State of California – Natural Resources Agency DEPARTMENT OF FISH AND WILDLIFE Bay Delta Region 2825 Cordelia Road, Suite 100 Fairfield, CA 94534

GAVIN NEWSOM, Governor CHARLTON H. BONHAM, Director



December 19, 2022

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Governor's Office of Planning & Research

Dec 19 2022

Jason Hade, Planning Manager City of Benicia 250 East L Street Benicia, CA 94510 jhade@ci.benicia.ca.us

STATE CLEARING HOUSE

Subject: City of Benicia 2023-2031 Housing Element & Safety Element Updates,

Draft Environmental Impact Report, SCH No. 2022060021, City of Benicia,

Solano County

Dear Mr. Hade:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (DEIR) from the City of Benicia (City) for the City of Benicia 2023-2031 Housing Element & Safety Element Updates (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines. CDFW previously submitted comments in response to the Notice of Preparation of the DEIR.

CDFW is submitting comments on the DEIR to inform the City, as the Lead Agency, of potentially significant impacts to biological resources associated with the Project.

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Lake and Streambed Alteration (LSA) Program, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

PROJECT DESCRIPTION SUMMARY

The Project would update the Housing Element within the City's General Plan. The Housing Element Update (Update) would be applicable citywide from 2023 through 2030. The Update identifies 73 parcels on approximately 117 acres as opportunity sites for a maximum of 2,963 future housing units, which would require rezoning or redesignation for residential use. An additional 107 parcels on 39.65 acres already zoned for residential development are identified in the Update for informational purposes but are not evaluated in the DEIR. The Update also includes a new overlay zone, which would increase allowable density of dwelling units per parcel, as well as different land use categories. Additional zoning changes are included in the Update to address state law and local objectives.

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA, either during construction or over the life of the Project. The Project has the potential to impact Swainson's hawk (*Buteo swainsoni*) and tricolored blackbird (*Agelaius tricolor*), CESA listed as threatened species. Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain an ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, & 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the project proponent's obligation to comply with CESA.

Lake and Streambed Alteration

CDFW requires a LSA Notification, pursuant to Fish and Game Code section 1600 et seq., for project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake, or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to LSA Notification requirements. CDFW would consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

Raptors and Other Nesting Birds

CDFW has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

Fully Protected Species

The Project has the potential to impact the following Fully Protected species: salt marsh harvest mouse (*Reithrodontomys raviventris*), California Ridgeway's rail (*Rallus obsoletus* obsoletus), California black rail (*Laterallus jamaicensis coturniculus*), white-tailed kite (*Elanus leucurus*), and golden eagle (*Aquila chrysaetos*). Fully Protected species may not be taken or possessed at any time (Fish & G. Code, §§ 3511, 4700, 5050, & 5515) except for collecting these species for necessary scientific research, relocation of the bird species for the protection of livestock, or if they are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan. The DEIR should include mitigation measures to ensure avoidance of the abovementioned species, as further described below.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, including those CDFW recommends in Attachment B, CDFW concludes that an Environmental Impact Report is appropriate for the Project.

I. Subsequent Project CEQA Evaluation

COMMENT 1: The DEIR identifies that "individual projects may require more detailed evaluations of biological resources and formation of mitigation measures by a qualified biologist" (DEIR, page 4.3-6). CDFW provided comments on the NOP for the DEIR in a letter dated June 20, 2022 and recommended providing a clear checklist or procedure for evaluating subsequent Project impacts and clearly citing the portions of the DEIR, including page and section references, containing the analysis of the subsequent Project activities' potentially significant effects. The DEIR does not include the checklist and CDFW strongly recommends that the DEIR include a procedure or checklist for subsequent projects in an appendix to ensure subsequent project impacts to fish and wildlife resources are appropriately evaluated in compliance with CEQA and impacts are mitigated to less-than-significant.

II. Mitigation Measures and Related Impact Shortcomings

Mandatory Findings of Significance: Does the Project have the potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species?

And,

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or U.S Fish and Wildlife Service (USFWS)?

COMMENT 2: Deferred Mitigation

Issue, specific impacts, why they may occur and be potentially significant: CDFW previously commented on the NOP, informing the City that fully protected, threatened, endangered, candidate, and other special-status species that are known to occur, or have the potential to occur in or near the Project site, include but are not limited to those listed in **Attachment 1**. The DEIR does not evaluate potential impacts to the species on that list, nor any other species, though it does state a "record search indicates several plant and animal species with special status in the City" (Page 4.3-5).

Mitigation Measure (MM) BIO-1 proposes to mitigate impacts to special-status species by requiring that "all projects provide documentation that the site does not include special status species", conduction of focused surveys "if the species are found on the site", and development of a mitigation plan approved by the City if special-status species are found on the site (DEIR page 4.3-7).

CDFW does not consider requiring documentation regarding presence of special-status species (MM BIO-1) and subsequent preparation of a mitigation plan (MM BIO-2) to be mitigation measures under CEQA, as mitigation measures must be included in the CEQA environmental document, in this case the DEIR (CEQA Guidelines, §§ 15126.4). CEQA Guidelines section 15126.4, subdivision (b) states: "The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure. Compliance with a regulatory permit or other similar process may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards."

MM BIO-1 and MM BIO-2 do not adopt specific performance standards, nor identify types of actions that could meet these standards.

Further, the City reviewing documentation for subsequent Projects does not provide certainty that impacts to special-status species would be reduced to the level of less-than-significant. MM BIO-1 states that a mitigation plan will need to be approved by the City if special-status species are found on the site, but there is no requirement that any action would be taken. Similarly, Mitigation Measure BIO-2 states a mitigation plan shall be prepared prior to ground disturbance, but does not require implementation of the plan.

A potential outcome based on the text of Mitigation Measures BIO-1 and BIO-2 is that subsequent Project impacts to state and federally listed species, such as Swainson's hawk and salt-marsh harvest mouse, or other special-status species, would not be appropriately evaluated or identified in the biological resources site assessment, and appropriate mitigation measures to reduce impacts to less-than-significant would not be implemented.

Without specific performance standards, CDFW considers impacts to special-status species as potentially significant (CEQA Guidelines, §§ 15065, 15380).

Recommendation: To reduce potential impacts to special-status species to less-than-significant, CDFW recommends the DEIR evaluate potential Project impacts and include specific mitigation measures, such as those included in **Attachment 2**, for foreseeable potentially significant impacts. Where future site-specific impacts may not be presently foreseeable based on the Project's broad scope, the checklist discussed in Comment 1 above should be used to determine if a future CEQA environmental document is required. CDFW would appreciate the opportunity to review the revised DEIR and may have further comments once more specific species information is provided.

For example, CDFW recommends including the below mitigation measure in the DEIR:

Swainson's Hawk Surveys and Avoidance. If Project activities are scheduled during the nesting season for Swainson's hawks (March 1 to August 31), prior to beginning work on this Project, a Qualified Biologist shall survey for Swainson's hawk nesting activity. The survey area shall include a 0.5-mile radius surrounding the Project site, unless otherwise approved in writing by CDFW. The Qualified Biologist shall conduct surveys according to the *Recommended timing and methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.* Survey results shall be submitted to CDFW for review and written acceptance prior to starting Project activities. If the Qualified Biologist identifies nesting Swainson's hawks, then Project activities shall be prohibited within 0.5 miles of the nest between March 1 and August 31, unless otherwise approved in writing by CDFW, which may include consultation pursuant to CESA and the Permittee obtaining a CESA Incidental Take Permit, or a Qualified Biologist determining that the nest is no longer active.

Additional measures CDFW recommends including in the DEIR are listed in Attachment 2.

COMMENT 3: Presence of Special-Status Species in the Vicinity of the Project

Issue: MM BIO-1 references what steps may be taken if a special-status species is found <u>on-site</u> (page 4.3-7). However, species that are <u>within the vicinity</u> of the Project may still be significantly impacted by the Project via auditory and visual disturbance, reduced connectivity between suitable habitats, etc. For example, impacts to Swainson's hawk should be considered within a 0.25 mile of the Project site in urban areas and 0.5 mile of the Project site in rural areas.

Recommendation: CDFW recommends clarifying that the Project site *and the nearby vicinity* will be evaluated for the suitability of special-status plants and animals that have the potential to occur on or near the Project site. Additionally, mitigation measures

should address potential impacts to species that could occur on the Project site, as well as the vicinity of the Project site.

COMMENT 4: Nesting Birds

Issue, specific impacts, why they may occur and be potentially significant: Birds that are California Species of Special Concern and common bird species have the potential to occur in the vicinity of the Project, such as northern harrier (*Circus hudsoniusl*), saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*), and Suisun song sparrow (*Melospiza melodia maxillaris*).

MM BIO-4 (pages 4.3-10-11) is insufficient to reduce potential impacts to nesting birds to less than significant. The measure states that the nesting season starts March 15, however, CDFW considers the nesting season to start February 1. Furthermore, the measure does not indicate when surveys will be conducted relative to the start of construction, nor if they will be repeated in the event there is a lapse of construction.

If construction occurs early in the nesting season and surveys are not conducted when nesting birds could be present as early as February 1, and appropriate buffer zones are not established, nesting birds could be disturbed by Project activities resulting in nest abandonment and loss of eggs or reduced health and vigor and loss of young. Additionally, nest building can be completed rapidly and the time from nest initiation to egg laying can occur in a matter of days. If additional surveys are not conducted when there has been a one week lapse in construction, there is an increased risk that nests may become established and be disturbed by Project activities. Given these concerns, the Project may have significant impacts on nesting birds.

Recommendation: The DEIR should evaluate impacts for all special-status birds that have the potential to occur within the vicinity of the Project, including those listed in Attachment 1.

Furthermore, CDFW recommends replacing MM BIO-4 with the following language:

<u>Mitigation Measure BIO-4: Nesting Bird Avoidance:</u> Active nests occurring at or near the Project site shall be avoided. Permittee is responsible for complying with Fish and Game Code section 3503 et seq. and the Migratory Bird Treaty Act of 1918.

- a. Nesting Bird Surveys. If construction, grading, vegetation removal, or other Project-related activities are scheduled during the nesting season, February 1 to August 31, a focused survey for active nests shall be conducted by a Qualified Biologist within 7 days prior to the beginning of Project-related activities. If an active nest is found, Permittee shall consult with CDFW regarding appropriate action to comply with Fish and Game Code. If a lapse in Projectrelated work of 7 days or longer occurs, another focused survey and, if needed, consultation with CDFW, shall be required before Project work can be reinitiated.
- b. Active Nest Buffers. If an active nest is found during surveys, the Project shall consult with CDFW regarding appropriate action to comply with state and federal laws. Active nest sites shall be designated as "Ecologically Sensitive Areas" (ESA) and protected (while occupied) during Project work by demarking a "No Work Zone" around each nest site.
 - Buffer distances for bird nests shall be site-specific and an appropriate
 distance, as determined by a Qualified Biologist. The buffer distances shall be
 specified to protect the bird's normal behavior to prevent nesting failure or
 abandonment. The buffer distance recommendation shall be developed after
 field investigations that evaluate the bird(s) apparent distress in the presence of
 people or equipment at various distances. Abnormal nesting behaviors which
 may cause reproductive harm include, but are not limited to, defensive
 flights/vocalizations directed towards Project personnel, standing up from a

brooding position, and flying away from the nest. The Qualified Biologist shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.

- The Qualified Biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project work. Nest monitoring shall continue during Project work until the young have fully fledged (have completely left the nest site and are no longer being fed by the parents), as determined by the Qualified Biologist. Any reduction in monitoring active nests must be approved in writing by CDFW.
- c. <u>Nesting Habitat Removal or Modification</u>. No habitat removal or modification shall occur within the ESA-marked nest zone until the young have fully fledged and will no longer be adversely affected by the Project, as determined by a Qualified Biologist.

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or the USFWS?

COMMENT 5: Measures to Reduce Impacts to Sensitive Natural Communities

Issue, specific impacts, why they may occur and be potentially significant: The DEIR indicates the City includes riparian and wetland habitats and that implementation of MM BIO-1 through MM BIO-3 would reduce impacts to sensitive natural communities to less-than-significant (page 4.3-8). However, the DEIR does not explicitly evaluate whether these habitats could potentially be impacted by the Project. Additionally, MM BIO-1 through MM BIO-3 do not mention sensitive natural communities or impacts to habitat, so it is unclear how these measures would reduce impacts to less-than-significant. MM BIO-2 requires a "detailed mitigation plan" but does not specify what impacts this plan is meant to address. Additionally, the language of the measure does not require implementation of the plan.

CDFW does not consider preparation of a mitigation plan to be a mitigation measure under CEQA, as outlined in Comment 2. MM BIO-1 and BIO-2 do not identify types of actions that will be taken to mitigate for impacts and specific performance standards are not proposed. MM BIO-3 does propose some actions to be taken if wildlife movement corridors will be impacted by the Project, however, these actions lack a level of detail to ensure impacts would be reduced to less-than-significant. For example, MM BIO-3 states a buffer will be implemented between the Project and sensitive habitats but does not specify how the buffer distance/type will be determined.

Without specific performance standards CDFW considers impacts to sensitive natural communities, riparian habitat, and wetlands as potentially significant.

Recommendation: The DEIR should include an evaluation of sensitive natural communities, including riparian and wetland habitats, that could be impacted by the Project. Additionally, MM BIO-2 should require restoration on-site or off-site to mitigate temporary or permanent subsequent Project impacts to sensitive natural communities at a minimum 1:1 (restore on-site temporary impacts) or 3:1 (permanent impacts) mitigation to impact ratio for acres of impacts, or habitat compensation including permanent protection of habitat at the same ratio through a conservation easement and preparing and funding implementation of a long-term management plan. MM BIO-2 should also require habitat compensation for permanent wetland impacts and obtaining permits from the Regional Water Quality Control Board and Army Corps of Engineers pursuant to the Clean Water Act.

Lastly, if the Project could impact sensitive riparian habitat, the DEIR should include a mitigation measure that requires subsequent Projects to submit an LSA notification to CDFW prior to construction and comply with the LSA Agreement, if issued, if the Project may substantially impact a stream or lake.

III. Editorial Comments and/or Suggestions

COMMENT 6: BIO-1 states that focused surveys shall be done if a special-status species is found on the site. It is unclear how species presence would be determined <u>before</u> surveys are conducted. CDFW recommends revising this language to clarify that surveys shall be conducted if special-status species have the <u>potential</u> to occur at the project site, as determined by a qualified biologist.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be filled out and submitted online at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Alicia Bird, Environmental Scientist, at (707) 980-5154 or alicia.bird@wildlife.ca.gov; or Melanie Day, Senior Environmental Scientist (Supervisory), at (707) 210-4415 or melanie.day@wildlife.ca.gov.

Sincerely,

--- DocuSigned by:

Erin Chappell

Erin Chappell Regional Manager Bay Delta Region

Attachment 1: Special-Status Species

Attachment 2: Draft Mitigation Monitoring and Reporting Program

ec: Office of Planning and Research, State Clearinghouse (SCH No. 2022060021)

Attachment 1: Special-Status Species

Species Name	Common Name	Status
Reithrodontomys raviventris	Salt-marsh harvest mouse	FP, FE
Rallus obsoletus obsoletus	California Ridgeway's rail	FP, FE
Laterallus jamaicensis coturniculus	California black rail	FP
Elanus leucurus	White-tailed kite	FP
Aquila chrysaetos	Golden eagle	FP
Buteo swainsoni	Swainson's hawk	ST
Agelaius tricolor	Tricolored blackbird	ST
Geothlypis trichas sinuosa	Saltmarsh common yellowthroat	SSC
Melospiza melodia maxillaris	Suisun song sparrow	SSC
Circus hudsoniusI	Northern harrier	SSC
Antrozous pallidus	Pallid bat	SSC
Taxidea taxus	American badger	SSC
Corynorhinus townsendii	Townsend's big-eared bat	SSC
Sorex ornatus sinuosus	Suisun shrew	SSC
Bombus occidentalis	Western bumble bee	SC, ICP
Blepharizonia plumosa	Big tarplant	CRPR1B.1
Isocoma arguta	Carquinez goldenbush	CRPR1B.1
Centromadia parryi ssp. congdonii	Congdon's tarplant	CRPR1B.1
Eryngium jepsonii	Jepson's coyote-thistle	CRPR1B.2
Trifolium hydrophilum	Saline clover	CRPR1B.2

FP = state fully protected under Fish and Game Code; FE = federally listed as endangered under the Endangered Species Act (ESA); FT = federally listed as threatened under ESA; SE = state listed as endangered under CESA; SC = state candidate for listing under California Endangered Species Act (CESA); ICP = California Terrestrial and Vernal Pool Invertebrate of Conservation Priority²; SSC = state Species of Special Concern; CRPR = California Rare Plant Rank³

² The list of California Terrestrial and Vernal Pool Invertebrates of Conservation Priority was collated during CDFW's Scientific Collecting Permit rulemaking process: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=157415&inline

³ CRPR 1B plants are considered rare, threatened, or endangered in California and elsewhere while Further information on CRPR ranks is available in CDFW's *Special Vascular Plants*, *Bryophytes*, *and Lichens List* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109383&inline) and on the California Native Plant Society website (https://www.cnps.org/rare-plants/cnps-rare-plant-ranks).

Attachment 2: Draft Mitigation Monitoring and Reporting Program (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

	Biological Resources (BIO)		
Mitigation Measure (MM)	Description	Timing	Responsible Party
MM BIO-2	 The following language is recommended for incorporation into MM BIO-2: Any permanent impacts to sensitive natural communities shall be mitigated for at a 3:1 ratio by acreage and temporary impacts shall be restored on-site at a 1:1 ratio by acreage. Oak trees shall be replaced at the following ratios: 3:1 replacement for trees 5 to 8 inches diameter at breast height (DBH) 5:1 replacement for trees greater than 8 inches to 16 inches DBH 10:1 replacement for trees greater than 16-inch DBH, which are considered old-growth oaks 	Within the same year as the project start	Project Applicant
MM BIO-4	 The following language is recommended for replacement of existing MM BIO-4: Nesting Bird Avoidance. Active nests occurring at or near the Project site shall be avoided. Permittee is responsible for complying with Fish and Game Code section 3503 et seq. and the Migratory Bird Treaty Act of 1918. a) Nesting Bird Surveys. If construction, grading, vegetation removal, or other Project-related activities are scheduled during the nesting season, February 1 to August 31, a focused survey for active nests shall be conducted by a Qualified Biologist within 7 days prior to the beginning of Project-related activities. If an active nest is found, Permittee shall consult with CDFW regarding appropriate action to comply with Fish and Game Code. If a lapse in Project-related work of 7 days or longer occurs, another focused survey and, if needed, consultation with CDFW, shall be required before Project work can be reinitiated. b) Active Nest Buffers. If an active nest is found during surveys, the Project shall consult with CDFW regarding appropriate action to comply with state and federal laws. Active nest sites shall be designated as "Ecologically Sensitive Areas" (ESA) and protected (while occupied) during Project work by demarking a "No Work Zone" around each nest site. Buffer distances for bird nests shall be site-specific and an appropriate distance, as determined by a Qualified Biologist. The buffer distances shall be specified to protect the bird's normal behavior to prevent nesting 	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant

	recommendation shall be developed after field investigations that evaluate the bird(s) apparent distress in the presence of people or equipment at various distances. Abnormal nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The Qualified Biologist shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. • The Qualified Biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project work. Nest monitoring shall continue during Project work until the young have fully fledged (have completely left the nest site and are no longer being fed by the parents), as determined by the Qualified Biologist. Any reduction in monitoring active nests must be approved in writing by CDFW. c) Nesting Habitat Removal or Modification. No habitat removal or modification shall occur within the ESA-marked nest zone until the young have fully fledged and will no longer be adversely affected by the Project, as		
MM BIO-5	Pre-Project Special-Status Plant Surveys. A Qualified Biologist shall conduct botanical surveys during the appropriate blooming period and conditions for all special-status plants that have the potential to occur prior to the start of construction. More than one year of surveys may be necessary. Surveys shall be conducted following CDFW's Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (https://wildlife.ca.gov/Conservation/Survey- Protocols#377281280-plants). Survey reports shall be submitted to CDFW for written approval prior to the start of construction. If any special-status plant species are observed, the Project shall fully avoid direct and indirect impacts to all individuals and prepare and implement a CDFW-approved avoidance plan prior to Project activities. If special-status plants will be impacted, the Project shall provide mitigation prior to Project start in a form accepted in writing by CDFW which may include on-site restoration pursuant to a restoration plan prepared by the Project and approved by CDFW, off-site habitat preservation at a minimum 3:1 mitigation to impact ratio based on acreage or number of plants as appropriate, unless otherwise approved in writing by CDFW.	Prior to Ground Disturbance	Project Applicant

MM BIO-6	Swainson's Hawk Surveys and Avoidance: If Project activities are scheduled during the nesting season for Swainson's hawks (March 1 to August 31), prior to beginning work on this Project, Swainson's hawk surveys shall be conducted by a qualified biologist with experience surveying for and detecting the species pursuant to the Recommended timing and methodology for Swainson's Hawk Nesting Surveys in California's Central Valley Swainson's Hawk (2000) survey protocol, within 0.5 mile of the Project site each year that Project activities occur. Pursuant to the above survey protocol, surveys shall be completed for at least the two survey periods immediately prior to a Project's initiation. For example, if the project is scheduled to begin on June 20, the qualified biologist shall complete three surveys in Period III and three surveys in Period V. It is recommended that surveys be completed in Periods II, III and V. The Project shall obtain CDFW's written acceptance of the qualified biologist and survey report prior to Project construction occurring between March 1 and August 31 each year. If the qualified biologist identifies nesting Swainson's hawks, the Project shall implement a 0.5 mile no disturbance buffer zone around the nest, unless otherwise approved in writing by CDFW. Project activities shall be prohibited within the buffer zone between March 1 and August 31, unless otherwise approved in writing by CDFW. If take of Swainson's hawk cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP.	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant
MM-BIO-7	Surveys and Avoidance of Fully Protected Raptors. Surveys shall be conducted for fully protected raptors, including white-tailed kite and golden eagle. The survey area shall be determined by a qualified Raptor Biologist in consultation with CDFW based on the species of concern, and if the nest of any fully protected raptor is identified during pre-construction nesting surveys, a biological based justification for the buffer zone, as determined by a qualified Raptor Biologist, shall be submitted to CDFW for review. Project activities shall not proceed between March 1 and August 31 unless CDFW provides written approval of the buffer zone around any nest of a fully protected raptor species.	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant
MM BIO-8	Tricolored Blackbird Avoidance. If nesting tricolored blackbird or evidence of their presence is found, CDFW shall be notified immediately and work shall not occur without written approval from CDFW allowing the Project to proceed. Project activities shall not occur within 500 feet of an active nest unless otherwise approved in writing by CDFW. Presence of nesting tricolored blackbird may require a CESA Incidental Take Permit before Project activities may commence.	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant
MM BIO-9	Special-Status Bee Habitat Assessment and Avoidance: A qualified wildlife biologist shall conduct visual surveys of areas planned for ground disturbance, including but not limited to, installation	Prior to Ground Disturbance and	Project Applicant

	90 days prior to tree removal and shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for foliage roosting species). If suitable habitat trees are found, they shall be flagged or otherwise clearly marked, CDFW shall be notified immediately, and tree trimming or removal shall not proceed without approval in writing from CDFW. Trees may be removed only if: a) presence of bats is presumed, or documented during the surveys described below, in trees with suitable habitat, and removal using the two-step removal process detailed below occurs only during seasonal periods of bat activity, from approximately March 1 through April 15 and September 1 through October 15, or b) after a Qualified Biologist, under prior written approval of the proposed survey methods by CDFW, conducts night emergence surveys or completes visual examination of roost features that establish absence of roosting bats. Two-step tree removal shall be conducted over two consecutive days, as follows: 1) the first day (in the afternoon), under the direct supervision and instruction by a Qualified Biologist with experience conducting two-step tree removal, limbs and branches shall be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be avoided, and 2) the second day the entire tree shall be removed.	continuing over the course of the Project	
MM BIO-11	Avoidance of Fully Protected Marsh Birds. Project activities within or adjacent to tidal marsh or suitable Ridgway's (California clapper) rail (CCR) or California black rail (CBR) habitat shall be avoided during rail breeding season (January 15 – August 31 for CCR, February 1 – August 31 for CBR) each year unless appropriately timed, yearly protocol level surveys are conducted and survey methodology and results are submitted to and accepted by CDFW. Surveys shall focus on suitable habitat that may be disturbed by project activities during the breeding season to ensure that these species are not nesting in these locations. If breeding rails are determined to be present, no activities, visual disturbance (direct line of sight) and/or an increase in the ambient noise level shall occur within 700 feet of areas where CCR and/or CBR have been detected during the breeding season. If surveys have not been conducted, all work shall be conducted 700 feet from CCR and/or CBR habitat during nesting season. Additionally, no project activities shall occur within 50 feet of suitable habitat during extreme high tide events or when adjacent tidal marsh is flooded. Extreme high tides events are defined as a tide forecast of 6.5 feet or higher measured at the Golden Gate Bridge and adjusted to the timing of local high tides.	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant
MM BIO-12	Avoidance of Fully Protected Salt-Marsh Harvest Mouse. Impacts to salt-marsh harvest mouse shall be fully avoided. a) Habitat Avoidance. No project activities shall	Prior to Ground Disturbance and	Project Applicant

occur within 50 feet of suitable tidal marsh habitat for the salt marsh harvest mouse (SMHM) within two (2) hours before and after an extreme high tide event (6.5 feet or higher measured at the Golden Gate Bridge and adjusted to the timing of local high tides) or when adjacent marsh is flooded unless SMHM proof exclusion fencing has been installed around the work area.

- continuing over the course of the Project
- b) Vegetation Removal. Prior to impacting salt marsh habitat, an approved qualified biologist or biological monitor, familiar with salt marsh harvest mouse (SMHM), shall walk through and inspect suitable habitat prior to vegetation removal and search for signs of harvest mice or other sensitive wildlife and plants. Following inspection, personnel, under the supervision of the qualified biologist, will disturb (e.g., flush) vegetation to force movement of SMHM into adjacent marsh areas. Flushing of vegetation will first occur in the center of the site then progress toward the two sides away from the open water areas or in this case, away from impacted habitat. Immediately following vegetation flushing, personnel, under the supervision of the qualified biologist or biological monitor, will remove vegetation with hand tools (e.g., weed-eater, hoe, rake, trowel, shovel, grazing) so that vegetation is no taller than 2 inches.
- c) Exclusion Fencing. After vegetation removal, a mouse proof barrier shall be placed along the edge of the area removed of vegetation to further reduce the likelihood of SMHM returning to the area prior to construction. The fence shall be made of a heavy plastic sheeting material that does not allow salt marsh harvest mice to pass through or climb, and the bottom shall be buried to a depth of 4 inches so that salt marsh harvest mouse cannot crawl under the fence. Fence height shall be at least 12 inches higher than the highest adjacent vegetation with a maximum height of 4 feet. All supports for the exclusion fencing shall be placed on the inside of the work area. An approximately 2-foot-wide de-vegetated buffer shall be created along the habitat side of the exclusion fence. The SMHM exclusion fencing shall remain in operating condition throughout the duration of all placement of fill events. The qualified biologist or biological monitor shall daily inspect the integrity of the exclusion fencing to ensure there are no gaps, tears or damage. Maintenance of the fencing shall be conducted as needed. Any necessary repairs to the fencing shall be completed within 24 hours of the initial observance of the damage. Any mice found along or outside the fence shall be closely monitored until they move away from the project area.

MM BIO-13	American Badger Avoidance. A qualified biologist shall conduct a habitat assessment to determine if the Project site or nearby vicinity has suitable habitat for American badger. If suitable habitat is present at the Project site, a qualified biologist shall survey for American badger within the Project site and nearby vicinity prior to construction. If any occupied burrows are discovered the Project shall implement an appropriate buffer from the burrow, as determined by a qualified biologist and approved in writing by CDFW. If the Project cannot avoid impacts to the occupied burrow the Project shall confer with CDFW regarding next steps before proceeding. This make require the Project to prepare and implement a relocation plan, unless otherwise approved in writing by CDFW.	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant
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