Solano County

675 Texas Street
Fairfield, California 94533
www.solanocounty.com

Agenda - Final

Thursday, June 16, 2016

7:00 PM

Board of Supervisors Chambers

Planning Commission

Any person wishing to address any item listed on the Agenda may do so by submitting a Speaker Card to the Clerk before the Commission considers the specific item. Cards are available at the entrance to the meeting chambers. Please limit your comments to five (5) minutes. For items not listed on the Agenda, please see “Items From the Public”.

All actions of the Solano County Planning Commission can be appealed to the Board of Supervisors in writing within 10 days of the decision to be appealed. The fee for appeal is $150.

Any person wishing to review the application(s) and accompanying information may do so at the Solano County Department of Resource Management, Planning Division, 675 Texas Street, Suite 5500, Fairfield, CA. Non-confidential materials related to an item on this Agenda submitted to the Commission after distribution of the agenda packet are available for public inspection during normal business hours and on our website at www.solanocounty.com under Departments, Resource Management, Boards and Commissions.

The County of Solano does not discriminate against persons with disabilities and is an accessible facility. If you wish to attend this meeting and you will require assistance in order to participate, please contact Kristine Letterman, Department of Resource Management at (707) 784-6765 at least 24 hours in advance of the event to make reasonable arrangements to ensure accessibility to this meeting.

AGENDA

CALL TO ORDER

SALUTE TO THE FLAG

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF THE MINUTES

PC 16-021 PC minutes for June 2, 2016

Attachments: Minutes

ITEMS FROM THE PUBLIC:

This is your opportunity to address the Commission on a matter not heard on the Agenda, but it must be within the subject matter jurisdiction of the Commission. Please submit a Speaker Card before the first speaker is called and limit your comments to five

minutes. Items from the public will be taken under consideration without discussion by the Commission and may be referred to staff.

REGULAR CALENDAR

1 **PC 16-020** Conduct a public hearing to consider Use Permit Application No. U-16-01 of Westervelt Ecological Services who is developing the Tule Red Restoration Project on behalf of the State and Federal Contractors Water Agency (SFCWA) to construct and operate a tidal wetlands restoration project within the Primary Management Area of the Suisun Marsh. The project is located within unincorporated Solano County approximately 9 miles southeast of Suisun City within the Marsh Preservation "MP" Zoning District, APN's 0046-260-030, 070, and 110

The State and Federal Contractors Water Agency is the CEQA lead agency for the project, and Solano County will be acting as a Responsible Agency pursuant to CEQA Guidelines Sections 15050(c) & 15096. The State and Federal Contractors Water Agency approved the project after preparing an Addendum to the Suisun Marsh Plan Habitat Management, Preservation, and Restoration Plan EIS/EIR. The State and Federal Contractors Water Agency filed a Notice of Determination with the Office of Planning and Research as well as the Solano County Clerk following its project approval action. (Project Planner: Eric Wilberg)

Attachments:
- A - PC Resolution-draft
- B - Assessor Parcel Map
- C - Site plan
- D1 - Berm cross sections
- D2 - Berm cross sections
- E - Water management infrastructure
- F - Staging and access plan
- G1 - Levee crossing diagram
- G2 - Levee crossing diagram
- G3 - Levee crossing diagram

ANNOUNCEMENTS AND REPORTS

ADJOURN

To the Planning Commission meeting of July 7, 2016 at 7:00 P.M., Board Chambers, 675 Texas Street, Fairfield, CA

MINUTES OF THE SOLANO COUNTY PLANNING COMMISSION

Meeting of June 2, 2016

The regular meeting of the Solano County Planning Commission was held in the Solano County Administration Center, Board of Supervisors' Chambers (1st floor), 675 Texas Street, Fairfield, California.

PRESENT: Commissioners Rhoads-Poston, Walker, and Vice-Chairman Hollingsworth

EXCUSED: Commissioners Castellblanch and Cayler

STAFF PRESENT: Mike Yankovich, Planning Program Manager; Eric Wilberg, Associate Planner; Jim Laughlin, Deputy County Counsel; and Kristine Letterman, Planning Commission Clerk

Vice-Chairman Hollingsworth called the meeting to order at 7:00 p.m. with a salute to the flag. Roll call was taken and a quorum was present.

Approval of the Agenda
The Agenda was approved with no additions or deletions.

Approval of the Minutes
The minutes of the regular meeting of April 7, 2016 were approved as prepared.

Items from the Public
There was no one from the public wishing to speak.

Regular Calendar

Item No. 1

PUBLIC HEARING to consider Lot Line Adjustment Application No. LLA-16-01 and Certificate of Compliance No. CC-16-01 of **Ronald Timothy** to adjust property boundaries between three contiguous parcels located at 8550 Runge Road, Dixon. The properties are entered into an active Williamson Act Contract, within the Exclusive Agriculture "A-160" Zoning District, APN's: 0110-180-110, 120 and 0111-060-010. Lot line adjustments are ministerial projects, and therefore are not held to the provisions and requirements of CEQA per CEQA Section 21080 (b)(1). (Project Planner: Eric Wilberg)

Eric Wilberg gave a brief presentation of the written staff report. The applicant proposes to reconfigure interior property lines of three contiguous parcels under common ownership. The adjustment would realign parcel boundaries to better follow existing layout of agricultural fields on-site. The proposed Lot Line Adjustment does not propose changes to the access routes to

the existing parcels. The adjustment is not expected to generate any additional traffic in the area as no development is being proposed. Each newly configured parcel will have access from an existing public right of way. Staff recommended approval of the application.

Vice-Chairman Hollingsworth opened the public hearing.

The applicant, Ronald Timothy, stated that he is proposing the reconfiguration of the parcels to allow for him to gift the property to his children. He agreed with the findings and conditions as presented in staff's report.

Since there were no further speakers, Vice-Chairman Hollingsworth closed the public hearing.

A motion was made by Commissioner Rhoads-Poston and seconded by Commissioner Walker to approve Lot Line Adjustment Application No. LLA-16-01 subject to the recommended conditions of approval. The motion passed unanimously. (Resolution No. 4638)

ANNOUNCEMENTS and REPORTS

Vice-Chairman Hollingsworth spoke with regard to a meeting he attended on May 4th concerning a new county noise ordinance which is being developed. He noted that there were numerous attendees who took advantage of the opportunity to provide comment. He said the consultant did a good job explaining how the ordinance will be developed and what it will entail.

Mike Yankovich pointed out that a draft of the ordinance will likely come before the commission in late August, early September. He inquired if the commission would be interested in holding a study session before seeing the draft. Commissioner Walker commented that he felt a study session could be beneficial, although he did not feel a special meeting should be called if it could not be included as an item on a regular meeting agenda.

Since there was no further business, the meeting was **adjourned**.

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Agenda Submittal

Agenda #:	1	**Status:**	PC-Regular
Type:	PC-Document	**Department:**	Planning Commission
File #:	PC 16-020	**Contact:**	Eric Wilberg
Agenda date:	6/16/2016	**Final action:**	

Title: Conduct a public hearing to consider Use Permit Application No. U-16-01 of Westervelt Ecological Services who is developing the Tule Red Restoration Project on behalf of the State and Federal Contractors Water Agency (SFCWA) to construct and operate a tidal wetlands restoration project within the Primary Management Area of the Suisun Marsh. The project is located within unincorporated Solano County approximately 9 miles southeast of Suisun City within the Marsh Preservation "MP" Zoning District, APN's 0046-260-030, 070, and 110

The State and Federal Contractors Water Agency is the CEQA lead agency for the project, and Solano County will be acting as a Responsible Agency pursuant to CEQA Guidelines Sections 15050(c) & 15096. The State and Federal Contractors Water Agency approved the project after preparing an Addendum to the Suisun Marsh Plan Habitat Management, Preservation, and Restoration Plan EIS/EIR. The State and Federal Contractors Water Agency filed a Notice of Determination with the Office of Planning and Research as well as the Solano County Clerk following its project approval action. (Project Planner: Eric Wilberg)

Governing body: Planning Commission

District:

Attachments:
A - PC Resolution-draft
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F - Staging and access plan
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G3 - Levee crossing diagram

Date	Ver.	Action By	Action	Result

Published Notice Required? Yes _X__ No ___
Public Hearing Required? Yes _X__ No ___

RECOMMENDATION:

1. Determine Solano County is acting as a Responsible Agency pursuant to CEQA Guidelines Sections 15050(c) & 15096; and

2. Adopt a resolution approving Use Permit U-16-01 to construct and operate the proposed tidal wetlands restoration project pursuant to the mandatory findings and subject to the conditions of approval.

EXECUTIVE SUMMARY:

Westervelt Ecological Services is developing the Tule Red Restoration Project on behalf of the State and Federal Contractors Water Agency and in cooperation with the Department of Water Resources and Bureau of Reclamation. This public-private partnership effort to restore approximately 420 acres of tidal wetlands within the Suisun Marsh is part of the larger Suisun Marsh Habitat Restoration, Preservation, and Management Plan (SMP). The SMP is a comprehensive 30-year plan designed to address various conflicts regarding the use of Marsh resources, with a focus on achieving an acceptable multi-stakeholder approach to habitat conservation and the restoration of tidal wetlands.

ENVIRONMENTAL ANALYSIS:

The State and Federal Contractors Water Agency is the CEQA lead agency for the project, and Solano County will be acting as a Responsible Agency pursuant to CEQA Guidelines Sections 15050(c) & 15096. The State and Federal Contractors Water Agency approved the project after preparing an Addendum to the Suisun Marsh Plan Habitat Management, Preservation, and Restoration Plan EIS/EIR. The State and Federal Contractors Water Agency filed a Notice of Determination with the Office of Planning and Research as well as the Solano County Clerk following its project approval action.

BACKGROUND:

A. **Prior approvals:** None applicable, Williamson Act Contract 1339

B. **Applicant/Owner:**
0046-260-110
Westervelt Ecological Services
c/o Robert Capriola
600 North Market Blvd. Suite 3
Sacramento, CA 95834

Applicant/Owner:
0046-260-030 & 070
California State
c/o State Controllers Office
PO Box 1019
Sacramento, CA 95805

Applicant:
State and Federal Contractors Water Agency (SFCWA)
c/o Byron Buck
1121 L Street, Suite 806
Sacramento, CA 95814

C. **General Plan Land Use Designation/Zoning:**
General Plan: Marsh, Resource Conservation Overlay
Zoning: Marsh Preservation “MP”

D. **Existing Use:** Marsh, seasonal duck hunting

E. **Adjacent Zoning and Uses:**
North: Marsh Preservation, marsh
South: Marsh Preservation, marsh/seasonal duck hunting
East: Marsh Preservation, marsh/seasonal duck hunting, Grizzly Island Wildlife Area

West: Marsh Preservation, marsh, Grizzly Bay

ANALYSIS:

A. Environmental Setting:

The proposed project is located within unincorporated Solano County within the Suisun Marsh, adjacent to Grizzly Bay, approximately 9 miles southeast of Suisun City. The property on which the project is proposed is currently, and has been historically, managed as the Tule Red Duck Club. It is located adjacent to the Grizzly King Duck Club, the Department of Fish & Wildlife Grizzly Island Wildlife Area, and Grizzly Bay.

The site consists of approximately 2,000 acres owned by Westervelt Ecological Services (WES) and 70 acres owned by California Department of Fish and Wildlife (CDFW). Within the WES property boundary, approximately 1,600 acres lie within the intertidal and sub-tidal zone of Grizzly Bay. The area proposed to be restored to tidal influence is comprised of a crescent of land roughly 1,500 feet wide and 8,000 feet long, totaling approximately 420 acres currently managed and maintained as a duck club. The vast majority of the site is managed marsh, with a small amount of tidal marsh at the northern end and along the bay side margin of a natural berm. Upland habitat is found along the uppermost slopes and tops of the levees along the eastern edge of the Project site.

The natural berm is approximately 6 feet in elevation on the western edge of the property, where daily tidal accretion occurs. The site gradually slopes eastward to an elevation of 3 to 4 feet; the eastern boundary is defined by levees established for water management on the adjacent Grizzly King Duck Club and Grizzly Island Wildlife Area. A majority of the project area is currently disconnected from direct tidal influence, and water levels are managed on a seasonal basis for waterfowl hunting. The site is typically kept flooded at a stable water level from October to February for duck hunting, then repeatedly drained and re-flooded through the spring to leach salts from the soil. The site is fully drained through summer and early fall for disking, mowing and maintenance activities.

Vegetation within the Project site consists of various perennial wetland types alternately dominated by cattails (*Typha angustifolia*), tules (*Schoenoplectus californicus, S. acutus*), common reed, pickleweed (*Salicornia pacifica*), and saltgrass (*Distichlis spicata*). The road margins support ruderal vegetation composed mainly of perennial pepperweed (*Lepidium latifolium*) and poison hemlock (*Conium maculatum*) with occasional mature coyote brush shrubs (*Baccharis pilularis*), wild radish (*Raphanus sativus*), and annual grasses (*Bromus diandrus, B. hordeaceus,* and *Hordeum murinum*).

The surrounding properties are very similar to the project site; properties to the east and south are utilized for duck hunting. The land to the north is tidal marsh. The site is bound to the west by Grizzly Bay.

B. Project Description:

Westervelt Ecological Services is developing the Tule Red Restoration Project on behalf of the State and Federal Contractors Water Agency and in cooperation with the Department of Water Resources and Bureau of Reclamation. This public-private partnership effort to restore approximately 420 acres of tidal wetlands within the Suisun Marsh is part of the larger Suisun Marsh Habitat Restoration, Preservation, and Management Plan (SMP). The SMP is a comprehensive 30-year plan designed to address various conflicts regarding the use of Marsh resources, with a focus on achieving an acceptable multi-stakeholder approach to habitat conservation and the restoration of tidal wetlands.

The project would restore approximately 420 acres of existing managed wetlands to tidal habitat. The project would be designed to be a naturally self-regulating system that would not require active management or intervention, which is the intent of the SMP for restoration projects. The project would provide four primary habitat features: 1) a breach of the natural levee at the northern part of the project area to allow for full daily

tidal exchange through the interior of the project site, 2) a network of distribution channels to convey water across the marsh plain, 3) a series of tidal pans and basins to retain water for periods of up to 2 weeks and maximize aquatic food production, and 4) a continuous habitat berm along the eastern perimeter of the property to provide a more gradual transition from marsh to upland habitat and maintain the existing levels of flood protection for adjacent properties.

Attachment C shows the conceptual plan for the proposed project, and Attachments D1 and D2 show a cross section of the proposed habitat berm. The four habitat features would support the interrelated resources and functions described in the SMP.

The proposed project would support approximately 460 acres of tidal wetlands and associated jurisdictional habitats and approximately 18 acres of uplands (compared with approximately 54 acres of existing tidal wetlands and 10 acres of uplands). This would represent a gain in tidal wetlands of approximately 334 acres. Implementation of the proposed project would result in a permanent net loss of approximately 7.5 acres of wetlands or other waters of the United States. The proposed project would also include demolishing several existing structures within the project site and removing the on-site northern and southern water control structures, as well as modifying the existing CDFW drain to improve dissolved oxygen (DO) on the project site. Attachment E shows the location of the existing CDFW drain and other water control structures on the project site.

The existing CDFW drain outfall allows CDFW to pump discharged drain water from the managed wetlands of the Grizzly Island Wildlife Area onto the project site. WES has collected continuous water quality data using in situ monitors at this location; during certain conditions, the discharge water has low DO levels. When this water is concentrated in channels, it has the potential to negatively affect aquatic life. The proposed project includes two approaches for resolving the low DO levels: retrofit the existing outlet pipe or construct a pooling area. Retrofitting the existing drainage pipe would consist of fitting a spray aeration device on the existing pipe to aerate water as it drains and increase the DO levels. Constructing a pooling area would consist of excavating an area around the existing pipe to control discharges of CDFW drain water onto the project site. As part of this approach, WES would conduct continuous water quality monitoring using in situ monitors to determine the effectiveness of the spray aeration fitting. The water would be retained or discharged, depending on tides and the DO content of the drain water.

Construction

The proposed project would restore the project site to tidal wetlands. Construction activities to restore the project site, including phasing, scheduling, and the workforce and equipment required are described below.

Phasing and Schedule

This section describes the proposed phasing and schedule, workforce and equipment required, and activities that would occur during the two phases of construction to restore the existing managed wetlands to tidal habitat. Phase 1 would consist of site preparation, grading, revegetation, and associated activities on the land side of the natural berm, including modification of the CDFW drain. After Phase 1 is complete, the project site would be managed for 1 to 2 years to revegetate the disturbed soils and thereby minimize potential erosion during the subsequent Phase 2 when the site would be exposed to tidal action. Phase 2 would consist of demolishing several on-site structures and breaching the natural berm to restore tidal action to the project site.

Phase 1 is scheduled to begin in 2016, pending receipt of project approvals, associated permits and authorizations, and funding. All construction activities would occur on the managed marsh portion of the site and landward of the existing natural berm. Depending on soil conditions within the site and when permits are issued, work could start as early as June 1 and may continue until October 15 or the onset of the rainy season. Depending on permit requirements and allowable hours of operation, shift work and/or weekend work may take place. However, given potential working conditions and the different activities that would need to

occur on any given day, it is reasonable to assume for the purposes of analysis that work would typically occur 8 to 10 hours a day, 5 days a week, for an estimated duration of 40 to 80 working days under Phase 1.

Phase 2 construction is scheduled to occur in 2017 or 2018 and would consist of demolishing several on-site structures, removing the two existing water control structures (combination gates and bulkheads), and excavating the primary tidal channel through the bayside berm out into the mudflats to allow for tidal exchange. Depending on permit requirements and allowable hours of operation, shift work and/or weekend work may take place. However, given potential working conditions and the different activities that would need to occur on any given day, it is anticipated work would typically occur 8 hours a day, 5 days a week, for a period of 50 working days within a 3-month timeframe under Phase 2. Demolishing the on-site structures would generally occur between the beginning of September and middle of October. Demolition would occur prior to the breach and removal of the water control structures, and would take several weeks to complete. In-water activities related to breaching the exterior natural berm would be conducted during the months of September through November and take approximately 1 week to complete. Removal of the two water control structures would take approximately 2 weeks. The timing of all Phase 2 in-water activities would be consistent with the special-status fish species work windows (September 1 through November 30 for delta smelt and August 1 through November 30 for salmonids).

Workforce and Equipment

Temporary construction staffing for the proposed project would consist of approximately 10 to 20 personnel during Phase 1 and fewer personnel during Phase 2. Contractors working on-site would be properly trained and certified for construction activities, best management practices, and recognizing special-status plants and animals that may be encountered during construction.

Restoration of the project site would require many different equipment types. Conditions in the field at the time of construction would influence the type of equipment that would be best suited for the work and ultimately would be chosen by the construction contractor. Equipment would be delivered to the project site by flatbed truck and transported to the work areas via existing access roads.

Six different types of equipment are anticipated to be used through the duration of Phase 1 (40 to 80 working days). The mix and number of pieces of equipment that would actually be used would depend on the activities that would occur within the phase and the conditions of the project site. The following types of equipment are expected to be used during Phase 1: scraper, dozer, excavator, grader, backhoe, front-end loader, and dump truck/water truck. All scrapers, dozers, and excavators (e.g., the high horsepower equipment) used during Phase 1 would have a Tier 3 engine or greater.
Five different types of equipment are anticipated to be used through the duration of Phase 2 (50 working days). The mix and number of pieces of equipment actually be used would depend on the activities that would occur within the phase and the conditions of the site. The following types of equipment are expected to be used during Phase 2: dozer, excavator, backhoe, front-end loader, and dump truck/water truck. Dump trucks would be required for hauling away debris generated through the demolition of the structures. All scrapers, dozers, and excavators (e.g., the high horsepower equipment) used during Phase 2 would have a Tier 3 engine or greater.

Phase 1

Phase 1 consists of site preparation, earthwork, modification of the CDFW drain, and site stabilization. Only the site preparation, earthwork, and the second component to modifying the CDFW drain would require active construction and construction equipment. Site stabilization includes seeding and mulching the upland areas and managing water to facilitate revegetation within the marsh interior prior to breaching the exterior natural berm. Phase 1 work would be conducted on the WES parcel and the CDFW parcel at the same time. Phase 1 is scheduled to begin in 2016, pending receipt of project approvals, associated permits and authorizations, and funding.

Site Preparation

Several site preparation activities would occur on-site as part of Phase 1. These activities are either currently occurring on-site or part of baseline management or would be part of the proposed project to prepare the site for Phase 2. Site preparation activities that are not part of baseline management include improving existing access roads and setting up a construction management center and equipment staging area(s), including a location for managing hazardous materials. Attachment F shows the approximate location of staging areas. Site preparation activities that are currently part of baseline management include the removal of vegetation. The total footprint of all excavations, staging areas, access roads, and fill areas, including buffers, is approximately 150 acres.

Prior to earthwork, the site would be prepared by clearing existing vegetation, using standard practices that are currently used for managed wetlands within Suisun Marsh and have been used on the project site. Biologists would conduct pre-construction surveys for special-status species before vegetation clearing to ensure no listed species are present. Vegetation removal would first be accomplished by using mowers towed behind wheeled tractors and bulldozer tractors, as used under baseline conditions. Depending on the slope, an articulated arm powered by an excavator may be used to remove vegetation.

Existing levee roads would be utilized to access the project site from Grizzly Island Road. Equipment travel routes and excavated material transport would occur primarily along temporary access roads within the cut-and-fill footprint of the project. The final decision on access and haul routes would be reached through collaboration among the contractor and design team, in compliance with applicable regulatory permitting requirements, prior to construction.

Approximately four staging areas and one Construction Management Center (CMC) would be established to support project implementation. Each staging area would be approximately 1 acre in size; the CMC would be established at an existing gravel parking lot and also measure approximately 1 acre. Because the temporary staging areas would be located within the habitat berm footprint, they would be covered over successively by fill as work moves along the length of the project.

Earthwork

Earthwork (grading, excavation, and redistribution of material) would be necessary to construct the tidal channel network, create a series of tidal pannes and basins, and construct the habitat berm. Prior to earthmoving, the topsoil layer (less than 6 inches) with detritus from mowing, would be stripped back by bulldozer with blade and stockpiled in the construction areas. This would be used later as mulch for exposed mineral soils. Grading includes excavating tidal channel networks and basins throughout the site and transporting excavated materials to construct the habitat berm. Equipment utilized may include a scraper, bulldozer, excavator, and grader.

Overall, grading for the new tidal channels and depressions would require excavation of up to 300,000 cubic yards of soil within 150 acres of the project site. The proposed project is designed as a balanced cut-and-fill project. For the purposes of this analysis, no soil would be brought to the site or hauled off the site. Material excavated from the primary tidal channel (and from the tidal pannes and basins) would be transported within the project site to construct the habitat berm, which would have a gradual and varying slope (10:1 to 50:1); primarily wetland vegetation would be grown on the berm. Material would be picked up and transported within the project site, then spread with a variety of equipment, depending on the moisture content of the material and the haul distance within the project site. Additionally, some of this excavated material would first be used to improve and/or construct staging areas and haul routes throughout the project site. Material excavated from the lower order tidal channels would be side cast in a diffuse pattern or mounded in the area immediately surrounding the channel network, allowing wetland vegetation to colonize the spoils within a single growing season.

Modifying CDFW Drain

WES would implement an approach to improving the low DO experienced at the CDFW drain. This would involve two components: (1) installation of a spray aeration structure on the existing outlet pipe and (2) constructing a pooling area. WES would retrofit the existing drain outlet pipe where it enters the Tule Red property with a spray aeration fitting, engineered to bring the DO in the drain discharge water to within ecologically acceptable tolerances. WES would conduct continuous downstream water quality monitoring using in-situ monitors. Retrofitting the existing outlet pipe of the CDFW drain pump with a spray aeration structure would require no earthwork or construction equipment. Additionally, a pooling area would be constructed to control the discharge of the CDFW drain water into the restoration area. The new pooling area would be created downstream of the existing discharge by constructing a new crossing between the two existing levees. The crossing would include a new water control structure that would allow water to be retained within the pooling area or discharged into the restoration site, depending on tides and DO content of the drain water. This would allow water to be released upon outgoing tides, ensuring a well-mixed water column and eliminating any low DO concentrations. This component would require construction of a road, approximately 10 feet wide, to connect both levees. The amount of fill associated with the road and levee would be less than 0.1 acre (Attachments G1 - G3 show the locations of the new road crossing and levee cross sections). Construction of the road and levee would be included in all permit applications.

Site Stabilization

Upon completion of grading and excavation of marsh plains and tidal channels but prior to construction of the tidal connection, the site would be managed for 1 to 2 years to encourage revegetation and soil stabilization. Land management activities during the site stabilization period would include vegetation management, *Phragmites* control, and the installation of tules and other plants to help establish native vegetation on the site. These land management activities the same as the land management activities associated with managed marshland management activities for wetland maintenance activities within Suisun Marsh. Land within the project restoration area would continue to rely on RGP 3 authorization for land management activities until the site is breached, or approximately 1 to 2 years after project initiation.

Phase 2

Phase 2 consists of demolishing several onsite structures and then breaching the natural berm and removing the north and south water control structures. Phase 2 is expected to occur in 2018, but could occur earlier (2017), depending on vegetation establishment and invasive species management.

Demolition of Structures

Existing structures, including the current duck club residence, shop areas, and viewing platform, would be demolished as part of Phase 2, prior to breaching the existing natural berm. The use of the project site has changed over time, and activities that were dependent on these structures no longer occur at the project site or in the buildings; therefore, the buildings would be demolished because they are no longer in use. Five existing structures, totaling approximately 3,600 square feet, would be demolished. These structures are primarily constructed of wood, and while there is no known history of bat use, there is a history of birds nesting on the structures. As such, pre-demolition surveys would be required prior to the demolition to ensure no bat or migratory bird presence. These pre-demolition surveys would be conducted by a qualified biologist, and would occur up to 3 days prior to demolition. The survey would occur in conjunction with nesting bird surveys. Windows and doors of the structures would be kept closed and sealed prior to demolition through the summer to prevent bats, migratory birds, or other species from inhabiting or roosting in the interior of the structures. Debris piles, material stored in and around the buildings, decorative panels and building furnishings will be removed prior to the preconstruction survey to ensure full survey access. If no live bats or sign (e.g., guano, staining, prey remains, bat carcasses) are found, and if no nests of protected bird species are active on or within the existing structures the structures may be demolished at any time. If live bats or indications of bat

use are found, or if active protected bird nests are found, the demolition of the structures would be limited to the beginning of September to the middle of October, at which time the survey procedure described would be repeated, and demolition would be postponed until colonial bats or special status bats are evicted or leave of their own volition. Demolition would take several weeks prior to breaching the natural berm. Much of the work would be done by hand and some materials (i.e., wood) would be salvaged. It would require the same type of equipment used for breaching the existing natural berm (i.e., excavator, backhoe, dump truck, and grader). Less than 20 dump trucks (approximately 40 trips) would be required over a period of several weeks.

Breach of the Natural Berm

A permanent tidal connection would be established during Phase 2 by breaching the existing natural berm on the project site to allow for full daily tidal exchange through the interior of the project site. The breach would occur approximately 1 to 2 years after the creation of habitat features (i.e., tidal channel network, a series of tidal pannes/basins, habitat berm) and site stabilization efforts.

The breach would be constructed by a long-reach excavator operating from the edge of the created channel. Side-cast material from the breach would be placed along the habitat berm. The breach would be conducted during low tide of a neap tidal cycle so that the first tidal action occurring from the breach would deliver any loose sediment into the site (on a rising tide) and not deliver them into Grizzly Bay. This would minimize initial sediment scour. Complete construction of the breach would take a maximum of 5 days. The breach would be approximately 50 feet wide and located at the north end of the project site. By maintaining isolation between the restoration area and Grizzly Bay during the first phase of construction (i.e., not breaching the levee during early project phases), the work area would remain as dry as possible during earthwork. This method would minimize impacts on aquatic organisms and the transport of silt and construction debris/contaminants into adjacent waterways. In addition, the existing north and south water control structures would be removed from the project site under Phase 2. This would take approximately 14 days and require several pieces of equipment, including an excavator, backhoe, dump truck, and grader.

Site Restoration

The temporary staging areas would all be located within the habitat berm footprint and, as such, covered over successively by the habitat berm as work moves along the length of the project from north to south. The habitat berm would be seeded following completion.

The CMC and the access road to the clubhouse area (existing gravel road) would receive a top dressing of gravel at project completion, returning them to pre-project conditions. The levee roads would receive a final top dressing of fill at the very end of the project to bring their elevations to pre-project elevations and compensate for any settling or compaction from vehicle travel during the construction phase. The levee road between Tule Red and Grizzly King will be seeded with a mix of perennial and annual native and naturalized grasses.

Project Site Monitoring and Management

The project would use an adaptive management approach with objective-driven monitoring as intended by the SMP (*Adaptive Management and Monitoring Plan*, of the SMP EIS/EIR). Pre-construction monitoring would take place for one to two years prior to breaching (pre-breach conditions). Post-breach monitoring would occur during the first five years after breaching (Interim Management Period) for at least three of the five years (e.g., Year 1, 3, and 5). The effectiveness monitoring program would be periodically evaluated during the first few years and adjustments would be made as necessary, based on interim findings and feedback on methods. Monitoring metrics would address physical habitat, hydrological regime and water quality, vegetation, aquatic food web (primary and secondary producers), fish community, and wetlands and vegetation. The actual schedule and sampling design (location and number of sampling sites and events) would be tailored to the project needs prior to construction, and in coordination with IEP and other regional monitoring programs. Fish

monitoring would be coordinated with regional monitoring by IEP and UC Davis Suisun Marsh Fish Study, and other agency programs.

Once the project site is restored, habitat establishment would occur, starting in approximately 2018. Limited maintenance, monitoring, and management tasks would occur during this time, including development of tules and other native marsh vegetation, weed control within the habitat berm, inspection of erosion or settling with respect to habitat level, and patrolling for trash and trespass. Long-term management of the project area would begin once the habitat berm vegetation is established. Long-term management would include all habitat establishment activities, periodic biological monitoring of the project area, and periodic mapping of the marsh and channel. The breach location is expected to reach equilibrium at a width of approximately 120 feet during this time.

Ultimately, SFCWA is proposing a transfer of the project site to CDFW to be managed as part of the Grizzly Island Wildlife Area. CDFW would manage the restored property in perpetuity as part of the Grizzly Island Wildlife Area. Public access would be regulated through the Grizzly Island Wildlife Area public use plan.

Project Objectives

The proposed project would partially fulfill the 8,000-acre tidal restoration obligations of the Fish Restoration Program Agreement (FRPA), satisfying the requirements of the Service's 2008 Biological Opinion for Delta Smelt, the 2009 NMFS Biological Opinion for the Coordinated Operations of the State Water Project (SWP) and the Federal Central Valley Project (CVP), and the Longfin Smelt Incidental Take Permit for the SWP. The proposed project is also identified as a priority restoration project under the California EcoRestore program. The objectives of the proposed project are:

- Enhance regional food-web productivity and export to Grizzly Bay in support of delta smelt and longfin smelt recovery
- Provide rearing habitats for out-migrating juvenile salmonids
- Provide rearing, breeding, and refugia habitats for a broad range of other aquatic and wetland-dependent species that utilize or depend on the combination of brackish aquatic/tidal marsh habitat
- Provide ecosystem functions associated with the Delta brackish aquatic, tidal marsh, and upland interfaces that these species required
- Provide topographic variability to allow for habitat succession and resilience against future climate change and sea level rise

C. Environmental Determination:

The State and Federal Contractors Water Agency (SFCWA) is the California Environmental Quality Act (CEQA) Lead Agency for the project, and Solano County will be acting as a Responsible Agency pursuant to CEQA Guidelines Sections 15050(c) & 15096.

The SFWCA approved the Tule Red project after preparing an Addendum to the *Suisun Marsh Habitat Management, Preservation, and Restoration Plan Environmental Impact Statement/Environmental Impact Report* (SMP EIS/EIR). Subsequently, the SFWCA filed a Notice of Determination with the Office of Planning and Research as well as the Solano County Clerk following its project approval action.

The SMP EIS/EIR was certified by the California Department of Fish and Wildlife (CDFW) in December 2011 and the Bureau of Reclamation (Reclamation) and the U.S. Fish and Wildlife Service (Service) in April 2014. The Suisun Marsh Plan (SMP) provides a comprehensive 30-year plan for management of activities within Suisun Marsh (Marsh), including tidal restoration activities. The SMP EIS/EIR programmatically evaluated the conversion of 5,000 to 7,000 acres of managed wetlands to tidal habitat over the next 30 years. The proposed project would be the first tidal restoration project within the Marsh that was planned for by the SMP and programmatically evaluated in the SMP EIS/EIR.

D. General Plan Consistency:

The project site is designated Marsh by the Solano County General Plan Land Use Diagram which provides for the protection of marsh and wetland areas, and for the restoration of historical tidal wetlands (General Plan, Table LU-5). In addition, General Marsh Policies RS.P-8 and RS.P-9 encourage restoration of historic marshes to wetland status, either as tidal marshes or managed wetlands. When managed wetlands are no longer used for waterfowl hunting, restore them as tidal marsh.

The site is also identified with a Resource Conservation Overlay which protects areas of the County with special resource management needs. The Addendum prepared for the project has evaluated a number of environmental resources, including potential impacts to Biological Resources, Land Use, and Water Quality. Mitigation Measures reducing impact to less than significant levels have been adopted in the Addendum where appropriate.

E. Zoning Consistency:

The project site is located within the Marsh Preservation "MP" Zoning District. As identified in Section 28.52 of the County Zoning Ordinance, the restoration of tidal, managed, and seasonal wetlands is a conditionally permitted land use within the MP District.

F. Solano County Policies and Regulations Governing the Suisun Marsh

The County's Policies and Regulations Governing the Suisun Marsh consolidate the policies and regulation contained in the County's Local Component of the Suisun Marsh Local Protection Program as certified by BCDC. The Resource Conservation and Open Space Elements (Chapter 4) details benefits of the Suisun Marsh at the local, state, and national levels and also sets forth policies for wildlife habitat management and preservation. The project is consistent with the following Suisun Marsh policy:

5. Where feasible, historic marshes should be returned to wetland status, either as tidal marshes or managed wetlands. If, in the future, some of the managed wetlands are no longer needed for waterfowl hunting, they should also be restored as tidal marshes.

G. Williamson Act Consistency

A portion of the land (APN 0046-260-110) is currently under Williamson Act Contract No. 1339. The California Land Conservation Act of 1965 provides that agricultural preserves may be established that consist of land devoted to open-space. The project will retain the open-space use of the property; therefore no changes to the contract are necessary.

H. Agency Review:

As part of the Addendum preparation and public notice, the following agencies were involved in the project review:

Department of Conservation
Department of Fish and Wildlife - Region 3
Delta Protection Commission
Office of Historic Preservation
Department of Parks and Recreation
Central Valley Flood Protection Board
San Francisco Bay Conservation and Development Commission
Department of Water Resources

Caltrans
Division of Aeronautics - District 4
Air Resources Board
Regional Water Quality Control Board - Region 2
Department of Toxic Substances Control
Native American Heritage Commission
Public Utilities Commission
Delta Stewardship Council

FINDINGS:

Staff recommends that the Planning Commission make the following findings in support of approving Use Permit U-16-01:

1. **The establishment, maintenance, or operation of the proposed use is in conformity with the County General Plan with regard to traffic circulations, population densities and distribution, and other aspects of the General Plan.**

   The establishment and operation of the Tule Red tidal, managed, and seasonal wetlands restoration project is a conditionally permitted Resource Conservation land use within the Marsh Preservation "MP" Zoning District and consistent with the Marsh General Plan Land Use Designation. General Plan Marsh Policies RS.P-8 and RS.P-9 encourage restoration of historic marshes to wetland status, either as tidal marshes or managed wetlands. When managed wetlands are no longer used for waterfowl hunting, restore them as tidal marsh.

2. **Adequate utilities, access roads, drainage and other necessary facilities have been or are being provided.**

Access to the project is provided via encroachment off Grizzly Island Road. Temporary utilities including water, septic, and electrical power would be utilized during construction of the project. Once constructed, the project would be unmanned and does not require permanent utilities.

3. **The subject use will not, under the circumstances of the particular case, constitute a nuisance or be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in or passing through the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.**

   The State and Federal Contractors Water Agency is the CEQA lead agency for the project, and Solano County will be acting as a Responsible Agency pursuant to CEQA Guidelines Sections 15050(c) & 15096. The State and Federal Contractors Water Agency approved the project after preparing an Addendum to the Suisun Marsh Plan Habitat Management, Preservation, and Restoration Plan EIS/EIR. The State and Federal Contractors Water Agency filed a Notice of Determination with the Office of Planning and Research as well as the Solano County Clerk following its project approval action.

RECOMMENDED CONDITIONS OF APPROVAL:

General and Permit Term

1. The Tule Red tidal, managed, and seasonal wetlands restoration project shall be established in accord with the application materials and development plans for Use Permit U-16-01, filed February 5, 2016,

by Westervelt Ecological Services, and as approved by the Solano County Planning Commission.

This permit shall be approved for an indefinite term; however subject to periodic renewal every five (5) years. A renewal may be granted if said request is received prior to the permit renewal date of June 16, 2021 and the use is found to be in compliance with the permit terms and conditions at that time. Prior to permit renewal, the applicant shall submit an application for renewal along with applicable renewal fees as may be set by the County Board of Supervisors.

No additional uses (including outdoor storage), new or expanded buildings shall be established or constructed beyond those identified on the approved site plan without prior approval of a new use permit, minor revision, or amendment to the permit and further environmental review as determined by the Department of Resource Management.

2. The applicant shall prevent offensive noise, odor, dust, fumes, smoke, and/or vibration; shall be located that generated traffic will not constitute a hazard or nuisance to surrounding property.

Building and Safety Division

3. Prior to any construction or improvements taking place, a building permit application shall first be submitted as per Section 105 of the 2013 California Building Code or the latest edition of the codes enforced at the time of building permit application. "Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit."

Public Works - Engineering

4. The applicant shall secure and comply with the requirements of a grading permit for the construction of the proposed project.

Best Management Practices & Mitigation Measures Identified in CEQA Addendum

Air Quality

5. The permittee shall implement following air quality control practices:

- Hydroseed with native or noninvasive species appropriate to that specific location or apply (nontoxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation with native or noninvasive species appropriate to that specific location in disturbed areas as quickly as possible.
- Maintain properly tuned engines.
- Minimize the idling time of diesel-powered construction equipment to 2 minutes.
- Use alternative-powered (e.g., hybrid, compressed natural gas, biodiesel, electric) construction equipment.
- Use add-on control devices such as diesel oxidation catalysts or particulate filters.
- Require all contractors to use equipment that meets California Air Resources Board's most recent certification standard for off-road heavy-duty diesel engines.

6. Construction activity shall be limited so that construction emissions do not exceed the BAAQMD's construction threshold for NO_X. Such measures include, but are not limited to, implementing off road equipment mitigation, including installing 1st tier diesel particulate filters (DPFs), and installing diesel oxidation catalysts to reduce NOx emissions by 40%.

7. The permittee shall implement the following BAAQMD standards:

- Cover all haul trucks transporting soil, sand, or other loose material off-site.
- Remove all visible mud or dirt track-out onto adjacent public roads.
- Minimize idling times 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.
- Maintain all construction equipment 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 contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Standard Design Features and Construction Practices

8. The permittee shall implement the following:

- Stop work immediately if a conflict with a utility facility occurs and contacting the affected utility to (1) notify it of the conflict, (2) aid in coordinating repairs to the utility, and (3) coordinate to avoid additional conflicts in the field.
- Implement BMPs to minimize any disease-carrying mosquitoes and threats to public health if it is found that project components pose a threat to public health.
- Control construction equipment access and placement of fill to maintain acceptable loading based on the shear strength of the foundation material.
- Minimize degradation of wetland habitats where feasible by minimizing the disturbance footprint.
- Implement BMPs and minimization measures to minimize water quality impacts such as temporary turbidity increases. See Erosion and Sediment Control Plan below.
- Inspect all equipment for oil and fuel leaks every day prior to use. Equipment with oil or fuel leaks will not be used within 100 feet of wetlands.
- Require the construction contractor to remove all trash and construction debris after construction and to implement a revegetation plan for temporarily disturbed vegetation in the construction zones.
- Maintain waste facilities. Waste facilities include concrete wash-out facilities, chemical toilets, and hydraulic fluid containers. Waste will be removed to a proper disposal site.

Access Point/Staging Areas

9. The permittee shall implement the following:

- Establish staging areas for equipment storage and maintenance, construction materials, fuels, lubricants, solvents, and other possible contaminants in coordination with resource agencies.
- Staging areas shall have a stabilized entrance and exit and will be located at least 100 feet from bodies of water unless site-specific circumstances do not provide such a setback, in which case the maximum setback possible will be used. If an off-road site is chosen, qualified biological

and cultural resources personnel will survey the selected site to verify that no sensitive resources would be disturbed by staging activities. If sensitive resources are found, an appropriate buffer zone will be staked and flagged to avoid impacts. If impacts on sensitive resources cannot be avoided, the site will not be used. An alternate site will be selected.

- Where possible, no equipment refueling or fuel storage will take place within 100 feet of a body of water. Vehicle traffic will be confined to existing roads and the proposed access route. Ingress and egress points will be clearly identified in the field using orange construction fence. Work will not be conducted outside the designated work area.

Erosion and Sediment Control Plan

10. The permittee shall implement the following:

- Prepare and implement an erosion and sediment control plan to control short-term and long-term erosion and sedimentation effects and to restore soils and vegetation in areas affected by construction activities. The plan will include all the necessary local jurisdiction requirements regarding erosion control and will implement BMPs for erosion and sediment control as required.
- Develop an erosion control plan to ensure that during rain events construction activities do not increase the levels of erosion and sedimentation. This plan will include the use of erosion control materials (baffles, fiber rolls, or hay bales; temporary containment berms) and erosion control measures such as straw application or hydroseeding with native grasses on disturbed slopes, and floating sediment booms and/or curtains to minimize any impacts that may occur from increased mobilization of sediments.

Stormwater Pollution Prevention Plan

11. The permittee shall implement the following: Develop a stormwater pollution prevention plan (SWPPP) prior to construction. The objectives of the SWPPP will be to (1) identify pollutant sources associated with construction activity and project operations that may affect the quality of stormwater and (2) identify, construct, and implement stormwater pollution prevention measures to reduce pollutants in stormwater discharges during and after construction. The project proponents and/or their contractor(s) will develop and implement a spill prevention and control plan as part of the SWPPP to minimize effects of spills of hazardous, toxic, or petroleum substances during construction of the project. Implementation of this measure will comply with state and federal water quality regulations. The SWPPP will be kept on site during construction activity and during operation of the project and will be made available upon request to representatives of the Regional Water Quality Control Board (Regional Water Board). The SWPPP will include but is not limited to:

a. A description of potential pollutants to stormwater from erosion.
b. Management of dredged sediments and hazardous materials present on site during construction (including vehicle and equipment fuels).
c. Details of how the sediment and erosion control practices comply with state and federal water quality regulations.
d. A description of potential pollutants to stormwater resulting from operation of the project.

Hazardous Materials Management Plan

12. The permittee shall implement the following:

- The SWPPP will include a hazardous materials spill plan. The plan will describe the actions that will be taken in the event of a spill. The plan also will incorporate preventive measures to be implemented (such as vehicle and equipment staging, cleaning, maintenance, and refueling)

and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site immediately will cease until the contractor has contained and mitigated the spill. The contractor will immediately prevent further contamination, notify appropriate authorities, and mitigate damage as appropriate. Adequate spill containment materials, such as oil diapers and hydrocarbon cleanup kits, will be available on site at all times. Containers for storage, transportation, and disposal of contaminated absorbent materials will be provided on the project site.

- Do not use any hazardous material in excess of reportable quantities, as specified in Title 40 Code of Federal Regulations (CFR) Part 355, Subpart J, Section 355.50, unless approved in advance by the Office of Emergency Services (OES), and will provide to the OES in the annual compliance report a list of hazardous materials contained at a project site in reportable quantities. The reporting of hazardous materials in excess of reportable quantities of Title 40 CFR Part 355 is required annually to Solano County Environmental Health Services Division as the Solano County Certified Unified Program Agency (CUPA).

Mosquito Abatement Best Management Practices

13. The permittee shall develop a management program consistent with Marsh-wide management actions for the control of mosquitoes. If necessary, implement a sampling and treatment program for any depressions that would retain tidal water.

Cultural Resources

14. The permittee shall implement the following:

- Prior to ground-disturbing activities in restoration areas, SFCWA will conduct a cultural resources inventory of the restoration area, according to the standards cited in the SMP EIS/EIR (CUL-MM-1 and CUL-MM-5), including:
- The implementing regulations for Section 106 of the NHPA (36 CFR 800.4).
- The State CEQA Guidelines (14 CCR 15064.5[a]).
- Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 Federal Register [FR] 44716-44742).
- The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act (including the Guidelines for the Treatment of Cultural Landscapes).
- Applicable NRHP bulletins and National Park Service technical briefs (Andrus and Shrimpton 1997; Birnbaum 1994; McClellan et al. 1995).

15. If any cultural resources are determined to be historic properties and ground-disturbing activities are found to result in adverse effects, the Corps or SFCWA will resolve the effects in accordance with Section 106 of the NHPA or CEQA, as applicable.

16. If no cultural resources are identified in specific restoration areas, or identified resources are not determined to be significant, no additional cultural work is required.

17. If any previously unknown historic or archeological artifacts are discovered while accomplishing the authorized work, the landowner must stop work within 100 feet of the find immediately and notify the SFCWA and the Corps. All construction personnel will leave the area. Vehicles and equipment will be left in place until a qualified archaeologist identifies a safe path out of the area. The on-site supervisor will flag or otherwise mark the location of the find and keep all traffic away from the resource. The on-site supervisor immediately will notify the lead state or federal agency of the find. The activity is not authorized until the requirements of Section 106 of the NHPA have been satisfied.

18. If human remains of Native American origin are discovered during ground disturbing activities on non-federal land, SFCWA or the Corps must comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (NAHC) (PRC 5097). If human remains are discovered or recognized in any location other than a dedicated cemetery, SFCWA or the Corps will not allow further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

a. the Solano County coroner has been informed and has determined that no investigation of the cause of death is required; and
b. if the remains are of Native American origin, the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98; or

1. The NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 48 hours after being notified by the NAHC.
2. If any previously unknown historic or archeological artifacts are discovered while accomplishing the authorized work, the landowner must stop work immediately and notify the Corps. The activity is not authorized until the requirements of Section 106 of the NHPA have been satisfied.

Biological Resources - General

19. No firearms (except for federal, state, or local law enforcement officers and security personnel) will be permitted at the project site to avoid harassment, killing, or injuring of wildlife.

20. No pets will be permitted at the project site to avoid harassment, killing, or injuring of wildlife.

21. Native vegetation trimmed or removed on the project site will be stockpiled during work. After construction activities, removal of temporary mats and construction-related materials, and application of native and naturalized species seed mix have been completed, stockpiled native vegetation will be reapplied over temporarily disturbed wetlands to provide temporary soil protection and as a seed source.

22. Vegetation shall be removed under the supervision of a qualified biologist approved by DFW and USFWS. If a mouse of any species is observed within the areas being removed of vegetation, DFW and USFWS shall be notified. Vegetation removal may begin when no mice are observed and shall start at the edge farthest from the salt marsh or the poorest habitat and work its way toward the salt marsh or the better salt marsh habitat.

23. Removal of vegetation in wetland habitat will be conducted with a qualified biological monitor present. This monitor will watch for special-status wildlife species and temporarily stop work if special-status species are encountered. Wildlife will be allowed to escape before work is resumed. Monitors with the appropriate qualifications to handle special-status species will be allowed to move special-status species to safe locations as permitted by their authorizations.

24. Temporarily affected wetlands will be restored by removing construction related debris and trash. Affected areas will be seeded with a native and naturalized seed mix.

Worker Training

25. The Service-approved biologist will provide training to field management and construction personnel on

the importance of protecting environmental resources. Communication efforts and training will take place during preconstruction meetings so that construction personnel are aware of their responsibilities and the importance of compliance.

26. Construction personnel will be educated on the types of sensitive resources located in the project area and the measures required to avoid impacts on these resources. Materials covered in the training program will include environmental rules and regulations for the specific project and requirements for limiting activities to the construction right-of-way and avoiding demarcated sensitive resources areas. Training seminars will educate construction supervisors and managers on:

i. The need for resource avoidance and protection.
ii. Construction drawing format and interpretation.
iii. Staking methods to protect resources.
iv. The construction process.
v. Roles and responsibilities.
vi. Project management structure and contacts.
vii. Environmental commitments.
viii. Emergency procedures.

27. If new construction personnel are added to the project, the contractor will ensure the personnel receive the mandatory training before starting work. A representative will be appointed during the employee education program to be the contact for any employee or contractor who might inadvertently kill or injure a listed species or who finds a dead, injured, or entrapped individual. The representative's name and telephone number will be provided to the USFWS before the initiation of ground disturbance.

Special-Status Plant Species Protection

28. Special-status plant surveys required for project-specific permit compliance will be conducted within 1 year prior to initiating construction. The purpose of these surveys will be to verify the locations of special-status plants identified in previous surveys are extant, identify any new special-status plant occurrences, and cover any portions of the project area not previously identified. The extent of mitigation of direct loss of or indirect impacts on special-status plants will be based on these survey results.

29. If found, the locations of special-status plants in proposed construction areas will be recorded using a global positioning system (GPS) unit and flagged.

30. Any special-status plant species observed during surveys will be reported to the Service and DFW so the observations can be added to the California Natural Diversity Database (CNDDB).

Special-Status Wildlife Species Protection

31. If individuals of listed wildlife species may be present and subject to potential injury or mortality from construction activities, a Service or DFW-approved biologist will conduct a preconstruction survey. If a listed wildlife species is discovered, construction activities will not begin in the immediate vicinity of the individual until the Service or DFW is contacted, depending on the species, and the individual has been allowed to leave the construction area.

32. Minimum qualifications for the qualified biologist will be a 4-year college degree in biology or related field and 2 years of professional experience in the application of standard survey, capture, and handling methods for the species of concern. However, in the case of fully protected species, no capture or handling will be done.

33. Any special-status mammal, bird, or other species observed during surveys will be reported to the Service and DFW so the observations can be added to the California Natural Diversity Database (CNDDB).

Mammals
Salt Marsh Harvest Mouse and Suisun Shrew

34. A Service-approved biologist, with previous salt marsh harvest mouse monitoring and surveying experience, will identify suitable salt marsh habitat for the mouse and conduct preconstruction surveys for the mouse prior to project initiation.

35. Vegetation will be removed from all areas (driving roads, action area, or anywhere else that vegetation could be stepped on).

36. If a salt marsh harvest mouse is discovered, construction activities will cease in the immediate vicinity of the individual until the Service is contacted and the individual has been allowed to leave the construction area.

37. A Service-approved biologist with previous salt marsh harvest mouse experience will be on site during construction activities occurring in wetlands. The biologist will document compliance with the project permit conditions and avoidance and conservation measures. The Service-approved biologist has the authority to stop project activities if any of the requirements associated with these measures is not being fulfilled. If the Serviceapproved biologist has requested work stoppage because of take of any of the listed species, the Service and DFW will be notified within 1 day by email or telephone.

38. Disturbance to wetland vegetation (i.e., pickleweed [*Salicornia* spp.]) will be avoided to the extent feasible in order to reduce potential impacts on SMHM habitat. If wetland vegetation (i.e., pickleweed [*Salicornia* spp.]) cannot be avoided, it will be removed by a method approved by the USFWS and DFW. The USFWS-approved biologist will be on site to monitor all wetland vegetation removal activities.

Bats

39. Pre-demolition surveys would be required prior to the demolition of existing structures to ensure no bat presence. These pre-demolition surveys would be conducted by a qualified biologist, and would occur up to 3 days prior to demolition. If live bats or indications of bat use, including guano, staining, prey remains, bat carcasses are not found within the existing structures, the structures may be demolished at any time.

40. If live bats or indications of bat use are found, the demolition of the structures would be limited to the beginning of September to the middle of October, at which time remaining bats would be evicted using appropriate protocols prior to demolition.

41. Windows and doors of the structures would be kept closed and sealed prior to demolition to prevent bats from inhabiting or roosting in the structures.

42. To the degree feasible, stored material, furnishings, wooden fixtures and debris piles in and around the buildings will be checked for bats and cleared from the area prior to demolition to improve visual survey access to potential roost spaces.

Birds

43. Preconstruction surveys will be performed to determine whether nesting birds, including migratory

birds, raptors, and special-status bird species, are present within or immediately adjacent to the project sites and associated staging and storage areas if activities would occur during active nesting periods. Bird species using the managed wetland habitat include waterfowl, shorebirds, Suisun song sparrow, Suisun common yellowthroat, and several other resident and migratory songbirds.

44. All woody and herbaceous vegetation will be removed from construction areas (earthwork areas), during the nonbreeding season (September 1-February 1) to the extent feasible, to minimize effects on nesting birds. If woody and herbaceous vegetation removal occurs during the breeding season, a qualified biologist will survey the construction area for active nests and young migratory birds immediately before removal activities.

45. During the breeding season, all vegetation subject to impact will be maintained to a height of approximately 6 inches to minimize the potential for nesting.

46. If active nests or migratory birds are found within the boundaries of the construction area, an acceptable buffer width and appropriate measures will be developed in coordination with DFW.

47. Inactive migratory bird nests (excluding raptors) located outside the construction areas will be preserved. If an inactive migratory bird nest is located in the area of effect, it will be removed before the start of the breeding season (approximately February 1).

48. Impacts on great blue heron rookeries will be avoided; mature trees will not be removed, and nearby work will occur outside the nesting season.

Raptors

49. Preconstruction surveys will be performed before and during the raptor nesting season (bimonthly, i.e., two times per month) to identify existing nests that may be used during the nesting season.

50. Raptors may nest from later winter through mid-summer; therefore, multiple nesting season surveys will performed.

51. DFW will be notified of all raptor nests located during the preconstruction surveys. If a raptor nest is located within the recommended buffer, the project proponents will coordinate with DFW to determine an acceptable buffer width.

52. If an active raptor nest is found outside the construction areas, a buffer zone will be developed in coordination with DFW. For special-status species, a larger buffer will be required (e.g., 0.5-mile Swainson's hawk buffer). The project proponents will coordinate with DFG prior to project implementation to determine the species-specific buffer widths.

California Clapper Rail and California Black Rail

53. If construction activities are necessary during the breeding season, preconstruction surveys for California clapper rail and black rail will be conducted by a Service-approved biologist at and adjacent to areas of potential tidal and managed wetlands habitat for California clapper rail and black rail. The surveys will focus on potential habitat that may be disturbed by construction activities during the breeding season to ensure that these species are not nesting in these locations.

Exception: Only inspection, maintenance, research, or monitoring activities may be performed during the California clapper rail or black rail breeding season in areas within or adjacent to California clapper rail breeding habitat with approval of the USFWS and DFG under the supervision of a qualified biologist

California Least Tern

54. No activities will be performed within 300 feet of an active least tern nest during the least tern breeding season, April 15 to August 15 (or as determined through surveys).

Exception: Only inspection, maintenance, research, or monitoring activities may be performed during the least tern breeding season in areas within or adjacent to least tern breeding habitat with approval of the Service and DFW under the supervision of a qualified biologist.

Western Pond Turtle

55. Preconstruction surveys will be performed in all managed wetlands and in adjacent sloughs that provide suitable habitat for western pond turtle. If pond turtles are identified, the area will be surveyed for nesting sites, if construction activities would occur during the nesting season.

56. If pond turtles are identified in managed wetlands to be breached, the ponds and associated drainages will be dewatered and, to the extent feasible, any turtles observed will be captured and released to other suitable locations within a nearby managed wetland or drainage.

Fish

57. The NMFS Santa Rosa Area Office must be notified by letter or email message stating the project commencement date, at least 14 days prior to implementation.

58. NMFS employee(s) or any other person(s) designated by NMFS will be allowed access to the work site.

59. A biologist or on-site monitor will evaluate the project site during construction to document any actions or condition that could adversely affect salmonids, green sturgeon, or their habitat. Whenever conditions are identified that could adversely affect salmonids, green sturgeon, or their habitat, in a manner not described in this opinion, NMFS shall be immediately notified by contacting biologist Daniel Logan at (707) 575-6053 or dan.logan@noaa.gov <mailto:dan.logan@noaa.gov>.

60. Draft restoration design plans (65-90 percent design level) will be submitted to NMFS for review and written approval at least 120 days prior to initiation of construction. The draft restoration design plans will be submitted to:

NMFS Santa Rosa Area Office
Attention: Supervisor of Protected Resources Division
777 Sonoma Avenue, Room 325
Santa Rosa, California, 95404-6528

61. In-water construction activities, such as levee construction and levee breaching, will occur during the in -channel work window of September 1 through November 30.

Biological Monitoring

62. A Service-approved biologist/environmental monitor will be responsible for monitoring implementation of the conditions in the state and federal permits (CWA Section 401, 402, and 404; ESA Section 7; Fish and Game Code Section 1602 and/or 2050; project plans [SWPPP]; and EIS/EIR mitigation measures).

63. The Service-approved biologist/environmental monitor will determine the location of environmentally sensitive areas adjacent to each construction site based on mapping of existing land-cover types and special-status plant species. If such maps are not available, the biologist/environmental monitor will map and quantify the land-cover types and specialstatus plant populations in the proposed project footprint prior to construction.

64. The biologist/environmental monitor will ensure the avoidance of all sensitive habitat areas outside direct project footprints, including patches of tidal wetland along channel banks, during dredging operations, to the extent practical.

65. Plants for revegetation will come primarily from natural recruitment. Plants imported to the restoration areas will come from local stock, and to the extent possible, local nurseries. Only native or naturalized plants will be used for restoration efforts.

66. To avoid construction-phase disturbance to sensitive habitats immediately adjacent to the action area, the limits of construction will be marked on the construction drawings and identified in the field.

Construction Period Restrictions

67. Timing of restoration construction activities will depend on the type of activity, presence or absence of sensitive resources, tides, and/or water management in wetlands. In general, landside work will occur between July and September. In-water activities will be conducted during the months of August through November. Working outside this window will require additional approvals from the resource agencies. Other timing restrictions may be necessary during the hunting season, such as limiting work to days other than Saturday, Sunday, and Wednesday.

Nonnative Plant Control

68. The following measures will be included in the project construction specifications to minimize the potential for the introduction of new noxious weeds and the spread of weeds previously documented in the project area.

69. Use certified, weed-free, imported erosion control materials (or rice straw in upland areas).

70. Coordinate with the county agricultural commissioner and land management agencies to ensure that the appropriate BMPs are implemented.

71. Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of noxious weeds.

74. Clean equipment at designated wash stations after leaving noxious weed infestation areas.

75. As feasible, treat isolated infestations of noxious weeds identified in the project area with approved eradication methods at an appropriate time to prevent further formation of seed, and destroy viable plant parts and seed.

76. Minimize surface disturbance to the greatest extent possible.

77. Seed all disturbed areas with native and naturalized seed mixes, as provided in the revegetation plan developed in cooperation with DFW. Mulch with certified weed-free mulch. Rice straw may be used to mulch upland areas.

78. Use native, noninvasive species or nonpersistent hybrids in erosion control plantings to stabilize site

conditions and prevent invasive species from colonizing.

79. Restore or enhance suitable habitat areas that are occupied by, or are near and accessible to, special-status species that have been adversely affected by the permanent removal of occupied habitat areas.

ATTACHMENTS

A - Draft Resolution
B - Assessor's Parcel Map
C - Site Plan
D1, D2 - Berm Cross Sections
E - Water management infrastructure
F - Staging and Access Plan
G1, G2, G3 - Levee Crossing diagram

SOLANO COUNTY PLANNING COMMISSION
RESOLUTION NO. XX

WHEREAS, the Solano County Planning Commission has considered Use Permit Application No. U-16-01 of **Westervelt Ecological Services** who is developing the Tule Red Restoration Project on behalf of the State and Federal Contractors Water Agency (SFCWA) to construct and operate a tidal wetlands restoration project within the Primary Management Area of the Suisun Marsh. The project is located within unincorporated Solano County approximately 9 miles southeast of Suisun City within the Marsh Preservation "MP" Zoning District, APN's 0046-260-030, 070, and 110, and;

WHEREAS, the Commission has reviewed the report of the Department of Resource Management and heard testimony relative to the subject application at the duly noticed public hearing held on June 16, 2016, and;

WHEREAS, after due consideration, the Planning Commission has made the following findings in regard to said proposal:

1. **The establishment, maintenance, or operation of the proposed use is in conformity with the County General Plan with regard to traffic circulations, population densities and distribution, and other aspects of the General Plan.**

   The establishment and operation of the Tule Red tidal, managed, and seasonal wetlands restoration project is a conditionally permitted Resource Conservation land use within the Marsh Preservation "MP" Zoning District and consistent with the Marsh General Plan Land Use Designation. General Plan Marsh Policies RS.P-8 and RS.P-9 encourage restoration of historic marshes to wetland status, either as tidal marshes or managed wetlands. When managed wetlands are no longer used for waterfowl hunting, restore them as tidal marsh.

2. **Adequate utilities, access roads, drainage and other necessary facilities have been or are being provided.**

   Access to the project is provided via encroachment off Grizzly Island Road. Temporary utilities including water, septic, and electrical power would be utilized during construction of the project. Once constructed, the project would be unmanned and does not require permanent utilities.

3. **The subject use will not, under the circumstances of the particular case, constitute a nuisance or be detrimental to the health, safety, peace, morals, comfort or general welfare of persons residing or working in or passing through the neighborhood of such proposed use, or be detrimental or injurious to property and improvements in the neighborhood or to the general welfare of the County.**

   The State and Federal Contractors Water Agency is the CEQA lead agency for the project, and Solano County will be acting as a Responsible Agency pursuant to CEQA Guidelines Sections 15050(c) & 15096. The State and Federal Contractors Water Agency approved the project after preparing an Addendum to the Suisun Marsh Plan Habitat Management, Preservation, and Restoration Plan EIS/EIR. The State and Federal Contractors Water Agency filed a Notice of Determination with the Office of Planning and Research as well as the Solano County Clerk following its project approval action.

Attachment A

BE IT, THEREFORE, RESOLVED, that the Planning Commission of the County of Solano does hereby determine Solano County is acting as a Responsible Agency pursuant to CEQA Guidelines Sections 15050(c) & 15096; and approve Use Permit Application No. U-16-01 to construct and operate the proposed tidal wetlands restoration project subject to the following recommended conditions of approval:

General and Permit Term

1. The Tule Red tidal, managed, and seasonal wetlands restoration project shall be established in accord with the application materials and development plans for Use Permit U-16-01, filed February 5, 2016, by Westervelt Ecological Services, and as approved by the Solano County Planning Commission.

This permit shall be approved for an indefinite term; however subject to periodic renewal every five (5) years. A renewal may be granted if said request is received prior to the permit renewal date of June 16, 2021 and the use is found to be in compliance with the permit terms and conditions at that time. Prior to permit renewal, the applicant shall submit an application for renewal along with applicable renewal fees as may be set by the County Board of Supervisors.

No additional uses (including outdoor storage), new or expanded buildings shall be established or constructed beyond those identified on the approved site plan without prior approval of a new use permit, minor revision, or amendment to the permit and further environmental review as determined by the Department of Resource Management.

2. The applicant shall prevent offensive noise, odor, dust, fumes, smoke, and/or vibration; shall be located that generated traffic will not constitute a hazard or nuisance to surrounding property.

Building and Safety Division

3. Prior to any construction or improvements taking place, a building permit application shall first be submitted as per Section 105 of the 2013 California Building Code or the latest edition of the codes enforced at the time of building permit application. "Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit."

Public Works – Engineering

4. The applicant shall secure and comply with the requirements of a grading permit for the construction of the proposed project.

Best Management Practices & Mitigation Measures Identified in CEQA Addendum

Air Quality

5. The permittee shall implement following air quality control practices:

- Hydroseed with native or noninvasive species appropriate to that specific location or apply (nontoxic) soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation with native or noninvasive species appropriate to that specific location in disturbed areas as quickly as possible.
- Maintain properly tuned engines.
- Minimize the idling time of diesel-powered construction equipment to 2 minutes.
- Use alternative-powered (e.g., hybrid, compressed natural gas, biodiesel, electric) construction equipment.
- Use add-on control devices such as diesel oxidation catalysts or particulate filters.
- Require all contractors to use equipment that meets California Air Resources Board's most recent certification standard for off-road heavy-duty diesel engines.

6. Construction activity shall be limited so that construction emissions do not exceed the BAAQMD's construction threshold for NO_X. Such measures include, but are not limited to, implementing off road equipment mitigation, including installing 1st tier diesel particulate filters (DPFs), and installing diesel oxidation catalysts to reduce NOx emissions by 40%.

7. The permittee shall implement the following BAAQMD standards:

- Cover all haul trucks transporting soil, sand, or other loose material off-site.
- Remove all visible mud or dirt track-out onto adjacent public roads.
- Minimize idling times 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.
- Maintain all construction equipment 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 contact regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Standard Design Features and Construction Practices

8. The permittee shall implement the following:

- Stop work immediately if a conflict with a utility facility occurs and contacting the affected utility to (1) notify it of the conflict, (2) aid in coordinating repairs to the utility, and (3) coordinate to avoid additional conflicts in the field.
- Implement BMPs to minimize any disease-carrying mosquitoes and threats to public health if it is found that project components pose a threat to public health.
- Control construction equipment access and placement of fill to maintain acceptable loading based on the shear strength of the foundation material.

- Minimize degradation of wetland habitats where feasible by minimizing the disturbance footprint.
- Implement BMPs and minimization measures to minimize water quality impacts such as temporary turbidity increases. See Erosion and Sediment Control Plan below.
- Inspect all equipment for oil and fuel leaks every day prior to use. Equipment with oil or fuel leaks will not be used within 100 feet of wetlands.
- Require the construction contractor to remove all trash and construction debris after construction and to implement a revegetation plan for temporarily disturbed vegetation in the construction zones.
- Maintain waste facilities. Waste facilities include concrete wash-out facilities, chemical toilets, and hydraulic fluid containers. Waste will be removed to a proper disposal site.

Access Point/Staging Areas

9. The permittee shall implement the following:

- Establish staging areas for equipment storage and maintenance, construction materials, fuels, lubricants, solvents, and other possible contaminants in coordination with resource agencies.
- Staging areas shall have a stabilized entrance and exit and will be located at least 100 feet from bodies of water unless site-specific circumstances do not provide such a setback, in which case the maximum setback possible will be used. If an off-road site is chosen, qualified biological and cultural resources personnel will survey the selected site to verify that no sensitive resources would be disturbed by staging activities. If sensitive resources are found, an appropriate buffer zone will be staked and flagged to avoid impacts. If impacts on sensitive resources cannot be avoided, the site will not be used. An alternate site will be selected.
- Where possible, no equipment refueling or fuel storage will take place within 100 feet of a body of water. Vehicle traffic will be confined to existing roads and the proposed access route. Ingress and egress points will be clearly identified in the field using orange construction fence. Work will not be conducted outside the designated work area.

Erosion and Sediment Control Plan

10. The permittee shall implement the following:

- Prepare and implement an erosion and sediment control plan to control short-term and long-term erosion and sedimentation effects and to restore soils and vegetation in areas affected by construction activities. The plan will include all the necessary local jurisdiction requirements regarding erosion control and will implement BMPs for erosion and sediment control as required.
- Develop an erosion control plan to ensure that during rain events construction activities do not increase the levels of erosion and sedimentation. This plan will include the use of erosion control materials (baffles, fiber rolls, or hay bales; temporary containment berms) and erosion control measures such as straw application or hydroseeding with native grasses on disturbed slopes, and floating sediment booms and/or curtains to minimize any impacts that may occur from increased mobilization of sediments.

Stormwater Pollution Prevention Plan

11. The permittee shall implement the following: Develop a stormwater pollution prevention plan (SWPPP) prior to construction. The objectives of the SWPPP will be to (1) identify pollutant sources associated with construction activity and project operations that may affect the quality of stormwater and (2) identify, construct, and implement stormwater pollution prevention measures to reduce pollutants in stormwater discharges during and after construction. The project proponents and/or their contractor(s) will develop and implement a spill prevention and control plan as part of the SWPPP to minimize effects of spills of hazardous, toxic, or petroleum substances during construction of the project. Implementation of this measure will comply with state and federal water quality regulations. The SWPPP will be kept on site during construction activity and during operation of the project and will be made available upon request to representatives of the Regional Water Quality Control Board (Regional Water Board). The SWPPP will include but is not limited to:

a. A description of potential pollutants to stormwater from erosion.
b. Management of dredged sediments and hazardous materials present on site during construction (including vehicle and equipment fuels).
c. Details of how the sediment and erosion control practices comply with state and federal water quality regulations.
d. A description of potential pollutants to stormwater resulting from operation of the project.

Hazardous Materials Management Plan

12. The permittee shall implement the following:

- The SWPPP will include a hazardous materials spill plan. The plan will describe the actions that will be taken in the event of a spill. The plan also will incorporate preventive measures to be implemented (such as vehicle and equipment staging, cleaning, maintenance, and refueling) and contaminant (including fuel) management and storage. In the event of a contaminant spill, work at the site immediately will cease until the contractor has contained and mitigated the spill. The contractor will immediately prevent further contamination, notify appropriate authorities, and mitigate damage as appropriate. Adequate spill containment materials, such as oil diapers and hydrocarbon cleanup kits, will be available on site at all times. Containers for storage, transportation, and disposal of contaminated absorbent materials will be provided on the project site.

- Do not use any hazardous material in excess of reportable quantities, as specified in Title 40 Code of Federal Regulations (CFR) Part 355, Subpart J, Section 355.50, unless approved in advance by the Office of Emergency Services (OES), and will provide to the OES in the annual compliance report a list of hazardous materials contained at a project site in reportable quantities. The reporting of hazardous materials in excess of reportable quantities of Title 40 CFR Part 355 is required annually to Solano County Environmental Health Services Division as the Solano County Certified Unified Program Agency (CUPA).

Mosquito Abatement Best Management Practices

13. The permittee shall develop a management program consistent with Marsh-wide management actions for the control of mosquitoes. If necessary, implement a sampling and treatment program for any depressions that would retain tidal water.

Cultural Resources

14. The permittee shall implement the following:

- Prior to ground-disturbing activities in restoration areas, SFCWA will conduct a cultural resources inventory of the restoration area, according to the standards cited in the SMP EIS/EIR (CUL-MM-1 and CUL-MM-5), including:
- The implementing regulations for Section 106 of the NHPA (36 CFR 800.4).
- The State CEQA Guidelines (14 CCR 15064.5[a]).
- Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 Federal Register [FR] 44716–44742).
- The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act (including the Guidelines for the Treatment of Cultural Landscapes).
- Applicable NRHP bulletins and National Park Service technical briefs (Andrus and Shrimpton 1997; Birnbaum 1994; McClellan et al. 1995).

15. If any cultural resources are determined to be historic properties and ground-disturbing activities are found to result in adverse effects, the Corps or SFCWA will resolve the effects in accordance with Section 106 of the NHPA or CEQA, as applicable.

16. If no cultural resources are identified in specific restoration areas, or identified resources are not determined to be significant, no additional cultural work is required.

17. If any previously unknown historic or archeological artifacts are discovered while accomplishing the authorized work, the landowner must stop work within 100 feet of the find immediately and notify the SFCWA and the Corps. All construction personnel will leave the area. Vehicles and equipment will be left in place until a qualified archaeologist identifies a safe path out of the area. The on-site supervisor will flag or otherwise mark the location of the find and keep all traffic away from the resource. The on-site supervisor immediately will notify the lead state or federal agency of the find. The activity is not authorized until the requirements of Section 106 of the NHPA have been satisfied.

18. If human remains of Native American origin are discovered during ground disturbing activities on non-federal land, SFCWA or the Corps must comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (NAHC) (PRC 5097). If human remains are discovered or recognized in any location other than a dedicated cemetery, SFCWA or the Corps will not allow further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

a. the Solano County coroner has been informed and has determined that no investigation of the cause of death is required; and
b. if the remains are of Native American origin, the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in PRC 5097.98; or

    1. The NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 48 hours after being notified by the NAHC.

2. If any previously unknown historic or archeological artifacts are discovered while accomplishing the authorized work, the landowner must stop work immediately and notify the Corps. The activity is not authorized until the requirements of Section 106 of the NHPA have been satisfied.

Biological Resources - General

19. No firearms (except for federal, state, or local law enforcement officers and security personnel) will be permitted at the project site to avoid harassment, killing, or injuring of wildlife.

20. No pets will be permitted at the project site to avoid harassment, killing, or injuring of wildlife.

21. Native vegetation trimmed or removed on the project site will be stockpiled during work. After construction activities, removal of temporary mats and construction-related materials, and application of native and naturalized species seed mix have been completed, stockpiled native vegetation will be reapplied over temporarily disturbed wetlands to provide temporary soil protection and as a seed source.

22. Vegetation shall be removed under the supervision of a qualified biologist approved by DFW and USFWS. If a mouse of any species is observed within the areas being removed of vegetation, DFW and USFWS shall be notified. Vegetation removal may begin when no mice are observed and shall start at the edge farthest from the salt marsh or the poorest habitat and work its way toward the salt marsh or the better salt marsh habitat.

23. Removal of vegetation in wetland habitat will be conducted with a qualified biological monitor present. This monitor will watch for special-status wildlife species and temporarily stop work if special-status species are encountered. Wildlife will be allowed to escape before work is resumed. Monitors with the appropriate qualifications to handle special-status species will be allowed to move special-status species to safe locations as permitted by their authorizations.

24. Temporarily affected wetlands will be restored by removing construction related debris and trash. Affected areas will be seeded with a native and naturalized seed mix.

Worker Training

25. The Service-approved biologist will provide training to field management and construction personnel on the importance of protecting environmental resources. Communication efforts and training will take place during preconstruction meetings so that construction personnel are aware of their responsibilities and the importance of compliance.

26. Construction personnel will be educated on the types of sensitive resources located in the project area and the measures required to avoid impacts on these resources. Materials covered in the training program will include environmental rules and regulations for the specific project and requirements for limiting activities to the construction right-of-way and avoiding demarcated sensitive resources areas. Training seminars will educate construction supervisors and managers on:

i. The need for resource avoidance and protection.
ii. Construction drawing format and interpretation.
iii. Staking methods to protect resources.
iv. The construction process.

v. Roles and responsibilities.
vi. Project management structure and contacts.
vii. Environmental commitments.
viii. Emergency procedures.

27. If new construction personnel are added to the project, the contractor will ensure the personnel receive the mandatory training before starting work. A representative will be appointed during the employee education program to be the contact for any employee or contractor who might inadvertently kill or injure a listed species or who finds a dead, injured, or entrapped individual. The representative's name and telephone number will be provided to the USFWS before the initiation of ground disturbance.

Special-Status Plant Species Protection

28. Special-status plant surveys required for project-specific permit compliance will be conducted within 1 year prior to initiating construction. The purpose of these surveys will be to verify the locations of special-status plants identified in previous surveys are extant, identify any new special-status plant occurrences, and cover any portions of the project area not previously identified. The extent of mitigation of direct loss of or indirect impacts on special-status plants will be based on these survey results.

29. If found, the locations of special-status plants in proposed construction areas will be recorded using a global positioning system (GPS) unit and flagged.

30. Any special-status plant species observed during surveys will be reported to the Service and DFW so the observations can be added to the California Natural Diversity Database (CNDDB).

Special-Status Wildlife Species Protection

31. If individuals of listed wildlife species may be present and subject to potential injury or mortality from construction activities, a Service or DFW-approved biologist will conduct a preconstruction survey. If a listed wildlife species is discovered, construction activities will not begin in the immediate vicinity of the individual until the Service or DFW is contacted, depending on the species, and the individual has been allowed to leave the construction area.

32. Minimum qualifications for the qualified biologist will be a 4-year college degree in biology or related field and 2 years of professional experience in the application of standard survey, capture, and handling methods for the species of concern. However, in the case of fully protected species, no capture or handling will be done.

33. Any special-status mammal, bird, or other species observed during surveys will be reported to the Service and DFW so the observations can be added to the California Natural Diversity Database (CNDDB).

Mammals
Salt Marsh Harvest Mouse and Suisun Shrew

34. A Service-approved biologist, with previous salt marsh harvest mouse monitoring and surveying experience, will identify suitable salt marsh habitat for the mouse and conduct preconstruction surveys for the mouse prior to project initiation.

35. Vegetation will be removed from all areas (driving roads, action area, or anywhere else that vegetation could be stepped on).

36. If a salt marsh harvest mouse is discovered, construction activities will cease in the immediate vicinity of the individual until the Service is contacted and the individual has been allowed to leave the construction area.

37. A Service-approved biologist with previous salt marsh harvest mouse experience will be on site during construction activities occurring in wetlands. The biologist will document compliance with the project permit conditions and avoidance and conservation measures. The Service-approved biologist has the authority to stop project activities if any of the requirements associated with these measures is not being fulfilled. If the Service-approved biologist has requested work stoppage because of take of any of the listed species, the Service and DFW will be notified within 1 day by email or telephone.

38. Disturbance to wetland vegetation (i.e., pickleweed [*Salicornia* spp.]) will be avoided to the extent feasible in order to reduce potential impacts on SMHM habitat. If wetland vegetation (i.e., pickleweed [*Salicornia* spp.]) cannot be avoided, it will be removed by a method approved by the USFWS and DFW. The USFWS-approved biologist will be on site to monitor all wetland vegetation removal activities.

Bats

39. Pre-demolition surveys would be required prior to the demolition of existing structures to ensure no bat presence. These pre-demolition surveys would be conducted by a qualified biologist, and would occur up to 3 days prior to demolition. If live bats or indications of bat use, including guano, staining, prey remains, bat carcasses are not found within the existing structures, the structures may be demolished at any time.

40. If live bats or indications of bat use are found, the demolition of the structures would be limited to the beginning of September to the middle of October, at which time remaining bats would be evicted using appropriate protocols prior to demolition.

41. Windows and doors of the structures would be kept closed and sealed prior to demolition to prevent bats from inhabiting or roosting in the structures.

42. To the degree feasible, stored material, furnishings, wooden fixtures and debris piles in and around the buildings will be checked for bats and cleared from the area prior to demolition to improve visual survey access to potential roost spaces.

Birds

43. Preconstruction surveys will be performed to determine whether nesting birds, including migratory birds, raptors, and special-status bird species, are present within or immediately adjacent to the project sites and associated staging and storage areas if activities would occur during active nesting periods. Bird species using the managed wetland habitat include waterfowl, shorebirds, Suisun song sparrow, Suisun common yellowthroat, and several other resident and migratory songbirds.

44. All woody and herbaceous vegetation will be removed from construction areas (earthwork areas), during the nonbreeding season (September 1–February 1) to the extent feasible, to minimize effects on nesting birds. If woody and herbaceous vegetation removal occurs

during the breeding season, a qualified biologist will survey the construction area for active nests and young migratory birds immediately before removal activities.

45. During the breeding season, all vegetation subject to impact will be maintained to a height of approximately 6 inches to minimize the potential for nesting.

46. If active nests or migratory birds are found within the boundaries of the construction area, an acceptable buffer width and appropriate measures will be developed in coordination with DFW.

47. Inactive migratory bird nests (excluding raptors) located outside the construction areas will be preserved. If an inactive migratory bird nest is located in the area of effect, it will be removed before the start of the breeding season (approximately February 1).

48. Impacts on great blue heron rookeries will be avoided; mature trees will not be removed, and nearby work will occur outside the nesting season.

Raptors

49. Preconstruction surveys will be performed before and during the raptor nesting season (bimonthly, i.e., two times per month) to identify existing nests that may be used during the nesting season.

50. Raptors may nest from later winter through mid-summer; therefore, multiple nesting season surveys will performed.

51. DFW will be notified of all raptor nests located during the preconstruction surveys. If a raptor nest is located within the recommended buffer, the project proponents will coordinate with DFW to determine an acceptable buffer width.

52. If an active raptor nest is found outside the construction areas, a buffer zone will be developed in coordination with DFW. For special-status species, a larger buffer will be required (e.g., 0.5-mile Swainson's hawk buffer). The project proponents will coordinate with DFG prior to project implementation to determine the species-specific buffer widths.

California Clapper Rail and California Black Rail

53. If construction activities are necessary during the breeding season, preconstruction surveys for California clapper rail and black rail will be conducted by a Service-approved biologist at and adjacent to areas of potential tidal and managed wetlands habitat for California clapper rail and black rail. The surveys will focus on potential habitat that may be disturbed by construction activities during the breeding season to ensure that these species are not nesting in these locations.

Exception: Only inspection, maintenance, research, or monitoring activities may be performed during the California clapper rail or black rail breeding season in areas within or adjacent to California clapper rail breeding habitat with approval of the USFWS and DFG under the supervision of a qualified biologist

California Least Tern

54. No activities will be performed within 300 feet of an active least tern nest during the least tern breeding season, April 15 to August 15 (or as determined through surveys).

Exception: Only inspection, maintenance, research, or monitoring activities may be performed during the least tern breeding season in areas within or adjacent to least tern breeding habitat with approval of the Service and DFW under the supervision of a qualified biologist.

Western Pond Turtle

55. Preconstruction surveys will be performed in all managed wetlands and in adjacent sloughs that provide suitable habitat for western pond turtle. If pond turtles are identified, the area will be surveyed for nesting sites, if construction activities would occur during the nesting season.

56. If pond turtles are identified in managed wetlands to be breached, the ponds and associated drainages will be dewatered and, to the extent feasible, any turtles observed will be captured and released to other suitable locations within a nearby managed wetland or drainage.

Fish

57. The NMFS Santa Rosa Area Office must be notified by letter or email message stating the project commencement date, at least 14 days prior to implementation.

58. NMFS employee(s) or any other person(s) designated by NMFS will be allowed access to the work site.

59. A biologist or on-site monitor will evaluate the project site during construction to document any actions or condition that could adversely affect salmonids, green sturgeon, or their habitat. Whenever conditions are identified that could adversely affect salmonids, green sturgeon, or their habitat, in a manner not described in this opinion, NMFS shall be immediately notified by contacting biologist Daniel Logan at (707) 575-6053 or dan.logan@noaa.gov.

60. Draft restoration design plans (65-90 percent design level) will be submitted to NMFS for review and written approval at least 120 days prior to initiation of construction. The draft restoration design plans will be submitted to:

NMFS Santa Rosa Area Office
Attention: Supervisor of Protected Resources Division
777 Sonoma Avenue, Room 325
Santa Rosa, California, 95404-6528

61. In-water construction activities, such as levee construction and levee breaching, will occur during the in-channel work window of September 1 through November 30.

Biological Monitoring

62. A Service-approved biologist/environmental monitor will be responsible for monitoring implementation of the conditions in the state and federal permits (CWA Section 401, 402, and 404; ESA Section 7; Fish and Game Code Section 1602 and/or 2050; project plans [SWPPP]; and EIS/EIR mitigation measures).

63. The Service-approved biologist/environmental monitor will determine the location of environmentally sensitive areas adjacent to each construction site based on mapping of existing land-cover types and special-status plant species. If such maps are not available, the biologist/environmental monitor will map and quantify the land-cover types and special-status plant populations in the proposed project footprint prior to construction.

64. The biologist/environmental monitor will ensure the avoidance of all sensitive habitat areas outside direct project footprints, including patches of tidal wetland along channel banks, during dredging operations, to the extent practical.

65. Plants for revegetation will come primarily from natural recruitment. Plants imported to the restoration areas will come from local stock, and to the extent possible, local nurseries. Only native or naturalized plants will be used for restoration efforts.

66. To avoid construction-phase disturbance to sensitive habitats immediately adjacent to the action area, the limits of construction will be marked on the construction drawings and identified in the field.

Construction Period Restrictions

67. Timing of restoration construction activities will depend on the type of activity, presence or absence of sensitive resources, tides, and/or water management in wetlands. In general, landside work will occur between July and September. In-water activities will be conducted during the months of August through November. Working outside this window will require additional approvals from the resource agencies. Other timing restrictions may be necessary during the hunting season, such as limiting work to days other than Saturday, Sunday, and Wednesday.

Nonnative Plant Control

68. The following measures will be included in the project construction specifications to minimize the potential for the introduction of new noxious weeds and the spread of weeds previously documented in the project area.

69. Use certified, weed-free, imported erosion control materials (or rice straw in upland areas).

70. Coordinate with the county agricultural commissioner and land management agencies to ensure that the appropriate BMPs are implemented.

71. Educate construction supervisors and managers on weed identification and the importance of controlling and preventing the spread of noxious weeds.

74. Clean equipment at designated wash stations after leaving noxious weed infestation areas.

75. As feasible, treat isolated infestations of noxious weeds identified in the project area with approved eradication methods at an appropriate time to prevent further formation of seed, and destroy viable plant parts and seed.

76. Minimize surface disturbance to the greatest extent possible.

77. Seed all disturbed areas with native and naturalized seed mixes, as provided in the revegetation plan developed in cooperation with DFW. Mulch with certified weed-free mulch. Rice straw may be used to mulch upland areas.

78. Use native, noninvasive species or nonpersistent hybrids in erosion control plantings to stabilize site conditions and prevent invasive species from colonizing.

79. Restore or enhance suitable habitat areas that are occupied by, or are near and accessible to, special-status species that have been adversely affected by the permanent removal of occupied habitat areas.

*** ***

I hereby certify that the foregoing resolution was adopted at the regular meeting of the Solano County Planning Commission on June 16, 2016 by the following vote:

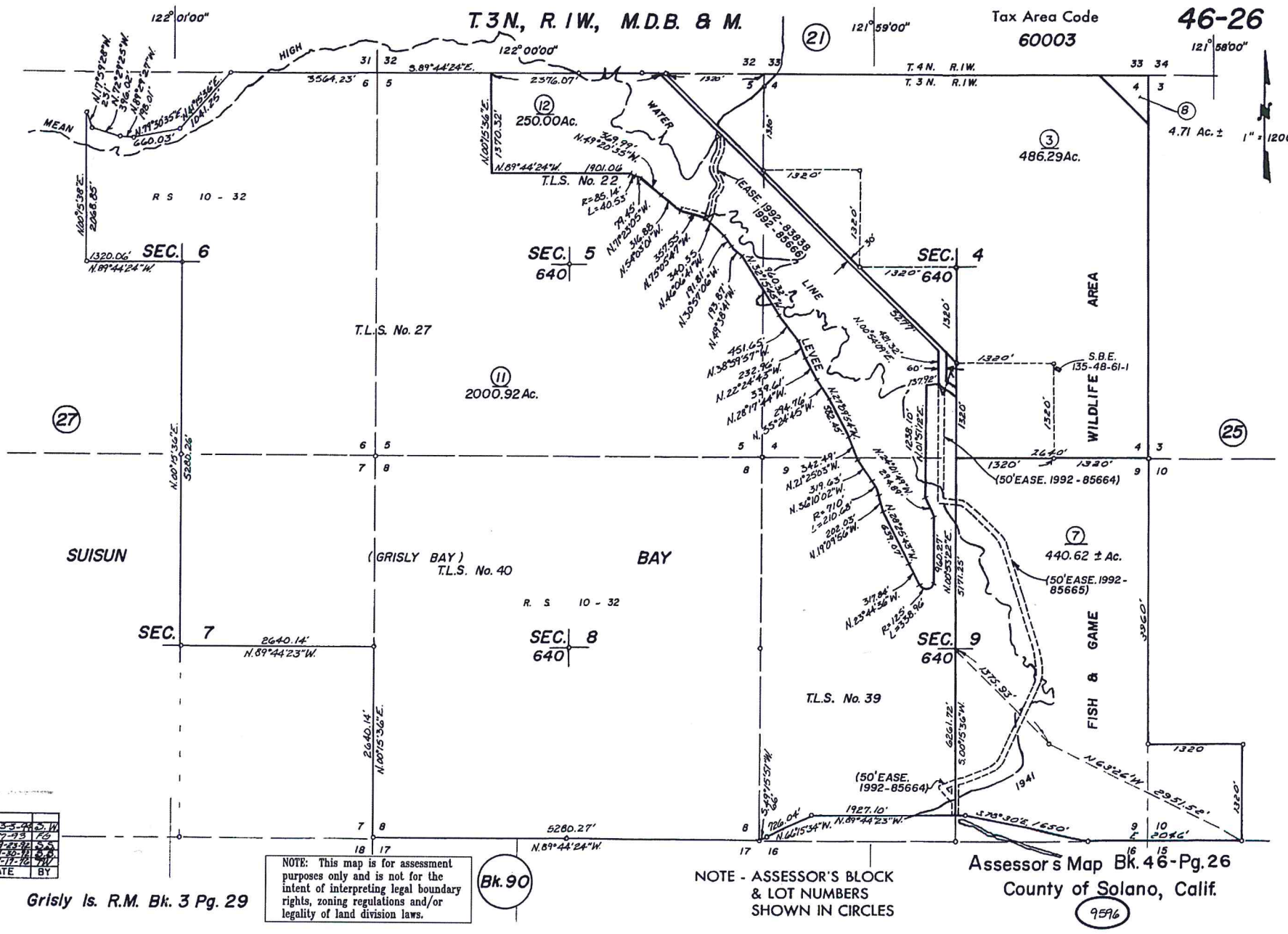
AYES: Commissioners _____

_____

NOES: Commissioners _____

EXCUSED: Commissioners _____

By: _____
Bill Emlen, Secretary



REVISION	DATE	BY
KILL 260-13 3-3-99		S.W
S.B.E.	5-27-99	RG
260-11-13	9-23-92	SS
260-9-10	1-30-91	RG
MIR. CONV.	11-11-76	RW

Grisly Is. R.M. Bk. 3 Pg. 29

NOTE: This map is for assessment purposes only and is not for the intent of interpreting legal boundary rights, zoning regulations and/or legality of land division laws.

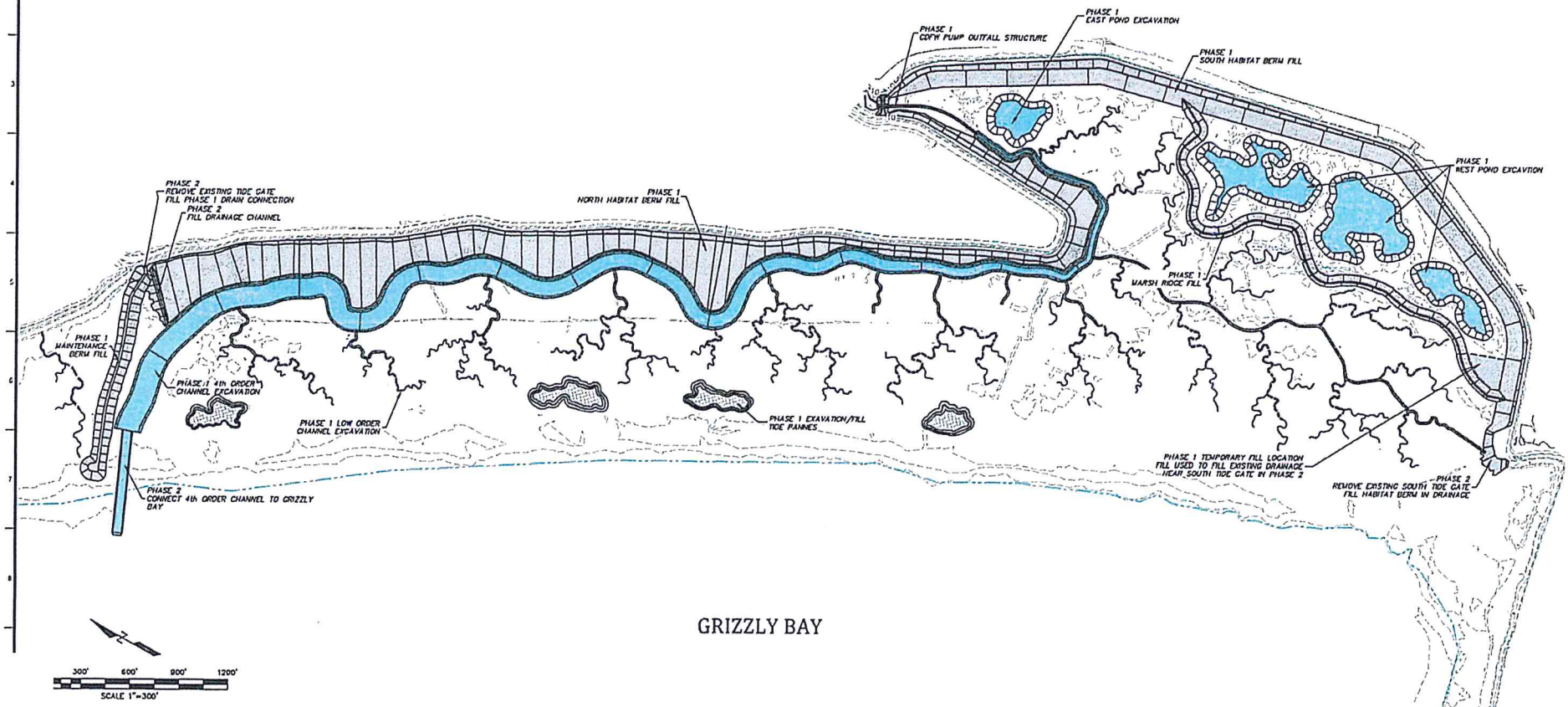
Bk. 90

NOTE - ASSESSOR'S BLOCK & LOT NUMBERS SHOWN IN CIRCLES

Assessor's Map Bk. 46-Pg. 26
County of Solano, Calif.

9596

ATTACHMENT B



ATTACHMENT C

State and Federal Contractors Water Agency
1121 'L' Street, Suite 806
Sacramento, California 95814
Phone: (916) 476-5056 Fax: (916) 476-5057
www.sfcwa.org

nhc
northwest hydraulic consultants
2600 capitol avenue, suite 140
sacramento, california 95816-5928
phone: (916) 371-7400
fax: (916) 371-7475
www.nhcweb.com

PRELIMINARY
NOT FOR CONSTRUCTION

Revisions			Drawing Information	
No.	Date	Description	Date	29 January 2016 (08:54)
			Status	30% Submittal
			Designer	tvs
			Drafter	tvs
			Checked	bgw
			File Name	TULE RED-30percentwPhase2
			Plotted Scale	0 1/2 1

Tule Red Restoration Project

General Plan Sheet

Job Number 5001024

Sheet Number 30-C1

Sheet xx of xx

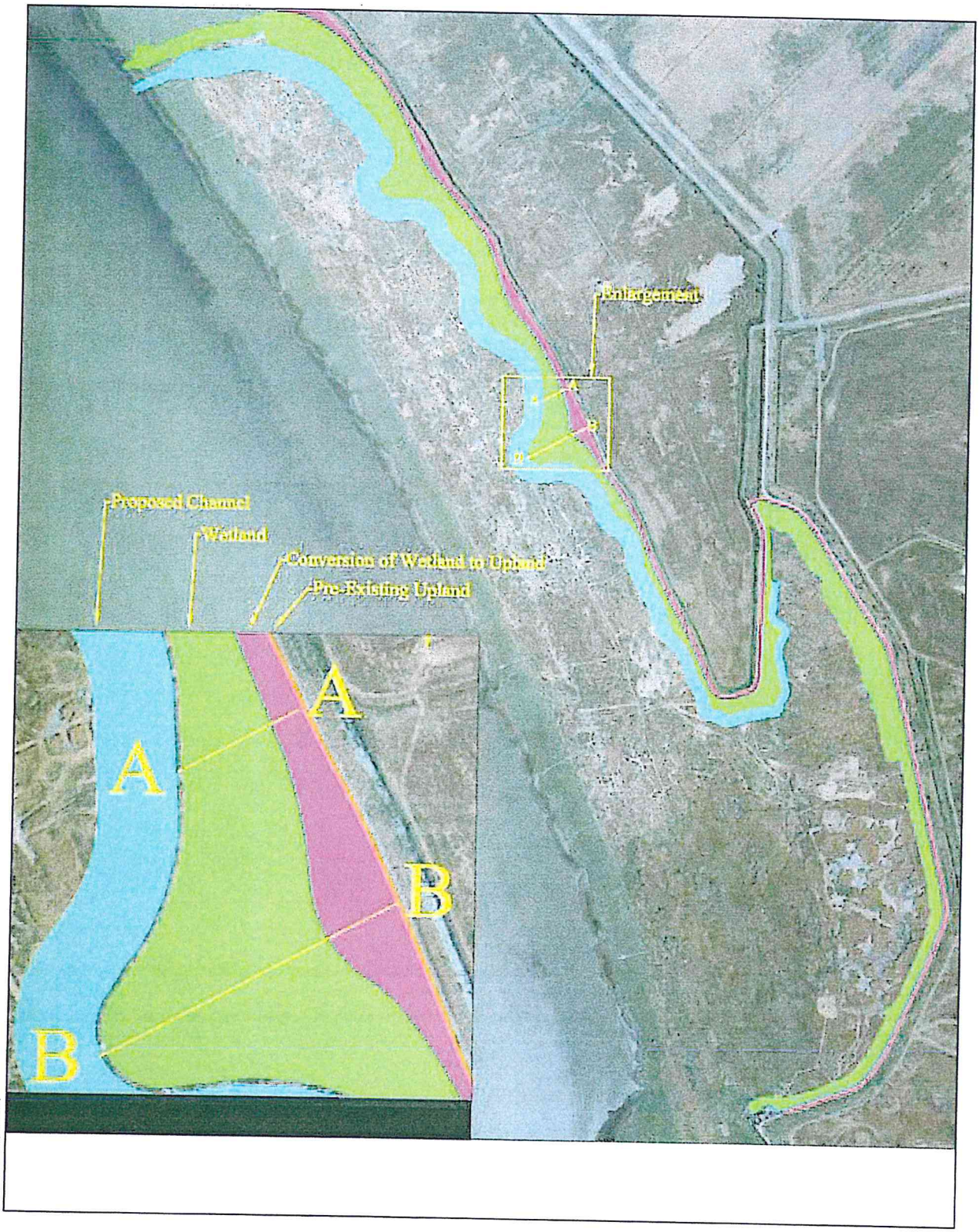
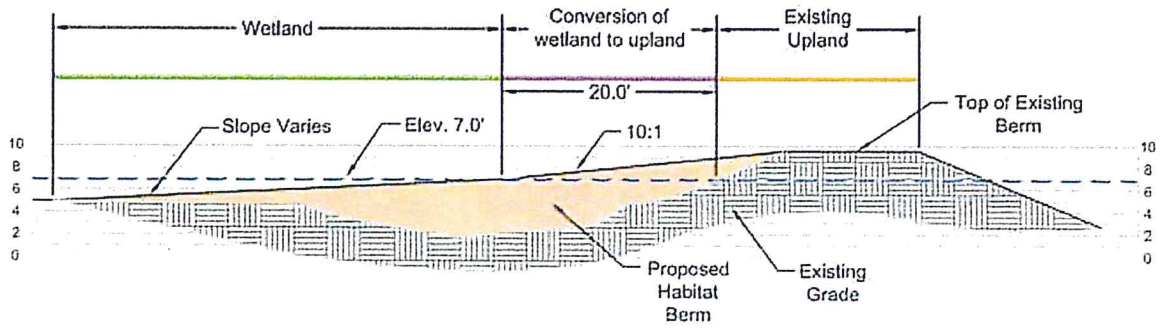


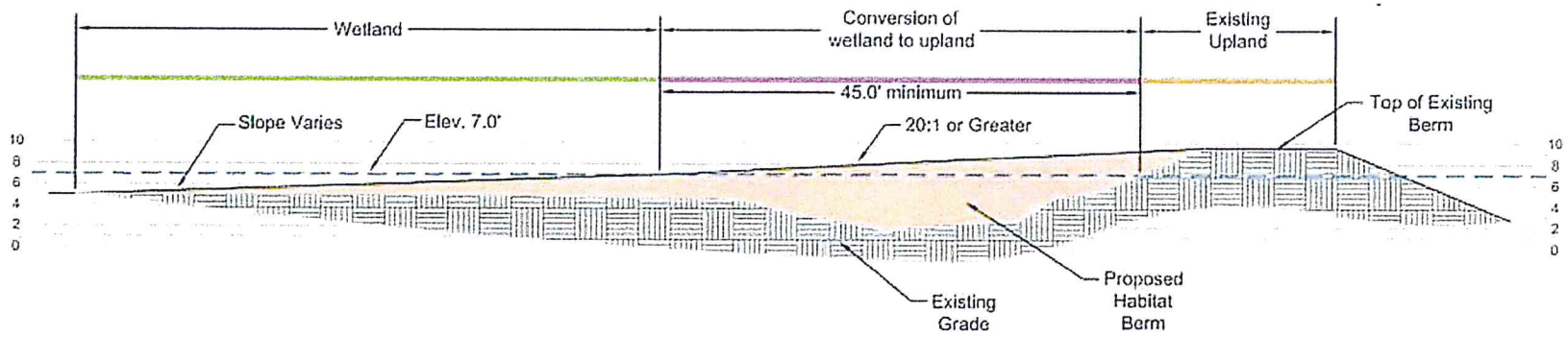
Figure 5a
Habitat Berm

ATTACHMENT D1



10:1 - Proposed Habitat Berm

Section A - A



20:1 or Greater - Proposed Habitat Berm

Section B - B

Source: Westervelt Ecological Services , 2015.

Figure 5b
Cross Section View of Habitat Berm

ATTACHMENT D2

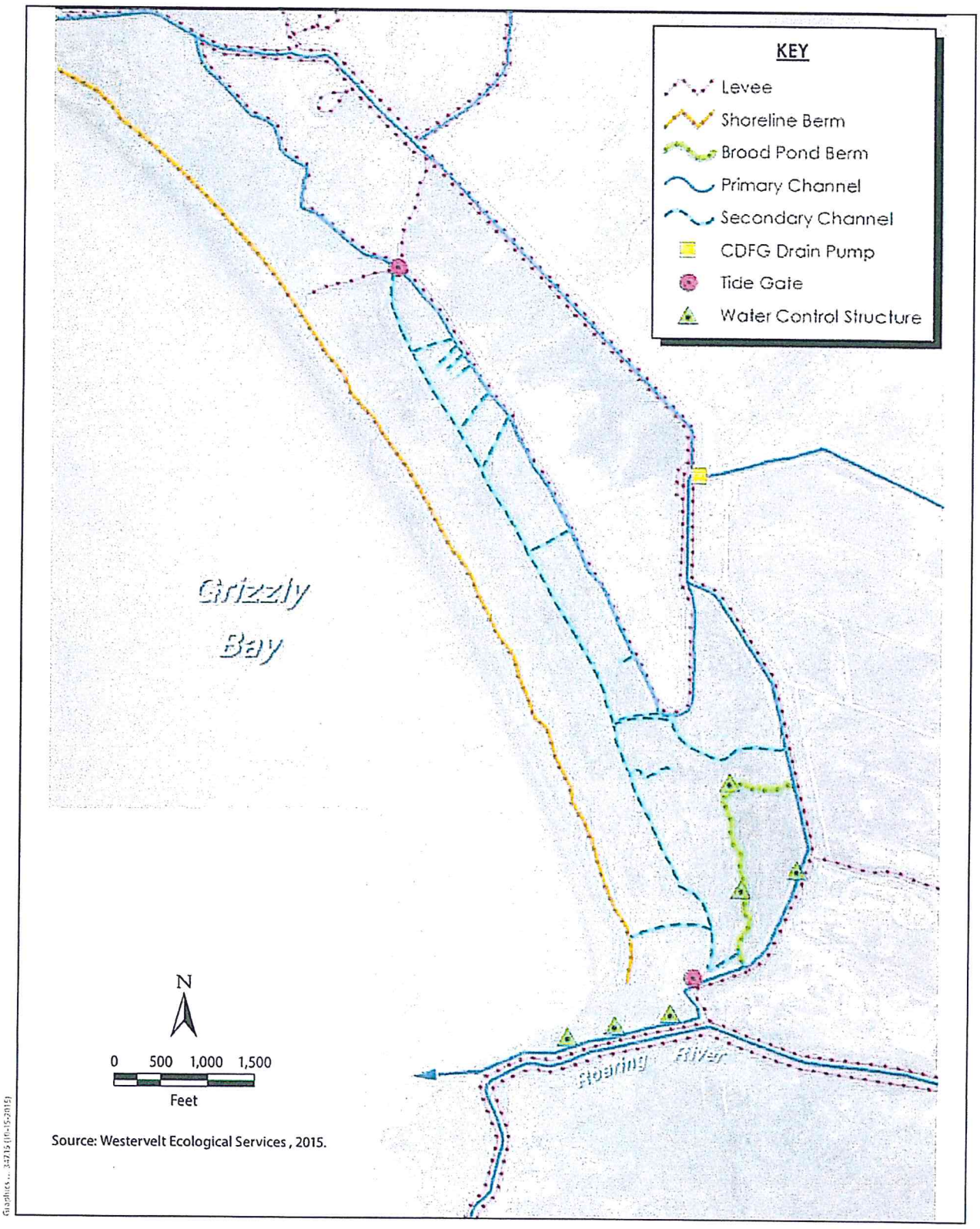


Figure 6
Existing Water Management Infrastructure

ATTACHMENT E

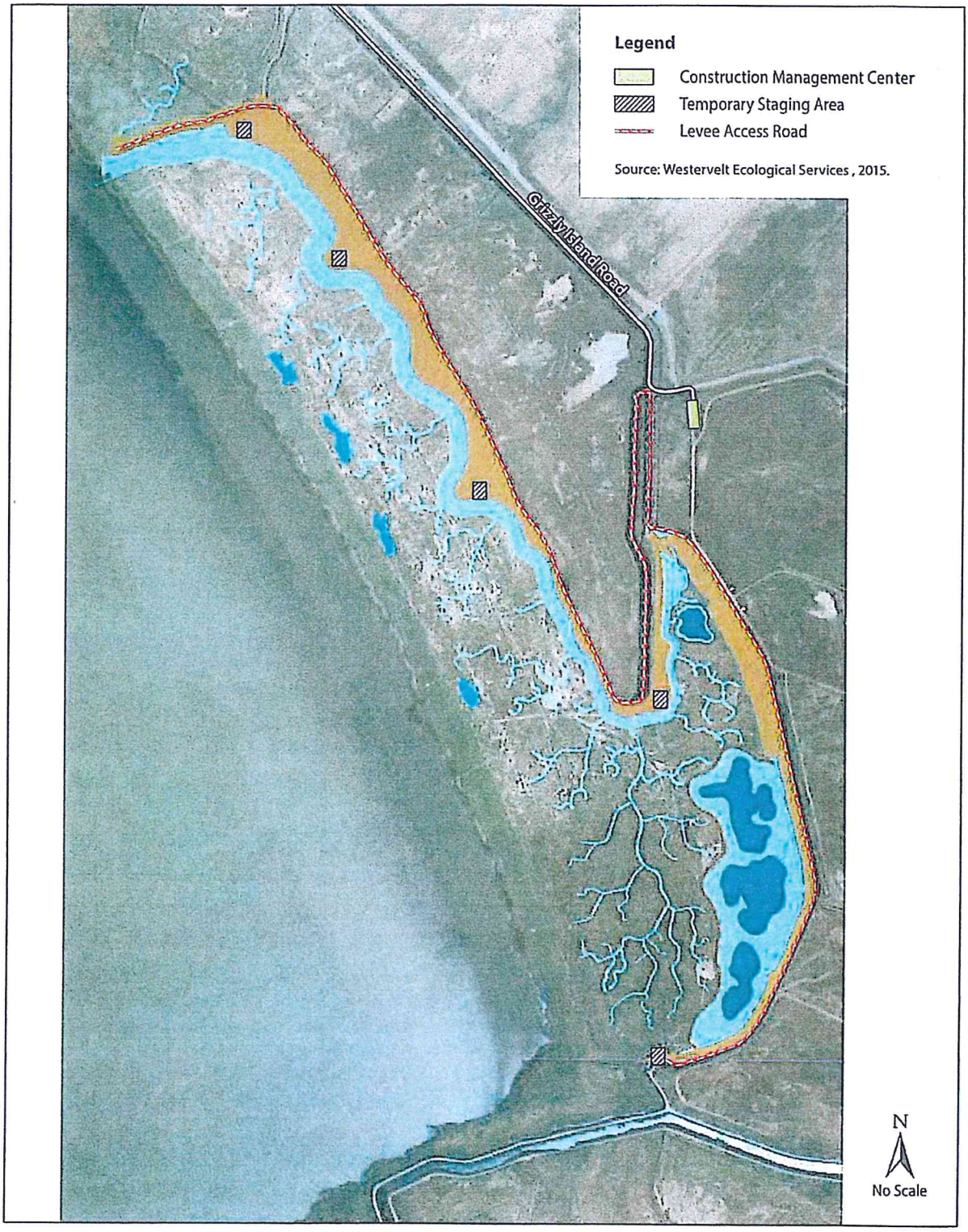


Figure 7
Proposed Project Area Staging and Access

ATTACHMENT F

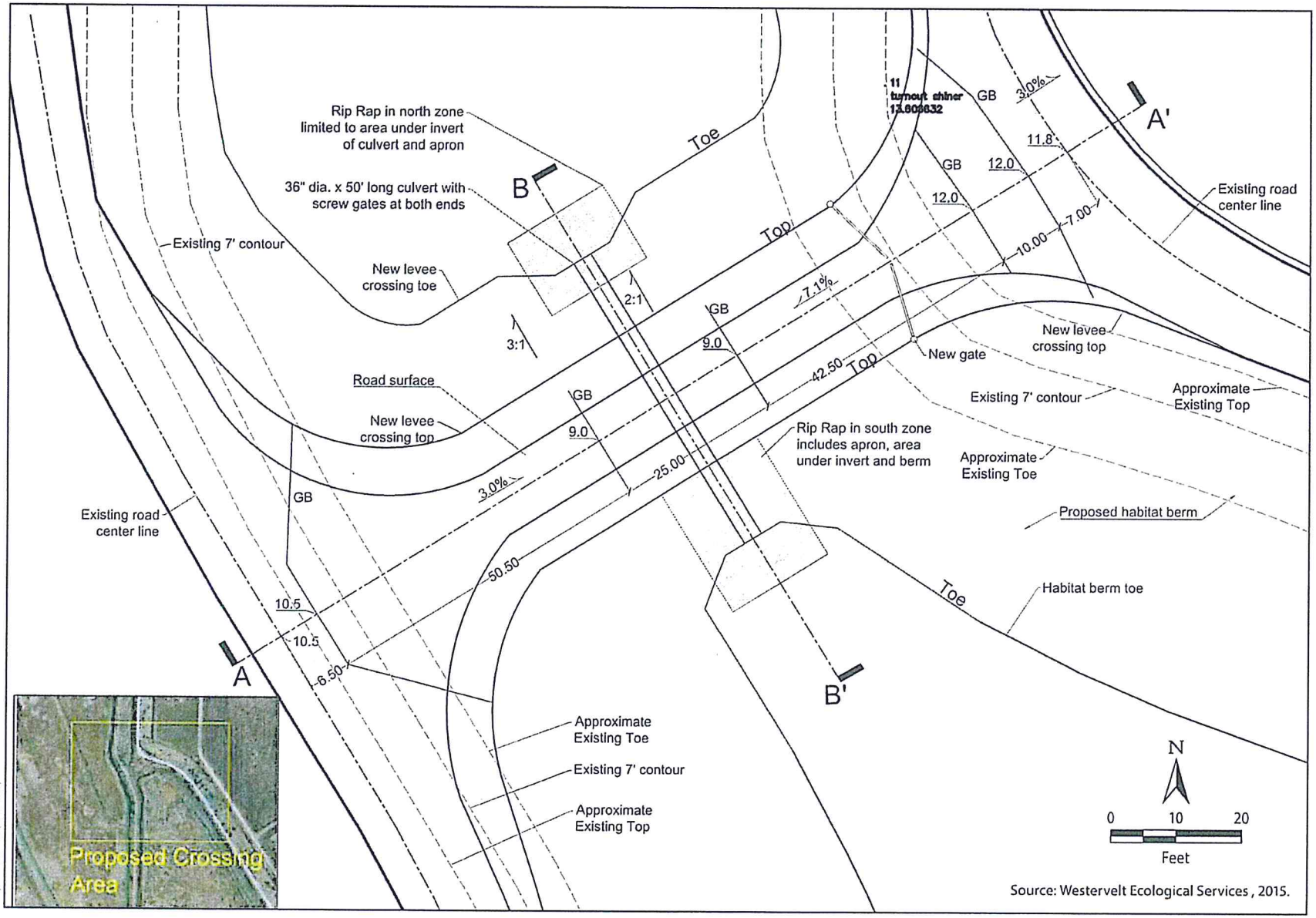


Figure 8a
Tule Red Proposed Levee Crossing Plan View

ATTACHMENT G1

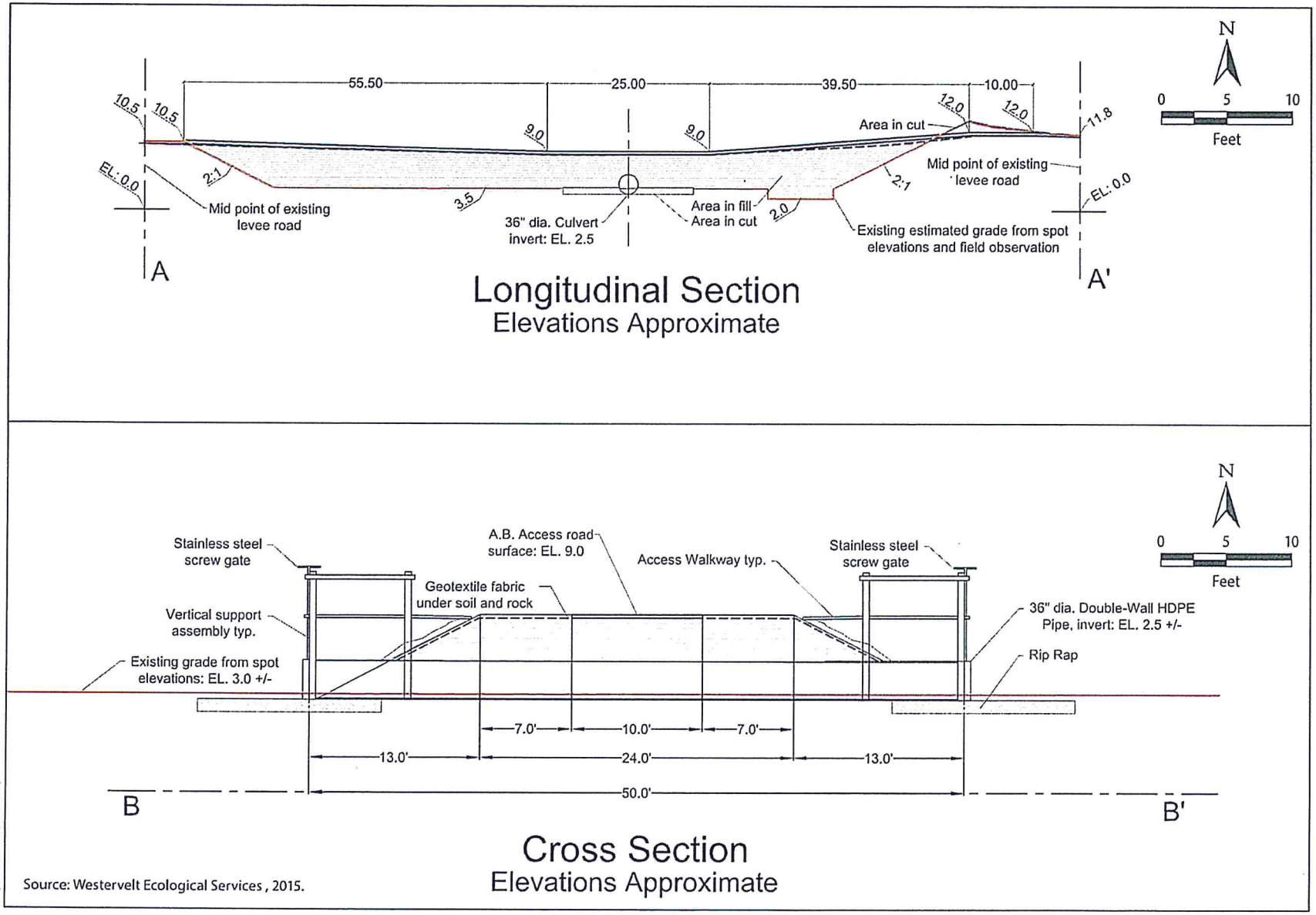


Figure 8b
Tule Red Proposed Levee Sections

ATTACHMENT G2

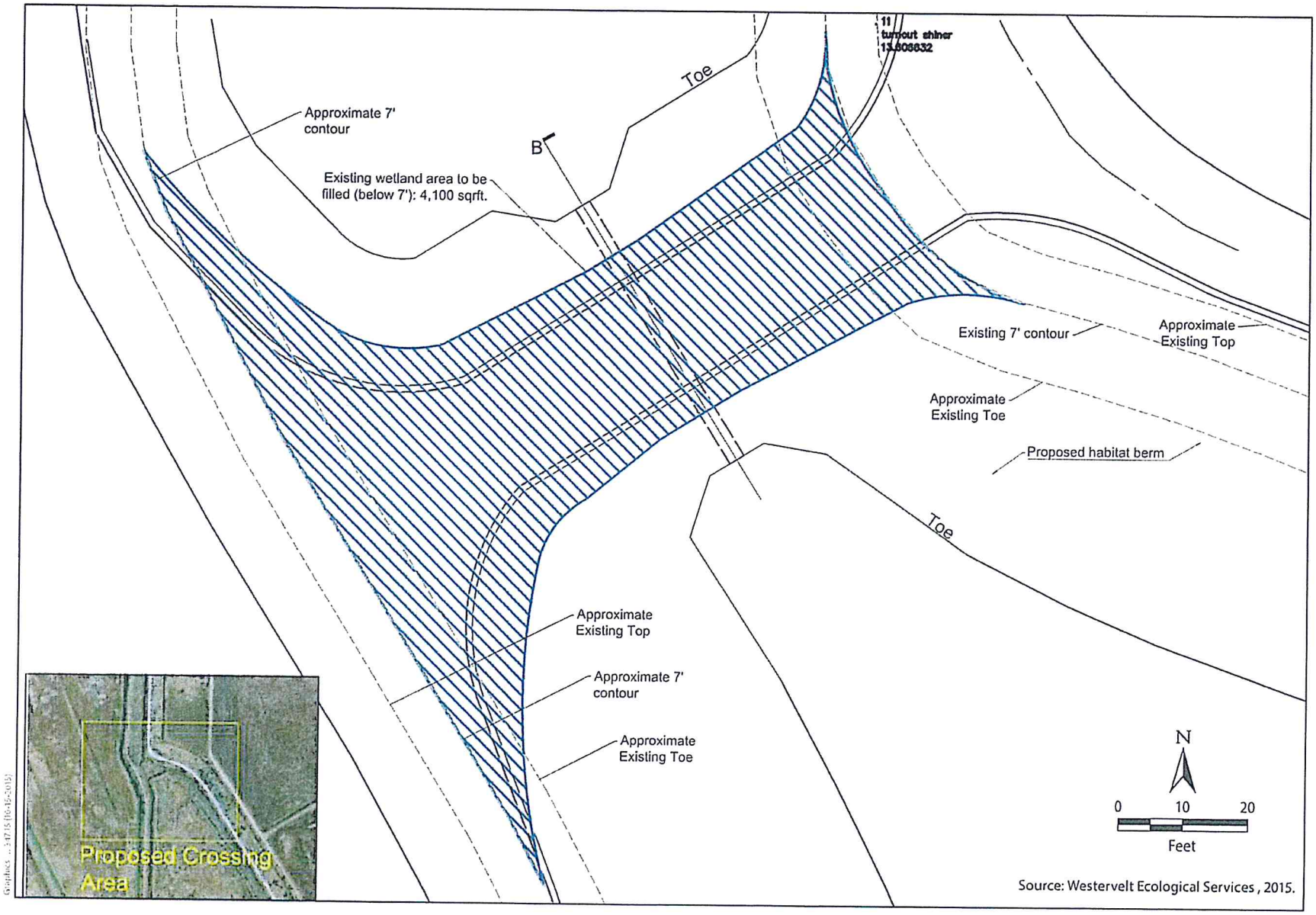


Figure 8c
Tule Red Proposed Levee Crossing Impacted 404 Area

ATTACHMENT G3