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In addition, as previously discussed, there are existing 10-inch and 15-inch sewer pipes located with Barrett Avenue, east and west of Condit Road, respectively. The City of Morgan Hill plans to replace the 10-inch pipe in Barrett Avenue between Condit Road and Hill Road with a larger 15-inch pipe in 2014. The High School would discharge effluent into the 15-inch line in Barrett Avenue.

The High School onsite sewer system will be a private system consisting of 6-inch to 8-inch piping and 4-inch building laterals. The High School will also need to extend the public sewer system south in Murphy Avenue approximately 1,000 feet to provide sufficient sewer service.

Because of an approximately 7-foot difference in elevation between Barrett Avenue and the southern portion of the High School site, there may be a need for an onsite lift station depending on how the site is graded and the finished floor elevation of the High School buildings. Regardless, the High School applicant would be responsible for the full cost of installing this infrastructure and, thus, has the discretion to determine what types of onsite facilities are most appropriate.

In summary, adequate wastewater treatment and collection capacity is available to serve the High School site.

Level of Significance Before Mitigation

SEQ Area (Program Level)

Less than significant impact.

High School Site (Project Level)

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

SEQ Area (Program Level)

Less than significant impact.

High School Site (Project Level)

Less than significant impact.

Storm Drainage

Impact US-3: **The proposed project may result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**

Impact Analysis

This impact addresses the checklist questions that concerns whether the project would require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. The analysis considers individual impacts associated with the implementation of the SEQ Area and the High School site.

SEQ Area (Program Level)

Buildout of the portion of the SEQ Area located within the USA would result in a need for storm drainage infrastructure to accommodate the increase in runoff volume from new impervious surfaces.

The storm drainage system of the City of Morgan Hill is composed of a combination of curb and gutter facilities, curb inlets, underground pipelines, and bubblers draining to the nearest creek or to manmade retention areas that flow through the City and are tributary to either Monterey Bay or San Francisco Bay. Existing drainage needs are currently met by the City's existing storm drainage system.

There is minimal existing storm drain infrastructure in the vicinity of the SEQ Area (including the High School site). The existing storm drain system includes the following:

- 24-inch, 15-inch and 12-inch pipes west of Condit Road, which provide drainage for the sports field and aquatics center east of Condit Road and existing developed properties east of Condit Road, and
- 42-inch pipes in San Pedro Avenue, which provides drainage for existing residential areas northeast of the SEQ Area.

One Capital Improvement Program project is planned to improve system capacity and service in the SEQ Area:

- Upsize the existing San Pedro Avenue storm drain to 48-inch. This project has not been completed by the City.

All existing storm drains outfall into Madrone Channel north of Tennant Avenue. There is no existing storm drain infrastructure south of Tennant Avenue.

RJA evaluated the existing storm drainage infrastructure in the SEQ Area and determined that there is limited opportunity to extend existing storm drain facilities in the northern portion of the USA expansion area. Storm drain can be extended in Barrett Avenue and Murphy Avenue to serve the

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public right-of-way. One or more new storm drain outfalls may be required in the southern portion of the USA expansion area to provide drainage for the Tennant Avenue, Fisher Avenue, and Murphy Avenue right-of-way. Exhibit 3.14-3 depicts the conceptual storm drainage system. Existing soils appear to have favorable infiltration rates. Therefore, individual projects within the SEQ Area should incorporate onsite stormwater retention facilities into the layout to collect and infiltrate runoff. This recommendation is reflected in Mitigation Measure US-3a. With the implementation of this mitigation measure, impacts would be less than significant.

High School Site (Project Level)

Development of the proposed High School would result in the introduction of new impervious surface coverage to the site, which would create a need for storm drainage infrastructure. As previously discussed, there is limited potential for expansion of the City's municipal storm drain system in the SEQ Area (including the High School site). Furthermore, because of the permeable characteristics of the soils within the SEQ Area (including the High School site), RJA has determined that onsite or offsite retention is the most appropriate method of storm drainage management. As such, Mitigation Measure US-3b is proposed requiring the project applicant to retain a qualified engineer to prepare and submit a Drainage Plan that employs the use of onsite or offsite retention to the City of Morgan Hill for review and approval. With the implementation of this mitigation measure, impacts would be less than significant.

Level of Significance Before Mitigation

SEQ Area (Program Level)

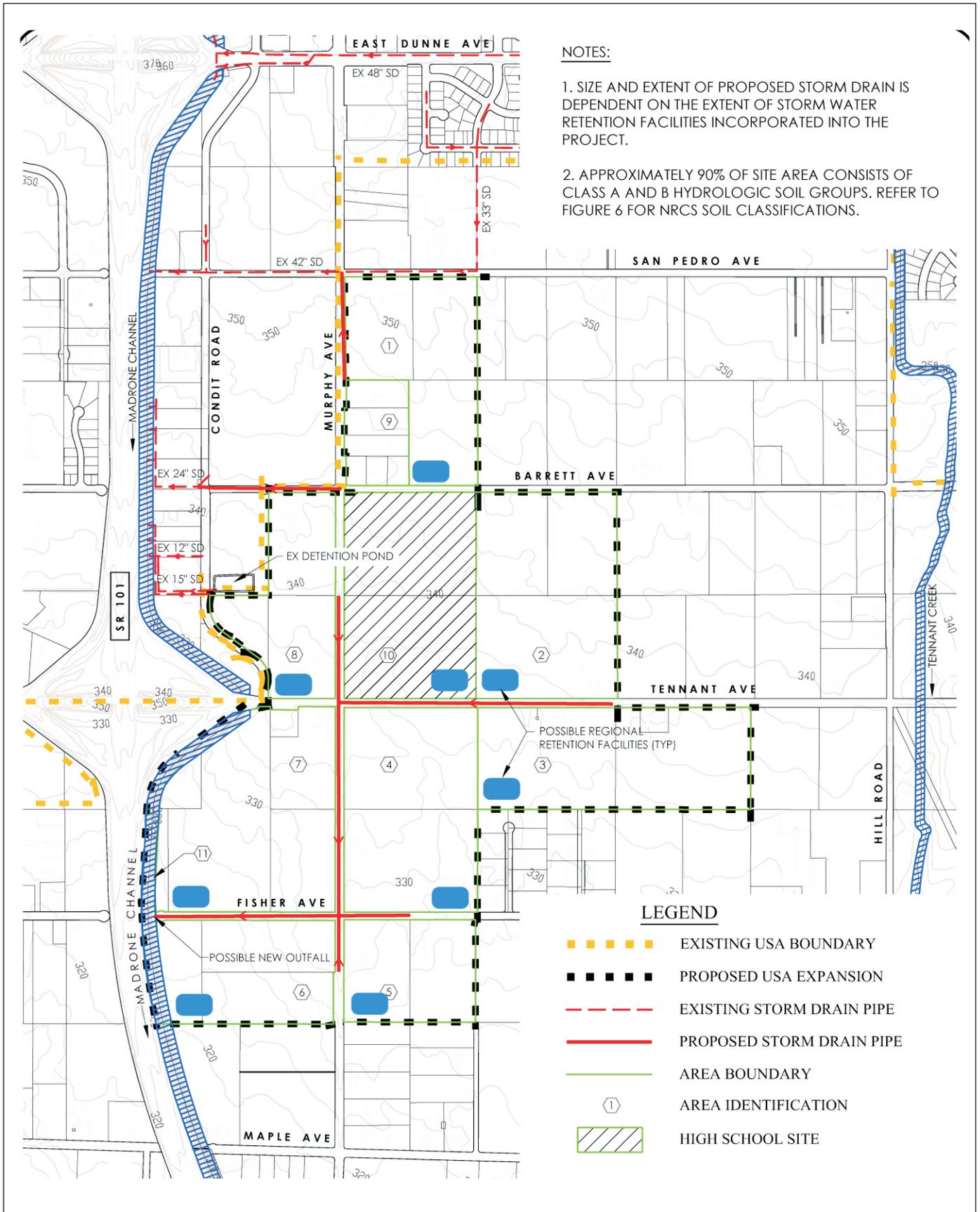
Potentially significant impact.

High School Site (Project Level)

Potentially significant impact.

Mitigation Measures

MM US-3a **SEQ Area.** As part of the development review process, the City of Morgan Hill shall verify that all future urban development proposals within the Southeast Quadrant Area employ onsite or offsite retention for stormwater management. Offsite retention consists of larger facilities that serve multiple properties. Connection to the City's municipal storm drainage system shall be pursued only if retention would not be feasible. Note that runoff within the public right-of-way (e.g., roadways) may be discharged to the City's municipal storm drainage system.



Source: Ruggeri-Jensen-Azar, April 2012.



Michael Brandman Associates



Exhibit 3.14-3 Conceptual Storm Drainage System

MM US-3b High School Site. As part of the Development Permit application, the project applicant shall retain a qualified engineer to prepare and submit a Drainage Plan to the City of Morgan Hill for review and approval depicting onsite storm drainage facilities. The Drainage Plan shall employ onsite or offsite retention as the method of stormwater management. Offsite retention consists of larger facilities that serve multiple properties. The approved Drainage Plan shall be incorporated into the project and fully implemented and maintained. Connection to the City's municipal storm drainage system only be pursued only if retention would not be feasible. Note that runoff within the public right-of-way (e.g., Tennant Avenue, Murphy Avenue, and Barrett Avenue) may be discharged to the City's municipal storm drainage system.

Level of Significance After Mitigation

SEQ Area (Program Level)

Less than significant impact.

High School Site (Project Level)

Less than significant impact.

Solid Waste

Impact US-4: The proposed project would be served by sufficient landfill capacity and would comply with applicable statutes and regulations concerning solid waste.

Impact Analysis

This impact addresses the checklist questions that concern whether the project would (1) be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs or (2) comply with federal, state, and local statutes and regulations related to solid waste. The analysis considers individual impacts associated with the implementation of the SEQ Area and the High School site.

SEQ Area (Program Level)

The General Plan Amendments associated with the SRL, Public Facilities, Open Space and Residential Estate land uses have the potential to facilitate new development that could generate significant amounts of solid waste, while those associated with Rural County have limited potential to generate significant amounts of solid waste. Because of the wide range of uses allowed within the SRL and Open Space land use designations, it is difficult to reliably estimate solid waste generation. Nonetheless, future development activities that occur within the SEQ Area pursuant to the boundary adjustments and land use designations changes would be subject to project-level environmental review, as well as applicable state and local standards concerning solid waste, recycling, and waste diversion. Impacts would be less than significant.

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High School Site (Project Level)

This impact assesses whether South County Catholic High School would be served by a landfill with adequate capacity or comply with federal, state, and local statutes and regulations related to solid waste. Solid waste would be generated by construction and operational activities. Each is discussed below.

Construction Waste

Short-term construction waste generation is summarized in

Table 3.14-11. The estimate of 573 tons was calculated using an average of 3.89 pounds of debris per square foot of non-residential construction.

Table 3.14-11: Estimated Construction Waste Generation

| Waste Generation Rate | Square Footage | Construction Waste Generation | |
|---|----------------|-------------------------------|-------------|
| | | Tons | Cubic Yards |
| 3.89 pounds/square foot | 210,441 | 409 | 573 |
| Notes: 1 ton = 2,000 pounds 1 ton = 1.4 cubic yards Source: U.S. Environmental Protection Agency, 1998; Michael Brandman Associates, 2013. | | | |

As previously discussed, there is approximately 63.6 million cubic yards remaining at the four landfills previously shown in Table 3.14-4. While the estimate of 573 cubic yards of construction waste would be an extremely small amount relative to remaining capacity at the various landfills, Mitigation Measure US-6a is proposed that would require the project applicant to retain a contractor to recycle construction and demolition debris. The implementation of this mitigation measure would reduce potential impacts to a level of less than significant.

Operational Waste

Operational solid waste generation estimates were calculated using a standard commercial waste generation rate provided by CalRecycle. The proposed project’s waste generation calculations are provided in Table 3.14-12. As shown in the table, the proposed project is expected to create 707 cubic yards of waste annually.

Table 3.14-12: Estimated Operation Waste Generation

| Waste Generation Rate | Square Footage | Annual Waste Generation | |
|---|----------------|-------------------------|-------------|
| | | Tons | Cubic Yards |
| 4.8 pounds/square foot/year | 210,441 | 505 | 707 |
| Notes: 1 ton = 2,000 pounds 1 ton = 1.4 cubic yards Source: Cal Recycle 2012; Michael Brandman Associates, 2013. | | | |

As previously discussed, there is approximately 63.6 million cubic yards remaining at the four landfills previously shown in Table 3.14-4. Given the amount of operational waste that would be generated, there is the potential that this could impair the City's ability to meet its state-mandated solid waste targets. As such, Mitigation Measure US-6b is proposed that would require the installation of recycling facilities. The implementation of this mitigation measure would reduce solid waste generation and reduce demand for landfill capacity. Therefore, solid waste impacts would be reduced to a level of less than significant.

Level of Significance Before Mitigation

SEQ Area (Program Level)

Less than significant impact.

High School Site (Project Level)

Potentially significant impact

Mitigation Measures

MM US-4a **High School Site.** Prior to issuance of building permits for the High School, the project applicant shall retain a qualified contractor to perform construction debris recycling. The applicant shall establish an objective of diverting a minimum of 50 percent of construction debris from the waste stream. The project applicant shall provide documentation to the satisfaction of the City of Morgan Hill demonstrating that construction and demolition debris was recycled.

MM US-4b **High School Site.** Prior to opening day, the project applicant shall install onsite facilities necessary to collect and store recyclable materials. Recyclable collection facilities shall be located in public spaces and clearly identify accepted materials.

Level of Significance After Mitigation

SEQ Area (Program Level)

Less than significant impact.

High School Site (Project Level)

Less than significant impact.

Energy

Impact US-5: **The proposed project would not result in the inefficient, wasteful, or unnecessary use of energy.**

Impact Analysis

This impact addresses the CEQA Guidelines Appendix F questions that concerns whether the project would result in the inefficient, wasteful, or unnecessary use of energy. The analysis considers individual impacts associated with the implementation of the SEQ Area and the High School site.

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SEQ Area (Program Level)

The General Plan Amendments associated with the SRL, Public Facilities, Open Space, and Residential Estate land uses have the potential to increase demand for electricity and natural gas, while those associated with Rural County have limited potential to increase demand for electricity and natural gas. Because of the wide range of uses allowed within the SRL land use designations, it is difficult to reliably estimate demand for electricity and natural gas. Nonetheless, future development activities that occur within the SEQ Area pursuant to the boundary adjustments and land use designations changes would be subject to project-level environmental review, as well as applicable state and local standards concerning energy efficiency. Impacts would be less than significant.

High School Site (Project Level)

Table 3.14-13 summarizes the estimated annual electricity and natural gas consumption estimates for the proposed project. The demand figures shown in the table are derived from information provided by the United States Energy Information Administration for commercial buildings that operate continuously. As such, these figures likely overstate actual energy consumption, since the High School would not operate continuously, and the data includes usage figures from states with different climactic characteristics and less stringent energy efficiency requirements than California.

Table 3.14-13: Energy Consumption Summary

| Energy Source | Consumption Rate | Square Feet | Annual Consumption |
|--|-----------------------------|-------------|--------------------------|
| Electricity | 15.7 kWh/square foot | 210,441 | 3.3 million kWh |
| Natural Gas | 58.3 cubic feet/square foot | | 122.7 million cubic feet |
| Notes: kWh = kilowatt hours Consumption rates provided by United States Energy Information Agency for buildings that operate continuously. Source: Michael Brandman Associates, 2013. | | | |

The High School’s structures would be subject to the most recently adopted edition of the Title 24 energy efficiency standards at the time building permits are sought. The Title 24 standards include a number of requirements associated with energy conservation and, therefore, ensure that the proposed project would not result in the inefficient, wasteful, or unnecessary use of energy. As such, impacts would be less than significant.

Level of Significance Before Mitigation

SEQ Area (Program Level)

Less than significant impact.

High School Site (Project Level)

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

SEQ Area (Program Level)

Less than significant impact.

High School Site (Project Level)

Less than significant impact.

