Impact at Off-Site MEI

Table 4.3-4 shows both the project and cumulative community risk impacts at the sensitivity receptor most affected by construction. With respect to community risk caused by project construction activities, annual PM_{2.5} concentration, and HI do not exceed their single-source thresholds. The combined annual cancer risk, PM_{2.5} concentration, and Hazard risk values would not exceed the cumulative threshold. **(Less than Significant Impact)**

Table 4.3-4: Impacts from Combined Sources at Off-Site MEI			
Source	Maximum Cancer Risk (per million)	Annual PM_{2.5} (µg/m³)	Hazard Index
Project Construction	7.2	0.07	0.01
UPPR Railroad	<10.6	<0.01	<0.03
Monterey Road (ADT~25,000) at 800 feet east	1.3	0.04	<0.03
Butterfield Boulevard (ADT~10,000)	1.1	0.03	<0.03
Cal Fire Morgan Hill Headquarters (Plant # 2128, generator) at 750 feet	0.01	<0.01	<0.01
CA Department of Forestry & Fire Station (Plant # 100439, Gas Dispensing Facility) at 750 feet	<0.1		<0.01
U.S Technical Ceramics, Inc. (Plant # 15939, generator) at 350 feet	0.5	<0.01	<0.01
Combined Sources	<20.8	<0.17	<0.13
<i>BAAQMD Threshold – Cumulative Source</i>	<i>>100</i>	<i>>0.8</i>	<i>>10.0</i>
Significant?	No	No	No

Impact AIR-4: The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. **(Less than Significant Impact)**

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors; however, the odors would be localized and temporary and would not affect people off-site. One fork-lift would be used during project operations. Odors generated by the forklift would be localized and would not affect adjacent residents. For these reasons, implementation of the proposed project would not result in significant long-term or short-term odor impacts, affecting a substantial number of people. **(Less than Significant Impact)**

4.4 BIOLOGICAL RESOURCES

The following discussion is based in part on a Biological Resources Assessment completed for this project site by WRA Associates, Inc. in July 2019. A copy of this report is included in Appendix B.

4.4.1 Environmental Setting

4.4.1.1 *Regulatory Framework*

Federal and State

Special-Status Species

Individual plant and animal species listed as rare, threatened or endangered under state and federal Endangered Species Acts are considered special-status species. Federal and state endangered species legislation has provided the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) with a mechanism for conserving and protecting plant and animal species of limited distribution and/or low or declining populations. Permits may be required from both the USFWS and CDFW if activities associated with a proposed project would result in the take of a species listed as threatened or endangered. To “take” a listed species, as defined by the State of California, is “to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill” said species. Take is more broadly defined by the federal Endangered Species Act to include harm of a listed species.

In addition to species listed under state and federal Endangered Species Acts, Section 15380(b) and (c) of the CEQA Guidelines provide that all potential rare or sensitive species, or habitats capable of supporting rare species, must be considered as part of the environmental review process. These may include plant species listed by the California Native Plant Society and CDFW listed Species of Special Concern.

Migratory Bird and Birds of Prey Protections

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, capture, possession, or trade in migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Hunting and poaching are also prohibited. The taking and killing of birds resulting from an activity is not prohibited by the MBTA when the underlying purpose of that activity is not to take birds.¹⁵ Nesting birds are considered special-status species and are protected by the USFWS. The CDFW also protects migratory and nesting birds under California Fish and Game Code Sections 3503, 3503.5, and 3800. The CDFW defines taking as causing abandonment and/or loss of reproductive efforts through disturbance.

¹⁵ U.S. Department of the Interior. M-37050. The Migratory Bird Treaty Act Does Not Prohibit Incidental Take. <https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf>.

Sensitive Habitats

Wetland and riparian habitats are considered sensitive habitats under CEQA. They are also afforded protection under applicable federal, state, and local regulations, and are generally subject to regulation by the US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), CDFW, and/or the USFWS under provisions of the federal Clean Water Act (e.g., Sections 303, 304, 404) and State of California Porter-Cologne Water Quality Control Act.

CDFW Stream/Riparian Habitat

Streambeds and banks, as well as associated riparian habitat, are regulated by the CDFW per Section 1602 of the Fish and Game Code. Work within the bed or banks of a stream or the adjacent riparian habitat requires a Streambed Alteration Agreement from the CDFW.

Regional and Local

Santa Clara Valley Habitat Plan/Natural Community Conservation Plan

The Santa Clara Valley Habitat Plan/Natural Community Conservation Plan (Habitat Plan) covers an area of 519,506 acres, or approximately 62 percent of Santa Clara County. It was developed and adopted through a partnership between Santa Clara County, the Cities of San José, Morgan Hill, and Gilroy, Santa Clara Valley Water District (Valley Water), Santa Clara Valley Transportation Authority (VTA), USFWS, and CDFW. The Habitat Plan is intended to promote the recovery of endangered species and enhance ecological diversity and function, while accommodating planned growth in approximately 500,000 acres of southern Santa Clara County. The Santa Clara Valley Habitat Agency is responsible for implementing the plan.

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to biological resources.¹⁶ The following goals and policies related to biological resources are applicable to the proposed project:

Goal NRE-6: *Protection of native plants, animals, and sensitive habitats.*

Policy NRE-6.1: **Natural State of Habitat.** Preserve all fish and wildlife habitats in their natural state whenever possible. Consider development impacts upon wildlife and utilize actions to mitigate those environmental impacts.

Policy NRE-6.4: **Tree Preservation and Protection.** Preserve and protect mature, healthy trees whenever feasible, particularly native trees, historically significant trees, and other trees which are of significant size or of significant aesthetic value to the immediate vicinity or to the community as a whole.

¹⁶ City of Morgan Hill, California (2016). "Chapter 9, Safety, Services, and Infrastructure." *City of Morgan Hill General Plan 2035*. Accessed July 10, 2019. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>

4.4.1.2 Existing Conditions

Site Habitats

The project site, historically disturbed by agricultural activities and grading, provides grassland habitat that supports a mixture of non-native annual grasses. The approximately 8.80 acres of grassland habitat provided by the site is common in the project site. Based on soil conditions, vegetation composition, and review of historical imagery, disking has occurred historically on the site for agricultural purposes.

There are no sensitive aquatic communities on the project site. A fenced-in excavated stormwater basin occupies approximately 0.30 acre within the western portion of the Project site. The man-made basin receives stormwater flow from local stormwater sewer system along Butterfield Boulevard and was built in ruderal herbaceous grassland uplands in 2012-2013 as part of the Butterfield South Extension Project. The basin appears to be regularly maintained. Open water was present in the stormwater basin during the May site visit and absent during the June site visit.

The nearest waterway to the project site is the Little Llagas Creek Channel east of the project site along Monterey Road. There are two ordinance sized trees, as defined by the City of Morgan Hill, in the Project site. The ordinance sized trees are located west of the stormwater basin and are both California walnut (*Juglans hindsii*) each with an approximate diameter at breast height (DBH) of 40 to 50-inches. No other protected trees, as defined by the City of Morgan Hill occur In the Project site.

Special Status Species

Appendix B of WRA's Biological Assessment lists all plant and wildlife species observed within and around the Project site. Appendix C contains representative photographs of the Project site. Appendix D lists all special-status plant and wildlife species with potential to occur within and around the Project site.

A five-mile radius search resulted in thirty-two (32) plant species being identified as known from around the Project site. No special-status plant species were present or determined to have a moderate or high potential to occur within the Project site. All 32 species were determined to have no potential to occur within the Project site due lack of necessary specific soils, hydrology, or habitats, and due to the site's elevation, competition from non-native species, and regular site disturbance, such as mowing.

Thirty-four (34) special status species of wildlife have been recorded in the vicinity of the Project site. Appendix B of WRA's Biological Assessment summarizes the potential for each of these species to occur in the Project site. No special status wildlife species were observed in the Project site during the site assessment. Two special status wildlife species were determined to have a moderate potential to occur in the Project site. These two special status species are both bird species: the loggerhead shrike (*Lanius ludovicianus*), a CDFW Species of Concern, and the white-tailed kite (*Elanus leucurus*), a CDFW Fully Protected Species.

Other special-status species that have been documented within the vicinity of the Project site, but are unlikely to occur include: burrowing owl, steelhead, San Francisco dusky-footed woodrat, San Joaquin Kit Fox, California Tiger Salamander, and California Red-legged Frog.

A number of locally occurring wildlife species may occur on the project site. Due to development surrounding the site, however, the habitat provided by the site provides limited value for wildlife.

Wildlife Corridors

A review of the California essential connectivity project (CDFW 2019b) showed that the Project site is not located within areas previously identified as an essential connectivity area, core reserve or corridor, landscape block, or general wildlife corridors identified in the BIOS system. While habitat connectivity areas are mapped surrounding the City of Morgan Hill, the Project site does not overlap with any of them.

The Project site is a ruderal agricultural field and is bordered on three sides (east, west and north) by roads, or to the south by urban development (trailer park). Areas surrounding the Project site are also similarly composed of a mixture of developed uplands, and agricultural operations. The presence of man-made features such as roads, housing tracks etc., and lack of intact natural communities or other areas that would provide necessary elements for wildlife to sustain, mean that the Project site does not likely function as a wildlife corridor as it does not connect two core habitats, or provide a linkage between areas commonly used by wildlife for daily activities.

4.4.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or United States Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐
2) 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 CDFW or USFWS?	☐	☒	☐	☐
3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☒	☐	☐

Impact BIO-1: The project would not 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 CDFW or USFWS. **(Less than Significant Impact with Mitigation Incorporated)**

Given the history of the project site, disturbance from agricultural uses and grading, and surrounding urban development, no natural sensitive habitats which would support endangered, threatened or special status plant or wildlife species would occur on or adjacent to the site. The entirety of project impacts are proposed within non-sensitive natural communities, including ruderal grassland and stormwater basin. Habitats observed on-site are considered unsuitable for local special status plant species and thus no impacts to special status plant species are anticipated as a result of the proposed project. With the implementation of mitigation measures described below, no significant impacts are expected to occur.

Based on the information provided in Habitat Plan database, the project site is not located within a burrowing owl survey or fee zone.¹⁷ Therefore, the site is not considered burrowing owl habitat and pre-construction surveys for the owls are not required.

All 32 special status plant species documented to occur in the vicinity of the Project site are unlikely or have no potential to occur; the Project site does not have the potential to support any of these species due to the lack of necessary habitat and ruderal grassland habitat. No special-status plant species were observed in the Project site during the assessment and no protocol-level rare plant surveys are recommended.

There are 34 special status wildlife species known to occur in the vicinity of the project site. Of the 34 special status wildlife, there are two special-status species that were determined to have the potential to occur in the Project site; the loggerhead shrike (*Lanius ludovicianus*) and the white-tailed kite (*Elanus leucurus*). These species may forage in the ruderal and agricultural fields on-site, and may find nesting habitat in trees and shrubs within the Project site. Grading and development

¹⁷ Santa Clara Valley Habitat Agency. *Habitat Agency Geobrowser*. Accessed July 10, 2019. <http://www.hcpmaps.com/habitat/>.

proposed within the site may reduce nesting and foraging habitat for special status species, or may impact these species through visual and auditory disturbance sufficient to cause nest abandonment. Such impacts would be considered significant under CEQA.

In addition, common avian species may also nest with the project site and may be similarly affected by project activities. Due to the protected status of these species under both the MBTA and CFGC, impacts to common native nesting birds would also be considered a significant impact under CEQA.

Mitigation Measures: The following mitigation measure will reduce impacts from construction at the project site to nesting raptors and migratory birds to a less than significant level:

MM BIO-1.1: If construction activities cannot be scheduled to avoid the breeding season (February through August), pre-construction breeding bird surveys shall be conducted within 14 days of ground disturbance to avoid disturbance to active nests, eggs, and/or young of nesting birds. Additionally, any trees and shrubs in or adjacent to the project site that are proposed for removal and that could be used as avian nesting sites shall be removed during the non-breeding season (September 1 through February 1), otherwise pre-construction breeding bird surveys shall be conducted as noted above.

In the event that an active nest is located, a ‘no disturbance’ buffer shall be established around the nest until all young have fledged or the nest otherwise becomes inactive (e.g. due to predation). Suggested buffer zone distances differ depending on species, location, and placement of nest and will be determined and implemented in the field by a qualified biologist in consultation with CDFW.

With the implementation of the above mitigation measure, the project would not result in a substantial adverse impact on both special-status species and native nesting birds and would reduce impacts to nesting birds to less than significant. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-2: Construction activities including grading, addition of impervious surfaces, and associated construction related activities located within the 35-foot stream setback area may adversely affect the riparian vegetation and associated character of Little Llagas Creek. **(Significant Impact)**

The Project site is located approximately 5 feet above the top of bank and within the 100-year floodplain (FEMA, 2019) of Little Llagas Creek. Little Llagas Creek is a Category 2 Stream feature under Chapter 18.92.110 of the Morgan Hill Municipal Code because it is intermittent stream that dries up during the summer months. The Muni Code therefore requires an associated 35-foot setback for all development adjacent to the creek. The 100-year floodplain for Little Llagas extends throughout 90% of the Project site and is defined at 319 feet NAVD88 with a defined base flood elevation. Proposed activities (grading, installation of impervious surfaces for parking), as currently shown in the conceptual site plan, are proposed within the 35-foot setback and within the 100-year floodplain.

Impact BIO-2: Activities including grading, addition of impervious surfaces, associated construction related activities located within the 35-foot stream setback area may adversely affect the riparian vegetation and associated character of Little Llagas Creek. **(Significant Impact)**

Mitigation Measures: The following mitigation measures will be implemented as part of the further refined plans, prior to issuance of a contract to construct the park, to maintain a healthy riparian zone, maintain water quality, provide habitat, maintain connectivity, and a variety of other physical and biological functions, to reduce impacts from construction at the project site by to a less than significant level:

MM BIO-2.1: BMPs including silt fencing, fiber rolls, and/or wattles, will be implemented throughout the duration of construction activities to minimize the potential for sediment movement offsite. Vegetation along the boundary of the Project site will be preserved to the extent feasible to maintain temporary soil stabilization. Areas graded during construction activities will be hydroseeded or mulched to stabilize exposed surfaces post construction. Implementation of these measures will reduce impacts to stream features.

MM BIO-2.2: The project proponent will comply with the Flood Damage Prevention requirements in Chapter 15.80 of the City of Morgan Hill Municipal Code and submit permit applications with the City's Floodplain Administrator. Though the Project complies with Chapter 15.80.220 of the City Municipal Code, which allows open space uses such as outdoor recreation in floodplain setback areas, measures identified by the Floodplain Administrator shall be incorporated into the project design to avoid flood-related erosion hazards.

Additionally, as described in MM BIO-6 below, to the extent feasible, all non-compatible activities will avoid encroachment into the 35-foot stream setback to protect the stream corridor. With the implementation of the above mitigation measures, the project would not result in a substantial adverse impact to the character of Little Llagas Creek. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-3: The project would not have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. **(No Impact)**

There are no wetlands or sensitive aquatic communities on the project site. The project site is a ruderal agricultural field and is bordered on three sides (east, west and north) by roads, or to the south by urban development (trailer park). There is a man-made stormwater detention basin also present on site that occupies approximately 0.30 acre within the western portion of the Project site. The man-made basin receives stormwater flow from local stormwater sewer system along Butterfield Boulevard and was built in ruderal herbaceous grassland uplands in 2012-2013 as part of the Butterfield South Extension Project. The project would not result in the direct removal, filling, or hydrological interruption of a protected wetland. **(No Impact)**

Impact BIO-4: The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. **(Less than Significant Impact)**

The project site is a ruderal agricultural field and is bordered on three sides (east, west and north) by roads, or to the south by urban development (trailer park). Areas surrounding the Project site are also similarly composed of a mixture of developed uplands, and agricultural operations. The presence of man-made features such as roads, housing tracks etc., and lack of intact natural communities or other areas that would provide necessary elements for wildlife to sustain, mean that the project site does not likely function as a wildlife corridor as it does not connect two core habitats, or provide a linkage between areas commonly used by wildlife for daily activities.

Little Llagas Creek runs through an adjacent field to the Project site, approximately 5 feet outside of the Project site. The creek is intermittent and thus does not provide a year-round migration corridor for fish species of any kind, including steelhead. The creek will not be affected by any Project activities. The stormwater detention basin that will be covered or converted as part of the Project does not connect directly to the creek as the culvert connecting the detention basin and Little Llagas Creek is capped with an upturned flume and only allows water to flow from the basin to the creek at high levels. Flows into this detention basin originate from a submerged culvert that channels drainage from the nearby roadway and the basin is designed to draw down within 48-hours after large runoff events. Therefore, the location of the Project in relation to the creek will prevent any impacts to the creek and because the basin is functionally isolated, and naturally dries down after rain events, it is not suitable for or accessible by steelhead.

The project would, therefore, not interfere with the movement of fish or wildlife species, nor interfere with established corridors or wildlife nursery sites. **(Less than Significant Impact)**

Impact BIO-5: The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. **(Less than Significant Impact with Mitigation Incorporated)**

There are two ordinance sized trees, as defined by the City of Morgan Hill, in the Project site. The ordinance sized trees are located west of the stormwater basin and are both California walnut (*Juglans hindsii*) each with an approximate diameter at breast height (DBH) of 40 to 50-inches.

No other protected trees, as defined by the City of Morgan Hill, occur In the Project site. There are numerous protected trees, as defined by the City Ordinance on the outer perimeter, outside the project site. Proposed activities will directly impact ordinance-sized trees on the site. Access to the site may also directly or indirectly impact ordinance sized trees.

Mitigation Measures: The following mitigation measures will assure that impacts to ordinance sized trees are less than significantly impacted. Implementation of the following measures will reduce impacts on protected trees to a less-than-significant level by bringing the project into compliance with all local ordinances:

MM BIO-5.1: To the extent feasible, activities will avoid impacts to protected trees. Avoidance is considered to be completely avoiding any work or staging under the dripline of trees. The boundary of the designated avoidance buffer will be flagged or fenced prior to initial ground disturbance. If complete avoidance is not feasible, MM BIO 5.2 will be implemented.

MM BIO-5.2: The City will comply with its own applicable local ordinances for removal, trimming, damage, or relocation of all trees. Any trees to be removed will require replacement according to the City's normal practice. This will include requiring replacement of any and all trees on a comparable ratio of size or quantity. The replacement trees will be planted on site to the extent feasible.

With the implementation of the above mitigation measures, project construction would not result in a significant impact to trees designated for preservation nor would it conflict with a tree preservation policy. **(Less than Significant Impact with Mitigation Incorporated)**

Impact BIO-6: The project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. **(Less than Significant Impact with Mitigation Incorporated)**

The project site is located in the Santa Clara Valley Habitat Plan area (ICFI 2012). The entirety of the mapped Project site is non-native annual grassland located within the Land Cover Fee Zone B (Agriculture and Valley Floor Lands) of the Habitat Plan. A Land Cover development fee applies to the Project within this Fee Zone. The project site is located outside of Burrowing Owl Fee Zones, Wetland Fee Zones, Serpentine Fee Zones and does not require plant or wildlife surveys for designated species.

The Project site is located 5 feet beyond top of bank of Little Llagas Creek and is entirely outside of the Habitat Plan's Geobrowser mapped Category 1 stream buffer setback areas. With intermittent flows, Little Llagas Creek is considered a Category 2 stream. This stream type has a 35 feet setback requirement, per Condition 11 of the Santa Clara Valley Habitat Plan. Exemptions to Condition 11 setback are provided for recreational trails, however, additional Project components of the Preliminary Design Concept such as parking lot uses are not exempt from the setback. Encroachment with impervious surfaces and parking areas into the 35-foot stream setback would conflict with the Santa Clara Valley Habitat Plan and be considered a significant impact.

Mitigation Measures: The future refined park design shall implement the following mitigation measure to ensure the project will comply with Condition 11 of the Santa Clara Valley Habitat Plan 35-foot stream setback and implementation of BIO MM 2.1 will reduce potential for impacts to occur the stream setback. Implementation of Condition 11 will reduce impacts to the stream setback to a less than significant level:

MM BIO-6.1: To the extent feasible, all non-compatible activities will avoid encroachment into the 35-foot stream setback to protect the stream corridor. Avoidance is considered to be completely avoiding any work, staging inside the setback, or development of the setback that is not compatible with setback uses. The boundary of the designated avoidance buffer will be flagged or fenced prior to initial ground disturbance.

With the implementation of the above mitigation measure identified by the Santa Clara Valley Habitat Agency to project design would avoid impacts to the stream setback corridor would not result in a significant impact and would maintain a healthy riparian zone which is critical for maintaining water quality, providing habitat, maintaining connectivity, and a variety of other physical and biological functions. **(Less than Significant Impact with Mitigation Incorporated)**

4.5 CULTURAL RESOURCES

This discussion is based in part on an archaeological survey and Native American consultation completed by Holman & Associates on May 29, 2019. This report contains sensitive information and is on file at Morgan Hill City Hall for review by qualified personnel.

4.5.1 Environmental Setting

4.5.1.1 *Regulatory Framework*

Federal

National Historic Preservation Act

Federal protection is legislated by the National Historic Preservation Act (NHPA) of 1966 and the Archaeological Resource Protection Act of 1979. These laws maintain processes for determination of the effects on historical properties eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA and related regulations (36 Code of Federal Regulations Part 800) constitute the primary federal regulatory framework guiding cultural resources investigations and require consideration of effects on properties that are listed or eligible for listing in the NRHP. Impacts to properties listed in the NRHP must be evaluated under CEQA.

State

California Register of Historical Resources

The California Register of Historical Resources (CRHR) is administered by the State Office of Historic Preservation and encourages protection of resources of architectural, historical, archeological, and cultural significance. The CRHR identifies historic resources for state and local planning purposes and affords protections under CEQA. Under Public Resources Code Section 5024.1(c), a resource may be eligible for listing in the CRHR if it meets any of the NRHP criteria.¹⁸

Historical resources eligible for listing in the CRHR must meet the significance criteria described previously and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

The concept of integrity is essential to identifying the important physical characteristics of historical resources and, therefore, in evaluating adverse changes to them. Integrity is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance.” The processes of determining integrity are similar for both the CRHR and NRHP and use the same seven variables or aspects to define integrity that are used to evaluate a resource’s eligibility for listing. These seven characteristics include 1) location, 2) design, 3) setting, 4) materials, 5) workmanship, 6) feeling, and 7) association.

¹⁸ California Office of Historic Preservation. “CEQA Guidelines Section 15064.5(a)(3) and California Office of Historic Preservation Technical Assistance Series #6.” March 14, 2006.

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act applies to both state and private lands. The act requires that upon discovery of human remains, construction or excavation activity must cease and the county coroner be notified.

Public Resources Code Sections 5097 and 5097.98

Section 15064.5 of the CEQA Guidelines specifies procedures to be used in the event of an unexpected discovery of Native American human remains on non-federal land. These procedures are outlined in Public Resources Code Sections 5097 and 5097.98. These codes protect such remains from disturbance, vandalism, and inadvertent destruction, establish procedures to be implemented if Native American skeletal remains are discovered during construction of a project, and establish the Native American Heritage Commission (NAHC) as the authority to resolve disputes regarding disposition of such remains.

Pursuant to Public Resources Code Section 5097.98, in the event of human remains discovery, no further disturbance is allowed until the county coroner has made the necessary findings regarding the origin and disposition of the remains. If the remains are of a Native American, the county coroner must notify the NAHC. The NAHC then notifies those persons most likely to be related to the Native American remains. The code section also stipulates the procedures that the descendants may follow for treating or disposing of the remains and associated grave goods.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to loss of cultural resources.¹⁹ The following goal and policy related to cultural resources are applicable to the proposed project:

Healthy Community:

Goal HC-8: Historic identity and cultural resources that are preserved for future generations.

Policy HC-8.5: **Mitigation.** Require that if cultural resources, including tribal, archaeological, or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.

¹⁹ City of Morgan Hill, California (2016). "Chapter 6, Healthy Community." *City of Morgan Hill General Plan 2035*. Accessed May 16, 2019. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>

4.5.1.2 Existing Conditions

The City of Morgan Hill's Archaeological Sensitivity Map identifies a portion of the project site to be within a potentially archaeologically sensitive area due to the site's proximity to Little Llagas Creek.²⁰ Additionally, based on initial discussion with the Amah Mutsun Tribal Band, the creek is a sensitive waterway that could contain pre-historic cultural resources.²¹

The project site includes a stormwater detention basin and vacant land. Based on the historic properties listed in the City's General Plan EIR (Table 4.5-1), no historic properties are adjacent to the site, and the nearest historic site (the 21 Mile House) is located within a quarter mile of the site.

4.5.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☒
2) Cause a substantial adverse change in the significance of an archaeological resource as pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐
3) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐
Impact CUL-1:	The project would not cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5. (No Impact)			

The project site includes a stormwater detention basin and vacant land and does not contain any buildings or structures. As a result, there are no structures listed, determined eligible, or pending on the California Register of Historical Resources located on the project site; and no significant or potentially significant local, state, or federal cultural resources/historic properties (e.g., landmarks, points of interest, etc.) are located on the project site. Based on the historic properties listing in the City's General Plan, the project site is not adjacent to any historic properties, and the nearest historic property is within a quarter mile of the site, located at intersection of Edmundson Avenue and Monterey Road.²² Given the distance of the site from the nearest historic property, the project would have no impact on historic resources. **(No Impact)**

²⁰ City of Morgan Hill. *Archaeological Sensitivity Map*. April 2009.

²¹ Holman & Associates. *Results of a CEQA Archaeological Survey and Native American Consultation for the Butterfield Park Project at Butterfield Boulevard and Monterey Road*. June 2019.

²² This is a plaque marking a historic site. No historic structures remain at this site.

Impact CUL-2: The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.
(Less than Significant Impact)

No archaeological sites are recorded within or adjacent to the project site, nor are any resources listed on state or federal inventories.²³ No cultural materials or archaeological deposits were observed during the field survey by the archaeologist, and Holman & Associates does not recommend any additional archaeological study or the need for monitoring during ground-disturbing construction activities. Nevertheless, the project shall implement the following standard condition in the event that an undiscovered archaeological resource is encountered during project construction activities:

Standard Condition CUL-1.1:

In the event of the unintentional discovery of undocumented human remains or significant historic or archaeological materials during construction, the following policies and procedures for treatment and disposition measures shall be implemented:

- If human remains are encountered, they shall be treated with dignity and respect as due to them. Information about such a discovery shall be held in confidence by all project personnel on a need to know basis. The rights of Native Americans to practice ceremonial observances on sites, in labs and around artifacts shall be upheld.
 - Remains should not be held by human hands. Surgical gloves should be worn if remains need to be handled.
 - Surgical mask should also be worn to prevent exposure to pathogens that may be associated with the remains.
- In the event that known or suspected Native American remains are encountered or significant historic or archaeological materials are discovered, ground-disturbing activities shall be immediately stopped.²⁴ Ground-disturbing project activities may continue in other areas that are outside the discovery location.
- An “exclusion zone” where unauthorized equipment and personnel are not permitted shall be established (e.g., taped off) around the discovery area plus a reasonable buffer zone by the Contractor Foreman or authorized representative, or party who made the discovery, or if on-site at the time of discovery, by the Monitoring Archaeologist (typically 25 to 50 foot buffer for a single burial or archaeological find).
- The discovery location shall be secured as directed by the City if considered prudent to avoid further disturbances.

²³ Ibid.

²⁴ Examples of significant historic or archaeological materials include, but are not limited to, concentrations of historic artifacts (e.g., bottles, ceramics) or prehistoric artifacts (chipped chert or obsidian, arrow points, groundstone mortars and pestles), culturally altered ash-stained midden soils associated with pre-contact Native American habitation sites, concentrations of fire-altered rock and/or burned or charred organic materials, and historic structure remains such as stone-lined building foundations, wells or privy pits.

- The Contractor Foreman or authorized representative, or party who made the discovery shall be responsible for immediately contacting by telephone the parties listed below to report the find and initiate the consultation process for treatment and disposition:
 - o The City of Morgan Hill Community Development Director
 - o The Contractor's Point(s) of Contact
 - o The Coroner of the County of Santa Clara (if human remains found)
 - o The Native American Heritage Commission (NAHC) in Sacramento
 - o The Amah Mutsun Tribal Band
- The Coroner will have two working days to examine the human remains after being notified of the discovery. If the remains are Native American, the Coroner has 24 hours to notify the NAHC. The NAHC is responsible for identifying and immediately notifying the Most Likely Descendant (MLD) from the Amah Mutsun Tribal Band. (Note: NAHC policy holds that the Native American Monitor will not be designated the MLD.)
- Within 24 hours of their notification by the NAHC, the MLD will be granted permission to inspect the discovery site if they so choose.
- Within 24 hours of their notification by the NAHC, the MLD may recommend to the City's Community Development Director the recommended means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The recommendation may include the scientific removal and non-destructive or destructive analysis of human remains and items associated with Native American burials. Only those osteological analyses or DNA analyses recommended by the Amah Mutsun Tribal Band may be considered and carried out.
- If the MLD recommendation is rejected by the City of Morgan Hill, the parties will attempt to mediate the disagreement with the NAHC. If mediation fails, then the remains and all associated grave offerings shall be reburied with appropriate dignity on the property in a location not subject to further subsurface disturbance.

With the implementation of the above standard conditions, the project would have a less than significant impact on archaeological resources. **(Less than Significant Impact)**

Impact CUL-3: The project would not disturb any human remains, including those interred outside of dedicated cemeteries. **(Less than Significant Impact)**

As explained in Section 4.5.1.2, the project site is partially located within a potentially archaeologically sensitive area due to its proximity to Little Llagas Creek. According to the City's Archaeological Sensitivity Map, and input from the Amah Mutsun Tribal Band, the creek is a sensitive waterway that could potentially contain cultural resources.^{25,26} In the unlikely event that human remains are discovered during construction activities, implementation of **Standard Condition CUL-1.1** would reduce the project's impact on human remains to a less than significant level. **(Less than Significant Impact)**

²⁵ City of Morgan Hill. *Archaeological Sensitivity Map*. April 2009.

²⁶ Holman & Associates. *Results of a CEQA Archaeological Survey and Native American Consultation for the Butterfield Park Project at Butterfield Boulevard and Monterey Road*. May 2019.

4.6 ENERGY

The following discussion is based in part on CalEEMod results completed by Illingworth & Rodkin, Inc. on June 27, 2019. A copy of this report is included in Appendix A.

4.6.1 Environmental Setting

4.6.1.1 *Regulatory Framework*

Federal

At the federal level, energy standards set by the U.S. Environmental Protection Agency (EPA) apply to numerous consumer products and appliances (e.g., the EnergyStar™ program). The EPA also sets fuel efficiency standards for automobiles and other modes of transportation.

State

Renewables Portfolio Standard Program

In 2002, California established its Renewables Portfolio Standard (RPS) Program, with the goal of increasing the percentage of renewable energy in the state's electricity mix to 20 percent of retail sales by 2010. In 2008, Executive Order S-14-08 was signed into law requiring retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. In October 2015, Governor Brown signed SB 350 to codify California's climate and clean energy goals. A key provision of SB 350 requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable sources by 2030. SB 100, passed in 2018, requires 100 percent of electricity in California to be provided by 100 percent renewable and carbon-free sources by 2045.

California Building Standards Code

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years, and the 2016 Title 24 updates went into effect on January 1, 2017.²⁷ Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.²⁸

California Green Building Standards Code

CALGreen establishes mandatory green building standards for buildings in California. CALGreen was developed to reduce GHG emissions from buildings, promote environmentally responsible and healthier places to live and work, reduce energy and water consumption, and respond to state environmental directives. The most recent update to CALGreen went in to effect on January 1, 2017, and covers five categories: planning and design, energy efficiency, water efficiency and conservation, material and resource efficiency, and indoor environmental quality.

²⁷ California Building Standards Commission. "Welcome to the California Building Standards Commission." Accessed July 2, 2019. <http://www.bsc.ca.gov/>.

²⁸ California Energy Commission (CEC). "2016 Building Energy Efficiency Standards." Accessed July 2, 2019. <http://www.energy.ca.gov/title24/2016standards/index.html>.

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing pollutants and GHG emissions into a single coordinated set of requirements for vehicle model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.²⁹

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts due to energy usage.³⁰ The following goal and policy related to energy resources are applicable to the proposed project:

Natural Resources and Environment:

Goal NRE-16 *Conservation of energy resources.*

Policy NRE-16.1: **Energy Standards for New Development.** New development, including public buildings, should be designed to exceed State standards for the use of energy.

Policy NRE-16.5 **Energy Efficiency.** Encourage development project designs that protect and improve air quality and minimize direct and indirect air pollutant emissions by including components that promote energy efficiency.

Policy NRE-16.6: **Landscaping for Energy Conservation.** Encourage landscaping plans for new development to address the planting of trees and shrubs that will provide shade to reduce the need for cooling systems and allow for winter daylighting.

Policy NRE-16.7: **Renewable Energy.** Encourage new and existing development to incorporate renewable energy generating features, like solar panels and solar hot water heaters.

²⁹ California Air Resources Board. "The Advanced Clean Cars Program." Accessed July 3, 2018.

<https://www.arb.ca.gov/msprog/acc/acc.htm>.

³⁰ City of Morgan Hill, California (2016). "Chapter 8, Natural Resources and Environment." *City of Morgan Hill General Plan 2035*. Accessed July 3, 2019. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>

4.6.1.2 Existing Conditions

Total energy usage in California was approximately 7,830 trillion Btu in the year 2016, the most recent year for which this data was available. Out of the 50 states, California is ranked 2nd in total energy consumption and 48th in energy consumption per capita. The breakdown by sector was approximately 18 percent (1,384 trillion Btu) for residential uses, 19 percent (1,477 trillion Btu) for commercial uses, 24 percent (1,853 trillion Btu) for industrial uses, and 40 percent (3,116 trillion Btu) for transportation.³¹ This energy is primarily supplied in the form of natural gas, petroleum, nuclear electric power, and hydroelectric power.

Energy usage is typically quantified using the British thermal unit (Btu). PG&E provides natural gas services within the City of Morgan Hill. In 2017, approximately 1.4 percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.³² In 2016, residential and commercial customers in California used 29 percent, power plants used 32 percent, and the industrial sector used 37 percent. Transportation accounted for one percent of natural gas use in California. In 2017, Santa Clara County used approximately 3.5 percent of the state's total consumption of natural gas.³³

Overall natural gas demand in California is anticipated to decrease slightly through 2028. This decline is due to on-site residential, commercial, and industrial electricity generation; aggressive energy efficiency programs; and a decrease in demand for electrical power generation as a result of state-mandated RPS targets (as the state moves to power generation resources that result in less GHG emissions than natural gas).³⁴

Electricity

Electricity in Santa Clara County in 2017 was consumed primarily by the commercial sector (76 percent), followed by the residential sector consuming 24 percent. In 2017, a total of approximately 17,190 GWh of electricity was consumed in Santa Clara County.³⁵

The community-owned Silicon Valley Clean Energy (SVCE) is the electricity provider for the City of Morgan Hill.³⁶ SVCE sources the electricity and the Pacific Gas and Electric Company delivers it to customers over their existing utility lines. Customers are automatically enrolled in the GreenStart plan, which generates its electricity from 100 percent carbon free sources; with 50 percent from solar and wind sources, and 50 percent from hydroelectric. Customers have the option to enroll in the

³¹ United States Energy Information Administration. *State Profile and Energy Estimates, 2016*. Accessed July 3, 2019. <https://www.eia.gov/state/?sid=CA#tabs-2>.

³² California Gas and Electric Utilities. 2018 California Gas Report. Accessed July 3, 2019. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.

³³ CEC. "Natural Gas Consumption by County". Accessed July 3, 2019. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

³⁴ California Gas and Electric Utilities. 2017 Natural Gas Market Trends and Outlook. Accessed July 3, 2019. http://docketpublic.energy.ca.gov/PublicDocuments/17-IEPR-04/TN222400_20180131T074538_STAFF_FINAL_REPORT_2017_Natural_Gas_Market_Trends_and_Outlook.pdf.

³⁵ CEC. Energy Consumption Data Management System. "Electricity Consumption by County". Accessed July 3, 2019. <http://ecdms.energy.ca.gov/elecbycounty.aspx>.

³⁶ SVCE. "Frequently Asked Questions". Accessed July 9, 2019. <https://www.svcleanenergy.org/faqs>.

GreenPrime plan, which generates its electricity from 100 percent renewable sources, such as wind and solar.

Pacific Gas and Electric Company (PG&E) is the City of Morgan Hill energy utility, providing both natural gas and electricity for residential, commercial, industrial, and municipal uses. PG&E generates or buys electricity from hydroelectric, nuclear, renewable, natural gas, and coal facilities. In 2017, natural gas facilities provided 20 percent of PG&E's electricity delivered to retail customers; nuclear plants provided 27 percent; hydroelectric operations provided 18 percent; renewable energy facilities including solar, geothermal, and biomass provided 33 percent; and two percent was unspecified.³⁷

Natural Gas

PG&E provides natural gas services within the City of Morgan Hill. In 2017, approximately 1.4 percent of California's natural gas supply came from in-state production, while the remaining supply was imported from other western states and Canada.³⁸ In 2016, residential and commercial customers in California used 29 percent, power plants used 32 percent, and the industrial sector used 37 percent. Transportation accounted for one percent of natural gas use in California. In 2017, Santa Clara County used approximately 3.5 percent of the state's total consumption of natural gas.³⁹

Fuel for Motor Vehicles

In 2017, 15 billion gallons of gasoline were sold in California.⁴⁰ The average fuel economy for light-duty vehicles (autos, pickups, vans, and SUVs) in the United States has steadily increased from about 13.1 miles-per-gallon (mpg) in the mid-1970's to 22 mpg in 2016.⁴¹ Federal fuel economy standards have changed substantially since the Energy Independence and Security Act was passed in 2007. That standard, which originally mandated a national fuel economy standard of 35 miles per gallon by the year 2020, was subsequently revised to apply to cars and light trucks Model Years 2011 through 2020.^{42,43}

³⁷ PG&E. "Exploring Clean Energy Solutions". Accessed July 3, 2019. https://www.pge.com/en_US/about-pge/environment/what-we-are-doing/clean-energy-solutions/clean-energy-solutions.page.

³⁸ California Gas and Electric Utilities. 2018 California Gas Report. Accessed July 3, 2019. https://www.socalgas.com/regulatory/documents/cgr/2018_California_Gas_Report.pdf.

³⁹ CEC. "Natural Gas Consumption by County". Accessed July 3, 2019. <http://ecdms.energy.ca.gov/gasbycounty.aspx>.

⁴⁰ California Department of Tax and Fee Administration. Net Taxable Gasoline Gallons. Accessed July 3, 2019. http://www.cdtfa.ca.gov/taxes-and-fees/MVF_10_Year_Report.pdf.

⁴¹ U.S. EPA. Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles. Accessed July 3, 2019. <https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles>.

⁴² U.S. Department of Energy. Energy Independence & Security Act of 2007. Accessed July 3, 2019. <http://www.afdc.energy.gov/laws/eisa>.

⁴³ Public Law 110-140—December 19, 2007. Energy Independence & Security Act of 2007. Accessed July 3, 2019. <http://www.gpo.gov/fdsys/pkg/PLAW-110publ140/pdf/PLAW-110publ140.pdf>.

4.6.2 Impact Discussion

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

Impact EN-1: The project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation. **(Less than Significant Impact)**

New automobiles purchased by future occupants of the proposed project would be subject to fuel economy and efficiency standards applied throughout the State of California, which means that over time the fuel efficiency of vehicles associated with the project site would improve. **(Less than Significant Impact)**

Energy Efficiency during Construction

The anticipated construction schedule assumes that the project will be built over a period of approximately 12 months, starting in January 2021 and ending in December 2021. The project would require site preparation, grading and excavation, trenching, paving, and building of interior and exterior public restroom. Energy would not be wasted or used inefficiently by construction equipment, as the proposed project would include several measures to improve efficiency of the construction process. For example, during construction, construction waste management methods and processes will be employed to reduce the amount of and track construction waste. **(Less than Significant Impact)**

Energy Efficiency during Operation

The project would not use energy or fuel in a wasteful manner, given the project features that reduce energy use, including the following:

- Bicycle parking will be provided on-site.
- Parking for clean air vehicles will be provided.
- The proposed public restroom will include water conserving water fixtures.
- During construction, construction waste management methods and processes will be employed to reduce the amount of construction waste.

(Less than Significant Impact)

Impact EN-2: The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. **(Less than Significant Impact)**

Electricity for the outdoor lighting proposed on the vacant site would be provided by Pacific Gas & Electric Company. The proposed development would be completed in compliance with the current energy efficiency standards set forth in Title 24, CALGreen, and the City's Municipal Code. For these reasons, the project would not conflict with or obstruct state or local plans for renewable energy or energy efficiency. **(Less than Significant Impact)**

4.7 GEOLOGY AND SOILS

The following discussion is based in part on a geotechnical report prepared by Pacific Geotechnical Engineering on March 8, 2011 for the Butterfield Boulevard Extension Project, which was constructed on a portion of the project site. A copy of this report is included as Appendix D.

4.7.1 Environmental Setting

4.7.1.1 *Regulatory Framework*

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed following the 1971 San Fernando earthquake. The act regulates development in California near known active faults due to hazards associated with surface fault ruptures. Alquist-Priolo maps are distributed to affected cities, counties, and state agencies for their use in planning and controlling new construction. Areas within an Alquist-Priolo Earthquake Fault Zone require special studies to evaluate the potential for surface rupture to ensure that no structures intended for human occupancy are constructed across an active fault.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (SHMA) was passed in 1990 following the 1989 Loma Prieta earthquake. The SHMA directs the California Geological Survey (CGS) to identify and map areas prone to liquefaction, earthquake-induced landslides, and amplified ground shaking. CGS has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, landslides, and ground shaking, including the central San Francisco Bay Area. The SHMA requires that agencies only approve projects in seismic hazard zones following site-specific geotechnical investigations to determine if the seismic hazard is present and identify measures to reduce earthquake-related hazards.

California Building Standards Code

The California Building Standards Code (CBC) prescribes standards for constructing safer buildings. The CBC contains provisions for earthquake safety based on factors including occupancy type, soil and rock profile, ground strength, and distance to seismic sources. The CBC requires that a site-specific geotechnical investigation report be prepared for most development projects to evaluate seismic and geologic conditions, such as surface fault ruptures, ground shaking, liquefaction, differential settlement, lateral spreading, expansive soils, and slope stability. The CBC is updated every three years; the current version is the 2016 CBC.

California Division of Occupational Safety and Health Regulations

Excavation, shoring, and trenching activities during construction are subject to occupational safety standards for stabilization by the California Division of Occupational Safety and Health (Cal/OSHA) under Title 8 of the California Code of Regulations and Excavation Rules. These regulations minimize the potential for instability and collapse that could injure construction workers on the site.

Paleontological Resources Regulations

Paleontological resources are the fossilized remains of organisms from prehistoric environments found in geologic strata. They range from mammoth and dinosaur bones to impressions of ancient animals and plants, trace remains, and microfossils. These are valued for the information they yield about the history of the earth and its past ecological settings. The California Public Resources Code (Section 5097.5) specifies that unauthorized removal of a paleontological resource is a misdemeanor. Under the CEQA Guidelines, a project would have a significant impact on paleontological resources if it would disturb or destroy a unique paleontological resource or site or unique geologic feature.

Local

City of Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to due to geological conditions and seismicity.⁴⁴ The following goal and policy related to geology and soils is applicable to the proposed project:

Safety, Services, and Infrastructure:

Goal SSI-1: Development that avoids or minimizes risk from environmental hazards.

Policy SSI-1.2: **Hazard Reporting.** Known or potential geologic, fire, and flood hazards shall be disclosed as part of every real estate transaction and recorded on documents to be reported for building permits, subdivisions, and land development reports. Mitigation of hazards shall be noted in the same manner.

Goal SSI-2: Reduction of potential harm to persons or property from geologic/seismic hazards.

Policy SSI-2.1: **Land Use and Geologic Hazards.** Limit uses on lands with geologic hazards but allow uses on previously urbanized lands with proper mitigation. Keep development in hazardous areas to a minimum by encouraging low-density, low-intensity uses and the types of uses least disruptive to the soil and vegetative cover.

4.7.1.2 Existing Conditions

Regional Geology

The project site is located in the Santa Clara Valley, an alluvial basin, bounded by the Santa Cruz Mountains to the west, the Hamilton/Diablo Range to the east, and the San Francisco Bay to the north. The Santa Clara Valley was formed when sediments derived from the Santa Cruz Mountains and the Hamilton/Diablo Range were exposed by the continued tectonic uplift and regression of the

⁴⁴ City of Morgan Hill, California (2016). "Chapter 9, Safety, Services, and Infrastructure." *City of Morgan Hill General Plan 2035*. Accessed May 16, 2019. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>

inland sea that had previously inundated this area. Bedrock in this area is made up of the Franciscan Complex, a diverse group of igneous, sedimentary, and metamorphic rocks of Late Jurassic to Cretaceous age (70-140 million years old). Sediments of the Santa Clara Valley are composed of water-bearing Plio-Pleistocene and Upper Quaternary sediments, which are underlain by older non-water bearing rocks. The Upper Quaternary sediments consist of up to 1,000 feet of poorly sorted gravel, sand and clay, which were deposited in alluvial fan (triangular-shaped deposits of water-transported material) and deltaic (delta) depositional environments.

Site Geology

Seismicity

The project site is located within the San Francisco Bay Area, the most seismically active region in the U.S. Faults in the region are capable of generating earthquakes of magnitude 6.7 or higher, and strong to very strong ground shaking would be expected to occur at the project site during a major earthquake on one of the nearby faults. The U.S. Geological Survey (USGS) estimates that there is a 72 percent chance of at least one magnitude 6.7 earthquake occurring in the Bay Area between 2014 and 2043.⁴⁵

The site is not located within a designated Alquist-Priolo Earthquake Fault Zone⁴⁶ or in a Santa Clara County Fault Hazard Zone⁴⁷ and no active faults have been mapped on-site. Therefore, the risk of fault rupture at the site is low. Faults in the region are, however, capable of generating earthquakes of magnitude 7.0 or higher and strong to very strong ground shaking would be expected to occur at the project site during a major earthquake on one of the nearby faults. The distance between the site and nearby active faults (faults in which historic displacement has occurred within the last 200 years) near the project site are shown in Table 4.7-1.⁴⁸

Table 4.7-1: Active Faults Near the Project Site	
Fault	Approximate Distance from Site
Calaveras	4 miles northeast
San Andreas	9 miles southwest
Hayward	13 miles northwest

⁴⁵ United States Geological Survey. "Earthquake Outlook for the San Francisco Bay Region 2014 – 2043." August 2016. Accessed May 20, 2019. <https://pubs.usgs.gov/fs/2016/3020/fs20163020.pdf>.

⁴⁶ California Geological Survey. "Earthquake Zones of Required Investigation." Accessed May 16, 2019. <https://maps.conservation.ca.gov/cgs/EQZApp/>

⁴⁷ Santa Clara County Geologic Hazard Zones Map, Map 53. Accessed May 17, 2019.

⁴⁸ Pacific Geotechnical Engineering. *Geotechnical and Foundation Investigation Proposed Butterfield Boulevard Extension*. March 8, 2011.

Liquefaction

Liquefaction is the result of seismic activity and is characterized as the transformation of loose water-saturated soils from a solid state to a liquid state during ground shaking. During ground shaking, such as during earthquakes, cyclically induced stresses may cause increased pore water pressures within the soil voids, resulting in liquefaction. The project site has low liquefaction susceptibility and is not located in a State of California designated Seismic Hazard Zone.^{49,50}

Lateral Spreading

Lateral spreading is a failure within a nearly horizontal soil zone (possibly due to liquefaction) that causes the overlying soil mass to move toward a free face (such as an open body of water, channel or excavation) or down a gentle slope. The project site is relatively flat, but its proximity to Little Llagas Creek increases the potential for lateral spreading.

Paleontological Resources

Paleontological resources or fossils are the remains of prehistoric plant and animal life. Paleontological resources do not include human remains or artifacts. Fossil remains such as bones, teeth, shells, and wood are found in geologic formations. Paleontological resources are limited, non-renewable, sensitive scientific and educational resources. The potential for fossil remains at a location can be predicted based on whether or not previous fossil finds have been made in the vicinity, as well as based on the age of the geologic formations. Based on the findings in the General Plan EIR, no paleontological resources have been identified in the City of Morgan Hill.

4.7.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
- Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault (refer to Division of Mines and Geology Special Publication 42)?	☐	☐	☒	☐
- Strong seismic ground shaking?	☐	☐	☒	☐
- Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐

⁴⁹ Association of Bay Area Governments. Earthquake and Hazard Zones Program. Liquefaction. <http://quake.abag.ca.gov/earthquakes/>. Accessed May 17, 2019.

⁵⁰ Pacific Geotechnical Engineering. *Geotechnical and Foundation Investigation Proposed Butterfield Boulevard Extension*. March 8, 2011.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
- Landslides?	☐	☐	☒	☐
2) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
4) Be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
6) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☒

Impact GEO-1: The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides.
(Less than Significant Impact)

The project site is located within the seismically active San Francisco Bay Area which has a 72 percent probability of experiencing at least one magnitude 6.7 earthquake during the next 30 years. The project site would experience intense ground shaking in the event of a large earthquake. No known faults occur beneath the project site. The project site is not located within an earthquake fault zone on an Alquist-Priolo Earthquake Fault Zoning Map and, therefore, the potential for fault rupture at the site is low.

The project site is not located within a state-designated liquefaction hazard zone; thus, liquefaction susceptibility is very low, and no liquefiable soils are present on-site.^{51,52,53} Since the soils on site are

⁵¹ Santa Clara County Geologic Hazard Zones Map, Map 53. Accessed May 17, 2019.

⁵² Association of Bay Area Governments Resilience Program. Liquefaction Susceptibility Map. Accessed May 17, 2019.

⁵³ Pacific Geotechnical Engineering. *Geotechnical and Foundation Investigation Proposed Butterfield Boulevard Extension*. March 8, 2011.

not prone to liquefaction, the probability of lateral spreading is low. However, Little Llagas Creek is located adjacent to the project site. The proposed project's proximity to the creek could create the potential for lateral spreading. The project site and area are flat and are not located in a landslide hazard zone. Therefore, there is no potential for landslides to occur on-site.

A site-specific, design-level geotechnical report would be prepared prior to construction in order to ensure project safety and compliance with local and state policies. Additionally, the project would implement the following standard condition.

Standard Condition GEO-1.1:

- To avoid or minimize potential damage from seismic shaking, the proposed development shall be built using standard engineering and seismic safety design techniques. Building design and construction at the site shall be completed in conformance with the recommendations of a design-level geotechnical investigation, which will be included in a report to the City. The structural designs for the proposed development will account for repeatable horizontal ground accelerations. The report shall be reviewed and approved by the City of Morgan Hill Building Division prior to issuance of a building permit. The buildings will be required to meet the requirements of applicable Building and Fire Codes, including the 2017 California Building Code Chapter 16, Section 1613, as adopted or updated by the City. The project will be designed to withstand soil hazards identified on the site and the project shall be designed to reduce the risk to life or property to the extent feasible and in compliance with the Building Code.

By conforming to standard engineering and seismic safety design techniques outlined in the City of Morgan Hill's Building Division and California Building Code, the proposed project would not expose people or structures to substantial adverse effects; nor would the project exacerbate existing geological hazards on the project site such that it would impact (or worsen) off-site geological and soil conditions. **(Less than Significant Impact)**

Impact GEO-2: The project would not result in substantial erosion or the loss of topsoil. **(Less than Significant Impact)**

Grading, trenching, and construction of the proposed project would result in ground disturbance at the site. Ground disturbance would expose soils and increase the potential for wind or water related erosion and sedimentation at the site until construction is complete. The City has developed standard conditions to avoid significant soil erosion impacts during construction. The following conditions would be included as part of the project:

Standard Condition GEO-2.1: (Storm Drain System): Prior to final map approval or issuance of a grading permit the applicant shall complete the following to the satisfaction of the Director of Public Works.

1. Storm drain calculations to determine detention pond sizing and operations.
2. Plan describing how material excavated during construction will be controlled to prevent this material from entering the storm drain system.

3. Water Pollution Control Drawings for Sediment and Erosion Control.

Standard Condition GEO-2.2: (NPDES Permit Conformance):

- As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) package and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with Section A, B, and C of the General Permit prior to the commencement of soil disturbing activities. A NOI Receipt Letter assigning a Waste Discharger Identification number to the construction site will be issued after the SWRCB receives a complete NOI package (original signed NOI application, vicinity map, and permit fee); copies of the NOI Receipt Letter and SWPPP shall be forwarded to the Building and Public Works Department review. The SWPPP shall be made a part of the improvement plans.

Through implementation of **Standard Conditions GEO-2 and GEO-3**, the proposed project would avoid substantial soil erosion and would not cause a significant loss of topsoil. **(Less than Significant Impact)**

Impact GEO-3: The project would not 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. **(Less than Significant Impact)**

With the implementation of the standard engineering and seismic safety design techniques outlined in the City of Morgan Hill's Building Division and California Building Code (refer to **Standard Condition GEO-1.1**), the project site would not be located on an unstable geological unit that would result in subsidence or collapse of the proposed infrastructure. The project site and area are not subject to landslides and have a low potential for liquefaction or lateral spreading. Therefore, compliance with **Standard Condition GEO-1.1** would ensure that the project would not exacerbate existing geological hazards on the site such that it would impact off-site geological and soil conditions. **(Less than Significant Impact)**

Impact GEO-4: The project would not be located on expansive soil, as defined in the current California Building Code, creating substantial direct or indirect risks to life or property. **(Less than Significant Impact)**

Native soils on the project site include Arbuckle loam, Pleasanton loam, and San Ysidro loam.⁵⁴ These soils have a moderate to high shrink-swell potential and low to moderate permeability.⁵⁵ The project would comply with **Standard Condition GEO-1.1**, discussed in Impact GEO-1. Standard engineering practices, including the standard permit condition outlined above, would ensure that the future site improvements are designed properly to account for soils-related hazards on the site. With implementation of the standard permit condition, expansive soils on-site would not exacerbate risks to life and property, and the project would result in a less than significant impact. **(Less than Significant Impact)**

Impact GEO-5: The project would not 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. **(No Impact)**

The project site is located within an urbanized area of Morgan Hill where sewers are available to dispose of wastewater from the project site. The site would not need to support septic tanks or alternative wastewater disposal systems. **(No Impact)**

Impact GEO-6: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geological feature. **(No Impact)**

No paleontological resources have been identified in the City of Morgan Hill. The proposed project would excavate to a maximum depth of approximately six feet below ground surface to install utilities. Given that the proposed project would not require excavation below six feet below ground surface and surface soils are relatively young deposits typically devoid of paleontological resources, paleontological resources would not likely be discovered during construction. The project would, therefore, not result in a significant impact to paleontological resources. **(No Impact)**

⁵⁴ United States Department of Agriculture. Web Soil Survey.
<https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

⁵⁵ City of Morgan Hill. *Butterfield Boulevard South Extension Initial Study*. June 2010.

4.8 GREENHOUSE GAS EMISSIONS

4.8.1 Environmental Setting

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities. Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO₂ being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO₂ equivalents (CO₂e).

An expanding body of scientific research supports the theory that global climate change is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California are adversely affected by the global warming trend. Increased precipitation and sea level rise will increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive diseases; more frequent and intense natural disasters such as flooding, hurricanes and drought; and increased levels of air pollution.

4.8.1.1 *Regulatory Framework*

State

Global Warming Solutions Act

Under the California Global Warming Solutions Act, also known as Assembly Bill (AB) 32, the California Air Resources Board (CARB) established a statewide GHG emissions cap for 2020, adopted mandatory reporting rules for significant sources of GHG, and adopted a comprehensive plan, known as the Climate Change Scoping Plan, identifying how emission reductions would be achieved from significant GHG sources.

In 2016, Senate Bill (SB) 32 was signed into law, amending the California Global Warming Solution Act. SB 32, and accompanying Executive Order B-30-15, require CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. CARB updated its Climate Change Scoping Plan in December of 2017 to express the 2030 statewide target in terms of million metric tons of carbon dioxide equivalent (MMTCO₂e). Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MMTCO₂e.

Senate Bill 375

SB 375, known as the Sustainable Communities Strategy and Climate Protection Act, was signed into law in September 2008. SB 375 builds upon AB 32 by requiring CARB to develop regional GHG reduction targets for automobile and light truck sectors for 2020 and 2035, as compared to 2005 emissions levels. The per-capita GHG emissions reduction targets for passenger vehicles in the San Francisco Bay Area include a seven percent reduction by 2020 and a 15 percent reduction by 2035.

Consistent with the requirements of SB 375, the Metropolitan Transportation Commission partnered with the Association of Bay Area Governments, BAAQMD, and Bay Conservation and Development Commission to prepare the region's Sustainable Communities Strategy (SCS) as part of the Regional Transportation Plan process. The SCS is referred to as Plan Bay Area. Plan Bay Area establishes a course for reducing per-capita GHG emissions through the promotion of compact, high-density, mixed-use neighborhoods near transit, particularly within identified Priority Development Areas (PDAs).

Advanced Clean Cars Program

CARB adopted the Advanced Clean Cars program in 2012 in coordination with the EPA and National Highway Traffic Safety Administration. The program combines the control of smog-causing (criteria) pollutants and GHG emissions into a single coordinated set of requirements for model years 2015 through 2025. The program promotes development of environmentally superior passenger cars and other vehicles, as well as saving the consumer money through fuel savings.⁵⁶

Regional

Bay Area 2017 Clean Air Plan

Regional air quality management districts, such as BAAQMD, must prepare air quality plans specifying how state and federal air quality standards would be met. BAAQMD's most recently adopted plan is the Bay Area 2017 Clean Air Plan (2017 CAP). The 2017 CAP focuses on two related BAAQMD goals: protecting public health and protecting the climate. To protect the climate, the 2017 CAP includes control measures designed to reduce emissions of methane and other super-GHGs that are potent climate pollutants in the near-term, and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

⁵⁶ CARB. "The Advanced Clean Cars Program". Accessed July 5, 2019.
<https://www.arb.ca.gov/msprog/acc/acc.htm>.

CEQA Air Quality Guidelines

The BAAQMD CEQA Air Quality Guidelines are intended to serve as a guide for those who prepare or evaluate air quality impact analyses for projects and plans in the San Francisco Bay Area. The Jurisdictions in the San Francisco Bay Area Air Basin utilize the thresholds and methodology for assessing GHG impacts developed by BAAQMD within the CEQA Air Quality Guidelines. The guidelines include information on legal requirements, BAAQMD rules, methods of analyzing impacts, and recommended mitigation measures.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts to greenhouse gas emissions.⁵⁷ The following goals and policies related to greenhouse gas emissions are applicable to the proposed project:

Natural Resources and Environment:

Goal NRE-15 *An adaptive and resilient community that responds to climate change.*

Policy NRE-15.1 **Greenhouse Gas Emission Reduction Targets.** Maintain a greenhouse gas reduction trajectory that is consistent with the greenhouse gas reduction targets of Executive Orders B-30-15 (40 percent below 1990 levels by 2030) and S-03-05 (80 percent below 1990 levels by 2050) to ensure the City is consistent with statewide efforts to reduce greenhouse gas emissions.

Policy NRE-15.4 **Sustainable Land Use.** Promote land use patterns that reduce the number and length of motor vehicle trips.

4.8.1.2 Existing Conditions

Unlike emissions of criteria and toxic air pollutants, which have regional and local impacts, emissions of GHGs have a broader, global impact. Global warming is a process whereby GHGs accumulating in the upper atmosphere contribute to an increase in the temperature of the earth and changes in weather patterns.

The proposed site includes a stormwater detention basin and vacant land. Minimal GHG emissions are generated by a small number of vehicles traveling to and from the site related to maintenance.

⁵⁷ City of Morgan Hill, California (2016). "Chapter 8, Natural Resources and Environment." *City of Morgan Hill General Plan 2035*. Accessed July 5, 2019. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>

4.8.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	☐	☐	☒	☐

Impact GHG-1: The project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. **(Less than Significant Impact)**

GHG emissions associated with development of the proposed project would occur over the short-term from construction activities, consisting primarily of emissions from equipment exhaust and worker and vendor trips. There would also be long-term operational emissions associated with vehicular traffic within the project vicinity, energy, and water usage, and solid waste disposal.

The operational screening size for public parks is 600 acres, while the proposed park would only occupy 9.5 acres. Since the project's scale is substantially below the screening level for operational GHG emissions, the project's operational GHG emissions would have a less than significant impact on the environment. **(Less than Significant Impact)**

Impact GHG-2: The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. **(Less than Significant Impact)**

The proposed project's operational emissions would be below the BAAQMD screening levels, and therefore, would be consistent with state and local plans and policies pertaining to GHG emission reductions. The project would be consistent with the greenhouse gas reduction targets of Executive Orders B-30-15. As a result, the project does not conflict with policies adopted at the state and local levels for the purpose of reducing GHG emissions. **(Less than Significant Impact)**

4.9 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based in part on a Phase II Shallow Soil Sampling Program prepared by Weber, Hayes & Associates on July 7, 2019. A copy of this report is included in Appendix E.

4.9.1 Environmental Setting

4.9.1.1 *Regulatory Framework*

Federal and State

Hazardous Materials Overview

The storage, use, generation, transport, and disposal of hazardous materials and waste are highly regulated under federal and state laws. Federal regulations and policies related to development include the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, and the Resource Conservation and Recovery Act (RCRA). In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (CalEPA). In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency (CUPA) program.

Worker health and safety and public safety are key issues when dealing with hazardous materials. Proper handling and disposal of hazardous material is vital if it is disturbed during project construction. Cal/OSHA enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, requirements for protective clothing, and training requirements to prevent exposure to hazardous materials. Cal/OSHA also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement.

Cortese List

Section 65962.5 of the Government Code requires CalEPA to develop and update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by the Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB), and Santa Clara County.

California Accidental Release Prevention Program

The California Accidental Release Prevention (CalARP) Program aims to prevent accidental releases of regulated hazardous materials that represent a potential hazard beyond the boundaries of property. Facilities that are required to participate in the CalARP program use or store specified quantities of toxic and flammable substances (hazardous materials) that can have off-site consequences if accidentally released. The County of Santa Clara Department of Environmental Health reviews CalARP risk management plans as the CUPA.

Local

Morgan Hill 2035 General Plan

The following goal and policy to reduce the effects of hazardous materials are applicable to the proposed project:

Goal SSI-4: Avoidance and exposure to hazardous substances.

Policy SSI-4.16 **Contaminated Site Mitigation.** Require new or expanding development projects in areas contaminated from previous discharges to mitigate their environmental effects.

4.9.1.2 *Existing Conditions*

The project site is open space and its general use has been for grazing. The project site is relatively flat with open grassy areas. The project is surrounded by developed and undeveloped parcels. Adjacent to the project site on Monterey Road is vacant land and the Maple Leaf RV Park. There is a single-family residence to the north of the project across Butterfield Blvd., which is a one-story single-family home. Across from the single-family home there is new residential development taking place.

A review of regulatory environmental databases was completed for the project site and surrounding properties within one mile of the site. Based the review of the search, the site is not listed in any regulatory databases. Based on the distance, direction, and/or nature of the remaining listings in the vicinity of the site, none of the surrounding properties are an environmental concern for the project site. Phase II Testing was conducted on the project site and the results indicate that the trace concentrations of past agricultural pesticides detected at the site do not pose an unacceptable risk to human health or the environment for land use transition to recreational.⁵⁸

4.9.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
2) 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?	☐	☐	☒	☐

⁵⁸ Weber, Hayes & Associates. Phase II Shallow Soil Sampling Program. July 7, 2019. Page 4.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
4) 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, will it create a significant hazard to the public or the environment?	☐	☐	☐	☒
5) 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, result in a safety hazard or excessive noise for people residing or working in the project site?	☐	☐	☐	☒
6) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
7) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Impact HAZ-1: The project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials. **(Less than Significant Impact)**

The project does not propose any on-site use of hazardous materials. The use, storage, transportation, and disposal of maintenance chemicals would be managed in accordance with existing laws and regulations (including California Code of Regulations, Division 6, Chapter 3, Subchapter 2, Article 4 Storage, Transportation and Disposal) that ensure herbicide and pesticide storage, transportation and disposal would result in a less than significant impact. No other routine use, storage, transportation, or disposal of hazardous materials is anticipated as part of the project. **(Less than Significant Impact)**

Impact HAZ-2: The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. **(Less than Significant Impact)**

As discussed in Section 4.9.1.2, the project site does not have any recorded contamination on-site as reported on the Phase II Shallow Soil Sampling Program. The project, therefore, would not create a hazard to the public or the environment involving the release of hazardous materials. **(Less than Significant Impact)**

Impact HAZ-3: The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. **(Less than Significant Impact)**

There are no public schools near the project site; however, there are private schools nearby. The Oakwood School and Morgan Hill Bible church are located approximately 0.6 miles southeast of the site. The project does not propose the use of substantial hazardous materials on-site as discussed under Impact HAZ-1 and the project site does not have any known contamination on-site as discussed under Impact HAZ-2. For these reasons, the project would not emit hazardous emissions or handle hazardous materials that would impact the nearby schools. **(Less than Significant Impact)**

Impact HAZ-4: The project would not 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, create a significant hazard to the public or the environment. **(No Impact)**

The project is not listed on a hazardous materials database or on the Cortese List.⁵⁹ **(No Impact)**

Impact HAZ-5: The project would not be 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. The project would not result in a safety hazard or excessive noise for people residing or working in the project site. **(No Impact)**

The project site is approximately four miles from the South County Airport. The project is not located within an Airport Influence Area or Federal Aviation Administration Height Restriction Area; therefore, the project would not result in an airport safety hazard. Since the site is not within the airport influence area (AIA), the site is not subject to Santa Clara County Airport Land Use Commission (ALUC) evaluation. **(No Impact)**

⁵⁹ CalEPA. *Cortese List Data Resources*. Accessed May 28, 2019. <https://calepa.ca.gov/sitecleanup/corteselist>.

Impact HAZ-6: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. **(Less than Significant Impact)**

The project would be constructed in accordance with current building and fire codes to ensure structural stability and safety in the event of a seismic or seismic-related hazard. In addition, Morgan Hill Fire Department would review the site development plans to ensure fire protection design features are incorporated and adequate emergency access is provided. For these reasons, the proposed project would not impair implementation of or physically interfere with the City of Morgan Hill Emergency Operations and Evacuation Plans. **(Less than Significant Impact)**

Impact HAZ-7: The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. **(No Impact)**

The project site is within the City limits and is not within a State of California Very High Fire Hazard Severity Zone or the City's wildland and urban interface.⁶⁰ Therefore, the project would not expose people or structures to wildfire hazards. **(No Impact)**

⁶⁰ California Department of Forestry and Fire Protection (CalFire). *California Fire Hazard Severity Zone Map Update Project: Fire Hazard Severity Zone Maps*. Accessed May 28, 2019.
http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones_maps.

4.10 HYDROLOGY AND WATER QUALITY

4.10.1 Environmental Setting

4.10.1.1 *Regulatory Framework*

Overview

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality in California. Regulations set forth by the EPA and the SWRCB have been developed to fulfill the requirements of this legislation. EPA regulations include the NPDES permit program, which controls sources that discharge pollutants into the waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by the RWQCBs. The project site is within the jurisdiction of the Central Coast RWQCB.

Federal and State

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100-year flood.

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California (Construction General Permit). For projects disturbing one acre or more of soil, a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) must be prepared by a qualified professional prior to commencement of construction. The Construction General Permit includes requirements for training, inspections, record keeping, and, for projects of certain risk levels, monitoring. The general purpose of the requirements is to minimize the discharge of pollutants and to protect beneficial uses and receiving waters from the adverse effects of construction-related storm water discharges.

Regional and Local

Phase II Small MS4 General Permit

Gilroy, Morgan Hill, and the portion of Santa Clara County that drains to the Pajaro River-Monterey Bay watershed, the City of Morgan Hill are traditional permittees under the state's Phase II Small MS4 General Permit. Since these regions are located in RWQCB Region 3 (Central Coast Region), they are subject to the Central Coast Post-Construction Requirements per Provision E.12.k of the Phase II Permit. The Central Coast Post-Construction Requirements became effective in 2014 and are specific to the Central Coast Region. Post-construction controls are permanent features of a new development or redevelopment project designed to reduce pollutants in stormwater and/or erosive

flows during the life of the project. Types of post-construction controls include low impact development (LID) site design, pollutant source control, stormwater treatment, and hydromodification management measures. The LID approach reduces stormwater runoff impacts by minimizing disturbed areas and impervious surfaces, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses).⁶¹

Water Resources Protection Ordinance and District Well Ordinance

The Santa Clara Valley Water District (Valley Water) operates as the flood control agency for Santa Clara County. Their stewardship also includes creek restoration, pollution prevention efforts, and groundwater recharge. Permits for well construction and destruction work, most exploratory boring for groundwater exploration, and projects within Valley Water property or easements are required under Valley Water's Water Resources Protection Ordinance and District Well Ordinance.

Construction Dewatering Waste Discharge Requirements

Each of the RWQCBs regulate construction dewatering discharges to storm drains or surface waters within its Region under the NPDES program and Waste Discharge Requirements.

Local

Morgan Hill 2035 General Plan

The following goal and policies to reduce impacts to hydrology and water quality are applicable to the proposed project:

- Goal SSI-16:** Minimized adverse effects on property, natural resources, and ground and surface water quality from stormwater runoff.
- Policy SSI-16.2: Drainage System Capacity.** Ensure that the level of detention or retention provided on the site of any new development is compatible with the capacity of the regional storm drainage system.
- Policy SSI-16.3: Stormwater Management Plans.** Require a stormwater management plan for each proposed development, to be presented early in the development process and describe the design, implementation, and maintenance of the local drainage facilities.

⁶¹ City of Gilroy, City of Morgan Hill, and County of Santa Clara. *Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements*. June 2015.

4.10.1.2 Existing Conditions

Hydrology and Drainage

The City of Morgan Hill is divided into several hydrologically distinct drainage areas. Each of these areas consist of conveyance facilities, pumps, and detention basins to collect and dispose of the runoff. The storm runoff from these areas is discharged into creeks or ponds that flow through the City and that are tributaries to Monterey Bay or San Francisco Bay. The project site has a detention basin located on the western end of the site, where runoff from Butterfield Boulevard is collected. The project site is also located in the Little Llagas Creek storm drainage basin.⁶² Little Llagas Creek flows to Llagas Creek and eventually drains into Monterey Bay.

The project site has 456,509 square feet of pervious surfaces consisting of non-native grasses.

Water Quality

The water quality of ponds, creeks, streams, and other surface waterbodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as “non-point” source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Grading and excavation activities during construction of a project could increase the amount of surface water runoff (i.e., particles of fill or excavated soil) from the site, or could erode soil downgradient, if the flows are not controlled. Deposition of eroded material in water features could increase turbidity, thereby endangering aquatic life, and reducing wildlife habitat. Excessive precipitation can carry these non-point pollutants downstream. Under existing conditions, stormwater runoff from Butterfield Boulevard is collected in the basin located on the project site.

Groundwater

The site is located in the Llagas Subbasin of the Santa Clara Valley Groundwater Basin. The site is within the Upper Llagas Area designated by the SCVWD.⁶³

Flooding and Other Hazards

The project site is located within a 100-year flood hazard area. According to the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Map (FIRM), the project site is located within Zone AE, is an area within the 100 year flood (1% annual flood), that has a 1% chance of being equaled or exceeded in any given year. A small portion of the project site is in Zone X which is an area within a 500-year flood, within a 100-year flood with average depths of less than one foot or drainage areas less than one square mile, or areas protected by levees from a 100-year flood.⁶⁴

⁶² City of Morgan Hill. *2018 Storm Drainage System Master Plan*. September 2018.

⁶³ Santa Clara Valley Water District. *Groundwater Management Plan*. Adopted November 22, 2016. Accessed June 6, 2019. <https://www.valleywater.org/your-water/where-your-water-comes-from/groundwater>.

Groundwater recharge area = Area that supplies water to an aquifer in a groundwater basin.

⁶⁴ Federal Emergency Management Agency. *Flood Insurance Rate Map, Community Panel #06085C0607H*. May 18, 2009.

A seiche is an oscillation of the surface of a lake or landlocked sea varying in period from a few minutes to several hours. There are no landlocked bodies of water near the project site that in the event of a seiche would affect the site.

A tsunami is a series of water waves caused by the displacement of a large volume of a body of water, such as an ocean or a large lake. Due to the immense volumes of water and energy involved, tsunamis can devastate coastal regions. The project site does not lie within a tsunami inundation hazard area.⁶⁵

4.10.2 Impact Discussion

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

⁶⁵ California Emergency Management Agency. *California Official Tsunami Inundation Map*. Accessed June 6, 2019. <https://www.conservation.ca.gov/cgs/tsunami/maps>.

Impact HYD-1: The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. **(Less than Significant Impact)**

Construction Water Quality Impacts

There is the potential for water quality impacts to occur during project construction. In addition to generating dust, litter, oil, and other pollutants that could contaminate runoff from the site, construction activities would increase the potential for erosion and sedimentation by disturbing and exposing underlying soil to the erosive forces of water and wind. Since construction of the proposed project would disturb more than one acre of soil, the project would be required to comply with the NPDES General Permit for Construction Activities.

In accordance with the City of Morgan Hill Standard Conditions of Approval and the NPDES General Permit for Construction Activities, Standard Condition HYD-1 and Standard Measure HYD-1 are included in the project to reduce construction-related water quality impacts to a less than significant level.

Standard Condition HYD-1.1: - The City shall implement the following standard condition prior to construction:

- As required by the State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ, construction activity resulting in a land disturbance of one acre or more of soil, or whose projects are part of a larger common plan of development that in total disturbs more than one (1) acre, are required to obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002 for Discharges of Storm Water Associated with Construction Activity (General Permit). To be permitted with the SWRCB under the General Permit, owners must file a complete Notice of Intent (NOI) package and develop a Storm Water Pollution Prevention Plan (SWPPP) Manual in accordance with Section A, B, and C of the General Permit prior to the commencement of soil disturbing activities. A NOI Receipt Letter assigning a Waste Discharger Identification number to the construction site will be issued after the State Water Resource Control Board (SWRCB) receives a complete NOI package (original signed NOI application, vicinity map, and permit fee); copies of the NOI Receipt Letter and SWPPP shall be forwarded to the Building and Public Works Department review. The SWPPP shall be made a part of the improvement plans. (SWRCB NPDES General Permit CA000002).

Standard Condition HYD-1.2: In accordance with the City of Morgan Hill Standard Conditions of Approval and the Construction General Permit, the following measures are included in the project to reduce construction-related water quality impacts to a less than significant level:

The following BMPs shall be implemented during project construction:

- Burlap bags filled with drain rock will be installed around storm drains to route sediment and other debris away from the drains.

- Earthmoving or other dust-producing activities will be suspended during periods of high winds.
- All exposed or disturbed soil surfaces will be watered at least twice daily to control dust.
- Stockpiles of soil or other materials that can be blown by the wind will be watered or covered.
- All trucks hauling soil, sand, and other loose materials will be covered and all trucks will be required to maintain at least two feet of freeboard.
- All paved access roads, parking areas, staging areas and residential streets adjacent to the construction site will be swept daily (with water sweepers).
- Vegetation in disturbed areas will be replanted as quickly as possible.

With the implementation of the above BMPs, the project would not violate any water quality standards during construction. **(Less than Significant Impact)**

Post-Construction Water Quality

Redevelopment and new projects that create or replace 2,500 square feet or more of impervious surface area are required to implement site design and runoff reduction measures where feasible. The project would add approximately 252,545 square feet of new impervious surface area. The project would conform to the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements. In place of the existing detention basin at the western edge of the site, an underground detention rain tank system would be constructed beneath the parking lot. The underground system would be expected to handle the existing flow, as well as the additional flow from the added impervious surface areas that would go into underground treatment units.

Water enters the underground detention rain tank system through an open stormdrain catch basin located at the ground surface. Once inside the system, water is diverted first to the Isolator Row which filters out sediment and trash from the rainwater. As the rain event intensifies the Isolator Row fills up until the water crests a weir and enters a header pipe that carries the water to the other adjacent rows. All of the stormwater chambers are open on the bottom to allow water to infiltrate into the ground. This would ensure that increases in stormwater runoff pollutant loads, rates and volumes generated by the project's increase in impervious surface area on the site would be controlled through the implementation of pollutant source controls and low impact development (LID)-based treatment controls (see response to Impact HYD-3 for a further description of LID-based treatment controls).⁶⁶

Conformance with the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements for implementing pollutant source controls and LID-based treatment controls would reduce impacts to post-construction water quality to a less than significant level. **(Less than Significant Impact)**

⁶⁶ City of Gilroy, City of Morgan Hill and County of Santa Clara. *Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements*. June 2015.

Impact HYD-2: The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. **(No Impact)**

The groundwater should be deep enough such that ground disturbance during construction would not interfere with groundwater flow or expose any aquifers. The project site is not an aquifer recharge facility (i.e., streams or ponds); therefore, development of the project site would not substantially interfere with aquifer recharge. **(No Impact)**

Impact HYD-3: The project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. **(Less than Significant Impact)**

The project site contains 348,480 square feet of pervious surfaces. The proposed development would add approximately 174,240 square feet of impervious surface area, consisting of the proposed walkways, water fountains, bike fix-it stations, restrooms, picnic areas, and the asphalt paved parking lot.

According to the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements, projects that create or replace 22,500 square feet or more of impervious surface area require the applicant to incorporate post-construction controls into the design of the project and to manage post-development peak flows discharged from the site (hydromodification management). Post-construction controls are permanent features designed to reduce pollutants in stormwater and/or erosive flows during the life of the project. Types of post-construction controls include LID site design, pollutant source control, stormwater treatment, and hydromodification management measures. The LID approach reduces stormwater runoff impacts by minimizing disturbed areas and impervious surfaces, maximizing opportunities for infiltration and evapotranspiration, and using stormwater as a resource (e.g. rainwater harvesting for non-potable uses).⁶⁷

There are waterways adjacent to the project site, however, the project would not alter the course of a stream or river causing substantial flooding, erosion, or siltation on- or off-site. With the implementation of BMPs, the project would not result in substantial erosion during construction. For these reasons, the project would not have a significant impact on the City's drainage systems or water quality. **(Less Than Significant Impact)**

⁶⁷ City of Gilroy, City of Morgan Hill and Santa Clara County. *Stormwater Management Guidance Manual for Low Impact Development & Post-Construction Requirements*. June 2015.

Impact HYD-4: The project would not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(No Impact)**

The project site is located in Zone AE and a small portion of the project site is located in Zone X designated by FEMA, the area in Zone AE is in the 100-year flood hazard area. The project site is a flat parcel on the valley floor and is not in proximity to a large body of water. Additionally, the project site is not located within a designated tsunami inundation zone. The proposed project would, therefore, not risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones. **(No Impact)**

Impact HYD-5: The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. **(No Impact)**

The project would comply with the City's Stormwater Management Guidance Manual for Low Impact Development and Post-Construction Requirements. The project would not impact groundwater recharge and would not conflict with the SCVWD's 2016 Groundwater Management Plan. For these reasons, the project would not conflict with implementation of a water quality or groundwater management plan. **(No Impact)**

4.11 LAND USE AND PLANNING

4.11.1 Environmental Setting

4.11.1.1 *Regulatory Framework*

Regional

South County Airport Comprehensive Land Use Plan

A small portion of Morgan Hill extends into the Airport Influence Area (AIA) of the South County Airport, which is located in the unincorporated community of San Martin between Morgan Hill and Gilroy. The airport is operated by Santa Clara County and is used for general aviation, which includes all aviation activities other than commercial passenger flights, commuter/air taxi, and military uses.

The AIA includes all areas surrounding the airport that are affected by noise, height, and safety considerations. All development projects within the AIA must be reviewed by the Santa Clara County Airport Land Use Commission (ALUC) to ensure consistency with the Comprehensive Land Use Plan (CLUP). The Morgan Hill City limits are located outside of the airport's noise contours and safety zones.

The CLUP also establishes height restrictions for structures, and the area subject to these height restrictions is slightly greater than the AIA. Per Figure 6, FAR Part 77 Surfaces, of the CLUP, structures in the southern portion of the Morgan Hill City limits should not exceed the height limits of between 481 feet and 631 feet above mean sea level depending on the location of the structure.

Local

Morgan Hill 2035 General Plan

The Morgan Hill 2035 General Plan includes goals, policies, and actions to avoid significant impacts.⁶⁸ The following goal and policies related to land use and planning are applicable to the proposed project:

City and Neighborhood Form:

Goal CNF-17: *Adequate land for maintaining and focusing industrial development in economically and geographically strategic locations.*

Policy CNF-17.4: **Property between Monterey Road and UPRR Tracks.** Allow a mix of uses on the property located on the east side of Monterey Road south of the Union Pacific train trestle. Require designs for new development to recognize the significance of this portion of Monterey Road as the northerly entrance to

⁶⁸ City of Morgan Hill, California (2016). "Chapter 3, City and Neighborhood Form." *City of Morgan Hill General Plan 2035*. Accessed May 16, 2019. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>

downtown and the necessary limitations on use due to its single point of access.

4.11.1.2 *Existing Conditions*

The 9.5-acre project site is located south of Butterfield Boulevard between Monterey Road and the UPRR. The site has a General Plan land use designation of Light Industrial, which is intended for research, warehouse, manufacturing, service commercial, and other job-generating uses. The site is vacant and undeveloped and is surrounded by open space and a single-family residential development to the west. Surrounding sites are zoned as Industrial. There are mixed use and commercial developments to the southwest, on the opposite side of Monterey Road.

The nearest airport is the South County Airport, located approximately three miles southeast of the project site. The project site is not located within the AIA shown in the South County Airport Comprehensive Land Use Plan.⁶⁹

4.11.2 Impact Discussion

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

Impact LU-1: The project would not physically divide an established community. **(No Impact)**

Examples of projects that have the potential to physically divide an established community include new freeways and highways, major arterial streets, and railroad lines. The project proposes to construct a neighborhood park, which would introduce a new use to the area, but would not include the construction of dividing infrastructure. Thus, development of the park would not physically divide an established community. **(No Impact)**

⁶⁹ Santa Clara County Airport Land Use Commission. *Comprehensive Land Use Plan, Santa Clara County: South County Airport*. Amended November 16, 2016. Accessed May 17, 2019. https://www.sccgov.org/sites/dpd/DocsForms/Documents/ALUC_E16_CLUP.pdf.

Impact LU-2: The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

Land use conflicts can arise from a new development or land use that would cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility conflicts can range from minor irritations and nuisance to potentially significant effects on human health and safety.

As described in Section 4.11.1.2, the Light Industrial land use designation allows research, warehouse, and a variety of other job-generating uses. Since the proposed development is a public park, the City would, upon implementing the park, amend the site's land use designation to Public Park in order to maintain consistency with the General Plan. However, this would not create a significant environmental impact or create a conflict with any plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. **(Less than Significant Impact)**

4.12 MINERAL RESOURCES

4.12.1 Environmental Setting

4.12.1.1 *Regulatory Framework*

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act (SMARA) was enacted by the California Legislature in 1975 to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property and the environment. As mandated under SMARA, the State Geologist has designated mineral land classifications in order to help identify and protect mineral resources in areas within the state subject to urban expansion or other irreversible land uses which would preclude mineral extraction. SMARA also allowed the State Mining and Geology Board, after receiving classification information from the State Geologist, to designate lands containing mineral deposits of regional or statewide significance.

4.12.1.2 *Existing Conditions*

The project site is located in an urban area within the City of Morgan Hill. Mineral resource recovery activities do not occur on or near the project site, nor does the site contain any known mineral resources.

4.12.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Result in the loss of availability of a known mineral resource that will be of value to the region and the residents of the state?	☐	☐	☐	☒
2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Impact MIN-1: The project would not result in the loss of availability of a known mineral resource that would be of value to the region and residents of the state. **(No Impact)**

Based on the United States Geological Survey (USGS) map of mines and mineral resources, the project site is not comprised of known mineral resources or mineral resource production areas.⁷⁰ The General Plan does not identify the project site or area as a mineral resource recovery site. Therefore, the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the residents in the state or region. **(No Impact)**

Impact MIN-2: The project would not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. **(No Impact)**

See discussion for Impact MIN-1. **(No Impact)**

⁷⁰ United States Geological Survey. *Mineral Resources Online Spatial Data: Interactive maps and downloadable data for regional and global Geology, Geochemistry, Geophysics, and Mineral Resources*. Available at <<https://mrdata.usgs.gov/general/map-us.html#home>>. Accessed May 10, 2019.

4.13 NOISE AND VIBRATION

The following discussion is based in part on a noise assessment prepared by Illingworth & Rodkin, Inc. on June 25, 2019. A copy of this report is included in Appendix F.

4.13.1 Environmental Setting

4.13.1.1 *Background Information*

Several factors influence sound as it is perceived by the human ear, including the actual level of sound, the period of exposure to the sound, the frequencies involved, and the fluctuation in the noise level during exposure. Noise is measured on a “decibel” scale which serves as an index of loudness. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Each 10 decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the A-weighted decibel, or dBA.

Since excessive noise levels can adversely affect human activities and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. Noise guidelines are almost always expressed using one of several noise averaging methods, such as L_{eq} , DNL, or CNEL.⁷¹ Using one of these descriptors is a way for a location’s overall noise exposure to be measured, given that there are specific moments when noise levels are higher (e.g., when a jet is taking off from an airport or when a leaf blower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows on freeways or in the middle of the night). L_{max} is the maximum A-weighted noise level during a measurement period.

4.13.1.2 *Vibration Overview*

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Vibration amplitude can be quantified using Peak Particle Velocity (PPV), which is defined as the maximum instantaneous positive or negative peak of the vibration wave. Because of the impulsive nature of construction activities, the use of the PPV descriptor has been routinely used to measure and assess ground-borne vibration. Studies have shown that the threshold of perception for average persons is in the range of 0.008 to 0.012 in/sec PPV.

⁷¹ L_{eq} is a measurement of average energy level intensity of noise over a given period of time. Day-Night Level (DNL) is a 24-hour average of noise levels, with a 10 dB penalty applied to noise occurring between 10:00 p.m. and 7:00 a.m. Community Noise Equivalent Level (CNEL) includes an additional five dB applied to noise occurring between 7:00 p.m. and 10:00 p.m. As a general rule of thumb where traffic noise predominates, the CNEL and DNL are typically within two dBA of the peak-hour L_{eq} .

4.13.1.3 Regulatory Background

Federal

Federal Transit Administration (FTA) Vibration Limits

The US Department of Transportation (DOT) has developed vibration impact assessment criteria for evaluating vibration impacts associated with transit projects. The FTA has proposed vibration impact criteria based on maximum overall levels for a single event. The impact criteria for groundborne vibration are shown in Table 4.13-1, below. Note that there are criteria for frequent events (more than 70 events of the same source per day), occasional events (30 to 70 vibration events of the same source per day), and infrequent events (less than 30 vibration events of the same source per day).

Table 4.13-1: Groundborne Vibration Impact Criteria			
Land Use Category	Groundborne Vibration Impact Levels (VdB re 1 pinch/sec, RMS)		
	Frequent Events¹	Occasional Events²	Infrequent Events³
Category 1: Buildings where vibration would interfere with interior operations	65 VdB ⁴	65 VdB ⁴	65 VdB ⁴
Category 2: Residences and buildings where people normally sleep	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use	75 VdB	78 VdB	83 VdB
1. Frequent Events - More than 70 vibration events from the same source per day, most rapid transit projects fall into this category 2. Occasional Events - Between 30 and 70 vibration events from the same source per day, most commuter trunk lines have this many operations 3. Infrequent Events – Fewer than 30 vibration events of the same kind per day, includes most commuter rail branch lines. 4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration sensitive manufacturing or research requires evaluation to define acceptable vibration levels.			

Local

Morgan Hill 2035 General Plan

The following goals and policies related to noise are applicable to the proposed project:

Goal SSI-8: An adaptive and resilient community that responds to climate change.

- Policy SSI-8.1:* **Exterior Noise Level Standards.** Require new development projects to be designed and constructed to meet acceptable exterior noise level standards (as shown in Table SSI-1) as follows:
- o Apply a maximum exterior noise level of 60 dBA L_{dn} in residential areas where outdoor use is a major consideration (e.g., backyards in single-family housing developments and recreation areas in multi-family housing projects). Where the City determines that providing a L_{dn} of 60 dBA or lower cannot be achieved after the application of reasonable and feasible mitigation, a L_{dn} of 65 dBA may be permitted.
- Policy SSI-8.2:* **Impact Evaluation.** The impact of proposed development project on existing land uses should be evaluated in terms of the potential for adverse community response based on significant increase in existing noise levels, regardless of compatibility guidelines.
- Policy SSI-8.5:* **Traffic Noise Level Standards.** Consider noise level increases resulting from traffic associated with new projects significant if: a) the noise level increase is 5 dBA L_{dn} or greater, with a future noise level of less than 60 dBA L_{dn} , or b) the noise level increase is 3 dBA L_{dn} or greater, with a future noise level of 60 dBA L_{dn} or greater.
- Policy SSI-8.6:* **Stationary Noise Level Standards.** Consider noise levels produced by stationary noise sources associated with new projects significant if they substantially exceed existing ambient noise levels.
- Policy SSI-8.7:* **Other Noise Sources.** Consider noise levels produced by other noise sources (such as ballfields) significant if an acoustical study demonstrates they would substantially exceed ambient noise levels.
- Policy SSI-8.9:* **Site Planning and Design.** Require attention to site planning and design techniques other than sound walls to reduce noise impacts, including: a) installing earth berms, b) increasing the distance between the noise source and the receiver; c) using non-sensitive structures such as parking lots, utility areas, and garages to shield noise-sensitive areas; d) orienting buildings to shield outdoor spaces from the noise source; and e) minimizing the noise at its source.

Morgan Hill Municipal Code

The City of Morgan Hill's Municipal Code Chapter 8.28 states that "It is unlawful and a misdemeanor for any person to make or continue, or cause to be made or continued, any loud, disturbing, unnecessary or unusual noise or any noise which annoys, disturbs, injures or endangers the comfort, health, repose, peace or safety of other persons within the city." The following sections of the code would be applicable to the project:

- C. Blowers, Fans, and Combustion Engines. The operation of any noise-creating blower, power fan or internal combustion engine, the operation of which causes noise due to the explosion of operating gases or fluids, unless the noise from such blower or fan is muffled and such engine is equipped with a muffler device to deaden such noise;
- D. 1. Construction activities as limited below. "Construction activities" are defined as including but not limited to excavation, grading, paving, demolition, construction, alteration or repair of any building, site, street or highway, delivery or removal of construction material to a site, or movement of construction materials on a site. Construction activities are prohibited other than between the hours of 7:00 AM and 8:00 PM, Monday through Friday and between the hours of 9:00 AM to 6:00 PM on Saturday. Construction activities may not occur on Sundays or federal holidays. No third person, including but not limited to landowners, construction company owners, contractors, subcontractors, or employers, shall permit or allow any person working on construction activities which are under their ownership, control or direction to violate this provision. Construction activities may occur in the following cases without violation of this provision:
- a. In the event of urgent necessity in the interests of the public health and safety, and then only with a permit from the chief building official, which permit may be granted for a period of not to exceed three days or less while the emergency continues and which permit may be renewed for periods of three days or less while the emergency continues.
 - b. If the chief building official determines that the public health and safety will not be impaired by the construction activities between the hours of 8:00 PM and 7:00 AM, and that loss or inconvenience would result to any party in interest, the chief building official may grant permission for such work to be done between the hours of eight p.m. and seven a.m. upon an application being made at the time the permit for the work is issued or during the progress of the work.
 - c. The city council finds that construction by the resident of a single residence does not have the same magnitude or frequency of noise impacts as a larger construction project. Therefore, the resident of a single residence may perform construction activities on that home during the hours in this subsection, as well as on Sundays and federal holidays from nine a.m. to six p.m., provided that such activities are limited to the improvement or maintenance undertaken by the resident on a personal basis.
 - d. Public work projects are exempt from this section and the public works director shall determine the hours of construction for public works projects.
 - e. Until November 30, 1998, construction activities shall be permitted between the hours of 10:00 AM to 6:00 PM on Sundays, subject to the following conditions. No power-driven vehicles, equipment or tools may be used during construction activities, except on the interior of a building or other structure which is enclosed by exterior siding (including windows and doors) and roofing, and which windows

and doors are closed during construction activities. Construction activities must be situated at least one hundred fifty feet from the nearest occupied dwelling. No delivery or removal of construction material to a site, or movement of construction materials on a site, is permitted. No activity, including but not limited to the playing of radios, tape players, compact disc players or other devices, which creates a loud or unusual noise which offends, disturbs or harasses the peace and quiet of the persons of ordinary sensibilities beyond the confines of the property from which the sound emanates is allowed.

2. If it is determined necessary in order to ensure compliance with this section, the chief building official may require fences, gates or other barriers prohibiting access to a construction site by construction crews during hours in which construction is prohibited by this subsection. The project manager of each project shall be responsible for ensuring the fences, gates or barriers are locked and/or in place during hours in which no construction is allowed. This subsection shall apply to construction sites other than public works projects or single dwelling units which are not a part of larger projects.
- G. Loading or Unloading Vehicles and Opening Boxes. The creation of loud and excessive noise in connection with loading or unloading any vehicle or the opening and destruction of bales, boxes, crates and containers;
- J. Pile Drivers, Hammers and Similar Equipment. The operation, between the hours of eight p.m. and seven a.m. of any pile driver, steam shovel, pneumatic hammer, derrick, steam or electric hoist or other appliance, the use of which is attended by loud or unusual noise.

Chapter 18.76.090 of the Municipal Code establishes quantitative noise performance standards:

- No land use or activity may produce a noise level in excess of the standards shown in Table 4.13-2.

Table 4.13-2: Maximum Noise Levels at Adjacent Land Uses	
Receiving Land Use	Maximum Noise Level at Lot Line of Receiving Use
Industrial and Wholesale	70 dBA
Commercial	65 dBA
Residential or Public/Quasi Public	60 dBA
Note: Above noise standards do not apply to noise generated by vehicle traffic in the public right-of-way or from temporary construction, demolition, and vehicles that enter and leave the site of the noise generating use (e.g., construction equipment, trains, trucks).	

4.13.1.4 Existing Conditions

The site is undeveloped and is surrounded by open space directly to the south and across Butterfield Boulevard to the north. Sensitive land uses in the vicinity include residences approximately 130 feet to the northwest across Butterfield Boulevard, 260 feet to the west across the intersection of

Butterfield Boulevard and Monterey Road, 430 feet to the south across Monterey Road, 450 feet to the east across the UPRR tracks and Railroad Avenue, and 540 feet to the southeast across open space. The noise environment at the site results primarily from vehicle traffic along Butterfield Boulevard and Monterey Road and intermittent train activity along the UPRR tracks.

Existing Noise Environment

A noise monitoring survey was performed at the site and included one long-term measurement and three short-term noise measurements, as shown in Figure 4.13-1. An additional short-term measurement was taken at a BMX pump track in Novato, California to characterize and quantify noise levels associated with the use of pump track facilities.

Long-term noise measurement LT-1 was made from a light post on the north side of Butterfield Boulevard, approximately 215 feet from the center of the intersection of Butterfield Boulevard and Monterey Road, and 45 feet from the centerline of Butterfield Boulevard. This site was chosen to quantify noise levels along Butterfield Boulevard and to characterize ambient noise levels at the nearest residential receptor to the west. Hourly average noise levels at LT-1 ranged from 65 to 72 dBA Leq during the day and from 55 to 75 dBA Leq at night. The day-night average noise level measured from Tuesday through Friday was 72 dBA Ldn.

Long-term noise measurement LT-2 was made from a utility pole near the junction of Railroad Avenue and Maple Avenue, approximately 30 feet from the center of UPRR tracks. This measurement was made from Tuesday, April 9, 2019 to Thursday, April 11, 2019, and was included in this analysis to quantify noise levels from freight trains along UPRR tracks and to characterize ambient noise levels at residential receptors to the east and southeast of the project site. Hourly average noise levels at LT-2 ranged from 57 to 74 dBA Leq during the day and from 45 to 71 dBA Leq at night. The day-night average noise level measured was 70 dBA Ldn. Noise levels at this site were heavily influenced by passenger and freight trains, and the hourly Leq was considerably higher during hours of the day when trains passed. Therefore, ambient noise levels for the majority of the day near these residences are likely considerably lower than the given Leq and Ldn and are better represented by the L90 noise levels.

Short-term noise measurements ST-1 and ST-2 were made on Tuesday, June 11, 2019 and ST-3 and ST-4 were made on Friday, June 14, 2019. The intent of these short-term measurements was to quantify ambient noise levels at the project site and at land uses in the vicinity. ST-1 was made from the south side of Monterey Road, approximately 45 feet from the centerline of Monterey Road and 5 feet from the residential property line. This site was chosen to capture ambient noise levels at the residential receptors to the southwest and to quantify noise levels along Monterey Road. ST-2 was made approximately 420 feet south of the project site, about 90 feet from the property line of the single-family residences. Mechanical equipment was operating in the yard of one of the residences, so this setback was chosen to quantify ambient noise levels near the backyards of the residences without the influence of the mechanical equipment. ST-3 was made to the east of the project site, approximately 16 feet from the centerline of Railroad Avenue and 55 feet from the center of the UPRR track. This site was chosen to quantify ambient noise levels at land uses to the east of the project site when trains are not passing by. ST-4 was made near the center of the project, approximately 280 feet from the centerline of Butterfield Boulevard. This site was chosen to quantify

ambient noise levels near the track and field area at the project site. Table 4 summarizes the results of short-term measurements ST-1 through ST-4 as shown in Table 4.13-3.



PROJECT SITE NOISE MEASUREMENT LOCATIONS

FIGURE 4.13-1

Table 4.13-3: Noise Measurement Locations at the Project Site							
Noise Measurement Location	Date, Time	Measured Noise Level, dBA					
		L _{max}	L ₍₁₎	L ₍₁₀₎	L ₍₅₀₎	L ₍₉₀₎	L _{eq(10-min)}
ST-1: 45 feet from Monterey Rd centerline	6/11/2019, 11:30-11:40	89	80	75	65	53	71
ST-2: 420 feet south of project site	6/11/2019, 11:00-11:10	65	54	n/a	46	43	48
ST-3: 16 feet from Railroad Ave centerline	6/14/2019, 9:30-9:40	81	77	59	52	51	63
ST-4: Near center of project site	6/14/2019, 9:50-10:00	60	57	54	51	49	52

4.13.2 Impact Discussion

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

Impact NOI-1:	The project would not result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Less than Significant Impact with Mitigation Incorporated)
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Temporary Noise Increases

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction lasts over extended periods of time. The proposed project would not require pile driving, which can cause excessive noise.

Chapter 8.28 of the City of Morgan Hill's Municipal Code establishes allowable hours of construction between 7:00 a.m. and 8:00 p.m., Monday through Friday, and between the hours of 9:00 a.m. to 6:00 p.m. on Saturday. Construction activities may not occur on Sundays or federal holidays. Construction for the proposed project is anticipated to take place during these allowable hours.

While noise thresholds for temporary construction are not provided in the City's General Plan or Municipal Code, a threshold of 45 dBA for speech interference indoors is commonly used. Assuming a 15 dBA exterior-to-interior reduction for standard residential construction, this would correlate to an exterior threshold of 60 dBA Leq at residential land uses. Additionally, temporary construction would be annoying to surrounding land uses if the ambient noise environment increased by at least 5 dBA Leq for an extended period of time. Therefore, the temporary construction noise impact would be considered significant if project construction activities produced noise levels exceeding 60 dBA Leq at residential land uses and the ambient noise environment by 5 dBA Leq or more for a period longer than one year.

For the residences located to the west and southwest of the project site, opposite Butterfield Boulevard and/or Monterey Road, daytime ambient noise levels would be represented by ST-1, which was 71 dBA Leq (10-min). The ambient noise environment for the existing residences to the south of the site, across the open space area, would be represented by measurements made at ST-2, which was 48 dBA Leq (10-min) at a distance of 320 feet from the centerline of Monterey Road. The ambient noise environment for the existing residence to the east of the site, across UPRR tracks and Railroad Avenue, would be represented by measurements made at ST-3, which was 63 dBA Leq (10-min) without any trains passing by at a distance of 55 feet from the center of UPRR tracks. The typical range of maximum instantaneous noise levels for the proposed project would be 71 to 90 dBA Lmax at a distance of 50 feet. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

The typical range of average noise levels for the proposed project would be 71 to 83 dBA Leq at a distance of 50 feet.

When construction activities occur near surrounding land uses, construction noise levels would exceed the 60 dBA Leq threshold, and potentially exceed the ambient noise levels at residences to the south of the project by 5 dBA Leq or more. However, major noise-generating construction activity is not anticipated to last longer than one year, and incorporation of the controls outlined below would reduce construction noise levels at nearby land uses.

Reasonable regulation of the hours of construction, as well as regulation of the arrival and operation of heavy equipment and the delivery of construction material, are necessary to protect the health and safety of persons, promote the general welfare of the community, and maintain the quality of life. Construction activities will be conducted in accordance with the provisions of the City's General Plan and the Municipal Code, which limits temporary construction work to between the hours of 7:00 a.m. and 8:00 p.m. Monday through Friday and between 9:00 a.m. to 6:00 p.m. on Saturday.

Construction is prohibited on Sundays and federal holidays. Further, the City shall require the construction crew to adhere to the following construction best management practices to reduce construction noise levels emanating from the site and minimize disruption and annoyance at existing noise-sensitive receptors in the project vicinity.

Mitigation Measures: The following mitigation measures shall be implemented to reduce construction noise impacts to nearby noise-sensitive receptors to less than significant.

- MM NOI-1.1:** *Construction Best Management Practices* - The project shall develop a construction noise control plan, including, but not limited to, the following construction best management controls:
- Equipment and trucks used for construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds);
 - Impact tools (e.g., jackhammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools; and
 - Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or include other measures.
 - Unnecessary idling of internal combustion engines should be strictly prohibited.
 - Construction staging areas shall be established at locations that will create the greatest distance between the construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. Locate material stockpiles, as well as

maintenance/equipment staging and parking areas, as far as feasible from residential receptors.

- Control noise from construction workers' radios to a point where they are not audible at existing residences bordering the project site.
- Where feasible, temporary power service from local utility companies should be used instead of portable generators.
- Locate cranes as far from adjoining noise-sensitive receptors as possible.
- During final grading, substitute graders for bulldozers, where feasible. Wheeled heavy equipment are quieter than track equipment and should be used where feasible.
- Substitute nail guns for manual hammering, where feasible.
- Avoid the use of circular saws, miter/chop saws, and radial arm saws near the adjoining noise-sensitive receptors. Where feasible, shield saws with a solid screen with material having a minimum surface density of 2 lbs/ft² (e.g., such as ¾" plywood).
- Maintain smooth vehicle pathways for trucks and equipment accessing the site, and avoid local residential neighborhoods as much as possible.
- The contractor shall prepare a detailed construction schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.
- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

The implementation of the reasonable and feasible controls outlined above would reduce construction noise levels emanating from the site, minimizing disruption and annoyance. With the implementation of these controls, as well as the Municipal Code limits on allowable construction hours, and considering that construction is temporary. **(Less than Significant Impact with Mitigation Incorporated)**

Permanent Noise Increases

Circulation Noise

The traffic data counts from a study conducted in the surrounding area, between May and June 2015, show over 13,000 average daily trips along the segment of Butterfield Boulevard adjacent to the project site⁷². In order to increase ambient noise levels by 1 dBA Ldn, the project would need to generate an average daily traffic volume of 3,300 trips. Based on the site plans and size of the park in relation to similar projects, it is anticipated that the project would generate an average daily traffic volume well below 3,300 daily trips. The traffic study predicted the project would generate approximately 144 trips during the busiest Saturday peak hour of use. Therefore, the proposed project would not cause a substantial permanent noise level increase at noise-sensitive receptors in the project vicinity. **(Less than Significant Impact)**

On-Site Parking

Parking areas will be located along the western portion of the project site. Noise associated with the use of the parking lots would include vehicular circulation, loud engines, door slams, and human voices. The maximum noise level of a passing car at 15 mph typically ranges from 45 dBA to 55 dBA Lmax at a distance of 100 feet. The noise generated during an engine start is similar. Door slams cause slightly lower noise levels. The noise of car stereos is variable, potentially disturbing, and unnecessary. The hourly average noise levels resulting from all of these noise-generating activities in a busy parking lot typically ranges from 40 dBA to 50 dBA Leq at a distance of 100 feet from the parking area. Noise levels decrease at a rate of 6 dB per doubling of distance. Noise levels resulting from parking activities at the nearest residences would range from 38 to 48 dBA Leq and maximum noise levels would range from about 43 to 53 dBA Lmax. Noise levels associated with normal parking lot activities would typically be below the range of ambient traffic noise levels and would be below the residential Zoning Code limits established by the City.

The proposed project would not result in a substantial permanent noise level increase due to project-generated traffic at the existing noise-sensitive land uses in the project vicinity. **(Less than Significant Impact)**

Noise Level in Excess of Standards

The City of Morgan Hill limits noise from non-transportation related sources to 60 dBA at the property line of residences. For the pump track and ballfield area the Zoning Code does not define the acoustical time descriptor such as Leq (the average noise level) or Lmax (the maximum instantaneous noise level) that is associated with the above limit. A conservative interpretation of the Zoning Code would identify the Lmax as the noise limit at nearby residential property lines. The conceptual site plan, dated June 11, 2019, indicates one baseball field and one grass general use area, and two pump tracks. Other project amenities could include a picnic area, a walking path around the perimeter of the track and field area, and a concession building. The lit fields would be available for use until 10:00 pm with field lighting shutoff at 11:00 pm.

⁷² Hatch Mott MacDonald, "Exhibit 1 Average Daily Traffic Volumes." City of Morgan Hill Public Works Department. August 21, 2015.

Little League baseball games typically generate noise levels of about 57 dBA Leq at a distance of 100 feet from the center of the infield. Maximum noise levels of about 65 dBA Lmax typically result from baseballs being hit and shouting from players and spectators. Noise levels generated by softball games would be anticipated to be lower than baseball games.

Measurements at an existing pump track facility in Novato, California indicate that noise levels associated with biking would be lower than those during baseball and softball games. At a distance of 100 feet from the center of the pump tracks, maximum noise levels would be about 63 dBA Lmax as a result of shouting and cheering. Noise levels associated with the bicycles on the pump track are generally lower than talking and shouting from spectators and participants. Therefore, the noise levels generated by the pump tracks are anticipated to be lower than those generated during softball and baseball games.

Assuming a standard attenuation rate of 6 dBA per doubling of distance, the noise resulting from activities at the center of the proposed track and field area would generate a noise level of about 39 to 41 dBA Leq at the nearest sensitive receptors to the west. Maximum noise levels at these receptors would range from approximately 47 to 49 dBA Lmax. Receptors to the south and east could potentially be as close to noise-generating sources from the track and field area as the receptors to the west. Noise levels generated by the baseball fields would be below existing ambient noise levels measured at nearby residences and would not measurably increase the 24-hour average noise level (Ldn) at these residences. As described above, the noise levels generated by the activities at the baseball fields would be below the regulatory threshold at the nearest residential property lines, therefore, meeting the residential Zoning Code noise limits established by the City of Morgan Hill. **(Less than Significant Impact)**

Impact NOI-2:	The project would not result in generation of excessive groundborne vibration or groundborne noise levels. (Less than Significant Impact)
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The construction of the project may generate perceptible vibration when heavy equipment or impact tools (e.g. jackhammers, hoe rams) are used. While equipment and phasing information was not available at the time of this study, the proposed project is not expected to require pile driving, which can cause excessive vibration.

The California Department of Transportation recommends a vibration limit of 0.5 in/sec PPV for buildings structurally sound and designed to modern engineering standards, which typically consist of buildings constructed since the 1990s. Conservative vibration limits of 0.3 in/sec PPV has been used for buildings that are found to be structurally sound but where structural damage is a major concern. For historical buildings or buildings that are documented to be structurally weakened, a cautious limit of 0.08 in/sec PPV is often used to provide the highest level of protection. No historical buildings or buildings that are documented to be structurally weakened adjoin the project site. For the purposes of this study, groundborne vibration levels exceeding the conservative 0.3 in/sec PPV limit at the existing residential and buildings surrounding the site would have the potential to result in a significant vibration impact.

Typical vibration levels that could be expected from construction equipment at a distance of 25 feet. Construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or

vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. However, construction-related vibration is not expected to exceed 0.3 in/sec PPV at existing buildings surrounding the project site or at future on-site receptors. **(Less than Significant Impact)**

Impact NOI-3: The project would not be located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. The project would not expose people residing or working in the project site to excessive noise levels. **(Less than Significant Impact)**

The San Martin Airport is a public non-towered airport located about 2.25 miles southeast of the project site. According to the Santa Clara County Airport Land Use Commission (ALUC)'s Comprehensive Land Use Plan for this airport, the project site lies outside of the 2022 55 dBA CNEL noise contour. While aircraft flyovers would at times be audible at project site, noise levels due to aircraft would not result in future exterior noise levels of 60 dBA L_{dn} or more and noise levels resulting from aircraft would be compatible with the proposed project.

The project site is located more than two miles from a public airport or private-use airport and would not expose people residing or working in the project site to excessive noise levels. **(Less than Significant Impact)**

4.14 POPULATION AND HOUSING

4.14.1 Environmental Setting

4.14.1.1 *Regulatory Framework*

State

In order to attain the state housing goal, cities must make sufficient suitable land available for residential development, as documented in an inventory, to accommodate their share of regional housing needs. California's Housing Element Law requires all cities to: 1) zone adequate lands to accommodate its Regional Housing Needs Allocation (RHNA); 2) produce an inventory of sites that can accommodate its share of the RHNA; 3) identify governmental and non-governmental constraints to residential development; 4) develop strategies and work plan to mitigate or eliminate those constraints; and 5) adopt a housing element and update it on a regular basis.⁷³ The City of Morgan Hill Housing Element and related land use policies were last updated in February 2015.

Regional

The Association of Bay Area Governments (ABAG) allocates regional housing needs to each city and county within the nine-county Bay Area, based on statewide goals. ABAG also develops forecasts for population, households, and economic activity in the Bay Area. ABAG, Metropolitan Transportation Commission, and local jurisdiction planning staff created the Regional Forecast of Jobs, Population and Housing (upon which Plan Bay Area 2040 is based), which is an integrated land use and transportation plan looking out to the year 2040 for the nine-county San Francisco Bay Area.

Plan Bay Area 2040 is a state-mandated, integrated long-range transportation, land-use and housing plan intended support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution and GHG emissions in the Bay Area. Plan Bay Area promotes compact, mixed-use residential and commercial neighborhoods near transit, particularly within identified Priority Development Areas (PDAs). The project site is not located within a PDA.⁷⁴

Local

Morgan Hill 2035 General Plan

The following goal and policy to reduce the effects of population and housing are applicable to the proposed project:

- | | |
|-------------------------|--|
| <i>Policy CNF-3.4:</i> | Population Limit. Plan for a January 1, 2035 population of 58,200 residents. |
| <i>Policy CNF-11.10</i> | Open Space. Require new subdivisions to feature integrated common open spaces, parks, and community facilities that serve as social and design focal |

⁷³ "Regional Housing Needs Allocation and Housing Elements" Accessed May 16, 2019. <http://hcd.ca.gov/community-development/housing-element/index.shtml>.

⁷⁴ ABAG, Metropolitan Transportation Commission. Project Mapper. <http://projectmapper.planbayarea.org/>.

points. Open spaces should be a close walking distance from all residents and should be large enough to be useful for residents.

4.14.1.2 *Existing Conditions*

The population of Morgan Hill was estimated to be approximately 44,513 in January of 2018 and the average persons per household was an estimated 3.15.⁷⁵ The City grew in population by 1.9 percent from January 2017 to January 2018. The City's total population is projected to grow to approximately 46,100 by 2030.⁷⁶ The city has a population cap of 58,200 by the year 2035. By 2035 the existing and net new non-residential development would be 3.26 million square feet of retail space, 2.14 million square feet of office space, 12.13 million square feet of industrial space, 1.55 million square feet of service space, and approximately 774,000 square feet of total public facilities space.⁷⁷ There are no housing units on the project site and it is in an area with no infrastructure and no access roads but the main streets along the project site.

4.14.2 Impact Discussion

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

⁷⁵ California Department of Finance. *E-1: City/County Population Estimates with Annual Percent Change - January 2017 and 2018*. May 2018. Accessed March 29, 2019. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/>.

--. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2018 with 2010 Census Benchmark*. Table 2: *E-5 City/County Population and Housing Estimates, 1/1/2018*. May 2018. Accessed March 29, 2019. <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/>.

⁷⁶ City of Morgan Hill. *Morgan Hill General Plan: City of Morgan Hill Housing Element*. Adopted February 2015.

⁷⁷ City of Morgan Hill, Addendum to the Morgan Hill 2035 Environmental Impact Report for Zoning Code Update page 2-7, <https://www.morgan-hill.ca.gov/DocumentCenter/View/22813/Addendum-to-Morgan-Hill-2035-EIR?bidId=>

Impact POP-1: The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
(No Impact)

The project would not induce population growth in the City. The proposed park would serve the City's existing and planned population growth. The construction of an additional park does not remove an existing constraint on growth and development in the area. As a result, the project would not induce substantial population growth in the project site. **(No Impact)**

Impact POP-2: The project would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

The project site does not include residents or housing units and, therefore, the project would not displace existing people or housing, necessitating the construction of replacement housing elsewhere. **(No Impact)**

4.15 PUBLIC SERVICES
4.15.1 Environmental Setting
4.15.1.1 *Regulatory Framework*

State

Quimby Act

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

School Impact Fees

California Government Code Section 65996 specifies that an acceptable method of offsetting a project's effect on the adequacy of school facilities is the payment of a school impact fee prior to the issuance of a building permit. Government Code Sections 65995 through 65998 set forth provisions for the payment of school impact fees by new development by "mitigating impacts on school facilities that occur (as a result of the planning, use, or development of real property" (Section 65996[a]). The legislation states that the payment of school impact fees "are hereby deemed to provide full and complete school facilities mitigation" under CEQA (Section 65996[b]).

Regional and Local

Countywide Trails Master Plan

The Santa Clara County Trails Master Plan Update is a regional trails plan approved by the Santa Clara County Board of Supervisors. It provides a framework for implementing the County's vision of providing a contiguous trail network that connects cities to one another, cities to the county's regional open space resources, County parks to other County parks, and the northern and southern urbanized regions of the County. The plan identifies regional trail routes, sub-regional trail routes, connector trail routes, and historic trails.

Morgan Hill 2035 General Plan

The City's 2035 General Plan includes policies that call for adequate staffing and timely response for police and fire services. The General Plan also contains policies that contribute to the preservation and continued establishment of park land for the benefit of the community. The policies below are specific to public services and are applicable to the proposed project.

Healthy Community:

Goal HC-3: Usable, complete, well-maintained, safe, and high-quality activities and amenities, including active and passive parks and recreational facilities,

community gardens, and trails that are accessible to all ages, functional abilities, and socio-economic groups.

Policy HC-3.20: **Safety.** Incorporate fire and police services into the design review process for new parks, recreation facilities, and trails.

Policy HC-3.29: **Development Requirements.** Continue to require park acquisition and development fees and/or land dedication to support the acquisition and development of parks, trails and other recreation facilities.

Safety, Services, and Infrastructure:

Goal SSI-11: *Efficient police, fire, and emergency medical response and services, and access to local medical facilities.*

Policy SSI-11.2: **Prevention through Design.** Promote police and fire security considerations in all structures by ensuring that crime and fire prevention concepts are considered in development and design.

Goal SSI-12: *Reduce risk to life and property associated with emergencies and natural and manmade disasters.*

Policy SSI-12.4: **Maintenance of Emergency Access Routes.** Require that emergency access routes be kept free of traffic impediments.

City Bikeways, Trails, Parks and Recreation Master Plan

The City of Morgan Hill Bikeways, Trails, Parks and Recreation Master Plan puts into action the General Plan’s policies for usable, well-maintained, safe, and high-quality parks and amenities. The Master Plan identifies existing parks and recreation conditions and contains guidelines for future development that would benefit the community. According to the Master Plan, the project site is located within the New Neighborhood Park Search Area.

4.15.1.2 Existing Conditions

Fire Protection

The City of Morgan Hill contracts with the California Department of Forestry and Fire Protection (CalFire) for fire and emergency medical services. The City is served by three stations at the following locations: 1) El Toro Fire Station, located at 18300 Old Monterey Road (approximately 3.0 miles northwest of the site), 2) Dunne Hill Fire Station, located at 2100 East Dunne Avenue (approximately 4.0 miles northeast of the project site), and 3) 15670 Monterey Street (approximately 0.5 miles northwest of the project site). In general, the response time meets the current standard of eight minutes 95 percent of the time. Based on estimated driving times provided by Google Maps, the project site is located within eight minutes driving distance of the 15670 Monterey Street Fire Station.

Police Protection

Police service is provided to the project site by the City of Morgan Hill Police Department (MHPD). The MHPD facility is located at 16200 Vineyard Boulevard, approximately 1.5 miles northwest of the project site. The department employs 39 sworn police officers.⁷⁸ The Police Department's goal is to respond to Priority One calls within five minutes and Priority Two calls within eight minutes.⁷⁹ Priority One calls are reports of a crime in progress or where an injury has occurred and Priority Two calls are reports of felonies and other major calls. Based on estimated driving times provided by Google Maps, the project site is located within five minutes driving distance of the MHPD.

Schools

The project site is located within the Morgan Hill Unified School District. The District has eight elementary schools, two middle schools, two comprehensive high schools, one continuation high school, and a community adult school, as well as a home-schooling program. The nearest schools to the site, Oakwood Preparatory School and Barrett Elementary School, are approximately 0.6 miles southeast and 1.5 miles north, respectively, from the site.

Parks

The City owns 64 acres of developed park land and 57 acres of recreation facilities.⁸⁰ The City maintains two community parks, five neighborhood parks, and 14 mini-parks, in addition to its public trail system and open space. There is also a substantial amount of recreational land and open space in the City that is privately owned and maintained. The nearest park to the project site is Morgan Hill Community Park, approximately one mile northwest.

The City also owns and operates special use facilities for recreational purposes. These facilities include the Morgan Hill Aquatics Center, Community and Cultural Center, Centennial Recreation Center, the 38-acre Outdoor Sports Center, and Skateboard/BMX park. Many sports leagues and teams use Morgan Hill School District facilities after school hours and on weekends. These facilities include 12 baseball/softball fields, two football fields, two tracks, and four swimming pools. The nearest recreational facility to the project site is the Centennial Recreation Center, one mile northwest from the project site.

⁷⁸ City of Morgan Hill. *FY 2018-2019 and 2019-2020 Operating and CIP Budget. Police Administration*. Accessed May 16, 2019. <http://www.morgan-hill.ca.gov/DocumentCenter/View/24920/FY-18-19-and-19-20-Adopted-Budget?bidId=>

⁷⁹ City of Morgan Hill. *Operating and CIP Budget, FY 13-14. Police Field Operations, Performance Measures*. Accessed May 16, 2019. <http://www.morgan-hill.ca.gov/DocumentCenter/View/11173/FY-2013-14-Adopted-Operating-Budget?bidId=>

⁸⁰ City of Morgan Hill. *Bikeways, Trails, Parks and Recreation Master Plan*. Accessed May 15, 2019. http://www.morgan-hill.ca.gov/DocumentCenter/View/21711/CityMorganHill_Plan-COMBINED-CHAPTERS_07062017?bidId=

4.15.1.3 *Existing Conditions*

4.15.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire Protection?	☐	☐	☒	☐
2) Police Protection?	☐	☐	☒	☐
3) Schools?	☐	☐	☐	☒
4) Parks?	☐	☒	☐	☐
5) Other Public Facilities?	☐	☐	☐	☒

Impact PS-1: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. **(Less than Significant Impact)**

The project proposes to construct a neighborhood park designed to serve the existing and planned City population. Since the project would not lead to an increase in population, the project would not substantially increase the demand for fire protection or otherwise require construction or expansion of fire facilities, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services. In addition, the MHFD would review the site design to ensure fire protection features are incorporated and adequate emergency access is provided. **(Less than Significant Impact)**

Impact PS-2: The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection services. **(Less than Significant Impact)**

The project site would be served by MHPD. As discussed in 4.15.1.2, the project site is located five minutes from MHPD, which is within the eight minute response time requirement. As with fire protection services, the proposed project is not expected to substantially increase the demand for

police protection, therefore it would not require new or expanded police protection facilities. Additionally, MHPD would review the site design to ensure the project provides adequate safety measures. **(Less than Significant Impact)**

Impact PS-3:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools. (No Impact)
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The project proposes new park facilities that are intended to serve the existing and planned population in the City. The project does not propose to develop residential units that would lead to an increase in the student population of the City. Therefore, the proposed project would not increase demand on or require additional construction of school facilities. **(No Impact)**

Impact PS-4:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for parks. (Less than Significant Impact with Mitigation)
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The project proposes new park facilities that are intended to serve the existing and planned population in the City. The park would be open from 6 AM to 10 PM, consistent with park operational hours at all City parks⁸¹. The lit fields would be available for use until 10:00 pm with field lighting shutoff at 11:00 pm. As discussed throughout this Initial Study, the construction and eventual use of the public park could result in substantial adverse physical impacts, however those environmental effects will be reduced to less than significant levels through implementation of various Standard Measures and Mitigation Measures presented in this Initial Study. **(Less than Significant Impact with Mitigation)**

Impact PS-5:	The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities. (No Impact)
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The proposed project would not generate new residents; thus, it would not generate demand for other public facilities such as libraries. The project, therefore, would not require new or physically altered facilities, and no impact would occur. **(No Impact)**

⁸¹ City of Morgan Hill. "Parks and Fields". Accessed May 16, 2019. <https://www.morgan-hill.ca.gov/244/Parks-Fields>

4.16 RECREATION

4.16.1 Environmental Setting

4.16.1.1 *Regulatory Framework*

State

Government Code Section 66477

The Quimby Act (included within Government Code Section 66477) requires local governments to set aside parkland and open space for recreational purposes. It provides provisions for the dedication of parkland and/or payment of fees in lieu of parkland dedication to help mitigate the impacts from new residential developments. The Quimby Act authorizes local governments to establish ordinances requiring developers of new residential subdivisions to dedicate parks, pay a fee in lieu of parkland dedication, or perform a combination of the two.

Local

Morgan Hill 2035 General Plan

The City's 2035 General Plan includes policies that call for adequate park and recreation services. The General Plan also contains policies that contribute to the preservation and continued establishment of park land for the benefit of the community. The policies below are specific to parks, recreation, and trails applicable to the proposed project.

Parks, Recreation, and Trails:

Goal HC-3: Usable, complete, well-maintained, safe, and high-quality activities and amenities, including active and passive parks and recreational facilities, community gardens, and trails that are accessible to all ages, functional abilities, and socio-economic groups.

Policy HC-3.4: New Facilities. Continue to develop and expand the recreational facilities identified within updates to the Bikeways, Trails, Parks, and Recreation Master Plan. These include, but are not limited to, softball/baseball fields and basketball, tennis, and sand volleyball courts.

Policy HC-3.13: Sports Fields. Locate sports fields and courts for efficiency and convenience. Group some fields and courts together at centers or complexes for league and tournament use, and others at neighborhood parks for neighborhood use.

4.16.1.2 *Existing Conditions*

The City owns 70 acres of developed park land (including the Civic Center, assessment district parks and city owned trails) and 59 acres of recreation facilities. Included within this inventory, the City maintains two community parks, five neighborhood parks, two neighborhood/school parks, and 15 mini-parks, in addition to its public trail system and open space. In addition to publicly owned park land, there is also a significant amount of recreational land and open space in the City that is privately owned and maintained.

The City also owns and operates special use facilities for recreational purposes. These facilities include the Morgan Hill Aquatics Center, Community and Cultural Center, the Centennial Recreation Center, the 38-acre Outdoor Sports Center, and Skateboard/BMX parks. Many sports leagues and teams use Morgan Hill School District facilities after school hours and on weekends. These facilities include 12 baseball/softball fields, two football fields, two tracks, and four swimming pools. The nearest parks and recreational facilities to the project site is the Morgan Hill Community Park approximately 2 miles northeast, Diana Park approximately 2 miles southwest, and the Centennial Recreation Center approximately 1 mile north of the site.

4.16.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility will occur or be accelerated?	☐	☐	☐	☒
2) 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?	☐	☒	☐	☐

Impact REC-1: The project would not 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. **(No Impact)**

The project proposes new park facilities that are intended to serve the existing and planned population in the City. The project would not induce population growth that would increase demand on parks. The proposed park would increase the City's parkland per capita service ratio, reducing existing demand on parks in the project site. For these reasons, the proposed project would not result in a recreation impact. **(No Impact)**

Impact REC-2: The project consists of the construction of recreational facilities which could have an adverse physical effect on the environment, however those effects are capable of being reduced to acceptable levels through implementation of mitigation measures and other conditions of approval, as discussed throughout this Initial Study. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed throughout this Initial Study, the construction and eventual use of the public park could result in substantial adverse physical impacts, however those environmental effects will be reduced to less than significant levels through implementation of various Standard Measures and Mitigation Measures presented in this Initial Study. **(Less than Significant Impact with Mitigation Incorporated)**

4.17 TRANSPORTATION

The following discussion is based in part on a Trip Generation and Operations Analysis prepared by Hexagon on July 5, 2019. A copy of this report is included as Appendix G.

4.17.1 Environmental Setting

4.17.1.1 *Regulatory Framework*

State

Regional Transportation Plan

MTC is the transportation planning, coordinating, and financing agency for the nine-county San Francisco Bay Area, including Santa Clara County. MTC is charged with regularly updating the Regional Transportation Plan, a comprehensive blueprint for the development of mass transit, highway, airport, seaport, railroad, bicycle, and pedestrian facilities in the region. MTC and ABAG adopted Plan Bay Area 2040 in July 2017, which includes a Regional Transportation Plan to guide regional transportation investment for revenues from federal, state, regional and local sources through 2040.

Senate Bill 743

SB 743 establishes criteria for determining the significance of transportation impacts using a vehicle miles traveled (VMT) metric intended to promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. Specifically, SB 743 requires the replacement of automobile delay—described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion—with VMT as the recommended metric for determining the significance of transportation impacts. The Governor’s Office of Planning and Research (OPR) approved the CEQA Guidelines implementing SB 743 on December 28, 2018. Local jurisdictions are required to implement a VMT policy by July 1, 2020.

Regional and Local

Congestion Management Program

The Santa Clara Valley Transportation Authority (VTA) oversees the Congestion Management Program (CMP), which is aimed at reducing regional traffic congestion. The relevant state legislation requires that all urbanized counties in California prepare a CMP in order to obtain each county’s share of gas tax revenues. State legislation requires that each CMP define traffic LOS standards, transit service standards, a trip reduction and transportation demand management, a land use impact analysis program, and a capital improvement element. VTA has review responsibility for proposed development projects that are expected to affect CMP designated intersections.

Local

City of Morgan Hill 2035 General Plan

The following transportation goals and policies are applicable to the proposed project:

Goal TR-3: A coordinated, continuous network of streets and roads.

*Policy TR-3.2: **Safe and Complete Improvements.*** Avoid creating incomplete public improvements that create public safety hazards.

*Policy TR-3.4: **Level of Service Standards.*** As the Level of Service (LOS) policy and design criteria for roadway improvements, use a Tiered LOS Standard as follows:

- LOS F in the Downtown at Main/Monterey, along Monterey Road between Main and Fifth Street, and along Depot Street at First through Fifth Streets. This LOS standard in the Downtown recognizes the unique nature of and goals for Downtown Morgan Hill as the transit hub of the City and as a center for shopping, business, entertainment, civic and cultural events, and higher-density, mixed-use living opportunities. This standard does not preclude the City, developers, and property owners from voluntarily implementing improvements and employing operational strategies to improve level of service, especially at the Main/Monterey intersection, if and when land uses redevelop.
- LOS D for intersections and segments elsewhere; except:
 - Allow LOS E for identified freeway ramps/zones, road segments and intersections that (1) provide a transition to and are located on the periphery of downtown; (2) are freeway zone intersections; and/or (3) where achieving LOS D could result in interim intersection improvements which would be “over-built” once the City’s circulation network has been completed, and/or would involve unacceptable impacts on existing buildings or existing or planned transportation facilities, including roads, sidewalks, bicycle and transit facilities; and/or would involve extraordinary costs to acquire land and existing buildings, and build the improvement in relation to benefits achieved; and/or the facility would be widened beyond requirements to serve local traffic, in that the facility accommodates a significant component of peak-hour sub-regional and regional through-traffic.
- In order to reduce the incentive for regional travel to be drawn off the freeway and onto local neighborhood streets, protect neighborhoods, avoid overbuilding intersections, and to create an incentive for using alternate modes of travel, LOS E during peak hours of travel is acceptable for the following identified freeway ramps, road segments, and intersections:

- o Main Avenue and Del Monte Avenue
- o Main Avenue and Depot Street
- o Dunne Avenue and Del Monte Avenue
- o Dunne Avenue and Monterey Avenue
- o Dunne Avenue and Church Street; also, until closed: Dunne Avenue and Depot Street
- o Cochrane Road and Monterey Road
- o Tennant Avenue and Monterey Road
- o Tennant Avenue and Butterfield Boulevard
- o Cochrane Road Freeway Zone: from Madrone Parkway/Cochrane Plaza to Cochrane/DePaul Drive
- o Dunne Avenue Freeway Zone: from Walnut Grove/East Dunne to Condit/East Dunne
- o Tennant Avenue Freeway Zone: from Butterfield/Tennant to Condit/Tennant Freeway Ramps

Projects shall pay the City's standard traffic impact fees imposed on new developments in accordance with the adopted impact fee schedule.

Morgan Hill LOS Guidelines and Methodology

The City of Morgan Hill level of service methodology is TRAFFIX, which is based on the 2000 Highway Capacity Manual (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersections operations based on average delay time for all vehicles at the intersection. Since TRAFFIX is also the Congestion Management Plan (CMP)-designated intersections level of service methodology, the City of Morgan Hill methodology employs the CMP defaults values for the analysis parameters, which include adjusted saturation flow rates to reflect conditions in Santa Clara County. All intersections within the City of Morgan Hill are required to meet the City's LOS standard of LOS D, with the exception of intersections and freeway zones listed in General Plan Policy TR-3.4.

According to the City of Morgan Hill level of service guidelines, a development would create an adverse effect on traffic conditions at a signalized intersection if for either peak hour:

- The level of service at the intersection degrades from an acceptable level (LOS D or LOS E as identified above) under existing conditions to an unacceptable level (LOS E or F) under project conditions, or
- The level of service at the intersection is an unacceptable level (LOS E or F as identified above) under existing conditions and the addition of project trips causes the average critical delay to increase by four (4) or more seconds and the volume-to-capacity ratio (V/C) to increase by 0.01.

An exception to this rule applies when the addition of project traffic reduces the amount of average delay for critical movements (i.e., the change in average delay for critical movements is negative). In this case, the threshold of significance is an increase in the critical V/C value by 0.01 or more.

4.17.1.2 *Existing Conditions*

Roadway Network

Local Access

Monterey Road is classified in the City of Morgan Hill General Plan as a four-lane major arterial that runs directly through Morgan Hill. It extends from Market Street, in downtown San Jose, to US 101 south of the City of Gilroy. Monterey Road has a posted speed limit of 45 miles per hour (mph) in the vicinity of the project site.

Butterfield Boulevard is a north-south four-lane divided arterial roadway that begins in the north part of town at its intersection with Cochrane Road and extends southward to its intersection with Monterey Road where it changes designation to Watsonville Road. Butterfield Boulevard has a posted speed limit of 45 mph and, along with Monterey Road, serves as a primary north-south route within the City of Morgan Hill. Butterfield Boulevard would provide direct access to the site via one driveway.

Tennant Avenue is classified in the City of Morgan Hill General Plan as a 4- to 6-lane major arterial. Tennant Avenue extends from Monterey Road eastward over US 101 to Carey Avenue where it terminates. West of Monterey Road, Tennant Avenue changes designation to Edmundson Avenue. With a full interchange at US 101, Tennant Avenue provides regional access to the project site.

Existing Bicycle, Pedestrian and Transit Facilities

Pedestrian facilities in the vicinity of the project site include sidewalks along Butterfield Boulevard and marked crosswalks and pedestrian push buttons and signal heads along all approaches of the Monterey Road and Butterfield Boulevard intersection. Additionally, Americans with Disabilities Act (ADA)-compatible wheelchair ramps are installed at all four corners of the Monterey Road and Butterfield Boulevard intersection. Marked crosswalks and pedestrian push buttons and signal heads also are found along all legs of both the intersections of Monterey Road/Tennant Avenue and Butterfield Boulevard/Tennant Avenue.

There are existing bicycle networks along Monterey Road and Butterfield Boulevard that would provide an alternative mode of transportation, besides the automobile. Class II bike lanes (defined by the VTA as striped bike lanes on street) are currently provided along the following roadways in the vicinity of the project site:

Butterfield Boulevard, along its entire length (including the project frontage)
Watsonville Road, between Monterey Road and Santa Teresa Boulevard/Sunnyside Avenue
Monterey Road, nearly its entire length within the City of Morgan Hill (including the project frontage), with the exception the Downtown area (between Dunne and Main Avenues)
Tennant Avenue, west of Monterey Road to east of US 101

Additionally, the Llagas Creek Trail, a Class I bikeway (off-street path which is shared with pedestrians and excludes motor vehicles), runs north/south west of Monterey Road between Watsonville Road and Spring Avenue. The trailhead along Watsonville Road is located approximately ¼-mile west of the project site.

Existing transit services to the study area are provided by VTA. The nearest bus stops to the project site are located on Monterey Road just north and south of Butterfield Boulevard/Watsonville Road. These bus stops are served by Local Route 68. Local Route 68 operates on Monterey Road and Hale Avenue on its route between the Gilroy Transit Center and the Diridon Transit Center in San Jose with 15-20 minute headways on weekdays during the commute hours between the hours of 4:00 AM and 1:30 AM. On weekends, Route 68 operates with approximately 20-minute headways between the hours of 5:45 AM and 1:30 AM.

4.17.2 Impact Discussion

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

Impact TRN-1: The project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle lanes and pedestrian facilities. **(Less than Significant Impact)**

The City of Morgan Hill does not currently have an adopted vehicle miles traveled (VMT) policy. The City's adopted transportation policy utilizes level of service (LOS) as the metric by which the City determines the functionality of the roadway system and the effect of new development on the roadway network. The following discussion of LOS is provided as it pertains to consistency with the City's adopted transportation policy.

General Plan Level of Service Policy Evaluation

The proposed Butterfield Park would consist of a City park that would mainly serve City of Morgan Hill residents. It is not anticipated that regional events, or events that would result in a significant amount of traffic being generated from outside of Morgan Hill, would be held at the park. In

addition, it is not anticipated that the proposed park would generate a significant amount of traffic during the standard weekday AM (7:00 to 9:00 AM) and PM (4:00 to 6:00 PM) peak hours. The park is anticipated to generate the most visitors on Saturdays.

Because it is not anticipated that the proposed project would generate a significant amount of traffic during the standard weekday AM and PM peak hours, the trip generation and operations analysis focuses on the proposed project's effect during the Saturday peak-hour at the following signalized intersections:

1. Monterey Road and Watsonville Road/Butterfield Boulevard
2. Butterfield Boulevard and Tennant Avenue
3. Monterey Road and Tennant Avenue/Edmundson Avenue

Existing Saturday peak-hour traffic volumes were obtained from new manual turning-movement counts conducted on Saturday June 22 and 29, 2019 at the study intersections. Traffic count data was collected for a six-hour period in order to identify the Saturday peak-hour in the vicinity of the project site. Based on the traffic data collection, the Saturday peak-hour at the study intersections occurred between the hours of 12:00 PM and 2:00 PM. The LOS at the study intersections is identified in Table 4.17-2 and they are shown in Figure 4.17-1.

The following scenarios were studied to determine if the LOS of the local intersections in the project site would be adversely affected by project generated traffic:

1. **Scenario 1:** Existing Conditions – Existing traffic volumes were obtained from peak-hour turning movement counts conducted in June 2019.
2. **Scenario 2:** Existing Plus Project Conditions– Existing plus project peak-hour traffic volumes were estimated by adding to the existing traffic volumes the additional traffic that would be generated by the proposed project.

Trip Generation Estimates

It is estimated that the proposed project will generate 144 trips (73 inbound and 71 outbound) during Saturday peak hours (12:00-2:00 PM). The trip generation estimates for proposed project are shown in Table 4.17-1.

Table 4.17-1: Project Trip Generation Estimates			
Land Use	Saturday Peak Hour¹		
	In	Out	Total
Land Use			
Proposed Baseball Field ²	38	38	76
Pump Track (Soccer Field) ³	20	21	41
Public Park ⁴	15	12	27
Total	73	71	144
Notes: Source: ITE <i>Trip Generation Manual</i> , 10th Edition 2017 1. It is not anticipated that the proposed park would generate a significant amount of traffic during the standard weekday AM (7:00 to 9:00 AM) and PM (4:00 to 6:00 PM) peak hours. The park is anticipated to generate the most visitors on Saturdays. 2. The ITE <i>Trip Generation Manual</i> does not provide trip generation rates for baseball field land use. Thus, the trip generation for the baseball field was estimated assuming 12 players per team/2 teams (24 inbound trips), spectators for half the players (12 inbound trips), and 2 officials (2 inbound trips) per game. In addition, during the Saturday peak-hour, one game would end and a second one would begin, resulting in the same number of outbound trips. 3. The ITE <i>Trip Generation Manual</i> does not provide trip generation rates for bike pump track land use. Thus, it is assumed that the proposed two bike pump tracks would generate trips equivalent to one soccer field (ITE Land Use 488). 4. Trip generation for the remaining park land use and supporting amenities was estimated using ITE trip generation rates for Public Park land use (ITE Land Use 411).			

Intersection Level of Service Analysis

The results of the intersection level of service analysis under existing plus project conditions are summarized in Table 4.17-2.

Table 4.17-2 : Study Intersections Level of Service – Existing Plus Project Conditions							
No.	Intersection	Peak Hour	Existing		Existing Plus Project		
			Average Delay	LOS	Average Delay	LOS	Increase in Critical V/C
1	Monterey Road and Watsonville Road/Butterfield Boulevard	SAT	43.6	D	43.9	D	0.002
2	Butterfield Boulevard and Tennant Avenue	SAT	38.3	D	38.2	D	0.051
3	Monterey Road and Tennant Avenue/Edmundson Avenue	SAT	37.8	D	38.6	D	0.024

The results show that, measured against the City of Morgan Hill LOS policy, all of the study intersections currently operate and would continue to operate at acceptable LOS D under existing plus project conditions. Therefore, the addition of project traffic would not result in a LOS deficiency, and, therefore, would not warrant improvements that require physical changes to the environment. The project would comply with the City's LOS policy. **(No Impact)**

Impacts to Pedestrian, Bicycle and Transit Facilities

Transit Facilities

The transit ridership demands of the proposed project are expected to be minimal, on the order of a handful of riders per day, and can be accommodated by the existing transit facilities. The increase in ridership, therefore, would not require the expansion of transit facilities nor would it result in a significant environmental impact on existing facilities. **(Less than Significant Impact)**

Pedestrian Facilities

As discussed previously, there are currently segments of Watsonville Road and Monterey Road (along undeveloped parcels) with missing sidewalks in the vicinity of the project site. Due to the missing sidewalks, pedestrian access to the project site from adjacent neighborhoods would be discontinuous and would require pedestrians along these segments of Watsonville and Monterey Roads to walk along undeveloped roadway shoulders or dirt pathways. The project should be required to install sidewalks along its Monterey Road frontage to contribute to the development of a complete pedestrian network in the vicinity of the project site. However, constructing sidewalks along other undeveloped properties is beyond the project's right-of-way and responsibility. Each of the undeveloped parcels will have to install the missing sidewalks along its frontage as they develop, closing existing sidewalk gaps. Until a complete sidewalk network is available, pedestrians will need to rely on the available pedestrian network (sidewalks along Butterfield Boulevard, most of the north side of Watsonville Road, and most of Monterey Road, north of Butterfield Boulevard, in addition to bike lanes along all adjacent roadways) to access the project site.

The project proposes to construct a pedestrian walking path that would run along the perimeter of the site. The proposed pedestrian pathway would connect to all areas within the site, including the parking lot area, sports fields, and park amenities. In additions, the pathway would connect directly to existing sidewalks along Butterfield Boulevard (at the project site driveway) and to the intersection of Monterey Road/Butterfield Boulevard (at the southeast corner of the intersection). This pathway would provide a connection between the project site and existing pedestrian and bicycle facilities along Monterey Road and Butterfield Boulevard. These walkways would facility pedestrian movement between the parking lot and the park areas.

Pedestrian connectivity within the project site, parking lot, and adjacent pedestrian/bicycle facilities would adequately serve the estimated project demand. Pedestrian access to the project site from the adjacent neighborhoods, however, would need to rely on the available pedestrian network until a complete sidewalk network is available as other undeveloped parcels develop. **(Less than Significant Impact)**

Bicycle Facilities

Bicycle lanes are provided along the entire lengths of Monterey Road, Butterfield Boulevard, Watsonville Road, and Tennant Avenue. The number of bicyclists riding to the proposed project is expected to be minimal (e.g. those coming to use the bike pump tracks are assumed to drive to the site transporting their bikes), on the order of a handful of riders per day, and can be accommodated by the existing bicycle facilities in the vicinity of the project site. The project would not result in a

significant impact to existing or planned bicycle facilities described in the Bikeways, Trails, Parks and Recreation Master Plan.⁸² **(Less than Significant Impact)**

Impact TRN-2: The project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). **(No Impact)**

VTM is identified in CEQA Guidelines Section 15064.3 as the most appropriate measure of transportation impacts. However, per the CEQA Guidelines Section 15064.3, agencies have until July 1, 2020 to adopt a VTM-based threshold. The City has not yet adopted a standard approach or guidelines to evaluate a project's VTM impact. Therefore, the proposed project is not in conflict with CEQA Guidelines Section 15064.3, Subdivision (b). **(No Impact)**

Impact TRN-3: The project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). **(Less than Significant Impact)**

The proposed development would be accessed via a single right-in and out access driveway along Butterfield Boulevard. The preliminary conceptual site plan shows the proposed driveway to be located approximately 320 feet east of the Monterey Road and Butterfield Boulevard intersection. The site driveway would provide direct access to the proposed on-site parking area. The eastbound direction of Butterfield Boulevard adjacent to the proposed project site driveway consists of two 12-foot travel lanes and an 8-foot bike lane, for a total right-of-way of 32 feet. In order to avoid potential inbound vehicular queues from blocking eastbound through traffic on Butterfield Boulevard, Hexagon recommended that Butterfield Boulevard be widened an additional 2-4 feet at the project site entrance, for a distance of approximately 150 feet, in order to provide a total of 34 feet of right-of-way in the eastbound direction to continue to provide two 12-foot through lane and a 10-foot bike lane/right-turn lane. The 150-foot long 10-foot wide bike/right-turn lane at the project site driveway (shown on Figure 6 of the Traffic Operations Study, Appendix G of this Initial Study) would provide storage capacity for six inbound vehicles and avoid site access activity from interfering with eastbound through traffic on Butterfield Boulevard.

The preliminary conceptual site plan shows the project driveway on Butterfield Boulevard to be just over 20 feet wide. According to Section 18.72.060 (Parking design and development standards) of the City of Morgan Hill Municipal Code, the minimum required driveway width at the street entrance should be 35 feet for a two-way commercial driveway. As the project plans are further advanced, and prior to approval of a contract to construct the park, the project site access driveway would be designed to the satisfaction of City of Morgan Hill design standard and guidelines, including the minimum width and turn-radii requirements for site access. The project does not include sharp curves or incompatible uses. Therefore, the project would not increase hazards due to its geometric design. **(Less than Significant Impact)**

⁸² City of Morgan Hill. Bikeways, Trails, Parks and Recreation Master Plan. Adopted July 20, 2017. Accessed July 8, 2019. <http://www.morganhill.ca.gov/1429/Master-Plan-for-Parks-Trails-and-Bikeway>.

Impact TRN-4: The project would not result in inadequate emergency access. **(No Impact)**

The proposed project site driveway would provide access to larger vehicles, such as emergency vehicles and garbage collector trucks. For this reason, the design of the project site and parking lot, including driveway and drive aisle widths and on-site turn radii, must be adequate to ensure larger vehicles can maneuver through the site without a problem. By adhering to the City of Morgan Hill's standards and requirements for emergency access, the proposed site access points and layout of the surface parking areas would be adequate to accommodate circulation of both passenger and emergency vehicles. **(No Impact)**

4.18 TRIBAL CULTURAL RESOURCES

This discussion is based in part on an archaeological survey and Native American consultation conducted by Holman & Associates on May 29, 2019. This report contains sensitive information and is on file at Morgan Hill City Hall for review by qualified personnel.

4.18.1 Environmental Setting

4.18.1.1 *Regulatory Framework*

State

Assembly Bill (AB) 52, effective July of 2015, established a new category of resources for consideration by public agencies when approving discretionary projects under CEQA, called Tribal Cultural Resources (TCRs). AB 52 requires lead agencies to provide notice of projects to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached.

Under AB 52, a TCRs are defined as follows:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are also either:
 - Included or determined to be eligible for inclusion in the California Register of Historic Resources⁸³
 - Included in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)
- A resource determined by the lead agency to be a TCR.

⁸³ See Public Resources Code section 5024.1. The State Historical Resources Commission oversees the administration of the CRHR and is a nine-member state review board that is appointed by the Governor, with responsibilities for the identification, registration, and preservation of California's cultural heritage. The CRHR “shall include historical resources determined by the commission, according adopted procedures, to be significant and to meet the criteria in subdivision (c) (Public Resources Code, Section 5024.1 (a)(b)).

Local

Morgan Hill 2035 General Plan

The *Morgan Hill 2035 General Plan* includes goals, policies, and actions to avoid significant impacts due to loss of cultural resources.⁸⁴ The following goal and policy related to tribal cultural resources is applicable to the proposed project:

Healthy Community:

Goal HC-8: *Historic identity and cultural resources that are preserved for future generations.*

Policy HC-8.4: **Tribal Consultation.** Consult with Native American tribes that have ancestral ties to Morgan Hill regarding proposed new development projects and land use policy changes.

Policy HC-8.5: **Mitigation.** Require that if cultural resources, including tribal, archaeological, or paleontological resources, are uncovered during grading or other on-site excavation activities, construction shall stop until appropriate mitigation is implemented.

4.18.1.2 Existing Conditions

AB 52 requires lead agencies to conduct formal consultations with California Native American tribes during the CEQA process to identify tribal cultural resources that may be subject to significant impacts as a result of a project. This consultation requirement applies only if the tribes have sent written requests for notification of projects to the lead agency. The City of Morgan Hill has not been contacted for AB 52 notification and consultation by a tribe. The City of Morgan Hill has been contacted by the Ohlone Indian Tribe and the Amah Mutsun Tribal Band, who request to be contacted in the event any cultural resources are unearthed.

As mentioned in Section 4.5.1.2, a portion of the project site is located within a potentially archaeologically sensitive area due to its proximity to Little Llagas Creek, and the Amah Mutsun Tribal Band has stated that the Little Llagas Creek is a sensitive waterway that could contain cultural resources.^{85,86}

⁸⁴ City of Morgan Hill, California (2016). "Chapter 6, Healthy Community." *City of Morgan Hill General Plan 2035*. Accessed May 16, 2019. <https://www.morgan-hill.ca.gov/DocumentCenter/View/22839/MH2035-General-Plan---December-2017?bidId=>

⁸⁵ City of Morgan Hill. *Archaeological Sensitivity Map*. April 2000.

⁸⁶ Holman & Associates. *Results of a CEQA Archaeological Survey and Native American Consultation for the Butterfield Park Project at Butterfield Boulevard and Monterey Road*. May 2019.

4.18.2 Impact Discussion

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

Impact TCR-1: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k). **(Less than Significant Impact)**

No known tribal cultural resources are present on-site. For this reason, the project would not cause an adverse change in the significance of TCRs listed on the California Register or City of Morgan Hill historic properties inventory. In the event that any cultural resources are unearthed, both the Ohlone Indian Tribe and the Amah Mutsun Tribal Band would be contacted. As discussed in Section 4.5 Cultural Resources, in the unlikely event that human remains or other TCRs are discovered during construction activities, implementation of **Standard Condition CUL-1.1** would reduce the project's impact to a less than significant level. **(Less than Significant Impact)**

Impact TCR-2: The project would not cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.
(Less than Significant Impact)

There are no known tribal cultural resources on-site; however, as mentioned, the project site has the potential to contain TCRs given its proximity to a local waterway. If any TCRs are found, the Ohlone Indian Tribe and Amah Mutsun Tribal Band would be contacted. As discussed in Section 4.5 Cultural Resources, in the unlikely event that human remains or other TCRs are discovered during construction activities, implementation of **Standard Condition CUL-1.1** would reduce the project's impact to a less than significant level. **(Less than Significant Impact)**

4.19 UTILITIES AND SERVICE SYSTEMS

The following discussion is based in part on the City of Morgan Hill's Water System Master Plan, Sewer System Master Plan, and Storm Drainage System Master Plan.

4.19.1 Environmental Setting

4.19.1.1 *Regulatory Framework*

State and Regional

Urban Water Management Plan

Pursuant to the State Water Code, water suppliers providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet (approximately 980 million gallons) of water annually must prepare and adopt an urban water management plan (UWMP) and update it every five years. As part of a UWMP, water agencies are required to evaluate and describe their water resource supplies and projected needs over a 20-year planning horizon, water conservation, water service reliability, water recycling, opportunities for water transfers, and contingency plans for drought events. The City of Morgan Hill adopted its most recent UWMP in August 2016.⁸⁷

Wastewater

The City of Morgan Hill's wastewater is treated at the South County Regional Wastewater Authority (SCRWA) facility, which is permitted by the Central Coast Regional Water Quality Control Board (Central Coast RWQCB). The SCRWA manages the treatment of wastewater from the Cities of Gilroy and Morgan Hill.

Assembly Bill 939

The California Integrated Waste Management Act of 1989, or Assembly Bill (AB) 939, established the Integrated Waste Management Board, required the implementation of integrated waste management plans, and mandated that local jurisdictions divert at least 50 percent of solid waste generated (from 1990 levels), beginning January 1, 2000, and divert at least 75 percent by 2010. Projects that would have an adverse effect on waste diversion goals are required to include waste diversion mitigation measures.

Senate Bill 1383

Senate Bill (SB) 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The bill grants CalRecycle the regulatory authority required to achieve the organic waste disposal reduction targets and establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025.

⁸⁷ City of Morgan Hill. *2015 Urban Water Management Plan*. August 2016.

Local

Morgan Hill 2035 General Plan

The General Plan includes policies for the purpose of avoiding or mitigation impacts from planned development in the City. The policies below are specific to utilities and service systems and are applicable to the proposed project.

Safety, Services, and Infrastructure:

Goal SSI-14: *High quality water resources, managed effectively.*

Policy SSI-14.1: **Efficient Water Management.** Manage the supply and use of water more efficiently through appropriate means, such as watershed protection, percolation, conservation, and reclamation.

Policy SSI-14.3: **SB-X7-7.** Implement water conservation policies contained within Morgan Hill’s Urban Water Management Plan to achieve 20 percent per capita water reductions by 2020.

Policy SSI-14.4: **Drought Planning.** Encourage water agencies to develop and maintain drought contingency plans, including emergency water connections and relate measures to ensure adequate water during drought.

Policy SSI-14.5: **Water Supply.** Routinely evaluate the impact of new development proposals in Morgan Hill and require appropriate measures to ensure long-term water supplies are available.

Policy SSI-14.8: **Sufficient Supply.** Ensure that new development does not exceed the water supply.

Policy SSI-14.13: **Use of Recycled Water.** Increase use of recycled water in development projects and landscaping; implement best practices to expand recycled water use when safe, practical, and available.

4.19.1.2 Existing Conditions

Water Service

The City of Morgan Hill provides potable water service to its residential, commercial, industrial, and institutional customers within the City limits. The City’s water system facilities include 17 groundwater wells, 12 potable water storage tanks, 10 booster stations, and over 180 miles of pressured pipes ranging from two to 14 inches in diameter. The City’s water distribution system meets the needs of existing customers. In anticipation of future growth, the City has planned and constructed water projects in conjunction with new street construction.

The City of Morgan Hill relies on groundwater as its sole source of supply. The City relies on water imports from the State Water Project and the federal Central Valley Project for the purpose of

groundwater recharge of the sub-basins that supply water to the City (Coyote Valley sub-area of the Santa Clara sub-basin and the Llagas sub-basin). The City's 2015 Urban Water Management Plan (UWMP) identified potential shortages which may occur during prolonged years of drought, however, upon implementation of water shortage contingency actions these shortages in supply can be mitigated in dry-year and multiple dry-year scenarios.⁸⁸

The project site is vacant and does not currently place any demands on the City's water supply. There are existing 12-inch water pipes that run through Butterfield Boulevard, directly adjacent to the project site.⁸⁹

Sanitary Sewer/Wastewater Treatment

The City of Morgan Hill sewer collection system consists of approximately 160 miles of four-inch through 30-inch diameter sewers, three miles of force mains, and 14 sewage lift stations. The "backbone" of the system consists of the trunk sewers, generally 12-inches in diameter and larger, that convey the collected wastewater flows south to the South County Regional Wastewater Authority (SCRWA) Wastewater Treatment Plant.^{90,91} The treatment plant provides service to the cities of Morgan Hill and Gilroy. The treatment plant has capacity to treat an average dry weather flow (ADWF) of 8.5 million gallons per day (mgd) and is currently permitted by the Central Coast RWQCB to treat up to 8.5 mgd.⁹² Currently, Morgan Hill is allocated 42 percent of the treatment plant's 8.5 mgd capacity, amounting to 3.6 mgd. In 2016, the ADFW in the City was 2.35 mgd, leaving approximately 1.2 mgd of allowable growth within the City's General Plan before capacity at the plant is reached.

Using data through 2016, the SCRWA estimated in 2017 that the Wastewater Treatment Plant would reach capacity in 2025, using anticipated permit issuances/associated wastewater allocations and projected population data for the cities of Morgan Hill and Gilroy.⁹³ The SCRWA recommends that a fully commissioned plant expansion be completed by 2024 to ensure that the treatment plant has adequate capacity to service both cities. Following completion of the design process, appropriate project-level CEQA review would be completed by SCRWA.

Two sewer lines cross at the Watsonville/Monterey intersection of the project site: a 21-inch line parallel to Monterey Road known as the Railroad-Monterey Trunk and a 10-inch line parallel to Watsonville Road terminating at the Butterfield/Monterey intersection project site.

⁸⁸ Ibid.

⁸⁹ City of Morgan Hill. *2017 Water System Master Plan*. October 2017.

⁹⁰ City of Morgan Hill. *Sewer System Master Plan*. October 2017.

⁹¹ City of Morgan Hill. *City Council State Report 2163: Accept Report Regarding Wastewater System Needs and Rate Study Schedule*. May 18, 2019.

⁹² Santa Clara Valley Water District. *US Bureau of Reclamation WaterSMART Title XVI Water Reclamation and Reuse Program Funding FY 2017, FOA BOR-DO-17-F002. South Santa Clara County Recycled Water Project (Phases 1B and 2A)*. December 15, 2016. Accessed May 18, 2019.

<https://www.usbr.gov/watersmart/title/docs/applications/authorized/2017/F002-007santaclara.pdf>

⁹³ California Regional Water Quality Control Board. *Waste Discharge Requirements for the South County Wastewater Authority South County Regional Wastewater Treatment and Reclamation*. Order No. R3-2017-0028, NPDES No. CA0049964. Accessed May 18, 2019.

https://www.waterboards.ca.gov/centralcoast/board_decisions/adopted_orders/2017/2017_0028_permit.pdf.

Storm Drainage System

The City of Morgan Hill owns and maintains the storm drainage system which services the project site. The City's storm drainage system consists of a combination of curb and gutter facilities, curb inlets, underground pipelines, and bubblers. Stormwater runoff discharges to retention basins, the Fisher Creek, West Little Llagas Creek and Llagas Creek, and channels that transect the City.⁹⁴ The project site is within the Little Llagas Drainage Basin.

The detention basin on the project site currently accepts runoff from Butterfield Boulevard. As discussed in Section 3.2 Proposed Development and Section 4.10 Hydrology, the basin would be converted to a parking lot, with an underground bio-filtration system that would continue to accept runoff from Butterfield Boulevard as well as additional flow from the new impervious surfaces proposed on the site.

Adjacent to the project site is Little Llagas Creek, which contains a culvert that controls the flow of water. The closest existing storm drain runs through Concord Circle, Vineyard Boulevard, and La Crosse Drive. Existing storm drains are also located along Tennant Avenue. An existing storage basin and pump station is located on Concord Circle (adjacent to and north of the project site). Stormwater from the project site would be conveyed to the Little Llagas Creek.

Solid Waste

Recology South Valley provides solid waste and recycling services to the residents and businesses of the City. Recology South Valley is contracted with the Salinas Valley Solid Waste Authority for the disposal of municipal solid waste at Johnson Canyon Sanitary Landfill. Johnson Canyon Sanitary Landfill is expected to reach capacity in 2055.⁹⁵ No solid waste is currently generated at the project site.

4.19.2 Impact Discussion

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
1) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
2) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐

⁹⁴ City of Morgan Hill. *Storm Drainage Master Plan*. September 2018.

⁹⁵ CalRecycle. *SWIS Facility Detail: Johnson Canyon Sanitary Landfill (27-AA-0005)*. Accessed May 18, 2019. <https://www2.calrecycle.ca.gov/swfacilities/Directory/27-AA-0005>.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
3) Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
4) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
5) Be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact UTL-1: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. **(No Impact)**

The proposed project would utilize existing utility infrastructure to connect to the City's stormwater, electric, telecommunications, waste, and wastewater systems. The proposed project would incrementally increase the demand on existing facilities in the City of Morgan Hill. Based on the analysis below, no relocation of existing or construction of new facilities is needed to serve the proposed project; therefore, there would be no impact. **(No Impact)**

Impact UTL-2: The project would not have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. **(Less than Significant Impact)**

The project would require water to irrigate all turf and landscaped areas, which adds up to 229,655 square feet, or approximately 5 acres. Using CalEEMod estimates of water use, the proposed park would create a water demand of approximately 23,830 gpd, consistent with City water conservation policies, listed in Section 4.19.1.1.^{96,97} As a result, the proposed project would use more water compared to existing conditions, but there would be adequate water supplies to meet the project's demand. **(Less than Significant Impact)**

⁹⁶ CalEEMod Default Data Tables. September 2016.

⁹⁷ 229,655 square feet = 5 acres x 1,191,481 gallons/acre/year = 5,957,405 gallons/year = 23,830 gpd, based on a work-year of 250 days per year

Impact UTL-3: The project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. **(Less than Significant impact)**

The park restrooms would generate a small amount of wastewater per year. As discussed in Section 4.19.1.2, the ADFW in the City is approximately 2.35 mgd, leaving approximately 1.2 mgd of allowable growth within the City's General Plan before capacity at the plant is reached. The project's wastewater flow would not cause the Plant to exceed capacity. The City's General Plan determined that build-out of the General Plan would not result in significant impacts to the SCRWA Treatment Plant. The project would not adversely affect the functionality or the capacity of the existing wastewater treatment system. **(Less than Significant Impact)**

Impact UTL-4: The project would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

The City of Morgan Hill has contracted with Recology South Valley to provide solid waste disposal and recycling service within the City. Recology South Valley would dispose of solid waste from the City at Johnson Canyon Sanitary Landfill which has a projected permitted capacity of approximately 13,830,000 cubic yards and is expected to remain open through 2055.⁹⁸ The proposed project would generate approximately five pounds of solid waste per day.⁹⁹ Therefore, the proposed development would be served by a landfill with adequate capacity to serve the project site. **(Less than Significant Impact)**

Impact UTL-5: The project would not be noncompliant with federal, state, and local management and reduction statutes and regulations related to solid waste. **(Less than Significant Impact)**

The proposed project would not negatively impact the provision of solid waste services and would comply with the state's 75 percent solid waste reduction goal. The park staff managing the future park would be required to direct and recycle waste consistent with federal, state, and local requirements. Thus, the project would not impair the attainment of solid waste reduction goals. **(Less than Significant Impact)**

⁹⁸ CalRecycle. *SWIS Facility Detail: Johnson Canyon Sanitary Landfill (27-AA-0005)*. Accessed May 18, 2019. <https://www2.calrecycle.ca.gov/swfacilities/Directory/27-AA-0005>.

⁹⁹ 9.5 acres x 0.09 tons/acre/year = 0.855 tons/year = 1710 pounds/year = 4.68 pounds/day

4.20 WILDFIRE

4.20.1 Environmental Setting

4.20.1.1 *Existing Conditions*

The California Department of Forestry and Fire Protection (Cal Fire) is required by law to map areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. Referred to as Fire Hazard Severity Zones (FHSZ), these maps influence how people construct buildings and protect property to reduce risk associated with wildland fires. The project site is not located in a FHSZ.¹⁰⁰

4.20.2 Impact Discussion

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

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; therefore, the project would not result in wildfire impacts. **(No Impact)**

¹⁰⁰ California Board of Forestry and Fire Protection. *Fire Hazard Severity Zones Maps*. Accessed April 8, 2019. http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_zones.

4.21

MANDATORY FINDINGS OF SIGNIFICANCE)

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

Impact MFS-1: The project, with implementation of identified mitigation measures, does not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. **(Less than Significant Impact with Mitigation Incorporated)**

As discussed in the previous sections of this Initial Study, the proposed project would not degrade the quality of the environment with implementation of identified Standard Permit Conditions and mitigation measures. As discussed in Section 3.4, Biological Resources, with implementation of the identified mitigation measures (**MM BIO-1.1, and MM BIO-2.1, MMBIO-2.2, and MM BIO-5.1-MM BIO-5.7, and MM BIO-6.1 and MM BIO-6.2**), the project would not significantly impact sensitive habitats or species. As discussed in Section 3.5, Cultural Resources, with implementation of the identified standard measures, the project would result in a less than significant impact on archaeological resources. The project would have no impact on historic or tribal cultural resources. **(Less than Significant Impact with Mitigation)**

Impact MFS-2: The project, with implementation of identified mitigation measures, does not have impacts that are individually limited, but cumulatively considerable.
(Less than Significant Impact with Mitigation Incorporated)

Under Section 15065(a)(3) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has potential environmental effects “that are individually limited, but cumulatively considerable.” As defined in Section 15065(a)(3) of the CEQA Guidelines, cumulatively considerable means “that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.” This Initial Study evaluates the environmental impacts of the proposed carpenters training center project. This Initial Study also takes into account other past, pending, and probable future projects whose impacts could combine to produce cumulative impacts.

The nearest projects to the site include several residential developments on the west side of Monterey Road, both north and south of Watsonville Road, as well as residential development on Watsonville Road west of Monterey Road. Additionally, the Santa Clara Valley Water District is undertaking the Upper Llagas Creek Flood Protection Project, which will provide 100-year level of flood protection to urban areas of Morgan Hill. The stretch of Upper Llagas Creek near the Butterfield Park site is known as Reach 7a, and that reach is included as part of Phase 1 of the flood control project. Work for this phase consists of channel widening and deepening, instream improvements for wildlife and habitat, and revegetation.

Resource Topics not Impacted by the Project

The project would result in no wildfire hazards and would have no impact on agricultural resources, mineral resources, recreational facilities, historic resources or tribal cultural resources; therefore, the project has no potential to combine with other projects to result in cumulative impacts to those resources. **(No Cumulative Impact)**

Cumulative Air Quality Impacts

By its very nature, air pollution is largely a cumulative impact. The geographic area for cumulative air quality impacts is the San Francisco Bay Area Air Basin. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project’s individual emissions contribute to existing cumulatively significant adverse air quality impacts. The project would emit criteria air pollutants and contribute to the overall regional emissions of these pollutants. The project-level thresholds identified by BAAQMD (which the project’s impacts were compared to in Section 4.3, Air Quality) are the basis for determining whether a project has a cumulatively considerable contribution to the existing cumulatively significant air quality impact. The project’s construction and operational criteria air pollutant emissions would be below BAAQMD screening criteria and thresholds for these pollutants; therefore, the project would result in a less than cumulatively considerable contribution to significant regional air quality impact. Additionally, modeling of construction TACs (refer to Table 4.3-4 in Section 4.3 Air Quality) confirmed that cumulative impacts from all sources within 1,000 feet of the site would be less than significant. **(Less Than Cumulatively Considerable Contribution to a Significant Cumulative Impact)**

Cumulative GHG Impacts

The proposed project and past, present, present and future development projects worldwide contribute to global climate change. No single project is sufficient in size to, by itself, change the global average temperature. Therefore, due to the nature of GHG impacts, a significant project impact is a significant cumulative impact. As discussed in Section 4.8, Greenhouse Gas Emissions, the project's operational emissions would be below applicable thresholds for 2030; the project would, therefore, not result in significant GHG impact. For these reasons, the project would not result in a cumulatively considerable contribution to a significant cumulative GHG impact. **(Less Than Cumulatively Considerable Contribution to a Significant Cumulative Impact)**

Cumulative Cultural Resources and Geology Impacts

The geographic area for cumulative archaeological resources and human remains impacts are locations with approximately 1,000 feet of the site. The project site is partially located within a potentially archaeologically sensitive area due to its proximity to Little Llagas Creek. According to the City's Archaeological Sensitivity Map, and input from the Amah Mutsun Tribal Band, the creek is a sensitive waterway that could potentially contain cultural resources. In the unlikely event that human remains are discovered during construction would implement standard permit conditions to reduce potential impacts to archaeological resources and human remains during construction to less than significant. In the event that other development projects encounter unanticipated archaeological resources, they would also be required to implement standard permit conditions to reduce potential impacts to archaeological resources and human remains. The project would, therefore, have a less than significant cumulative impact on archaeological resources and human remains. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative geological impacts would be locations adjacent to the site, since geological impacts are limited to the project site and adjacent properties. There are no other current or future projects immediately adjacent to the project site. Therefore, the project has no potential to combine impacts to geological resources or soils with other projects. **(No Cumulative Impact)**

Cumulative Hydrology and Utilities Impacts

The geographic area for cumulative hydrology and water quality impacts is the Upper Llagas Creek watershed. Cumulative developments near the project would be subject to similar hydrological and urban runoff conditions. All projects occurring within Morgan Hill would be required to implement the same standard conditions and measures related to construction water quality as the proposed project (including preparation of a SWPPP if disturbance if greater than one acre). In addition, all current and probable future projects that would disturb more than one acre of soil or replace/add more at least 2,500 square feet of impervious surfaces would be required to meet applicable site design and runoff reduction measures where feasible and the City's Storm Drainage Manual requirements on a project-specific basis. For these reasons, the cumulative projects, including the proposed project, would not result in significant cumulative hydrology or water quality impacts. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative utility and service systems is the City boundaries. The project would incrementally contribute to cumulative demands on utilities and service systems (water, sewer,

solid waste, storm drainage). Implementation of the proposed project and cumulative projects in Morgan Hill would not cause the City to exceed water demand projections, which are primarily based on population and employment growth disclosed in the City's most recent Urban Water Management Plan.

The City's share of the South County Regional Wastewater Authority Wastewater Treatment Plant's treatment capacity is 3.6 mgd. The ADFW in the City is approximately 2.35 mgd, leaving approximately 1.2 mgd of allowable growth within the City before capacity at the plant is reached. The proposed project and identified current and probable projects are consistent with the growth assumptions in the Sewer System Master Plan.

As discussed in the Section 4.19, Utilities and Service Systems, the landfills serving the project site and the City as a whole, have remaining capacity to serve the region through 2055. Based on the above reasons, the combined projects would not result in significant cumulative impacts to the City's water, sewer, solid waste and storm drainage facilities. **(Less than Significant Cumulative Impact)**

The project would not relocate natural gas, electricity or telecommunications lines. The project would not combine impacts to these utility lines with other projects, therefore, no cumulative impacts to these utilities would result from the combined projects. **(No Cumulative Impact)**

Cumulative Biological Resources Impacts

The geographic area for cumulative impacts to trees includes the project site and adjacent parcels. There are no current or reasonably foreseeable projects adjacent to the project site. Therefore, the project would not have the potential to result in combined cumulative impacts to trees. **(No Cumulative Impact)**

The project would have no impacts to sensitive habitats such as wetlands and serpentine habitats, and therefore would not contribute to cumulative impacts to these habitats with other projects elsewhere. The project could have an indirect impact on riparian habitat along the adjacent reach of Upper Llagas Creek by not observing a 35 foot setback, however that impact would be mitigated in the refined project plans prior to issuance of a contract to construct the park by adhering to the riparian setback established in the Municipal Code and required as part of the Santa Clara Valley HCP to avoid paying encroachment fees, as detailed in **MM BIO-2.1** through **-2.2**, and **MM BIO-6.1** and **-6.2**. For this reason, the project would not contribute to significant cumulative impacts to riparian habitat. The Santa Clara Valley Water District is undertaking a flood control project along the adjacent reach of Upper Llagas Creek, and will be required to offset any impacts to riparian habitat through mitigation measures and obtaining regulatory permits from CDFW and USACE, as necessary. **(Less Than Significant Cumulative Impact with Mitigation)**

The project applicant will pay applicable Habitat Plan fees to offset the cumulative effects of nitrogen deposition from new vehicle trips to serpentine habitats protected by the Habitat Plan. **(Less than Significant Cumulative Impact)**

The geographic area for cumulative impacts to migratory wildlife would be Santa Clara County. Construction of projects throughout the County, including the proposed project, could result in a significant cumulative impact on nesting birds. Each project is subject to federal, state, and local regulations (including the MBTA, Fish and Game Code, and CEQA), which would avoid and/or minimize impacts to nesting birds. The project, with the implementation of mitigation measure **MM BIO-1.1** and **MM BIO-1.2** to comply with the MBTA and Fish and Game Code, would not result in a cumulatively considerable contribution to a significant cumulative impact to nesting birds. **(Less Than Cumulatively Considerable Contribution to Significant Cumulative Impact)**

Cumulative Population and Housing Impacts

The geographic area for cumulative population and housing impacts is defined as the City of Morgan Hill. The project would not induce population growth in the City. The proposed park would serve the City's existing and planned population growth. The construction of an additional park does not remove an existing constraint on growth and development in the area. As a result, the project would not induce substantial population growth in the project site and would not result in significant cumulative population impacts. **(Less than Significant Cumulative Impact)**

The project site is vacant with no existing residences. Therefore, the project would not result in combined impacts to the displacement of people housing. **(No Cumulative Impact)**

Cumulative Public Services Impacts

The geographic area for cumulative public services and recreation facilities is the City's boundaries. The proposed project would be a neighborhood park that would serve the existing and planned City population. The project would not result in an incremental demand for fire protection and police services. The project would be built to applicable fire code standards. The City would review plans and conduct construction inspections to ensure that new development complies with existing building and fire code requirements and public safety requirements for all of the cumulative projects. The cumulative projects would comply with General Plan policies pertaining to public safety. **(Less than Significant Cumulative Impact)**

The project does not propose construction of residences, and therefore, would have no impacts on parks or schools. Therefore, the project has no potential to combine with other projects to result in cumulative impacts to these facilities. **(No Cumulative Impact)**

Cumulative Land Use Impacts

The proposed project would conform to applicable land use plans, policies, and regulations for the purpose of avoiding or mitigating environmental impacts and would not have land use impacts that could combine with other nearby projects. A public park use is considered compatible with surrounding urban development. For these reasons, the combined projects would result in a less than significant cumulative land use impact. **(Less than Significant Cumulative Impact)**

Cumulative Hazards and Hazardous Materials and Impacts

The geographic area for cumulative hazardous materials impacts would be within 1,000 feet of the project. The use, storage, transportation, and disposal of maintenance chemicals would be managed in accordance with existing laws and regulations that ensure herbicide and pesticide storage, and transportation to and from the cumulative sites would not result in a significant cumulative impact related to hazardous materials. **(Less than Significant Cumulative Impact)**

The project would not result in an aircraft hazard given the project site is not located within an AIA of a Comprehensive Land Use Plan and is not located within an FAA height restriction area for new structures. The project would, therefore, not result in cumulative impacts due to aircraft hazards when combined with the impacts of other projects. **(No Cumulative Impact)**

Cumulative Noise Impacts

The geographic area for cumulative noise impacts is approximately a 1,000 feet radius from the site.

Construction

While the cumulative proposed project would result in a temporary construction noise increase, the project would be required to implement mitigation measures as discussed in Section 4.13, Noise. Construction of the proposed project would be approximately 12 months. Therefore, the project would have a less than significant cumulative construction noise impact on noise sensitive receptors on the site. **(Less than Significant Cumulative Impact)**

Operation

As discussed in Section 4.13 Noise and Vibration, project vehicles traveling on surrounding roadways would not, in combination with other growth in the area, lead to substantial increases in roadway noise. Roadway volumes on Monterey Road, Butterfield Boulevard, and Watsonville Road are already high, and would not double as a result of cumulative development, the amount of increased vehicular traffic necessary to cause a noticeable 3 dBA increase in roadway noise.

For recreational activities planned in the proposed park, there are no nearby facilities generating substantial noise that could combine with the park to produce cumulative noise impacts. Hour's restrictions on proposed park activities will serve to limit the potential for substantial noise affecting surrounding land use. **(Less than Significant Cumulative Impact)**

Cumulative Traffic Impacts

The geographic area for cumulative transportation resource impacts includes the project site and its surrounding area as defined by the study intersections as shown in Figure 4.17-1. The proposed project would be consistent with applicable General Plan policies regarding circulation and, therefore, would not result in a cumulative conflict with those policies. The cumulative projects would comply with current building and fire codes and be reviewed by the Fire Department to ensure adequate emergency access. For these reasons, the cumulative projects would not result in a significant cumulative impact to emergency access. **(Less than Significant Cumulative Impact)**

Impact MFS-3: The project, with implementation of identified mitigation measures, does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. **(Less than Significant Impact with Mitigation Incorporated)**

Consistent with Section 15065(a)(4) of the CEQA Guidelines, a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. Pursuant to this standard, a change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This factor relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could indirectly affect human beings would be represented by all of the designated CEQA issue areas, those that could directly affect human beings include air quality and noise. Implementation of the best management practices, standard permit conditions, mitigation measures, and adherence to General Plan, City Code, and state and federal regulations described in these sections of the report, would avoid significant impacts. No other direct or indirect adverse effects on human beings have been identified. **(Less Than Significant Impact with Mitigation Incorporated)**

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SECTION 6.0 LEAD AGENCY AND CONSULTANTS

6.1 LEAD AGENCY

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SECTION 7.0 ACRONYMS AND ABBREVIATIONS

2017 CAP	Bay Area 2017 Clean Air Plan
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ADFW	Average Dry Weather Flow
AIA	Airport Influence Area
ALUC	Airport Land Use Commission
BAAQMD	Bay Area Air Quality Management District
Btu	British Thermal Unit
CalEPA	California Environmental Protection Agency
CalFire	California Department of Forestry and Fire Protection
CalGreen	California Green Building Standards Code
Cal/OSHA	California Division of Occupational Safety and Health
CARB	California Air Resources Board
CBC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQA	California Environmental Quality Act
CGS	California Geological Survey
CFCs	Chlorofluorocarbons
CH ₄	Methane
CLUP	Comprehensive Land Use Plan
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalents
CRHR	California Register of Historical Resources
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
DOT	United States Department of Transportation
DPM	Diesel Particulate Matter
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency

FMMP	Farmland Mapping and Monitoring Program
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Administration
GHGs	Greenhouse Gases
GWP	Global Warming Potential
Habitat Plan	Santa Clara Valley Habitat Plan/Natural Community Conservation Plan
HFCs	Hydrofluorocarbons
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MHFD	Morgan Hill Fire Department
MHPD	Morgan Hill Police Department
MLD	Most Likely Descendant
MMTCO _{2e}	Million Metro Tons of Carbon Dioxide Equivalent
MND	Mitigated Negative Declaration
MTC	Metropolitan Transportation Commission
N ₂ O	Nitrous Oxide
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NO _x	Nitrogen Oxides
NOD	Notice of Determination
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O ₃	Ground-Level Ozone
PDA	Priority Development Areas
PFCs	Perfluorocarbons
PG&E	Pacific Gas and Electric Company
PM	Particulate Matter
PM _{2.5}	Fine Particulate Matter
PPV	Peak Particle Velocity
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Needs Allocation
RPS	Renewables Portfolio Standard

RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF ₆	Sulfur Hexafluoride
SHMA	Seismic Hazards Mapping Act
SMARA	Surface Mining and Reclamation Act
SVCE	Silicon Valley Clean Energy
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resource Control Board
TACs	Toxic Air Contaminants
TCRs	Tribal Cultural Resources
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VMT	Vehicle Miles Traveled
VTa	Santa Clara Valley Transportation Authority