

## 4 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) is a California Environmental Quality Act (CEQA)-required component of the EIR process. As part of the CEQA environmental review procedures, Public Resources Code §21081.6 requires a public agency to adopt a monitoring and reporting program to ensure efficacy and enforceability of any mitigation measures applied to the proposed project. The lead agency must adopt an MMRP for mitigation measures incorporated into the project or proposed as conditions of approval. As stated in Public Resources Code §21081.6 (a)(1):

“The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”

Table 4-1 represents the MMRP for the Project. This table lists each of the mitigation measures proposed in the EIR, including mitigation refined or updated in the final EIR in Chapter 3, Changes to the Draft EIR, and specifies the timing and responsible party responsible for each mitigation measure.

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**Table 4-1 Mitigation, Monitoring, and Reporting Program**

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
<b>Aesthetics</b>						
<b>Impact AES-1:</b> Implementation of the Project may result in degradation of the visual quality of the scenic hills to the north.	<b>Mitigation Measure AES-1:</b> Construction areas disturbed for equipment access and staging will be returned to their pre-Project condition. This may include minor regrading or sweeping and revegetation. Graded areas to the north of the Project site will be vegetated with an erosion control seed mix to minimize the visual change to the hillside and ensure that the graded areas blend with the surrounding natural hillside environment to the extent feasible.	Submittal of documentation, site inspection	Prior to Project completion	City of Dublin		
<b>Impact AES-2:</b> Retaining walls implemented as a part of the Project may disrupt the visual setting, thereby degrading visual quality.	<b>Mitigation Measure AES-2:</b> In coordination with Dublin, the County, and Livermore, retaining walls will be designed to include the following components: <ul style="list-style-type: none"> <li>▪ To reduce the visual impact of new retaining walls, aesthetic treatments consisting of color, texture and/or patterning will be applied to reduce visual impacts. The aesthetic treatment shall be context sensitive to the location. If concrete drainage ditches are required along the top of and behind the retaining walls, the ditch shall be stained to match the overall color of the wall. Aesthetic treatments will also reduce glare and deter graffiti, and shall be developed during the final design.</li> <li>▪ Where required, retaining wall cable safety railing should have black or brown vinyl cladding to make them less visually obtrusive and help them blend with the setting.</li> <li>▪ Concrete safety-shaped barriers should be sand blasted to a medium finish to minimize glare and deter graffiti. Barriers at the bottom of retaining</li> </ul>	Submittal of documentation	Project Design	City of Dublin		

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	walls are required to be stained or are required to match the overall wall color through techniques such as staining.					
<b>Impact AES-3:</b> The Project would include trees along the roadway, introducing new vertical elements that could compromise the eligibility of I-580 as a State Scenic Highway.	<b>Mitigation Measure AES-3:</b> All landscaping and new plantings along the Dublin Boulevard Extension must be selected and implemented to maintain the eligibility of I-580 as a State Scenic Highway. The final selection of plantings must ensure that new planting would not substantially impede views of the landscape. Landscaping plans will be coordinated with Caltrans to ensure compatibility.	Approval of Landscape Plan	Prior to Project construction	City of Dublin /Caltrans		
<b>Impact AES-4:</b> Project construction would include new sources of temporary night time lighting and glare, which could affect drivers traveling adjacent to the Project construction area.	<b>Mitigation Measure AES-4:</b> Appropriate light and glare screening measures, including the use of downward cast lighting, will be used in construction, staging, and laydown areas.	Submittal of documentation, on-site verification	Construction	City of Dublin		
<b>Air Quality</b>						
<b>Impact AIR-1:</b> Construction of the Project would result in temporary air quality impacts related to fugitive	<b>Mitigation Measure AQ-1:</b> Implement the most current BAAQMD best management practices at the time of construction to control dust and exhaust. Best management practices issued by BAAQMD change over time, and may include but are not limited to: During any construction period ground disturbance,	Notes on construction plans; field inspection	During construction	City of Dublin		

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dust.	<p>implement the following best management practices to control dust and exhaust:</p> <ul style="list-style-type: none"> <li>▪ All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.</li> <li>▪ All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>▪ 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.</li> <li>▪ All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.</li> <li>▪ All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.</li> <li>▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 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.</li> <li>▪ 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. Post a publicly visible sign with the telephone number and person to</li> </ul>					

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	contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.					
<b>Less than Significant Impact: Construction equipment emissions</b>	<b>Mitigation Measure AQ-2:</b> All off-road diesel-powered construction equipment greater than 50 horsepower shall meet United States Environmental Protection Agency Tier 4 interim off-road emissions standards to the extent feasible.	Submittal of documentation	Construction	City of Dublin		
<b>Biological Resources</b>						
<b>Impact BIO-1.1:</b> Project construction would result in 0.45 acres of direct and indirect temporary impacts to Congdon's tarplant and its seedbanks, and seed banks of San Joaquin spearscale or prostrate vernal pool navarretia, if these are present within the construction footprint.	<p><b>Mitigation Measure BIO-1:</b> The following measures shall be implemented to avoid and minimize impacts to special-status plant species and to the other special-status plants that have seed banks that may overlap the construction footprint:</p> <ul style="list-style-type: none"> <li>▪ To the extent feasible, Project construction will avoid all occupied habitat for Congdon's tarplant (which is also potential seed bank area for San Joaquin spearscale or prostrate vernal pool navarretia) plus a 50-foot buffer.</li> <li>▪ The mapped areas of Congdon's tarplant will be clearly shown on all construction plans.</li> <li>▪ To avoid special-status plants, a buffer of at least 50 feet will be clearly delineated from the active work areas through installation of environmental sensitive area fencing to prevent inadvertent access. The work area for utility line removal will be bound by environmental sensitive area fencing. A qualified plant ecologist shall oversee fencing placement.</li> <li>▪ Work to remove the existing utility line for relocation within the Project site will proceed</li> </ul>	Submittal of documentation, on-site verification by qualified plant ecologist	Prior to any vegetation removal or ground-disturbing activities; during construction	City of Dublin		

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	<p>using the least impactful equipment necessary to minimize crushing, soil compaction, and erosion.</p> <p><b>Mitigation Measure BIO-2:</b> The general avoidance and minimization measures detailed in the EACCS and the associated Programmatic Biological Opinion (PBO) shall be implemented. Implementation of the General Minimization Measures listed in the PBO for the EACCS will further avoid impacts and are required for all EACCS-compliant projects. These avoidance and minimization measures include general measures that apply to all work, activity-specific measures designed to address anticipated effects of certain work activities or particular types of resources, and standard best management practices. Specifically, the Project would implement EACCS Measure GEN-1 through GEN-17, and PBO General Minimization Measure 1 through 19. These measures are listed in Table 5.3-3.</p> <p><b>Mitigation Measure BIO-3:</b> To track recovery of temporarily impacted special-status plant populations, the actual area of impacts will be mapped and monitored for at least three years by a qualified plant ecologist. Prior to Project construction, an area to the south, outside the construction footprint and of a similar size and similar density of Congdon’s tarplant to the area to be impacted, will be identified and used as a reference area. Objectives during the monitoring will include removing any weed populations that may have become introduced due to disturbance, and to encourage grazing that benefits Congdon’s tarplant. By year three, if the Congdon’s tarplant density within the impacted area is not at least 50 percent of the reference area, or if there is more than 5 percent cover of Cal-Invasive Plant Council (IPC) high or moderate ecological impact invasive plants</p>					

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	within the recovery area (not including non-native grasses), the portion of the population impacted by the Project will be considered permanently impacted and the Project will then be required to mitigate for the impacts as per the EACCS, which would require preservation in perpetuity and management per EACCS guidelines of a similar-sized area and number of plants at a 5:1 ratio (number of new plant individuals:number of impacted plant individuals).					
<b>Impact BIO-1.2:</b> The Project could result in the direct loss and indirect disturbance of California red-legged frogs and their habitat.	<p><b>Mitigation Measure BIO-4:</b> The Project will incorporate the following species-specific avoidance and minimization prescribed by the EACCS Measure AMPH-2:</p> <ul style="list-style-type: none"> <li>▪ A qualified biologist will conduct pre-construction surveys prior to activities. If individuals are found, work will not begin until they are moved out of the construction zone to a USFWS/CDFW approved relocation site.</li> <li>▪ A USFWS/CDFW-approved biologist shall be present for initial ground disturbing activities.</li> <li>▪ If the work site is within the typical dispersal distance of potential breeding habitat, barrier fencing will be constructed around the worksite to prevent amphibians from entering the work area. Contact USFWS/CDFW for latest research on this distance for species of interest. Barrier fencing will be removed within 72 hours of completion of work. The Project site is known to be within dispersal distance of potential breeding habitat for California red-legged frog and California tiger salamander, and therefore barrier fencing consisting of silt fence and orange construction zone fencing will be installed on the northern and southern boundaries of the Project site where</li> </ul>	Submittal of documentation, qualified biologist	Prior to any vegetation removal or ground-disturbing activities, during construction	City of Dublin		

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	<p>construction activities border grassland habitat. The barrier fencing will be at least 3 feet high and the lower 6 inches of the fence will be buried in the ground to prevent animals from crawling under. The remaining 2.5 feet will be left above ground to serve as a barrier for animals moving on the ground surface.</p> <ul style="list-style-type: none"> <li>▪ No monofilament plastic will be used for erosion control.</li> <li>▪ Construction personnel will inspect open trenches in the morning and evening for trapped amphibians.</li> <li>▪ A qualified biologist possessing a valid FESA Section 10(a)(1)(A) permit or USFWS-approved under an active biological opinion, will be contracted to trap and to move amphibians to nearby suitable habitat if amphibians are found inside a fenced area. No trapping, such as the use of upland traplines for California red-legged frogs or California tiger salamanders, is proposed for this Project. However, a biologist approved by the USFWS under the Project's Biological Opinion and by the CDFW under the Project's Incidental Take Permit will survey for and relocate any individuals found within the impact area. The applicant will prepare a relocation plan for the Project to be reviewed and approved by the USFWS and CDFW prior to the onset of construction.</li> <li>▪ Work within suitable habitat will be avoided from 15 October (or the first measurable fall rain of 1 inch or greater) to 1 May.</li> </ul>					

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	<p><b>Mitigation Measure BIO-5:</b> Compensatory mitigation for the permanent direct and indirect loss of California red-legged frog and California tiger salamander habitat would be required in accordance with the measures outlined in Tables 3-7 and 3-8 of the EACCS. Mitigation will take the form of purchase of mitigation credits from a mitigation bank or Project-specific mitigation, or other mitigation plan as approved by the USFWS and CDFW in the Project's permits. The ratio of mitigation to impact varies with the location of the proposed mitigation, and would be 2.5:1 at minimum, but may be as high as 4:1 (acreage of new habitat:acreage of impacted habitat).</p>					
<p><b>Impact BIO-1.3:</b> Project construction could result in the direct loss and indirect disturbance of California tiger salamanders and their habitat.</p>	<p><b>Mitigation Measures BIO-2, BIO-4, and BIO-5</b> (discussed above)</p>	<p>See <b>Mitigation Measures BIO-2, BIO-4, and BIO-5</b> above</p>	<p>See <b>Mitigation Measures BIO-2, BIO-4, and BIO-5</b> above</p>	<p>See <b>Mitigation Measures BIO-2, BIO-4, and BIO-5</b> above</p>		
<p><b>Impact BIO-1.4:</b> The Project would result in permanent and temporary impacts to foraging habitat for tricolored blackbird.</p>	<p><b>Mitigation Measure BIO-6:</b> If dense stands of cattails regenerate within the proposed construction footprint prior to Project construction, the Project shall implement the following measures to avoid impacts to tricolored blackbird nesting colonies:</p> <ul style="list-style-type: none"> <li>▪ If work is initiated within the nesting season (i.e., February 1 to August 31), then a preconstruction survey for an active nesting colony of tricolored blackbirds shall be conducted within all perennial marsh and seasonal wetland habitats on and within 250 feet of the construction footprint.</li> </ul>	<p>Submittal of documentation, qualified biologist</p>	<p>No more than 14 days prior to initial ground disturbance and vegetation removal during the nesting season (February 1 to August 31)</p>	<p>City of Dublin</p>		

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	<ul style="list-style-type: none"> <li>(EACCS Measure BIRD-3): If an active nest colony is identified within 250 feet of the construction footprint, work within 250 feet of the colony will be conducted outside of the nesting season (March 15 to September 1).</li> </ul>					
<p><b>Impact BIO-1.5:</b> Project construction may result in mortality to individual western pond turtles and their eggs.</p>	<p><b>Mitigation Measures BIO-2 and BIO-4</b> (discussed above)</p>					
<p><b>Impact BIO-1.6:</b> Project construction may result in mortality to individual San Joaquin kit foxes, should they be present within the construction footprint.</p>	<p><b>Mitigation Measure BIO-7:</b> A qualified biologist shall conduct a preconstruction survey for San Joaquin kit fox and their dens prior to the start of construction activities. In the event that the species is detected during the preconstruction survey, avoidance of impacts to occupied kit fox dens will be implemented per the Standardized Recommendations for Protection of The San Joaquin Kit Fox Prior To Or During Ground Disturbance (USFWS 1999) and EACCS Measure MAMM-1 (outlined below):</p> <ul style="list-style-type: none"> <li>If potential dens are present, their disturbance and destruction will be avoided.</li> <li>If potential dens are located within the construction footprint and cannot be avoided during construction, a qualified biologist will determine if the dens are occupied or were recently occupied using methodology coordinated with the USFWS and CDFW. If unoccupied, the qualified biologist will collapse these dens by hand in accordance with USFWS</li> </ul>	<p>Submittal of documentation, qualified biologist</p>	<p>Prior to the first ground-disturbing activities</p>	<p>City of Dublin</p>		

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	<p>procedures (USFWS 1999).</p> <ul style="list-style-type: none"> <li>▪ Exclusion zones will be implemented following USFWS procedures (USFWS 1999) or the latest USFWS procedures available at the time. The radius of these zones will follow current standards or the following standards listed in the PBO for the EACCS:</li> <li>▪ Potential Den – A total of 4-5 flagged stakes will be placed 50 feet from the den entrance to identify the den location;</li> <li>▪ Known Den – Orange construction barrier fencing will be installed between the construction work area and the known den site at a minimum distance of 100 feet from the den. The fencing will be maintained until all construction-related disturbances have been terminated. At that time, all fencing will be removed to avoid attracting subsequent attention to the den;</li> <li>▪ Natal or Popping Den – The USFWS will be contacted immediately if a natal or pupping den is discovered at or within 200 feet from the boundary of the construction area.</li> <li>▪ Pipes will be capped and trenches will contain exit ramps to avoid direct mortality while construction areas are active.</li> </ul>					
<p><b>Impact BIO-1.7:</b> Project construction could result in the direct loss and indirect disturbance of burrowing owls and their habitat.</p>	<p><b>Mitigation Measures BIO-2 and BIO-5</b> (discussed above)</p> <p><b>Mitigation Measure BIO-8:</b> A qualified biologist shall conduct preconstruction surveys for nesting burrowing owls prior to construction. As feasible, all suitable habitat within 0.5 mile of the Project site shall be surveyed for</p>	<p>Submittal of documentation, qualified biologist</p>	<p>Prior to the first ground-disturbing activities, during construction</p>	<p>City of Dublin</p>		

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	<p>nesting burrowing owls. The survey should be conducted during the burrowing owl's nesting season, defined by the EACCS as March 15 to September 1. This survey shall consist of two or more site visits, with the biologist examining all potential burrows within 0.5 mile, as access permits, for signs of nesting burrowing owls (i.e., owls, pellets, feathers, and/or whitewash). Should these surveys identify burrowing owls on or near the BSA, avoidance of disturbance to the burrow will be conducted per EACCS Measure BIRD-2, outlined below:</p> <ul style="list-style-type: none"> <li>▪ If an active burrowing owl nest is identified near a proposed work area, work will be conducted outside of the nesting season (March 15 to September 1).</li> <li>▪ If an active nest is identified near a proposed work area and work cannot be conducted outside of the nesting season, a qualified biologist will establish a no-activity zone. The no activity zone will be large enough to avoid nest abandonment and will at minimum be 250-foot radius from the nest.</li> <li>▪ If burrowing owls are present within the construction footprint during the non-breeding period, a qualified biologist will establish a no-activity zone of at least 150 feet.</li> <li>▪ If an effective no-activity zone cannot be established in either case, an experienced burrowing owl biologist will develop a site-specific plan (i.e., a plan that considers the type and extent of the proposed activity, the duration and timing of the activity, and the sensitivity and habituation of the owls, and the dissimilarity of the proposed activity with background activities) to minimize the potential to affect the</li> </ul>					

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	<p>reproductive success of the owls.</p> <p><b>Mitigation Measure BIO-9:</b> The EACCS identifies burrowing owl nesting habitat as suitable habitat within 0.5 mile of a documented nest occurrence during the previous 3 years, and it recommends compensatory mitigation in the event of any impacts to such habitat. In the event that burrowing owls are found to be nesting on or within 0.5 mile of the Project site during preconstruction surveys, or if owls need to be evicted from burrows (which can only occur when they are not actively nesting) to implement the Project, compensatory mitigation will be necessary to mitigate for impacts on occupied burrowing owl habitat. If the California red-legged frog/California tiger salamander habitat mitigation provides suitable habitat for burrowing owls as well, then no additional mitigation for impacts to burrowing owls would be necessary. Otherwise, additional habitat mitigation will be necessary, in the form of purchase of mitigation credits from a mitigation bank or Project-specific mitigation in an area that supports such habitat. The EACCS prescribes mitigation ratios of 3:1 to 3.5:1 (acreage of new habitat:acreage of impacted habitat), depending on the location of the mitigation site.</p>					
<p><b>Impact BIO-1.8:</b> The Project could result in the direct loss and indirect disturbance of American badgers and their habitat, should they be present within the</p>	<p><b>Mitigation Measure BIO-2</b> (discussed above)</p> <p><b>Mitigation Measure BIO-10:</b> A qualified biologist shall conduct preconstruction surveys for denning American badgers prior to construction. As feasible, all suitable habitat within 0.5 mile of the Project site shall be surveyed for American badgers. The survey will be conducted for the area in which the qualified biologist</p>	<p>Submittal of documentation, qualified biologist</p>	<p>Prior to the first ground-disturbing activities</p>	<p>City of Dublin</p>		

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construction footprint.	can access. This survey can be conducted concurrently with the burrowing owl survey outlined in Mitigation Measure BIO-8. This survey shall consist of two or more site visits, with the biologist examining all potential burrows within 0.5 mile, as access permits, for American badger dens. Should these surveys identify American badgers on or near the BSA, avoidance of disturbance to the den will be conducted per EACCS Measure MAMM-1 outlined in Mitigation Measure BIO-7.					
<p><b>Impact BIO-1.9:</b> Project construction would result in the loss of foraging habitat and prey habitat for bats, and could temporarily alter foraging patterns in the immediate vicinity. Additionally, Project construction could indirectly result in mortality of bats and their young, if present within the construction footprint.</p>	<p><b>Mitigation Measure BIO-2</b> (discussed above)</p> <p><b>Mitigation Measure BIO-11:</b> A qualified bat biologist will conduct a pre-construction/pre-demolition survey for roosting bats within 15 days prior to the commencement of construction activities within 400 feet of trees or buildings providing potential roosting habitat. The survey will focus on detecting bats that may be day-roosting in trees within or immediately adjacent to (i.e., within 100 feet of) the impact areas. If suitable roost sites are found and a visual survey is not adequate to determine presence or absence of bats, acoustical equipment will be used to determine occupancy. If no evidence of bat roosts is found, any buildings or trees that contain potential roosting sites and are proposed for removal will be removed within 15 days following completion of the survey.</p> <p>If a day roost is found during the maternity season (1 April until the young are flying, typically by 31 August) within 400 feet of the impact areas, a qualified bat biologist (in consultation with the CDFW) will determine the width of a buffer that will be established around the roost. No construction-related activity shall occur within the buffer during the maternity season. Typical buffers recommended between intense construction activity and</p>	Submittal of documentation, qualified biologist	No more than 15 days prior to commencement of construction activities, during construction	City of Dublin		

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	<p>pallid bat roosts are: 90 feet for motor vehicles and foot traffic, 120 feet for heavy equipment, 150 feet for trenching, 250 feet for idling equipment or generators, 250 feet for shielded lighting, and 400 feet for unshielded lighting. No tree or structure containing a maternity roost will be removed or otherwise physically disturbed during the maternity season.</p> <p>Outside the maternity season, a day roost may be removed after individual bats are safely evicted under the direction of a qualified bat biologist. Eviction will occur between 1 September and 31 March, but will not occur during long periods of inclement or cold weather (as determined by the bat biologist) when prey are not available or bats are in torpor. If feasible, one-way doors will be used to evict bats. If use of a one-way door is not feasible, or the exact location of the roost entrance is not known, the roosts that need to be removed shall first be disturbed by the bat biologist. Such disturbance will occur at dusk to allow bats to escape during the darker hours. These buildings or trees shall then be removed the following day. All of these activities will be performed under the supervision of the bat biologist.</p> <p><b>Mitigation Measure BIO-12:</b> Compensatory mitigation for impacts on active bat roosts would not be warranted unless a maternity roost of pallid bats or Townsend’s big-eared bats will be lost. In this instance, the provision of one or more alternate roost structures would be appropriate to reduce impacts on special-status bat species. If a pallid bat or Townsend’s big-eared bat day roost is located within a tree or building to be removed, an alternative bat roost structure will be provided by the City of Dublin and its partners. The design and placement of this structure will be determined by a bat biologist, in</p>					

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	consultation with the CDFW, based on the location of the original roost and the habitat conditions in the vicinity. The roost structure will be built to specifications as determined by a bat biologist and CDFW, or it may be purchased from an appropriate vendor. The structure will be placed as close to the impacted roost site as feasible. This bat structure will be erected at least one month prior to removal of the original roost structure. A bat biologist will monitor this structure during the breeding season for up to two years following completion of the Project, or until it is found to be occupied by bats (whichever occurs first), to provide information for future projects regarding the effectiveness of such structures in minimizing impacts to bats.					
<b>Impact BIO-1.10:</b> Project construction could result in take of a special-status individual bird, egg, or nest, should an individual be foraging or nesting within the construction footprint during construction.	<p><b>Mitigation Measure BIO-2</b> (discussed above)</p> <p><b>Mitigation Measure BIO-13:</b> Project implementation shall include the following measures to comply with the MBTA and California Fish and Game Code and avoid death or injury of special-status birds or their active nests, eggs, or young.</p> <ul style="list-style-type: none"> <li>▪ <i>Avoidance of the Nesting Bird Season.</i> If feasible, Project activities will be scheduled to avoid the avian nesting season. If such activities are scheduled to take place outside the nesting season, all impacts on nesting birds, including raptors, protected under the MBTA and California Fish and Game Code, would be avoided. The nesting season for most birds in Alameda County typically extends from February 1 through August 31, although in most years, a majority of birds have finished nesting</li> </ul>	Submittal of documentation, qualified biologist	No more than 14 days prior to initial ground disturbance and vegetation removal during the nesting season (February 1 to August 31), during construction	City of Dublin		

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	<p>by August 1.</p> <ul style="list-style-type: none"> <li>▪ <i>Vegetation Removal during the Non-Nesting Season.</i> If Project activities will not be initiated until after the start of the nesting season, potential nesting substrate (e.g., bushes, trees, grasses, and other vegetation) that is scheduled to be removed may be removed prior to the start of the nesting season (e.g., prior to 1 February) to reduce the potential for initiation of nests. If it is not feasible to schedule vegetation removal during the nonbreeding season, or where vegetation cannot be removed (e.g., in areas immediately adjacent to the site), then pre-construction surveys for nesting birds will be conducted as described below. Sensitive and/or regulated wetland vegetation would not be removed prior to construction, if feasible.</li> <li>▪ <i>Pre-construction/Pre-disturbance Surveys for Nesting Birds.</i> If it is not possible to schedule Project activities between September 1 and February 1, then a qualified biologist will conduct pre-construction surveys for nesting birds to ensure that no nests will be disturbed during Project implementation. These surveys will be conducted no more than one week prior to the initiation of Project activities. During this survey, a qualified biologist will inspect all potential nesting habitats (e.g., trees, shrubs, grasslands, and structures) within 300 feet of impact areas for raptor nests and within 100 feet of impact areas for nests of non-raptors. Surveys for burrowing owls and nesting golden eagles will extend out to 0.5 mile from the Project site (to the extent that such areas are accessible)</li> </ul>					

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	<ul style="list-style-type: none"> <li>▪ <i>Buffers around Active Nests.</i> If an active nest (i.e., a nest with eggs or young, or any completed raptor nest attended by adults) is found sufficiently close to the construction footprint to be disturbed by these activities, the biologist, in consultation with CDFW, will determine the extent of a disturbance-free buffer zone to be established around the nest to ensure that no nests of species protected by the MBTA and California Fish and Game Code will be disturbed during Project implementation. Typical buffers are 0.25 mile (or 0.5-mile line-of-sight) for golden eagles, 250 feet for burrowing owls, 300 feet for other raptors, and 50-100 feet for non-raptors. Because the majority of the site is already subject to disturbance by vehicles and pedestrians, activities that will be prohibited from occurring within the buffer zone around a nest will be determined on a case-by-case basis by a qualified biologist. In general, activities prohibited within such a buffer while a nest is active will be limited to new construction-related activities (i.e., activities that were not ongoing when the nest was constructed) involving significantly greater noise, human presence, or vibrations than were present prior to nest initiation.</li> <li>▪ <i>Nest Deterrence.</i> If necessary to avoid impacts to active nests, nest starts may be removed on a regular basis (e.g., every second or third day), starting in late January or early February to prevent active nests from becoming established.</li> </ul>					
<b>Impact BIO-1.11:</b> Project	<b>Mitigation Measures BIO-2 and BIO-13</b> (discussed above)	See <b>Mitigation Measures BIO-2 and BIO-13</b>	See <b>Mitigation Measures BIO-2 and BIO-13</b>	See <b>Mitigation Measures</b>		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
construction could result in impacts to migratory bird species, their eggs, or nests, should an individual be foraging or nesting within the construction footprint during construction.		above	above	<b>BIO-2 and BIO-13</b> above		
<b>Impact BIO-2:</b> The Project may adversely affect riparian habitat and other sensitive natural communities at the Project site, through temporary disturbance during construction and permanent loss of natural areas through conversion to a multi-modal roadway.	<p><b>Mitigation Measures BIO-5</b> (discussed above)</p> <p><b>Mitigation Measure BIO-14:</b> Project implementation shall include the following measures to reduce riparian habitat impacts:</p> <ul style="list-style-type: none"> <li>▪ All riparian areas and riparian trees to be preserved will be clearly depicted on final Project plans. Areas to be avoided shall be indicated and protected at the site using orange sensitive area fencing to ensure inadvertent impacts do not occur.</li> <li>▪ No equipment will be staged or refueled in the riparian areas along Cottonwood Creek.</li> <li>▪ All appropriate AMMs listed in the EACCS that would apply to and protect these riparian habitats will be enacted.</li> </ul> <p><b>Mitigation Measure BIO-15:</b> The valley oak tree to be avoided during implementation of the Project will be</p>	Submittal of documentation, qualified arborist	Prior to any ground-disturbing activity on the site, during construction	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<p>protected with a tree protection zone, developed under the consultation of a qualified, International Society of Arborists-certified arborist. This tree protection zone may be larger than the drip line of the tree, as determined by the qualified arborist, and will be delineated with orange construction fencing. No fill placement, equipment access, or materials stockpiling may occur within the tree protection zone, unless approved by the qualified arborist (for example for crown trimming, if needed).</p> <p><b>Mitigation Measure BIO-16:</b> The permanent loss of riparian habitat types shall be mitigated consistent with requirements for species mitigation set by the EACCS. Mitigation will be provided via permanent preservation, enhancement or creation, and management as per EACCS guidelines, or through purchase of credits in an approved riparian mitigation bank. Because all riparian habitats in the construction footprint provide habitat for focal species, the mitigation ratio for the impacts will be at least 2.5:1 (acreage of new or enhanced habitat: acreage of impacted habitat). Because the wetland and stream habitats all provide dispersal and foraging habitat for California red-legged frog and California tiger salamander, the final mitigation ratio must be as high as the determined EACCS requirements for focal species. Mitigation ratios will vary based on the location and quality of the mitigation lands, which have not been selected yet. Mitigation must be in-kind for mixed riparian woodland impacts, but riparian grassland impacts may be mitigated with either grassy or wooded riparian habitat. Prior to impacting these habitats, the Project will prepare a Riparian Mitigation and Monitoring Plan (RMMP) that will describe the</p>					

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<p>mitigation site, enhancement or creation actions that will be enacted, prescribe planting palettes using native species, and provide a monitoring and reporting program and schedule for implementation. The RMMP must also identify success criteria, including less than 5 percent cover of California Invasive Plant Council (Cal-IPC)-rated high impact weeds by year 5, and at least 50 percent canopy cover of native woody riparian species in areas providing compensation for mixed riparian woodland impacts by year 10.</p> <p>Temporary impacts to riparian habitat shall be restored in place at a 1:1 ratio through re-establishment of original contours along banks, decompaction of compacted soils where necessary, and seeding with a native seed mix developed by a qualified restoration ecologist and containing species such as alkali barley (<i>Hordeum depressum</i>), meadow barley (<i>Hordeum brachyantherum</i>), purple needlegrass (<i>Stipa purpurea</i>), and/or other native grass and forb species that occur in the Project vicinity. Temporary impact areas will be monitored for 2 years and the criteria for success will be 75 percent vegetation cover or more compared to pre-Project conditions and no more than 5 percent cover of Cal-IPC-rated moderate and high impact weed species (excluding Cal-IPC-rated annual grasses).</p>					
<p><b>Impact BIO-3:</b> The Project may adversely affect protected wetlands through temporary placement of construction equipment, construction access,</p>	<p><b>Mitigation Measure BIO-18:</b> The permanent loss of waters and wetlands shall be mitigated consistent with requirements for species mitigation from the EACCS. Mitigation will be provided via preservation, enhancement, and management as per EACCS guidelines. This may be purchased as bank credits or managed as a Project-specific mitigation site. Because all wetland and stream habitats in the Project site provide habitat for focal species, the mitigation ratio for the impacts will be</p>	<p>Submittal of documentation</p>	<p>Prior to any ground-disturbing activity on the site</p>	<p>City of Dublin</p>		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
grading, placement of Project fill material, and permanent roadway improvements.	<p>at least 2.5:1 (acreage of new or enhanced habitat: acreage of impacted habitat). Because the wetland and stream habitats all provide dispersal and foraging habitat for California red-legged frog and California tiger salamander, the final mitigation ratio must be as high as the determined EACCS requirements for focal species.</p> <p>The required mitigation ratio will vary based on the location and quality of the mitigation lands, which have not been selected yet. Additionally, compensatory mitigation for wetlands and waters must be provided in-kind (wetlands for wetlands and streams for streams). Prior to impacting these habitats, if bank credits will not be used to compensate for wetland impacts, the Project will prepare a Wetland Mitigation and Monitoring Plan (WMMP, which may be a combined document with the RMMP referenced in Mitigation Measure BIO-16) that will describe the mitigation site, enhancement or creation actions that will be enacted, prescribe planting palettes using native species, and provide a monitoring and reporting program and schedule for implementation. The WMMP must also identify success criteria, including less than 5 percent cover of Cal-IPC-rated high impact weeds in created or enhanced wetlands by year 5, and indicators of hydrophytic vegetation, and indicators and/or direct observation of hydric soil development and wetland hydrology in created wetlands by year 5.</p> <p>Temporary impacts to these waters and wetlands will be restored in place at a 1:1 ratio through re-establishment of original contours in stream channels and wetlands, decompaction of compacted soils where necessary, and seeding with a native wetland seed mix developed by a qualified restoration ecologist containing species such as alkali barley and Mexican rush. Temporary impact areas will be monitored for 2 years and the criteria for success will be 75 percent vegetation cover or more compared to</p>					

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	pre-Project conditions and no more than 5 percent cover of Cal-IPC-rated moderate and high impact weed species (excluding Cal-IPC-rated annual grasses).					
<b>Impact BIO-4:</b> The Project may interfere with species migration through segmentation of habitat within the BSA and disruption of nesting birds during Project construction.	<b>Mitigation Measures BIO-5 and BIO-13</b> (described above)	<b>Mitigation Measures BIO-5 and BIO-13</b> (described above)	<b>Mitigation Measures BIO-5 and BIO-13</b> (described above)	<b>Mitigation Measures BIO-5 and BIO-13</b> (described above)		
<b>Impact BIO-5:</b> Without proper mitigation implementing the East Alameda County Conservation Strategy, the Project could conflict with the goals, objectives, and mitigation criteria contained in that strategy.	<b>Mitigation Measures BIO-2 through BIO-10, BIO-14, BIO-16, BIO-17, and BIO-18</b> (described above)	<b>Mitigation Measures BIO-2 through BIO-10, BIO-14, BIO-16, BIO-17, and BIO-18</b> (described above)	<b>Mitigation Measures BIO-2 through BIO-10, BIO-14, BIO-16, BIO-17, and BIO-18</b> (described above)	<b>Mitigation Measures BIO-2 through BIO-10, BIO-14, BIO-16, BIO-17, and BIO-18</b> (described above)		
<b>Cultural and Tribal Cultural Resources</b>						
<b>Impact CUL-1:</b> The	<b>Mitigation Measure CUL-1:</b> The following measures	Submittal of	Prior to	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
Project could result in damage to or destruction of the historic-period archeological resource identified within the construction footprint (Corral Site), as a result of grading and excavation during construction.	<p>shall be implemented prior to construction of the Project, and during construction of the Project, to ensure known and potential historic-period archeological resources at the Corral Site are properly documented and/or collected:</p> <ul style="list-style-type: none"> <li>▪ Prior to construction, surface remnants will be documented by a professionally qualified archaeologist with appropriate qualifications in historic-period archaeology. Surface remnants may be collected for further study, at the discretion of the archaeologist.</li> <li>▪ Prior to construction, recommendations for subsurface investigation outlined in the Archeological Survey Report prepared for the Project shall be implemented. A subsurface testing plan shall be prepared and executed by a professionally qualified archeologist with appropriate qualifications in historic-period archeology. The plan shall allow for, and outline requirements for, the documentation, collection, analysis, and curation of historic artifacts encountered during subsurface testing.</li> <li>▪ The report shall outline any further recommendations for the site, which may include additional site testing, construction protocols to avoid the destruction of resources on-site through documentation and collection, or other measures. The City of Dublin shall evaluate recommendations of this report and implement measures as feasible to further aid in resource documentation and collection at the site.</li> <li>▪ In addition to measures provided in the written report, a professionally qualified historic</li> </ul>	documentation, qualified archeologist	construction			

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<p>archeologist shall be present on-site when construction activities take place within the resource area. The need for on-site monitoring on a day-to-day basis shall be at the discretion of the historic archeologist. If artifacts or other historic archeological resources associated with the site are encountered during construction, work shall be halted within 25 feet of the discovery until the historic archeologist has evaluated the discovery. The historic archeologist shall determine whether the artifacts and/or resources are significant and warrant documentation and/or recovery, or whether they are not significant and no further action is warranted.</p> <ul style="list-style-type: none"> <li>▪ Any significant artifacts or other historic archeological resources encountered during construction shall be documented, collected, analyzed, and/or curated as appropriate so that their informational, research, and/or scientific value may be preserved. The appropriate treatment of artifacts and historic archeological resources encountered shall be determined by the professionally qualified historic archeologist.</li> <li>▪ The results of surface resource documentation and subsurface testing shall be documented in a written report prepared by the qualified historic archaeologist and submitted to the City of Dublin.</li> </ul>					
<b>Impact CUL-2:</b> The Project could result in damage to or destruction of	<b>Mitigation Measure CUL-2:</b> If buried archaeological resources are discovered during construction, operations shall stop within 50 feet of the find and a qualified archaeologist shall be consulted to evaluate the resource	Submittal of documentation, qualified archeologist	Prior to construction, continuation after discovery	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
unidentified buried archeological resources as a result of grading and excavation during construction.	in accordance with CEQA Guidelines 15064.5. Archeological resources may include, but are not limited to, glass, metal, ceramics, wood, privies, trash deposits or similar debris. A standard inadvertent discovery clause shall be included in the construction contract to inform contractors of this requirement. If after evaluation it is determined the resource does not qualify as a significant resource, then no further protection or study is necessary. If the resource does qualify as a significant resource then the archaeologist shall make recommendations concerning appropriate mitigation measures that shall be implemented to protect the resources, including but not limited to monitoring, excavation, and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines.		of archaeological resources			
<b>Impact CUL-3:</b> The Project could result in damage to or destruction of unidentified buried archeological resources as a result of grading and excavation during construction.	<p><b>Mitigation Measure CUL-3:</b> The following measures will ensure that any paleontological resources encountered during Project construction would be properly handled, evaluated, and curated to ensure their value to paleontological research is preserved.</p> <ul style="list-style-type: none"> <li>▪ A principal paleontologist shall be retained and shall determine when and where monitoring will be required, and who will conduct it. Monitoring shall be required where excavation at depths greater than 2 to 3 feet is being undertaken. The principal paleontologist shall have the authority to halt work in the event that paleontological specimens are discovered, until assessment and appropriate salvage (if needed) is completed.</li> <li>▪ The principal paleontologist or another mitigation program staff member shall coordinate with appropriate construction contractor personnel to provide information</li> </ul>	Submittal of documentation, qualified paleontologist	Prior to construction, continuation after discovery of paleontological resources	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<p>regarding applicable requirements concerning protecting paleontological resources. Contractor personnel, particularly heavy equipment operators, shall also be briefed on procedures to be followed in the event that fossil remains and/or a currently unrecorded fossil site is encountered by earthmoving activities, particularly if a paleontological construction monitor is not present on the site at the time of the discovery. Additional briefing shall be presented to new contractor personnel as necessary. Names and telephone numbers of the monitor and other appropriate mitigation program personnel shall be provided to appropriate contractor personnel.</p> <ul style="list-style-type: none"> <li>▪ When required, monitoring shall consist of visually inspecting freshly exposed cuts and spoil piles for the discovery and recovery of larger fossil remains, and periodically dry test screening to allow for the discovery and recovery of smaller fossil remains. If larger vertebrate fossils are noted by construction workers or monitors, excavation there will cease, and the monitor will be notified.</li> <li>▪ The monitor and recovery staff will salvage all larger vertebrate fossil remains, as soon as practicable and as quickly as possible, following Society of Vertebrate Paleontology protocols. The monitor shall document the location and proper geologic context of any recovered fossil occurrence or rock or sediment samples. Any recovered rock or sediment sample shall be processed to allow for the recovery of smaller fossil remains that normally are too small to be observed by the monitor.</li> </ul>					

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<ul style="list-style-type: none"> <li>▪ If the principal paleontologist or monitor determines that the fossil site is too unproductive or the fossil remains not worthy of recovery by the monitor, no further action will be taken to preserve the fossil site or remains, and earthmoving activities shall be allowed to proceed through the site immediately.</li> <li>▪ The monitor shall maintain daily monitoring logs that include the particular tasks accomplished, the earthmoving activity monitored, the location where monitoring was conducted, the rock unit(s) encountered, the fossil specimens recovered, and associated specimen data and corresponding geologic and geographic site data. A final technical report of results and findings shall be prepared by the principal paleontologist in accordance with any local jurisdictional requirements (including those of the City of Dublin, Alameda County, and City of Livermore as appropriate) and archived at a repository mutually approved by the jurisdiction and principal paleontologist.</li> <li>▪ Consistent with Federal and State law, if fossils are discovered during grading, the principal paleontologist must be called to the site to develop a mitigation plan to protect those resources.</li> <li>▪ All fossil specimens recovered as a result of mitigation, including those recovered as the result of processing rock or sediment samples, will be treated (i.e., prepared, identified, curated, catalogued) in accordance with designated museum repository requirements. Rock or sediment samples will be submitted to</li> </ul>					

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	commercial laboratories for microfossil, pollen, radiometric dating, or other analysis, as appropriate. The Project site lies in Alameda County. If paleontological specimens are encountered and collected at the site during mitigation, they become property of the County and should be properly curated at an approved facility (local to the Project location or a museum) and preserved for future research.					
<b>Impact CUL-4:</b> The Project could result in damage to or destruction of unidentified buried tribal cultural resources as a result of grading and excavation during construction.	<p><b>Mitigation Measure CUL-4:</b> The following measures shall be implemented to ensure that any tribal cultural objects or items encountered during Project construction are properly identified and evaluated, and avoided or preserved.</p> <ul style="list-style-type: none"> <li>▪ A culturally-affiliated Native American with knowledge of cultural resources shall be identified and agreed upon by the City of Dublin and local tribes listed by the NAHC and shall be present to monitor all ground-disturbing activities.</li> <li>▪ If tribal cultural objects or items are encountered, the treatment of those objects or items shall be considered in coordination with culturally-affiliated Native Americans. If avoidance or preservation in place is preferred, avoidance or preservation in place will be completed where feasible and agreed upon by culturally-affiliated Native Americans and the local jurisdiction.</li> <li>▪ Tribal cultural objects or items encountered during Project construction shall be treated with culturally appropriate dignity, taking into</li> </ul>	Submittal of documentation, culturally-affiliated Native American with knowledge of cultural resources	Prior to construction, continuation after discovery of tribal cultural resources	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<p>account the tribal cultural values and meaning of the resource.</p> <ul style="list-style-type: none"> <li>The disposition of recovered tribal cultural items that are not burial-associated shall be coordinated in consultation with culturally-affiliated Native Americans.</li> </ul>					
<b>Geology and Soils</b>						
<p><b>Impact GEO-1:</b> People and structures may be exposed to risks associated with slope stability, liquefaction, and seismically-induced settlement at or near Project site.</p>	<p><b>Mitigation Measure GEO-1:</b> As part of the final design phase, preparation of a design-level geotechnical and geologic report will be required and will include subsurface field work and laboratory testing. Site specific subsurface soil conditions and slope stabilities within the Project site will be verified during the preparation of this report to determine the appropriate final design for the Project. Recommendations from the design-level report will be incorporated into the Project design.</p> <p>Future subsurface exploration will include soil borings at approximate 500-foot intervals along the roadway extension. Soil borings will determine the geologic stability of soils underlying the Project site. In addition, borings will specifically be performed for cut slopes over 8 feet, at retaining wall locations, at bridge support locations, and at culvert crossing locations. Additional borings may be necessary for other Project components, at the discretion of the City of Dublin or the Responsible Agency in their jurisdiction and on the recommendation of professionally qualified specialists. The field investigation will consider Project design details to provide design recommendations. Key considerations shall include the following:</p> <ul style="list-style-type: none"> <li><i>Liquefaction.</i> The design-level geotechnical report shall evaluate liquefaction potential at the Cottonwood Creek crossing to determine the</li> </ul>	Submittal of documentation	Final Design Phase	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<p>need for foundation elements deeper than those required for structural loading purposes.</p> <ul style="list-style-type: none"> <li>▪ <i>Slope Stability.</i> The Project would include cuts and fills throughout the Project site. Cut/fill slopes will be addressed in the design-level geotechnical report to evaluate the need for selective grading provisions to mitigate the potential for clayey materials in fill slopes, which could create slope stability issues. Selective grading provisions, if necessary, will avoid this risk. In addition, the design-level geotechnical report will also evaluate the suitability of existing soils for re-use as fill material. If soils are not suitable to use as fill material, imported fill will be used where needed to ensure stability.</li> <li>▪ <i>Corrosive Soils.</i> The design-level geotechnical report will investigate for the presence of corrosive soils within the Project site. If corrosive soils are identified at locations where new subsurface facilities are proposed (e.g. bridge foundations, culverts, etc.) specially coated rebar, or alternative pipe culverts will be specified in the contract documents.</li> <li>▪ <i>Expansive Soils.</i> The design-level geotechnical report will investigate for the presence of expansive soils within the Project site. Depending on the extent of expansive soils and level of expansion potential, supplemental design measures such as lime-treatment, selective grading, or select import fill materials may be necessary.</li> <li>▪ <i>Erosion Potential.</i> The design-level geotechnical report will characterize the risk of increased</li> </ul>					

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	erosion as a result of topography, soil characteristics, and Project design.					
<b>Impact GEO-2:</b> The Project may result in soil erosion or loss of topsoil during construction.	<b>Mitigation Measure GEO-1</b> (described above)	<b>Mitigation Measure GEO-1</b> (described above)	<b>Mitigation Measure GEO-1</b> (described above)	<b>Mitigation Measure GEO-1</b> (described above)		
<b>Impact GEO-3:</b> With implementation of the Project, roadway users and the new Cottonwood Creek bridge may be exposed to risks associated with corrosive, expansive, or other unsuitable soils.	<b>Mitigation Measure GEO-1</b> (described above)	<b>Mitigation Measure GEO-1</b> (described above)	<b>Mitigation Measure GEO-1</b> (described above)	<b>Mitigation Measure GEO-1</b> (described above)		
<b>Hazards and Hazardous Materials</b>						
<b>Impact HAZ-1:</b> Project construction could expose construction workers and future users to soil contamination from past uses of the Project site and surrounding areas, including pesticides	<p><b>Mitigation Measure HAZ-1:</b> If petroleum-impacted soils or USTs are unexpectedly encountered during any construction activities, work in the area shall be temporarily halted and the corresponding jurisdiction (City of Dublin, the County, or Livermore) shall coordinate with the ACDEH to determine appropriate treatment and removal of the UST and contaminated soil.</p> <p><b>Mitigation Measure HAZ-2:</b> Prior to issuance of any demolition, grading, or building permit, a limited soil</p>	Submittal of documentation	Prior to construction, during construction	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
and/or petrochemicals from fuel.	<p>investigation will be completed within the construction area to identify potential contamination from past petroleum hydrocarbons and any agrichemical contamination from agricultural use.</p> <ul style="list-style-type: none"> <li>▪ Soil samples will be collected and tested for residual pesticides by a qualified professional. Concentrations of agricultural contaminants will be compared to applicable State Water Quality Control Board Environmental Screening Levels.</li> <li>▪ Dublin shall prepare and submit a comprehensive report to the ACDEH, signed by a qualified environmental professional, documenting the presence or lack of petroleum hydrocarbons, agrichemicals, or other contaminants on the Project site.</li> <li>▪ If the soil investigation finds contaminants are present, Dublin, in cooperation with the County if needed, shall create and implement a remediation plan that ensures workers and future users of the Project are not exposed to concentrations in excess of screening levels or other risks associated with soil contamination in accordance with regulatory standards.</li> <li>▪ Potential safety measures could include soil removal and treatment, or protective work attire requirements for construction workers.</li> <li>▪ The remediation plan shall also include provisions to outline safe transportation and disposal techniques, and would prevent the handling of hazardous materials<sup>1</sup> nearby</li> </ul>					

<sup>1</sup> In this context, *hazardous materials* include a hazardous substance (as defined in California Public Resources Code Section 21151.4) or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold specified pursuant to subdivision (j) of Section 25532 of the Health and Safety Code.

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	sensitive educational facilities by delimiting work areas and hauling routes within 0.25 mile of a school.					
<b>Impact HAZ-2:</b> Project construction could require transportation of contaminated soils within one-quarter mile of an existing or proposed school, if contaminated soils are found and removed from the construction footprint.	<b>Mitigation Measure HAZ-2</b> (described above)	<b>Mitigation Measure HAZ-2</b> (described above)	<b>Mitigation Measure HAZ-2</b> (described above)	<b>Mitigation Measure HAZ-2</b> (described above)		
<b>Noise and Vibration</b>						
<b>Impact NOI-1:</b> The Project would result in temporary noise increases during construction, which could exceed local standards.	<b>Mitigation Measure NOI-1:</b> The following measures will be implemented during Project construction. <ul style="list-style-type: none"> <li>The Project contractor shall submit a Construction Noise Management Program that identifies measures proposed to minimize construction noise impacts on existing residents.</li> <li>All construction equipment will conform to Section 14-8.02, Noise Control, of the latest Standard Specifications.</li> <li>In Dublin, all construction operations shall comply with local noise standards and be limited to normal daylight hours where feasible. All stationary equipment shall be adequately muffled and located away from sensitive receptors. The construction contractor shall</li> </ul>	Notes on plans; site inspection	During construction	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<p>limit all on-site noise-producing construction activities, including deliveries and warming up of equipment, to the daytime hours of 7:00 a.m. to 7:00 p.m., daily, where feasible. If work is necessary outside of these hours, the contractor shall acquire appropriate permits from the local jurisdiction and implement a construction noise monitoring program, providing additional mitigation where practical and feasible.</p> <ul style="list-style-type: none"> <li>▪ In the County and Livermore, construction activities generating excessive noise will be limited to the hours specified in the appropriate local ordinance, where feasible. If work is necessary outside of these hours, the contractor shall acquire appropriate permits from the local jurisdiction and implement a construction noise monitoring program, providing additional mitigation where practical and feasible.</li> <li>▪ Pile driving activities in all jurisdictions will be limited to daytime hours only, when feasible. If pile driving outside of typical construction hours specified in this measure is required, the contractor shall acquire appropriate permits from the local jurisdiction and implement a construction noise monitoring program, providing additional mitigation where practical and feasible.</li> <li>▪ Equip all internal combustion-engine driven equipment with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment.</li> <li>▪ Locate stationary noise generating equipment and self-powered lighting systems as far as possible from sensitive receptors when sensitive</li> </ul>					

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
	<p>receptors adjoin or are near the construction footprint</p> <ul style="list-style-type: none"> <li>▪ Utilize "quiet" air compressors and other "quiet" equipment where such technology exists.</li> <li>▪ Prohibit unnecessary idling of internal combustion engines within 100 feet of residences.</li> <li>▪ Avoid staging of construction equipment within 200 feet of noise-sensitive uses.</li> <li>▪ The construction contractor shall designate a noise disturbance coordinator who would be responsible for responding to any local complaints about construction noise. When a complaint is received, the disturbance coordinator shall notify Dublin within 24 hours of the complaint and determine the cause of the noise complaints (starting too early, bad muffler, etc.) and institute reasonable measures warranted to correct the problem, as deemed acceptable by the City of Dublin Community Development Department. The construction contractor shall conspicuously post the contact name and telephone number for the noise disturbance coordinator at the construction site.</li> </ul>					
<p><b>Impact NOI-2:</b> Project construction activities could result in substantial temporary and periodic noise increases as a result of construction equipment</p>	<p><b>Mitigation Measure NOI-1</b> (described above)</p>	<p><b>Mitigation Measure NOI-1</b> (described above)</p>	<p><b>Mitigation Measure NOI-1</b> (described above)</p>	<p><b>Mitigation Measure NOI-1</b> (described above)</p>		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
operation and construction activities in the vicinity of sensitive receptors.						
<b>Public Services</b>						
<b>Impact SERV-1:</b> Project construction could temporarily result in interference with emergency services access as a result of construction work at the intersections of Dublin Boulevard/Fallon Road and Doolan Road/North Canyons Parkway.	<b>Mitigation Measure TRAF-1</b> (described below)	<b>Mitigation Measure TRAF-1</b> (described below)	<b>Mitigation Measure TRAF-1</b> (described below)	<b>Mitigation Measure TRAF-1</b> (described below)		
<b>Transportation and Traffic</b>						
<b>Impact TRAF-1.1:</b> Project construction would result in a temporary increase in construction truck trips on local streets designated as truck routes and construction vehicle trips to and from the Project	<b>Mitigation Measure TRAF-1:</b> A TMP shall be prepared during the design phase for the Project, in accordance with all local requirements. The TMP should address traffic impacts from staged construction, detours, and specific traffic handling concerns during construction of the Project, including multi-modal access. The objective of the TMP is to minimize the impacts that construction activities would have on the traveling public. Traffic management strategies that require action by the construction contractor should be presented in detail in the technical specifications of the bid contract, and	Submittal of documentation	Prior to completion of Design Phase	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
<p>site. Project construction could require temporary closure of the Dublin Boulevard/Fallon Road intersection and the Doolan Road/North Canyons Parkway intersection, and temporary closure of Croak Road while a new intersection is constructed, necessitating detours. Construction truck, equipment, and vehicle trips, and intersection closures and detours could result in temporary congestion at local intersections in Dublin and Livermore.</p>	<p>should be considered part of the Project. In implementing the TMP, each jurisdiction should produce and disseminate press releases and other documents, as necessary, to adequately notify and inform motorists, pedestrians and cyclists, business community groups, local entities, emergency services, and elected officials of upcoming road closures and detours. This responsibility includes advance notification to local newspapers, television and radio stations, and emergency response providers. If agreed upon by Dublin, the County, and Livermore, Dublin as the lead agency may lead preparation and implementation of the TMP.</p>					
<p><b>Impact TRAF-1.2:</b> The change in travel patterns resulting from the Project would result in</p>	<p><b>Mitigation Measure TRAF-2:</b> Dublin is to implement the following geometric and signal timing improvements at the intersection of Dublin Boulevard/Fallon Road prior to the opening of the Dublin Boulevard Extension:</p> <ul style="list-style-type: none"> <li>▪ Implement the mitigation measures described in the Kaiser Environmental Impact Report (EIR)</li> </ul>	<p>Submittal of documentation</p>	<p>Prior to project completion</p>	<p>City of Dublin</p>		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
unacceptable operations at the intersection of Fallon Road and Dublin Boulevard during the AM peak hour over existing conditions.	<p>which includes the construction of an additional left turn lane for both the northbound and eastbound approaches. This improvement is the obligation of Kaiser and the City shall build and seek reimbursement from Kaiser if not built by the time the Dublin Boulevard – North Canyons Parkway Extension Project is built.</p> <ul style="list-style-type: none"> <li>▪ In addition to the mitigations proposed for the Kaiser EIR, Dublin shall implement the following improvements:</li> <li>▪ Northbound – construct at least one northbound right turn lane resulting in the following final lane configuration: 2 left turns, 2 through, and one right turn lane</li> <li>▪ Eastbound – construct at least one more through lane resulting in the following final lane configuration: 2 left turns, 2 through, and 2 rights</li> <li>▪ Westbound – construct at least two additional through lanes resulting in the following lane configuration: 1 left turn, 2 through, and a shared through/right</li> <li>▪ Optimize the signal timing</li> </ul>					
<b>Impact TRAF-1.3:</b> The change in travel patterns resulting from the Project would result in unacceptable operations at the intersection of Airway Boulevard and North Canyons	<p><b>Mitigation Measure TRAF-3:</b> The City of Livermore is to implement the following geometric and signal timing improvements at the intersection of Airway Boulevard and North Canyons Parkway prior to Project completion:</p> <ul style="list-style-type: none"> <li>▪ Shift the median of Airway Boulevard one lane to the west reducing the southbound lanes from three to two and increasing the northbound lanes from three to four</li> <li>▪ With the extra northbound lane, convert the northbound approach to Airway Boulevard and North Canyons Parkway to have an exclusive</li> </ul>	Submittal of documentation	Prior to project completion	City of Dublin		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
Parkway in Livermore during the AM peak hour over existing conditions.	<p>left, shared left/through, and two right turn lanes</p> <ul style="list-style-type: none"> <li>▪ Add an additional westbound through lane resulting in two left turns, one exclusive through, and a shared through/right</li> <li>▪ Optimize the signal timing</li> </ul>					
<b>Impact TRAF-1.4:</b> The change in travel patterns resulting from the Project would result in unacceptable operations at the intersection of Fallon Road and Dublin Boulevard during both the AM and PM peak hours under 2025 conditions.	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)		
<b>Impact TRAF-1.5:</b> The change in travel patterns resulting from the Project would result in unacceptable operations at the intersection of Airway Boulevard and North Canyons Parkway during the AM peak hour	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
under 2025 conditions.						
<b>Impact TRAF-1.6:</b> The change in travel patterns resulting from the Project would result in unacceptable operations at the intersection of Airway Boulevard and North Canyons Parkway during the AM and PM peak hours under 2040 (cumulative) conditions.	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)		
<b>Impact TRAF-2.1:</b> The Project would result in the northbound left turn queue at the intersection of Fallon Road and Dublin Boulevard increasing in length by more than 25 feet (389 feet) during the AM peak hour. This turn queue already exceeds the available storage	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
under existing conditions.						
<b>Impact TRAF-2.2:</b> The Project would result in the southbound left turn queue at the intersection of Fallon Road and Dublin Boulevard exceeding the available turn pocket storage by more than 25 feet (67 feet) during the PM peak hour under 2025 conditions.	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)	<b>Mitigation Measure TRAF-2</b> (described above)		
<b>Impact TRAF-2.3:</b> The Project would result in the westbound queue at Airway Boulevard and North Canyons Parkway increasing by more than 25 feet (29 feet) during the PM peak hour under 2040 conditions. This turn queue already exceeds the available storage	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)	<b>Mitigation Measure TRAF-3</b> (described above)		

Environmental Impact	Mitigation Measures	Method of Verification	Timing of Verification	Responsible for Verification	Verification of Completion	
					Date	Initial
under existing conditions.						
<p><b>Impact TRAF-2.4:</b> The Project would result in the westbound right turn at the intersection of Isabel Avenue and I-580 Westbound off-ramps exceeding the available turn pocket storage by more than 25 feet (58 feet) during the AM peak hour under 2040 conditions.</p>	<p><b>Mitigation Measure TRAF-4:</b> Caltrans is to optimize the traffic signal timing at Isabel Avenue and I-580 Westbound Ramps by the year 2035 to increase the green time for the westbound right turn movement.</p>	Submittal of documentation	Prior to project completion	City of Dublin		