MITIGATION MONITORING AND REPORTING PROGRAM
EAST DUNNE AVENUE - BUSK
RESIDENTIAL PROJECT
MORGAN HILL, CALIFORNIA

Prepared for the:

CITY OF MORGAN HILL

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INTRODUCTION

The City of Morgan Hill, as Lead Agency under the California Environmental Quality Act (CEQA) and State CEQA Guidelines, has prepared the Final Mitigated Negative Declaration (MND) for the East Dunne Avenue - Busk Residential Project (Project). When a lead agency makes findings on significant effects identified in an MND, it must also adopt a program for reporting or monitoring mitigation measures that were adopted or made conditions of project approval (Public Resources Code [PRC] Section 21081.6[a]; State CEQA Guidelines Sections 15091[d], 15097).

This document represents the mitigation monitoring and reporting program (MMRP) prepared by the City of Morgan Hill for the Project. This MMRP includes all measures required to reduce potentially significant environmental impacts to a less-than-significant level. It also identifies the timing of implementation; the agency responsible for implementing the mitigation; and the agency responsible for monitoring the mitigation. The mitigation measures, timing, and responsibility are summarized in Table 1, and the full text of the mitigation measures follows. The implementation and monitoring of these mitigation measures in conjunction with the implementation of the City's Standard Measures required for such projects will ensure the reduction of potentially significant environmental effects to less than significant levels.

This MMRP has been prepared by the City of Morgan Hill, with technical assistance from Geier & Geier Consulting, Inc., an environmental consulting firm. Questions should be directed to Terry Linder at the City of Morgan Hill.

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TABLE 1. MITIGATION MONITORING AND REPORTING PROGRAM – SUMMARY OF MITIGATION MEASURES

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility[1]	Monitoring Notes
Prior to Construction			
HAZ-2: Remove and dispose of existing hazardous materials prior to building demolition.	Project Applicant with Construction Contractor	City of Morgan Hill Community Development Department and County of Santa Clara Department of Environmental Health	
HAZ-3: Prepare a hazardous building materials survey and implement appropriate abatement such as containment and/or removal.	Project Applicant with Construction Contractor	City of Morgan Hill – Fire Department and BAAQMD	
NOI-1: Design acoustically effective noise control barrier at side and rear yards for lots designated by the Noise Study to comply with City of Morgan Hill Noise Element standards.	Project Applicant with Construction Contractor	City of Morgan Hill – Community Development Department	
NOI-2: Specify windows, doors, and ventilation equipment as detailed in the Mitigation Measure to ensure compliance with City indoor noise limits for living spaces; review acoustical specifications for proposed windows and doors to ensure selected fixtures will reduce traffic noise to acceptable levels.	Project Applicant with Construction Contractor	City of Morgan Hill – Community Development Department	
During Construction			
AQ-1: To limit the project's construction-related dust and criteria pollutant emissions, the BAAQMD-recommended Basic Construction Mitigation Measures shall be included in the project's grading plan, building plans, and contract specifications.	Project Applicant with Construction Contractor and City of Morgan Hill	City of Morgan Hill – Community Development Department	
AQ-2: Any diesel-powered equipment shall be equipped with diesel particulate filters to reduce particulate emissions and associated health risks to infants.	Project Applicant with Construction Contractor and City of Morgan Hill	City of Morgan Hill – Community Development Department	

TABLE 1. MITIGATION MONITORING AND REPORTING PROGRAM – SUMMARY OF MITIGATION MEASURES (CONTINUED)

Mitigation Measure	Implementation Responsibility	Monitoring Responsibility[1]	Monitoring Notes
HAZ-4: Soil sampling and management measures shall be required to reduce public health risks related to exposure to hazardous materials to a less-than-significant level. Oversight agency review may amend these measures as applicable.	Project Applicant with Construction Contractor	City of Morgan Hill – Public Works Department	
NOI-1: Install acoustically effective noise control barrier at side and rear yards for lots designated by the Noise Study to comply with City of Morgan Hill Noise Element standards.	Project Applicant with Construction Contractor	City of Morgan Hill – Community Development Department	
NOI-2: Install windows, doors, and ventilation equipment as detailed in the Mitigation Measure to ensure compliance with City indoor noise limits for living spaces.	Project Applicant with Construction Contractor	City of Morgan Hill – Community Development Department	
NOI-3: Construction equipment operation and practices shall be limited to days and times in accordance to those specified by the City of Morgan Hill Zoning Ordinance. Equipment selection is recommended for noise reduction from specific construction activities: earth removal, backfilling, ground preparation, building construction, and construction phasing.	Project Applicant with Construction Contractor	City of Morgan Hill – Community Development Department	
Prior to Occupancy			
HAZ-1: Implement Buyer Education Program for Household Hazardous Waste.	Project Applicant with City of Morgan Hill	City of Morgan Hill – Community Development Department	

[1] The City of Morgan Hill may hire a qualified contractor to conduct mitigation monitoring.

Air Quality

Although the project's construction-related air pollutant emissions would not exceed the BAAQMD's applicable significance thresholds, the following measures are recommended by the BAAQMD to reduce the project's construction emissions:

MM AQ-1: **Basic Construction Measures.** To limit the project's construction-related dust and criteria pollutant emissions, the following BAAQMD-recommended Basic Construction Mitigation Measures shall be included in the project's grading plan, building plans, and contract specifications:

a. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

b. All haul trucks transporting soi, sand, or other loose material off-site shall be covered.

c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d. All vehicle speeds on unpaved roads shall be limited to 15 mph.

e. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.

f. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

h. Post a publicly visible sign with the telephone number and person to contact at the City regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.

MM AQ-2: **Enhanced Particulate Controls.** Any diesel-powered dozers, graders, loader/backhoes, excavators, and cranes (> 75 HP) used during project construction shall be equipped with diesel particulate filters to reduce particulate emissions and associated health risks to infants. In addition, all exposed surfaces shall be watered three times per day rather than twice per day as listed above under Basic Construction Measures.

HAZARDS AND HAZARDOUS MATERIALS

The following mitigation measures will reduce potential hazardous materials impacts from structure demolition, site preparation, and construction grading that could occur on the project site.

MM HAZ-1: **Implement Buyer Education Program for Household Hazardous Waste:** The project sponsor, working with the City of Morgan Hill and County of Santa Clara Household Hazardous Waste program, shall implement a Buyer Education Program for Household Hazardous Waste, developing materials to educate buyers about the identification of household hazardous wastes, environmental hazards associated with mishandling of the wastes, appropriate disposal methods, and how to make an appointment for disposal. At a minimum, the educational materials shall include a list of example household hazardous wastes, discuss the environmental impacts of improper disposal, explain how to make an appointment for disposal, and list safer and less toxic alternatives to hazardous products commonly used. The educational materials shall be provided to the buyer at the time of purchase.

MM HAZ-2: **Removal and Disposal of Existing Hazardous Materials.** Removal and Disposal of Existing Hazardous Materials. Prior to demolition of the existing buildings at the project site, the project applicant shall retain a qualified and licensed contractor to remove all hazardous materials (pesticides, fungicides, other agricultural chemicals, sealants, lubricants, antifreeze, paints, and others) as well as all fuel tanks and 55- gallon drums from the property, and legally dispose of these materials. Documentation of appropriate disposal shall be submitted to the City of Morgan Hill Community Development Agency Building Division prior to issuance of a demolition permit.

MM HAZ-3: **Hazardous Building Materials Removal.** Prior to demolition of the existing buildings at the project site, the project applicant shall require that the contractor(s) have a hazardous building materials survey completed by a Registered Environmental Assessor or a registered engineer. This survey shall be completed prior to any demolition activities associated with the project. If any friable asbestos-containing materials or lead-containing materials are identified, adequate abatement practices, such as containment and/or removal, shall be implemented in accordance with applicable laws prior to demolition. Specifically, asbestos abatement shall be conducted in accordance with Section 19827.5 of the California Health and Safety Code, as implemented by the BAAQMD, and 8 CCR Section 1529 and Sections 341.6 through 341.14, as implemented by Cal/OSHA. Lead-based paint abatement shall be conducted in accordance with Cal/OSHA's Lead in Construction Standard.

Any PCB-containing equipment, fluorescent light tubes containing mercury vapors, and fluorescent light ballasts containing DEHP shall also be removed and legally disposed of in accordance with applicable laws including 22 CCR Section 66261.24 for PCBs, 22 CCR Section 66273.8 for fluorescent lamp tubes, and 22 CCR Division 4.5, Chapter 11 for DEHP.

MM HAZ-4: Soil Sampling and Management. The following measures shall be required to reduce public health risks related to exposure to hazardous materials to a less-than-significant level. Oversight agency review may amend these measures as applicable.

a. The project applicant shall retain a qualified professional to update the environmental database review performed as part of the Phase 1 Environmental Site Assessment no more than 90 days prior to the start of construction. The qualified professional shall prepare a report summarizing the results of the environmental database review and assessing the potential for any identified chemical release sites to affect soil quality at the proposed project site. Appropriate soil analysis to evaluate the potential for soil contamination at the proposed project site, if needed, shall also be identified.

b. The project applicant shall retain a qualified professional to conduct a soil quality investigation to assess the potential presence of pesticides and associated metals in the soil as well as the potential presence of any hazardous materials that may have been spilled. If the updated environmental database review performed in accordance with HAZ-4a, above, identifies the need for additional sampling, it shall be included in this investigation. The qualified professional shall prepare a report summarizing the results of the soil investigation, including recommendations for site cleanup and disposal of excavated soil.

c. The project applicant shall participate in the Voluntary Cleanup Program (VCP) administered by the Santa Clara County Department of Environmental Health (County) to develop the appropriate plan of action based on the results of the soil quality investigation conducted under HAZ-4b, above. If additional investigation or remediation is needed, the project applicant shall implement such action with oversight from the County, unless referred to an alternate agency.

d. The applicant shall submit a "no further action" letter from the oversight agency or comparable closure document that demonstrates the site has been released as clean or a mitigation plan has been approved and implemented. Each phase of building permit issuance shall be contingent upon approval of the soil investigation and remediation documentation.

e. If the soil investigation identifies soil requiring off-site disposal that is not suitable for unrestricted disposal, the project applicant shall require the construction contractor(s) to prepare a Soil Management Plan (SMP). The SMP shall provide a plan for disposal of identified hazardous soils and excess soil produced during construction activities, including the disposal methods for soil, potential disposal sites, and requirements for written documentation that the disposal site will accept the excess soil. If appropriate, excess soil may be disposed of on-site, under foundations or in other locations in accordance with applicable hazardous waste classifications and disposal regulations.

The contractor shall be required to submit the SMP to the project applicant for acceptance prior to implementation. If necessary, excess soil from construction activities shall be sampled to determine the appropriate disposal requirements in accordance with applicable hazardous waste classification and disposal regulations prior to or during construction,. The project applicant shall also submit the SMP to the County of Santa Clara Department of Environmental Health a minimum of 30 days prior to the planned start of construction,

f. If recommended by the qualified professional, the project applicant shall require the construction contractor to prepare and implement a site safety plan identifying the chemicals present, potential health and safety hazards, monitoring to be performed during site activities, soils-handling methods required to minimize the potential for exposure to harmful levels of the chemicals identified in the soil, appropriate personnel protective equipment, and emergency response procedures.

g. The project applicant shall require the construction contractor(s) to have a contingency plan for sampling and analysis of potential hazardous materials and for coordination with the appropriate regulatory agencies, in the event that previously unidentified hazardous materials are encountered during construction. If any hazardous materials are identified, the contractor(s) shall be required to modify their health and safety plan to include the new data, conduct sampling to assess the chemicals present, and identify appropriate disposal methods. Evidence of potential contamination includes soil discoloration, suspicious odors, the presence of USTs, or the presence of buried building materials.

NOISE

The following mitigation measures will reduce potential hazardous materials impacts from structure demolition, site preparation, and construction grading that could occur on the project site.

MM NOI-1: **Exterior Noise Control.** To achieve compliance with the 60 dB DNL limit of the City of Morgan Hill Noise Element standards for the noise-impacted rear yards along East Dunne Avenue and Murphy Avenue, the following noise control barrier shall be required:

- Construct six-foot high acoustically-effective barriers at the side and rear yards of Lots 2, 3, 7, 8 and 14 (see Figure 1 of Attachment 5. The barrier height is in reference to the nearest building pad elevation. To control flanking noise, the barriers at the fronts of the houses shall be turned to connect air-tight to the sides of the houses. In addition, the barrier behind Lot 14 shall be connected air-tight to the existing barrier along the easterly property line.

  To achieve an acoustically-effective barrier, the barrier must be constructed air-tight, i.e., without cracks, gaps or other openings, and must provide for long term durability. Barriers can be constructed of masonry, wood,

concrete, stucco, earth berm or a combination thereof and must have a minimum surface weight of 2.5 pounds per square foot. If wood fencing is used, homogeneous sheet materials are preferable to conventional wood fencing as the latter has a tendency to warp and form openings with age. However, high quality, air-tight, tongue-and-groove, board and batten or shiplap construction can be used. All connections with posts, pilasters or building shells must be sealed air-tight. No openings are permitted between the upper barrier components and the ground. Gates may be incorporated into the barriers, however, they must be meet the minimum surface weight requirement and must seal tight when closed. The gap at the bottom of the gate shall be less than one inch.

MM NOI-2: **Interior Noise Control.** To achieve compliance with the City's 55-dBA L_{max} limit for living spaces and the 50-dBA L_{max} limit for bedrooms, the following window controls shall be required:

- Maintain closed at all times all windows and glass doors that are proposed in bedrooms and living spaces on the second floors and unshielded first floors (i.e., a view to the road beyond a noise control barrier) located within 190 feet of the East Dunne Avenue centerline and with a direct or side view to this roadway (west, north and east facades). Shielded facades include the first floors of the rear and side facades of Lots 6, 7, 8, 12, 13, and 14. See Figure 2 of Attachment 5 for the locations of the noise impacted building facades and recommended STC ratings. At impacted spaces located within 120 feet of the centerline, windows and glass doors rated minimum Sound Transmission Class (STC) 31 shall be installed. At the noise impacted spaces between 120 feet and 190 feet of the centerline, install windows and glass doors rated minimum STC 28.

  Some type of mechanical ventilation to assure a habitable environment must be provided, per the Mechanical Code. Noise control windows are to be operable, as the requirement does not imply a "fixed" condition. In addition to the required STC ratings, the windows and doors shall be installed in an acoustically-effective manner. To achieve an acoustically-effective window construction, the sliding window and door panels must form an air-tight seal to the outside environment when in the closed position and the window frames must be caulked to the wall opening around their entire perimeter with a non-hardening caulking compound to prevent sound infiltration. Exterior doors must seal air-tight around the full perimeter when in the closed position.

  Please be aware that many dual-pane window and glass door assemblies have inherent noise reduction problems in the traffic noise frequency spectrum due to resonance that occurs within the air space between the window lites, and the noise reduction capabilities vary from manufacturer to manufacturer. Therefore, the acoustical test report of all sound rated windows should be reviewed by a qualified acoustician to ensure that the chosen windows will adequately reduce traffic noise to acceptable levels.

In addition, the following general building shell controls are also recommended to ensure the greatest potential exterior-to-interior attenuation where closed windows are required (see Appendix B of Attachment 5:

- Unshielded entry doors having a direct or side orientation toward the primary noise source must be 1-5/8" or 1-3/4" thick, insulated metal or solid-core wood construction with effective weather seals around the full perimeter.
- If any penetrations in the building shell are required for vents, piping, conduit, etc., sound leakage around these penetrations can be controlled by sealing all cracks and clearance spaces with a non-hardening caulking compound.
- Ventilation devices shall not compromise the acoustical integrity of the building shell.

MM NOI-3: **Implement Construction Noise Controls.** The following measures shall be required if future residences on the property immediately to the northwest are constructed and occupied at the time of project construction. However, these measures are recommended in any case to help minimize the potential for annoyance at nearby residential receptors:

- Quiet or "new technology" equipment should be used wherever feasible. All internal combustion engines used at the project site should be equipped with mufflers (as recommended by the vehicle manufacturer). In addition, all equipment should be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train and other components.
- Noisy operations shall be scheduled for the daytime hours (7:00 a.m. to 8:00 p.m., Monday through Friday and 9:00 a.m. to 6:00 pm. on Saturdays) in accordance with time limits specified in the City of Morgan Hill Zoning Ordinance.
- All diesel-powered equipment should be located more than 200 feet from any residence to the extent feasible if the equipment is to operate for more than several hours per day.
- Locate stockpiled materials so that they can help block construction noise at nearby sensitive receptors.
- Noise reduction benefits could also be achieved by appropriate selection of equipment utilized for various operations (subject to equipment availability and cost considerations). The following measures are recommended to reduce noise impacts on nearby residents:
  - Earth Removal: Use scrapers as much as possible for earth removal, rather than the noisier loaders and hauling trucks.
  - Backfilling: Use a backhoe for backfilling, as it is less costly and quieter than either dozers or loaders.

- Ground Preparation: Use a motor grader rather than a bulldozer for final grading.

- Building Construction: Powers saws should be shielded or enclosed where practical to decrease noise emissions. Nail guns should be used where possible as they are less noisy than manual hammering.

- Construction Phasing: Construct buildings or other significant structures at the site perimeter to help shield existing sensitive receptors from noise generated on the site.