Appendix A: Hercules New Town Center Mitigation Measure Applicability Matrix

This applicability matrix prepared for the proposed Emblem development identifies the Mitigation Measures presented in the NTC EIR and adopted MMRP, and provides a determination on applicability of each measure to the proposed Emblem development. All applicable measures shall be imposed on the project as environmental conditions of approval.

Mitigation Measure	Applicability Determination
Aesthetics	
AES-1: During construction activities associated with future development, construction sites shall be maintained to be clean and orderly (kept clear of trash, weeds and construction debris, regular emptying of dumpsters, etc.). Construction staging areas shall be sited away from public view where possible. A fence shall be installed around active construction areas to screen views of debris, equipment and work staging areas. Periodic inspections by the City staff would ensure compliance with this measure.	**Applicable** because the Project will include construction.
Air Quality	
AQ-1: The project sponsor shall submit a grading plan to the City's Engineering Services Manager for review and approval. The grading plan shall include measures to reduce emissions from construction equipment and wind blown soils and shall be followed for all construction activities for the project. The following measures shall be incorporated into the grading plan: • Water all active construction areas at least twice daily Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard • Pave, apply water three times daily, or apply(non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites. • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets. • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more). • Enclose, cover, water twice daily or apply (nontoxic) soil binders to exposed stockpiles (dirt, sand, etc.). • Limit traffic speeds on unpaved roads up to 15mph.	**Applicable** because the Project includes grading and construction.

• Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as quickly as possible.	
AQ-2: In addition to the dust control measures required in Mitigation Measure AQ1, the following enhanced control measures shall be included on grading plans: • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard • Pave, apply water three times daily, or apply(non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites • Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets • Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more) • Enclose, cover, water twice daily or apply (nontoxic) soil binders to exposed stockpiles (dirt, sand, etc.) • Limit traffic speeds on unpaved roads to 15 mph. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways • Replant vegetation in disturbed areas as quickly as possible • Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site • Install wind breaks, or plant trees/vegetative windbreaks at windward side(s) of construction areas • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph • Limit the area subject to excavation, grading and other construction activity at any one time	**Applicable** because the Project includes grading and construction.
AQ-3: The following construction equipment exhaust reduction measures shall be incorporated into the grading plan: • Maintain properly tuned engines • Minimize the idling time of diesel powered construction equipment to two minutes	**Applicable** because the Project includes grading and construction.

• Use alternative powered construction equipment (i.e., hybrid, compressed natural gas, biodiesel, electric) when possible • Use add-on control devices such as diesel oxidation catalysts or particulate filters • All contractors shall use equipment that meets CARB's most recent certification standard for offroad heavy duty diesel engines	
AQ-4: The construction contractor shall adhere to BAAQMD Regulation 8, Rule 3 (Architectural Coatings) which limits the VOC content of architectural coatings used in the Bay Area Air Quality Management District (BAAQMD). The construction contractor shall not allow the averaging of such coatings to exceed the allowable emissions specified in BAAQMD Regulation 8, Rule 3. Coatings applied to stationary structures and their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs shall adhere to this BAAQMD Rule. Coatings applied in shop applications or to nonstationary structures such as airplanes, ships, boats, railcars, and automobiles, and adhesives are not considered architectural coatings for the purpose of this rule.	**Applicable** because the Project includes grading and construction.
AQ-5: Prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development within the Hercules New Town Center incorporates the following measures to reduce project exposure to TACs: • Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines provide 500 feet. For operations with three or more machines, consult with the local air district. • Do not site new sensitive land uses in the same building with perc dry cleaning operations.	**Applicable** because the Project includes grading and construction.
AQ-6: Prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development within the Hercules New Town Center incorporates measures to reduce project operational emissions, which may include but are not limited to the following: • Use solar or low-emission water heaters in the residential buildings • Each appliance (i.e., washer/dryers, refrigerators, stoves, etc.) provided by the builder must be Energy Star qualified if an Energy Star designation is applicable for that appliance • Low flow appliances (i.e., toilets, dishwashers, shower heads, washing machines) shall be installed if provided by the builder/applicant	**Applicable** because the Project includes grading and construction.

• Require that residential landscapers providing services at the common areas of a project site use electric or battery-powered equipment, or other internal combustion equipment that is either certified by the California Air Resources Board or is three years old or less at the time of use, to the extent that such equipment is reasonably available and competitively priced	
AQ-7: Prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development incorporates the following transportation control measures: • TCM 1: Support voluntary employer-based trip reduction programs – Support and encourage voluntary efforts by employers to promote the use of commute alternatives by their employees (not applicable) • TCM 9: Improve bicycle access and facilities –Expand bicycle facilities serving employment sites, residential areas, shopping districts and other activity centers (applicable) • TCM 12: Improve arterial traffic management –Coordination of signals on major arterial routes (not applicable) • TCM 15: Local land use planning and development strategies – Local clean air plans policies and programs should incorporate measures to reduce the number and length of single-vehicle occupant trips (not applicable) • TCM 17: Conduct demonstration projects –Develop innovative approaches to reduce mobile source emissions (not applicable) • TCM 19: Improve Pedestrian Access and Facilities – Promote pedestrian travel (applicable) • TCM 20: Promote traffic calming – Improve conditions for pedestrians and bicyclists in residential and retail areas (applicable) In addition to the transportation control measures, prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development incorporates measures to reduce air quality emissions from transportation, which may include but are not limited to the following: • Unbundling parking costs from rents· Providing transit subsidies to future employees • Implementing traffic calming measures • Preferential parking for ridesharing	**Applicable** because the Project will add 180 new residential units that will increase VMT and the Transportation Control Measures and measures to reduce air quality emissions from transportation are required to reduce the potential for impacts.

AQ-8: Prior to the approval of plans submitted for building permits, the Building Division shall confirm that proposed development incorporates measures to reduce project greenhouse gas emissions and global climate change, which may include but are not limited to the following: Efficiency: • Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use. • Install efficient lighting and lighting control systems • Install light colored "cool" roofs, cool pavements, and strategically placed shade trees • Install energy efficient heating and cooling systems, appliances and equipment, and control systems • Limit hours of operations for outdoor lighting Renewable Energy: • Consider renewable energy such as solar and wind powered systems, solar or tankless hot water heaters, and energy efficient heating ventilation and air conditioning Water Conservation and Efficiency: • Create water efficient landscapes • Install water efficient irrigation systems and devices • Use reclaimed water for landscape irrigation • Design buildings to be water efficient. Installwater efficient fixtures and appliances. • Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff Solid Waste: • Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers in public areas. Transportation and Motor Vehicles: • Limit idling time for commercial vehicles, including delivery and construction vehicles • Promote ride sharing programs. Designate a certain percentage of parking spaces for ridesharing vehicles, designating adequate passenger loading and unloading and	**Applicable** because the Project will have GHG emissions from operations and implementation of this mitigation measure will reduce impacts.

waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides. • Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (e.g., electric vehicle charging facilities and conveniently located alternative fueling stations)	
Biological Resources	
BIO-1: To determine areas of aquatic habitat occupied by California red-legged frog (CRLF), preconstruction surveys shall be performed in all portions of the Hercules New Town Center Planning Area (HNTC) planning area where suitable aquatic habitat exists. Wherever practicable, CRLF aquatic habitat shall be avoided and those areas containing CRLF shall be preserved. To offset impacts to aquatic, upland, or dispersal habitat containing CRLF, the project sponsor shall create wetland with suitable breeding hydrology and vegetation within the planning area or in a suitable alternative location approved by the United States Fish and Wildlife Service (USFWS). If this is not feasible, the project sponsor shall provide off-site habitat conservation through a conservation bank and/or easement, at a 3:1 ratio of like-habitat for every acre of occupied CRLF habitat filled or removed. For example, CRLF mitigation credits may be purchased for projects in Contra Costa County at the Ohlone Preserve Conservation Bank, located in Livermore, CA.	**Applicable** because the Project site could have upland CRLF habitat and surveys are necessary to ensure adequate buffers between the Project and the adjacent wetland.
BIO-2: Mass grading shall be limited to the period between April 1 and October 31 to avoid potential impacts to dispersing frogs during the rainy season. A USFWS approved biologist shall be specifically approved to monitor work in the HNTC planning area. If fill is placed in aquatic habitat occupied by CRLF or surrounding upland habitat within 50 feet of aquatic habitat, or if other construction activity is necessary in occupied aquatic habitat, it shall be conducted between July and November, outside the breeding season. A USFWS-approved biologist shall conduct training of construction crews to identify special status species including CRLF and the importance of avoiding harm to specials status species including CRLF if observed. If CRLF are observed in construction areas, a USFWS-approved biologist shall relocate CRLF to suitable preserved habitat prior to the start of construction, with prior notification of USFWS.	**Partially Applicable** because the project's grading plan does not include the placement of fill in aquatic habitat and a 50 foot construction would preclude intrusion into the aquatic habitat. However, training of construction crews and monitoring is required.
BIO-3: Prior to the commencement of construction activities within the HNTC planning area, an exclusion fence plan designed by a USFWS-approved biologist and approved by USFWS shall be placed to form an adequate barrier between aquatic habitat and the construction	**Applicable** because the Project requires the installation of a barrier to preclude construction activities from

areas. Fences shall be constructed with one-way openings or exit funnels approximately every 300 feet to allow the movement of terrestrial wildlife species out of, but not into, the construction areas. The fence shall be installed before the first rainy season prior to ground disturbance, or earlier. This will give CRLF, which are adapted to migration in the winter months, a chance to leave the work area via the one-way exit funnels. A permanent exclusion fence/barrier around new residential or commercial developments adjacent to or near aquatic habitat shall be installed to reduce access by humans and pets into habitat areas, or CRLF into developed areas. Signage shall be installed near fenced areas, to provide information to residents in the area and discourage disturbance or entry into wildlife habitat. The fencing/barrier shall be designed by a USFWS-approved biologist and approved by USFWS.	intruding into the aquatic and riparian habitat and constructed in a manner that allows for special status species that may potentially be present including CRLF, WPT, and DFWR to exit out of and not enter into construction areas.
BIO-4: Proposed projects within the HNTC planning area shall be required to satisfy the requirements of provision C.3 of the National Pollution Discharge Elimination System (NPDES) permit under Section 401 of the Clean Water Act. The proposed project shall implement Policy 6-29 to control stormwater quality and discharge quantities so that they are not significantly affected by urban development in the planning area.	**Applicable** because the project has the potential to indirectly impact the adjacent wetland.
BIO-5: Prior to the commencement of activities in the HNTC planning area, pre-construction surveys for nesting birds and bats shall be conducted if construction will occur during the potential breeding period, generally between February and August, to determine if any of these species are present. If present, temporary protective breeding season buffers shall be established to avoid direct take of nesting birds and bats. Alternatively, suitable nesting habitat shall be removed prior to construction and outside of the nesting or maternity roosting period (September through January)	**Applicable** because there is the potential for nesting birds on the Project site.
BIO-6: To mitigate for fill placed in wetlands, creation of wetlands at a minimum of a 1:1 ratio, created to filled acreage or functions and values basis, shall be implemented within the HNTC planning area or in an off-site location. Wetland mitigation may be accomplished in combination with mitigation described for CRLF (Mitigation Measure BIO 1). Mitigation wetlands shall be created prior to or concurrent with filling of existing wetlands. If mitigation wetlands are to be created, a Mitigation Plan shall be developed for the site, which shall specify the use of locally native wetland plant species, quantities for planting, irrigation and maintenance requirements, performance criteria, and annual monitoring and reporting methods for a five-year period. In addition, when a specific project is designed that will impact a wetland, a Section 404 Individual or Nationwide Permit must be obtained from the	Not Applicable because the Project does not propose to place any fill in the wetland.

ACOE, and a Section 401 Water Quality Certification must be obtained from the RWQCB, prior to the placement of any fill in wetlands	
BIO-7: To mitigate for fill placed in streams and impacts to riparian areas, planting of riparian vegetation at a 2:1 ratio of planted riparian vegetation acreage and length to impacted stream acreage and length, shall be implemented as part of the HNTC planning area. Planting of riparian vegetation shall be accomplished along existing creeks or streams within or adjacent to the planning area to increase the riparian corridor and provide added habitat value. If riparian planting cannot be accomplished within or adjacent to the planning area, riparian plantings to compensate for stream and riparian impacts shall be performed at a 3:1 ratio in a suitable off-site location. A Mitigation Plan developed shall be prepared and specify the use of locally native, riparian plant species, quantities for planting, irrigation and maintenance requirements, performance criteria, and annual monitoring methods for a five-year monitoring period. In addition, a Section 404 Individual or Nationwide Permit shall be obtained from the USACOE, a Section 401 Water Quality Certification shall be obtained from the RWQCB, and a Section 1602 Lake and Streambed Alteration Agreement must be obtained from the CDFG prior to impacting existing streams or riparian areas	Not applicable because the Project does not propose to place fill in streams or riparian areas.
Cultural Resources	
CULT-1: Prior to the issuance of grading permits for future development allowed under the NTC land use designation and zoning district, the project sponsor(s) shall retain a qualified archaeologist, subject to approval by the City. The qualified archaeologist shall train the construction crew on the mechanisms used to identify cultural resources and to caution them on the legal and/or regulatory implications of knowingly destroying cultural resources or removing artifacts or human remains from the project site(s). In the event that culturally sensitive materials are encountered, work shall be temporarily redirected to another location while the archeologist consults with the City to determine the treatment of those resources. In the event that human remains are discovered, the County Coroner shall be contacted within 24 hours. If the remains are of Native American ancestry, the Coroner shall notify the Native American Heritage Commission, who shall appoint a most likely descendent to determine the proper treatment of the remains. All cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared according to current professional standards.	**Applicable** because the Project will include grading and ground disturbance.
Geology and Soils	

GS-1: Prior to issuance of grading permits for parcels within the HNTC planning area, final geotechnical investigations, including additional subsurface exploration and laboratory testing, shall be performed. The recommendations of these investigations shall include final building footprints, building loads, estimated site grades, and allowable settlement tolerances to be implemented in the final project design	**Applicable** because the site contains highly expansive soils and bedrock.
GS-2: Plans submitted for building permits for future development of parcels within the HNTC planning area shall include requirements for the construction contractor to moisture condition any expansive soil below slabs, placing non-expansive fill below slabs as well as supporting foundations (below the zone of severe moisture change), and/or design foundations to resist the movement associated with the volume changes. Methods of moisture conditioning include mixing and turning (aerating) the soil to naturally dry the soil and lower the moisture content to an acceptable level. Other stabilization alternatives include overexcavating and placing drier material in its place, and/or treating the soil with lime.	**Applicable** because the site contains highly expansive soils and bedrock.
Hazards and Hazardous Materials	
HM-1: The interior of individual on-site structures within the Caltrans and WC Drilling parcels shall be visually inspected prior to demolition or renovation activities. Should hazardous materials be encountered with any on-site structure, the materials shall be tested and properly disposed of in accordance with state and federal regulatory requirements. Any stained soils or surfaces underneath the removed materials shall be sampled. Results of the sampling would indicate the appropriate level of remediation efforts that may be required	Not applicable because Project does not include the sites identified as Caltrans or WC Drilling Parcel.
HM-2: The exact age of the temporary structures on the Caltrans parcel shall be confirmed prior to removal. Should the temporary structures on the Caltrans parcel be removed off-site, they shall be properly disposed of at an approved landfill facility. Once removed, a visual inspection of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required	Not applicable because Project does not include the Caltrans Parcel.
HM-3: Areas of exposed soils on the C1, Loop, Ramp, Caltrans, Carone, and WC Drilling parcels, which would be disturbed during excavation/grading activities, shall be sampled and tested for lead prior to the issuance of Plans, Specifications, and Estimates (PS&E) for the project(s), so that any special handling, treatment, or disposal provisions associated with aerially deposited lead may be included in construction documents (if aerially deposited lead is present).	**Applicable** because the Project is on the Loop site.

HM-4: Due to the age of on-site structures on the Caltrans and WC Drilling parcels, LBPs may be present and must be disposed of to an appropriate permitted disposal facility should renovation or demolition occur.	Not applicable because Project does not include the sites identified as Caltrans or WC Drilling Parcel.
HM-5: Pursuant to Bay Area Air Quality Management District (BAAQMD) regulations, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act and Cal OSHA certified building inspector to determine the levels of asbestos in structures on the Caltrans and WC Drilling parcels should renovation or demolition occur. Compliance with BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing) would be required for any demolition or renovation work involving asbestos containing material.	Not applicable because Project does not include the sites identified as Caltrans or WC Drilling Parcel.
HM-6: Any transformers to be relocated during site construction/demolitions shall be conducted under the purview of the local utility purveyor to identify proper handling procedures regarding potential PCBs.	**Applicable** because while there are no plans showing relocation of a transformer, this mitigation measure shall be implemented if transformers inadvertently have to be moved.
HM-7: The on-site AST on the Caltrans parcel shall be removed and properly disposed of at an approved landfill facility. Once the AST is removed, a visual inspection of the areas beneath and around the removed AST shall be performed. Any stained soils observed underneath the AST shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.	Not applicable because Project does not include the Caltrans Parcel.
HM-8: Due to the unknown origin of the undocumented debris piles, the piles shall be sampled and tested for hazardous materials. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.	**Applicable** because the Project site includes the remnants of prior grading from the construction of the I-80 SR 4 interchange.
HM-9: All miscellaneous debris on the C1 parcel shall be removed off-site and properly disposed of at an approved landfill facility. Once removed, a visual inspection of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required	Not applicable because the Project does not include the C1 parcel.
HM-10: The interior of the on-site storage unit(s) on the Caltrans, and WC Drilling parcels shall be visually inspected prior to removal. The storage unit(s) shall be removed off-site and properly disposed of at an approved landfill facility. Once removed, a visual inspection of the areas beneath the removed materials shall be performed. Any stained soils observed underneath the removed materials shall be sampled. Results of the sampling (if necessary) would indicate the level of remediation efforts that may be required.	Not applicable because Project does not include the sites identified as Caltrans or WC Drilling Parcel.

HM-11: Prior to ground disturbance on the Caltrans and Carone parcels, soil samples shall be collected and analyzed to determine if the Chevron pipeline has released contamination and compromised the project site. Results of sampling would indicate the level of remediation effort that may be required.	Not applicable because Project does not include the sites identified as Caltrans or Carone Parcel.
HM-12: If unknown wastes or suspect materials are discovered during construction by the contractor which he/she believes may involve hazardous waste/materials, the contractor shall: • Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area • Notify the Project Engineer of the implementing agency • Secure the areas as directed by the Project Engineer • Notify the implementing agency's Hazardous Waste/Materials Coordinator	**Applicable** because the site was graded in the past and may contain unknown hazardous waste.
HM-13: A soil management plan shall be prepared to properly handle soil that will be excavated in the vicinity of Treadwell & Rollo boring EB-6.	Not applicable because the Project is not within the vicinity of Treadwell & Rollo boring EB-6 (Market Town area)
HM-14: Prior to ground disturbance on the PNR parcel, soil samples shall be collected and analyzed to determine if the Chevron pipeline has released contamination and compromised the project site. Results of sampling would indicate the level of remediation effort that may be required.	Not applicable because the Project is not on the PNR parcel.
HM-15: The exact location of the historical petroleum pipeline on the PNR parcel shall be defined prior to the commencement of construction. Any activities occurring within the petroleum pipeline easement shall be conducted pursuant to applicable guidelines and regulations.	Not applicable because the Project is not on the PNR parcel.
HM-16: The soil management plan (see HM-13 and -14, above) shall be implemented during excavation in the vicinity of Treadwell & Rollo boring EB-6.	Not applicable because the Project is not on the PNR parcel.
HM-17: If unknown wastes or suspect materials are discovered during construction by the contractor which he/she believes may involve hazardous waste/materials, the contractor shall: Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area • Notify the Project Engineer of the implementing agency • Secure the areas as directed by the Project Engineer • Notify the implementing agency's Hazardous Waste/Materials Coordinator	Not applicable because the mitigation measure was established specifically for the Market Town project analyzed as part of the HNTC EIR.
Hydrology and Water Quality	

WQ-1: Prior to issuance of grading or building permits, whichever occurs first, the project sponsor shall submit a hydrology report (using the Hydro-6 model) that details the performance of pre- and post-project stormwater runoff from the project site to the City's drainage system for review and approval by the City's Engineering and Public Works Department. In addition, plans for the project's stormwater drainage system shall also be submitted for review and approval by the City's Engineering and Public Works Department. The stormwater drainage system shall be developed in accordance with the site specific Stormwater Control Plan for the project, and shall not result in a net increase in stormwater flow to the City's stormwater drainage system	**Applicable** because the Project includes construction and operation that could impact stormwater drainage.
WQ-2: Prior to issuance of grading or building permits for projects located on Parcel 3, project sponsors shall submit a hydrology report delineating the current 100-year flood hazard area on the site for review and approval by the City's Engineering and Public Works Department	**Applicable** because the Project is located on Parcel 3.
WQ-3: Prior to issuance of grading or building permits for projects located on Parcel 3, project sponsors shall submit development plans that have been designed to minimize generation and exposure to flood hazards, as well as showing finished floor elevations 1 foot above the 100-year flood hazard elevation	**Applicable** because the Project is located on Parcel 3.
WQ-4: Prior to issuance of grading or building permits for the Market Town project, whichever occurs first, the project sponsor shall submit to the Public Works Division Manager a Stormwater Management Plan for the proposed project that meets applicable C.3. Guidelines.	Not applicable because this mitigation is specific to the Market Town project.
Noise	
NOI-1: Prior to issuance of grading and/or building permits, whichever occurs first, the project sponsor(s) shall demonstrate, to the satisfaction of the City Planning Department, that projects located within 320 feet of any noise-sensitive receptors (e.g., residences, schools, childcare centers, churches, hospitals, and nursing homes) will implement appropriate noise controls to reduce daytime construction noise levels to meet the 70- dBA daytime speech interference criterion to the extent feasible. Such controls shall include any of the following, as appropriate: • Best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) shall be used for all equipment and trucks in order to minimize construction noise impacts.	**Applicable** because the Project will include construction activities.

• If impact equipment (e.g., jack hammers, pavement breakers, and rock drills) is used during project construction, hydraulically or electric powered equipment shall be used wherever feasible to avoid the noise associated with compressed-air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed-air exhaust shall be used (a muffler can lower noise levels from the exhaust by up to about 10 dBA). • Stationary noise sources shall be located as far from sensitive receptors as feasible. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) shall be used to ensure local noise ordinance limits are met to the extent feasible. Enclosure opening or venting shall face away from sensitive receptors. If any stationary equipment (e.g., ventilation fans, generators, dewatering pumps) is operated beyond the time limits specified by the pertinent noise ordinance, this equipment shall conform to the affected jurisdiction's pertinent day and night noise limits to the extent feasible. • Material stockpiles as well as maintenance/equipment staging and parking areas shall be located as far as feasible from residential and school receptors • A designated project liaison shall be responsible for responding to noise complaints during the construction phases. The name and phone number of the liaison shall be conspicuously posted at construction areas and on all advanced notifications. This person shall take steps to resolve complaints, including periodic noise monitoring, if necessary. Results of noise monitoring shall be presented at regular project meetings with the project contractor, and the liaison shall coordinate with the contractor to modify any construction activities that generated excessive noise levels to the extent feasible	
NOI-2: Prior to issuance of building permits for onsite residential development within the HNTC planning area along I-80 and John Muir Parkway (SR 4), an acoustical noise analysis shall be prepared to ensure that exterior and interior noise levels meet the City of Hercules Land Use Compatibility Standards at all residential, recreational, and other sensitive land uses. Residential buildings or structures shall prepare an acoustical analysis showing that the building has been designed to limit intruding noise to the level prescribed (interior CNEL of 45 dB). Individual developments shall, to the extent feasible, implement site-planning techniques such as the following: • Increasing the distance between the noise source and the receiver.	**Applicable** because the Project is located in the curvature of the freeway off-ramp from I-80 and adjacent to SR-4.

• Using non-noise sensitive structures such as garages to shield noise-sensitive areas. • Orienting buildings to shield outdoor spaces from a noise source. • Incorporating architectural design strategies, which reduce the exposure of noise-sensitive spaces to stationary noise sources (i.e., placing bedrooms or balconies on the side of the house facing away from noise sources). These design strategies shall be implemented based on recommendations of acoustical analysis for individual developments. • Incorporating noise barriers, walls, or other sound attenuation techniques, based on recommendations of acoustical analysis for individual developments, between the development and the existing highway. • Modifying elements of building construction (i.e., walls, roof, ceiling, windows, and other penetrations), as necessary to provide sound attenuation. This may include sealing windows, installing thicker or double-glazed windows, locating doors on the opposite side of a building from the noise source, or installing solid-core doors equipped with appropriate acoustical gaskets	
NOI-3: Prior to issuance of building permits for development within the HNTC planning area located adjacent to the Union Pacific Railroad, an acoustical analysis shall be prepared to fully analyze and develop standards to ensure that the exterior and interior noise levels would be attenuated to comply with the City of Hercules Land Use Compatibility Standards.	**Applicable** because the Union Pacific Railroad tracks are on the opposite side of Willow Avenue from the Project.
NOI-4: Prior to issuance of building permits, project sponsor(s) shall demonstrate, to the satisfaction of the City of Hercules Planning Department, that noise impacts from electrical and mechanical equipment (i.e., ventilation and air conditioning units) are located away from receptor areas. Additionally, the following considerations shall be given prior to installation: proper selection and sizing of equipment, installation of equipment with proper acoustical shielding, and incorporating the use of parapets into the building design.	**Applicable** because the Project includes new mechanical equipment for multi-family housing that could expose future residents to excess noise from that equipment.
NOI-5: Loading docks constructed within 250 feet of a residential use shall be designed to have either a depressed (i.e., below grade) loading dock area; an internal bay; or a wall to break the line of sight between residential land uses and other noise sensitive uses, and loading operations. Prior to issuance of building permits, an acoustical analysis shall be performed to demonstrate that operation of potential loading docks does not result in noise levels that exceed City standards at exterior on-site residences' living areas or off-site sensitive uses.	Not applicable because there are no proposed loading docks associated with the Project.

NOI-6: Prior to approval of final construction documents, the project engineer shall develop the sound transmission class specifications for building construction. The sound transmission class shall be adjusted when the final exterior surface area as a percent of room floor area is determined. The specifications shall be submitted to the City of Hercules prior to the issuance of building permits.	Not applicable because mitigation measure specifically applies to the Market Town Project.
NOI-7: Residential units located along I-80, John Muir Parkway (SR 4), and San Pablo Avenue require mechanical ventilation which shall be shown on plans submitted for building permits. The mechanical ventilation shall be installed to ensure noise levels will be below 45 dBA CNEL with the windows and doors closed. As specified in the Uniform Building Code (UBC), 1997 edition, Section 12.03.3, mechanical ventilation units shall be designed to supply two air changes per hour in guest rooms, dormitories, habitable rooms, and public corridors with a minimum of 15 cubic feet per minute (7L/s) of outside air per occupant during such time as the building is occupied.	Not applicable because mitigation measure specifically applies to the Market Town Project.
Transportation/Traffic	
TR-1: Sycamore Avenue between Willow Avenue and San Pablo Avenue shall be converted from a six-lane to a seven-lane cross-section by widening the PNR frontage on Sycamore Avenue by about 12 feet (the width of one travel lane). The resulting Sycamore Avenue cross-section north of the Willow Avenue/Sycamore Avenue intersection would include one full left-turn lane, one through lane, and one shared through/right-turn lane. In addition, the Willow Avenue WB left-turn storage shall be lengthened from 90 to 300 feet, the speed limit shall be reduced from 35 to 25 mph on Willow Avenue east of Sycamore Avenue, and the Willow Avenue/Sycamore Avenue/San Pablo Avenue traffic signal system shall be optimized. The additional Willow Avenue WB left-turn storage can be achieved by reconstructing the median on Willow Avenue. The project sponsor shall be responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. As part of the mitigation, the project sponsor shall dedicate sufficient right of way along the PNR site frontage along Sycamore Avenue for the addition of one travel lane (approximately 12 feet). This dedication of right of way shall be taken into consideration when determining fair share Development Impact Fees. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution.	Not applicable because mitigation measure specifically applies to the Market Town Project.

TR-2: Implement Mitigation Measure TR1. The Sycamore Avenue cross-section at the San Pablo Avenue approach shall be reconfigured to include two left-turn lanes, one shared through/right-turn lane, and one right-turn lane. The project sponsor shall be responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution.	Not applicable because mitigation measure specifically applies to the Market Town Project.
TR-3: The Willow Avenue/SR 4 EB Hook Ramp intersection shall be signalized, a 300-foot WB right turn pocket from Willow Avenue onto the SR 4 EB On-Ramp shall be installed, and the Willow Avenue EB left-turn lane to the SR 4 EB On-Ramp shall be extended to provide 300 feet of storage. The lane addition and extension would require widening the intersection by 12 to 14 feet. The project sponsor shall be responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution	Not applicable because mitigation measure specifically applies to the Market Town Project.
TR-4: The Willow Avenue/Palm Avenue intersection shall be signalized and left-turn lanes at each intersection approach shall be provided. The Willow Avenue WB approach shall have one 150-foot right turn pocket, one through lane, and one 300-foot left turn lane. The lane additions would require widening the intersection by 12 to 14 feet. The project sponsor shall be responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution.	Not applicable because mitigation measure specifically applies to the Market Town Project.
TR-5: Implement Mitigation Measure TR1.	Not applicable because mitigation measure specifically applies to the Market Town Project.

TR-6: Implement Mitigation Measure TR4.	Not applicable because mitigation measure specifically applies to the Market Town Project.
TR-7: The Palm Avenue/Sycamore Avenue intersection shall be signalized and a second lane shall be added at the EB Palm Avenue approach to allow the signal to serve EB Palm Avenue right-turns and NB Sycamore Avenue left-turns concurrently. The project sponsor shall be responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution.	Not applicable because mitigation measure specifically applies to the Market Town Project.
TR-8: The Transit Center East Driveway/Willow Avenue intersection shall be signalized. The proposed design for this intersection (BART Replacement Facility MND) already includes EB left turn and WB right-turn pockets, as well as two lanes out of the Transit Center. Therefore, no additional turn lanes would be required when the traffic signal is installed. The project sponsor is responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution.	Not applicable because mitigation measure specifically applies to the Market Town Project.
TR-9: Implement Mitigation Measure TR 1	Not applicable because this mitigation measure is now implemented by City of Hercules Municipal Code Section 10-18.601 which implements the Traffic Impact Fees based on the 2019 Hercules Transportation Impact Fee Nexus Study.
TR-10: Implement Mitigation Measure TR2	Not applicable because this mitigation measure is now implemented by City of Hercules Municipal Code Section 10-18.601 which implements the Traffic Impact Fees based on the 2019

	Hercules Transportation Impact Fee Nexus Study.
TR-11: A second right-turn lane shall be provided from NB San Pablo Avenue to EB John Muir Parkway. The second right-turn lane shall be extended along the PNR frontage to the San Pablo Avenue/PNR Driveway intersection. The project applicant should dedicate the needed right of way for this additional lane. EB John Muir Parkway shall be widened to four lanes from San Pablo Avenue to the SR 4 and I-80 ramps. This widened segment of John Muir Parkway would allow the two NB San Pablo Avenue right-turn lanes to have exclusive receiving lanes that serve the I-80 WB On-Ramp. This would also require widening the I-80 WB On Ramp from one to two lanes. The project sponsor is responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. As part of the mitigation, the project sponsor shall dedicate sufficient right of way along the PNR site frontage along San Pablo Avenue for the addition of one right-turn lane (approximately 12 feet). This dedication of right of way shall be taken into consideration when determining fair share development impact fees. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution	**Applicable** because the Project could cumulatively increase traffic in the area and would be responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued.
TR-12: At least one left-turn and one right-turn lane shall be provided at the PNR Driveway (WB) approach. Additional mitigation at this intersection is not possible given the closely spaced intersections along San Pablo Avenue (at John Muir Parkway and Sycamore Avenue), right-of-way constraints, and the PNR frontage on San Pablo Avenue. The project sponsor shall be responsible for constructing this mitigation	Not applicable because the Project will not develop on the PNR parcel.
TR-13: Willow Avenue shall be widened to a four lane cross section, the Willow Avenue/Palm Avenue intersection shall be signalized, and provide left-turn lanes shall be provided at each intersection approach. The Willow Avenue WB left-turn lane shall be continued to the EB SR 4 Off-Ramp intersection. The project sponsor is responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall	Not applicable because this mitigation measure is now implemented by City of Hercules Municipal Code Section 10-18.601 which implements the Traffic Impact Fees based on the 2019 Hercules Transportation Impact Fee Nexus Study.

construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution.	
TR-14: Implement Mitigation Measure TR7: The Palm Avenue/Sycamore Avenue intersection shall be signalized and a second lane shall be added at the EB Palm Avenue approach to allow the signal to serve EB Palm Avenue right-turns and NB Sycamore Avenue left-turns concurrently. The project sponsor shall be responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued. If the fee program is not sufficiently funded to construct the mitigation measure at the time the measure is needed to mitigate the selected project's impact, then the project sponsor shall construct the mitigation measure, and shall be reimbursed for the portion of costs in excess of its fair share contribution.	Not applicable because this mitigation measure is now implemented by City of Hercules Municipal Code Section 10-18.601 which implements the Traffic Impact Fees based on the 2019 Hercules Transportation Impact Fee Nexus Study.
TR-15: Implement Mitigation Measure TR8.	**Applicable** because the Project could cumulatively increase traffic in the area and would be responsible for the fair share contribution toward the construction of the proposed mitigation measure as determined by the Development Impact Fee program in effect at the time building permits are issued.
TR-16: Possible options to mitigate this impact include increasing the segment's capacity by adding lanes or managing the traffic demand to reduce the volumes. Adding lanes is considered infeasible due to the lack of available right-of-way (and associated cost and impacts of purchasing additional right-of way); moreover there would be operational constraints to adding lanes near the SR 4/ I-80 interchange. The traffic demand could be managed by increasing use of alternative modes (e.g., transit, bicycles, etc.) in the corridor or through ramp metering, and indeed, these are key elements of the County's plan for the I-80 corridor. However, a system-wide ramp metering program would need to be in effect to sufficiently reduce the volumes to better than LOS F, and this would likely cause unacceptable LOS F conditions on adjacent surface streets. Enhancements to transit service would not be likely to adequately alleviate the projected cumulative traffic increases. No other feasible mitigation was identified to reduce this impact to less than significant levels. Thus this cumulative impact would remain significant and unavoidable.	Not applicable because there are no actionable mitigations in this measure to apply.

TR-17: Possible options to mitigate this impact include increasing the segment's capacity by adding lanes or managing the traffic demand to reduce the volumes. Adding lanes is considered infeasible due to the lack of available right-of-way (and associated cost and impacts of purchasing additional right-of way); moreover there would be operational constraints to adding lanes near the SR 4/ I-80 interchange. The traffic demand could be managed by increasing use of alternative modes (e.g., transit, bicycles, etc.) in the corridor or through ramp metering, and indeed, these are key elements of the County's plan for the I-80 corridor. However, a system-wide ramp metering program would need to be in effect to sufficiently reduce the volumes to better than LOS F, and this would likely cause unacceptable LOS F conditions on adjacent surface streets. Enhancements to transit service would not be likely to adequately alleviate the projected cumulative traffic increases. No other feasible mitigation was identified to reduce this impact to less than significant levels. Thus this cumulative impact would remain significant and unavoidable.	Not applicable because there are no actionable mitigations in this measure to apply.
TR-18: Implement Mitigations Measures TR1, TR2, TR3, TR4, TR7 and TR8. All of these mitigation measures would benefit bus travel times through the affected study area. Additional actions to help lessen the transit travel time effects could include some of the following: • Provide bus transponders and traffic signal equipment that allow for signal preemption at major intersections along San Pablo Avenue and Sycamore Avenue, in order to allow transit vehicles to progress through the intersections with less delay, provided overall traffic flows are not worsened. • Re-route buses and update schedules to reflect the changes in travel time and retain opportunities for timed transfers at the HTC. This may include reducing dwell times or layover times at the new HTC or other stops. • Increase the number of buses on certain routes**.** • Provide real-time information systems at the HTC and other major stops that rely on accurate bus location information. Such information could be provided to all web users via services such as NextBus (currently used by AC Transit and Muni). • Provide enhanced scheduling software.	Not applicable because this mitigation measure was specifically applied to the Market Town Project.
TR-19: Implement Mitigations Measures TR1, TR2, TR8, TR11, TR12 and TR13. All of these mitigation measures would benefit bus travel times through the affected study area. Additional actions to help lessen the transit travel time effects could include some of the following:	Not applicable because this mitigation measure is now implemented by City of Hercules Municipal Code Section 10-18.601 which implements the Traffic

• Provide bus transponders and traffic signal equipment that allow for signal preemption at major intersections along San Pablo Avenue and Sycamore Avenue, in order to allow transit vehicles to progress through the intersections with less delay, provided overall traffic flows are not worsened. • Re-route buses and update schedules to reflect the changes in travel time and retain opportunities for timed transfers at the HTC. This may include reducing dwell times or layover times at the new HTC or other stops. • Increase the number of buses on certain routes. • Provide real-time information systems at the HTC and other major stops that rely on accurate bus location information. Such information could be provided to all web users via services such as NextBus (currently used by AC Transit and Muni). • Provide enhanced scheduling software.	Impact Fees based on the 2019 Hercules Transportation Impact Fee Nexus Study.
TR-20: Prior to issuance of building permits for the Market Town project, one of the following actions shall be taken: • Plans submitted for building permits shall provide an additional 87 parking spaces on-site. • A shared parking agreement between users in the Market Town project shall be prepared for review and approval of the Planning Division. The NTC zoning district allows projects in the NTC district to create shared parking arrangements between users in order to reduce the total number of parking spaces required. This could be combined with the first option above. • The City is currently in the process of developing a revised parking ordinance for the Central Hercules Area and this parking ordinance would apply to the Market Town project. In its current form, the Draft Ordinance is proposing reductions in the minimum parking ratios. If the Parking Ordinance is approved prior to the approval of building permits, then the Market Town project could provide the amount of parking in the new ordinance. This amount may be lower than the overall parking required in the Zoning Ordinance.	Not applicable because this mitigation measure was specifically applied to the Market Town Project.