

**COUNTY OF SAN LUIS OBISPO BOARD OF SUPERVISORS
AGENDA ITEM TRANSMITTAL**

(1) DEPARTMENT Public Works	(2) MEETING DATE 4/5/2016	(3) CONTACT/PHONE Genaro Diaz, Project Manager (805) 781-5279	
(4) SUBJECT Request to 1) ratify Public Works' approval of Contract Change Order No. 8, supplement 1 and 2, and Contract Change Order No. 9 to the Agreement with John Madonna Construction Co., in the amount of \$39,001, for the Oak Woodland Habitat Mitigation for the Willow Road Extension and Highway 101 Interchange Project; 2) approve Contract Change Order No. 10 in the amount of \$39,593; and 3) approve an additional \$50,000 for the construction contingency budget for the Oak Woodland Habitat Mitigation for the Willow Road Extension and Highway 101 Interchange Project. District 4.			
(5) RECOMMENDED ACTION It is recommended that the Board: <ol style="list-style-type: none"> 1. Ratify Public Works' approval of Contract Change Order No. 8, supplement 1 and 2, and Contract Change Order No. 9 to the agreement with John Madonna Construction Co., in the amount of \$39,001.56, for the Oak Woodland Habitat Mitigation for the Willow Road Extension and Highway 101 Interchange Project; and 2. Approve Contract Change Order No. 10 in the amount of \$39,593.16; and 3. Approve an additional \$50,000 for the construction contingency budget. 			
(6) FUNDING SOURCE(S) Prop 1B-State Local Partnership Program, Nipomo South County Area 1 Road Impact Fees	(7) CURRENT YEAR FINANCIAL IMPACT \$50,000.00	(8) ANNUAL FINANCIAL IMPACT \$0.00	(9) BUDGETED? Yes
(10) AGENDA PLACEMENT <input checked="" type="checkbox"/> Consent <input type="checkbox"/> Presentation <input type="checkbox"/> Hearing (Time Est. ____) <input type="checkbox"/> Board Business (Time Est. ____)			
(11) EXECUTED DOCUMENTS <input type="checkbox"/> Resolutions <input type="checkbox"/> Contracts <input type="checkbox"/> Ordinances <input checked="" type="checkbox"/> N/A			
(12) OUTLINE AGREEMENT REQUISITION NUMBER (OAR) 19001631		(13) BUDGET ADJUSTMENT REQUIRED? BAR ID Number: N/A <input type="checkbox"/> 4/5 Vote Required <input checked="" type="checkbox"/> N/A	
(14) LOCATION MAP Attached	(15) BUSINESS IMPACT STATEMENT? No	(16) AGENDA ITEM HISTORY <input type="checkbox"/> N/A Date: 11/20/12, #1; 3/19/13, #11; 3/24/15, #10; 8/11/15, #16	
(17) ADMINISTRATIVE OFFICE REVIEW David E. Grim			
(18) SUPERVISOR DISTRICT(S) District 4			

Reference: 16APR05-C-3

County of San Luis Obispo



TO: Board of Supervisors
FROM: Public Works
Genaro Diaz, Project Manager
VIA: Dave Flynn, Deputy Director of Public Works
DATE: 4/5/2016

SUBJECT: Request to 1) ratify Public Works' approval of Contract Change Order No. 8, supplement 1 and 2, and Contract Change Order No. 9 to the Agreement with John Madonna Construction Co., in the amount of \$39,001, for the Oak Woodland Habitat Mitigation for the Willow Road Extension and Highway 101 Interchange Project; 2) approve Contract Change Order No. 10 in the amount of \$39,593; and 3) approve an additional \$50,000 for the construction contingency budget for the Oak Woodland Habitat Mitigation for the Willow Road Extension and Highway 101 Interchange Project. District 4.

RECOMMENDATION

It is recommended that the Board:

1. Ratify Public Works' approval of Contract Change Order No. 8, supplement 1 and 2, and Contract Change Order No. 9 to the agreement with John Madonna Construction Co., in the amount of \$39,001.56, for the Oak Woodland Habitat Mitigation for the Willow Road Extension and Highway 101 Interchange Project; and
2. Approve Contract Change Order No. 10 in the amount of \$39,593.16; and
3. Approve an additional \$50,000 for the construction contingency budget.

DISCUSSION

This project implements the mitigation for loss of oak woodlands as a result of the Willow Road 101 Interchange project construction. On March 19, 2013, the Board awarded the subject contract to John Madonna Construction Co. in the amount of \$548,468.75, for the Oak Woodland Habitat Mitigation for the Willow Road Extension and Highway 101 Interchange Project in Nipomo. A contingency and supplemental work budget of \$69,850 was also approved as part of this project. Together, the contract amount plus contingency totaled \$618,318.75.

The contractor planted, is maintaining, and established an irrigation and water supply system for approximately 3,800 native oak acorns throughout a 22 acre area adjacent to the Dana Adobe in Nipomo. The contract also requires the contractor to maintain the site for a three-year plant establishment period after the acorns are installed. The project is expected to achieve at least an 80% survival rate. Fencing for the mitigation plots to prevent livestock encroachment was also installed under this contract.

During construction of the improvements, unforeseen conditions have required revisions to the contract plans and constructed improvements. Initially, it was discovered that the existing irrigation well casing was damaged, which caused dirt and debris to proliferate throughout and impair the irrigation system. On March 24, 2015, the Board authorized Contract Change Order No. 7, supplement No. 2 and increased the construction contingency by \$50,000, for a revised total construction budget of \$668,318.75. With this prior Board action, the damaged well casing and associated issues were resolved, the pumps were repaired, the irrigation lines were flushed, and the irrigation emitters were replaced to unclog the system. Even with these fixes, the irrigation system continued to exhibit signs of unproductive operations and other malfunctions. Due to these factors, use of the well water had to be discontinued until these issues were resolved. In order to continue to supply irrigation water to the sprouted acorns, water had to be trucked in and placed in an onsite storage tank, at a rate of approximately \$2,000 week. Without this supplemental irrigation, the newly sprouted oaks were not likely to survive the dry summer season.

In April 2015, the water quality produced from the modified well was analyzed due to clogging problems in the downstream drip system. Water testing revealed high amounts of precipitates in the water due to elevated levels of calcium carbonate. On August 11, 2015, the Board approved Contract Change Order No. 8 and increased the construction contingency by \$100,000, for a revised total construction budget of \$768,318.75. By this prior action the precipitates were treated by installation of a sulfuric acid injection system which minimized the clogging potential by maintaining a consistent pH balance in the range of 5.5 to 6.5 for the water. This pH is appropriate for both the oak trees and the onsite livestock. The sulfuric acid injection system was configured to inject acid at a predetermined rate when the well pump was activated, using the well pump flow rate of 20gpm.

In October 2015, it was determined that the well pump was periodically running dry and therefore only producing water intermittently, which resulted in an inconsistent performance from the sulfuric acid injection system, and low pH values for water being held in the storage tank. Operation of a large, deeper agricultural well within the adjacent Duncan Family Farm (Duncan Well) appears to be the cause of the insufficient production at the on-site well. Given the intermittent nature of the Duncan Well operations, problems with the on-site well and sulfuric acid injection system became challenging to troubleshoot. Discontinuation of use of the on-site well and water importation were the only viable options available until these new issues are resolved. With all of these issues, approximately half of the sprouted oaks did not survive. New acorns had to be collected and were planted again.

The irrigation system was shut off and winterized on December 2, 2015 and no supplemental watering has occurred during this winter season. A range of plausible alternatives for the project has been analyzed (see attached). We have been informed through a series of discussions with farm manager representatives from Duncan that the Duncan Well runs up to 16 hours per day during the dry season and an 8 hour rest period at night. Public Works now proposes a combination of installing two additional 5,000 gallon storage tanks onsite to accommodate night period pumping, adjustments to sulfuric acid injection system, and minimal water importation. These appear to be the most feasible and cost effective actions for the project. These actions are included in the Contract Change Order No. 10 at an estimated cost of \$39,593.16.

There are 12 months remaining in the current contract for plant establishment. The following Contract Change Orders (CCOs) require approval with this Board action:

<u>CCO No.¹</u>	<u>Description</u>	<u>Estimated Cost</u>
CCO 8 Sup. No 1	Sulfuric acid injection replacement materials, Additional acid, eye-wash station, and additional water delivery	\$ 20,000.00
CCO 8 Sup. No 2	Additional water delivery for March/April 2016, if needed, until the onsite water source is made available	\$ 4,875.00
CCO 9	Additional water delivery and installment well monitoring equipment	\$ 14,126.56
CCO 10 (proposed)	Additional water storage tanks and sulfuric injection system adjustments and maintenance	\$ 39,593.16
TOTAL		\$ 78,594.72

The contingency for the project is not adequate to cover these additional costs and it is expected that the construction contingency will need to be supplemented to address any additional unforeseen conditions for the required plant establishment period. The additional \$50,000 requested construction contingency will provide a revised total construction budget of \$818,318.75 which includes a new contingency and supplemental work budget of \$33,720.27.

The project also would come under the requirements of the new Public Works Groundwater Export Ordinance No. 3295 (Ordinance), adopted by the Board April 2015, that regulate groundwater exportation throughout the 22 recognized basins underlying the County². Under this Ordinance, a permit is required to export more than ½ acre foot of groundwater annually for use outside the boundaries of the basin of origin or outside of San Luis Obispo County. During 2015, the County Department of Public Works exceeded allowable water exportation by less than ½ acre foot. A total of 0.96 acre foot of groundwater was delivered to the project site from John Madonna Construction Company's private well located at Froom Ranch in San Luis Obispo. This importation of water to project site was necessary due to unforeseen conditions. Without this supplemental irrigation, the newly sprouted oaks were not likely to survive.

This project is not eligible for any exemptions to the Ordinance and therefore a permit must be obtained if the use of imported water for irrigation purposes becomes necessary again for this project. Consequently, it is imperative that the recommended items receive the Board's approval so that the modifications to the onsite well may be constructed and the irrigation system may become fully operational and reliable to serve as the sole source of irrigation water for the project. With El Niño rains potentially coming to an end, imported water may become necessary again until the onsite irrigation system can be made operational. If importing water becomes necessary, the amount will be limited to not exceed ½ acre foot so that the need to obtain an Ordinance permit can be avoided.

The project designer, Wallace Associates, has provided the attached technical memorandum regarding irrigation alternates.

¹ On August 11, 2015, the Board Ratified Public Works' approval of CCO 1-7, approved CCO 8, approved additional contraction contingency budget, and adopted resolution approving project construction change order policy. The above CCOs are within the authorized project construction change order policy.

² California Department of Water Resources. 2003. California's Groundwater, Bulletin 118 Update 2003 and subsequent revisions thereto. Sacramento, California.

OTHER AGENCY INVOLVEMENT/IMPACT

On May 9, 2006 the Board of Supervisors certified a Supplemental EIR for the Willow Road project. The Findings included in that resolution referenced two mitigation measures that directly addressed project impacts to oak woodlands. These two measures, F-15 and F-16, described the general mitigation commitment, including the tree mitigation "ratio" required, and the requirement for the County to develop a Habitat Creation, Conservation, and Enhancement Plan (HCCEP) to address oak woodland impacts. It should be noted that even with the inclusion of these measures, impacts to oak woodlands remained a significant and unavoidable (Class 1) impact. The HCCEP was completed in 2012. The HCCEP includes specific performance criteria for oak survival that have not yet been met. The HCCEP indicated that annual reports would be submitted to Caltrans (a major project funding agency) and the CDFW until success criteria are met.

This project was supported in part by the following: South County Advisory Council, SLOCOG, Caltrans, State Water Resources Control Board, Agricultural Commissioner, Air Pollution Control District, State Historical Preservation Office, California Department of Fish and Game, Army Corps of Engineers, Nipomo Community Services District, General Service's property management division, Nipomo Community, AT&T, ConocoPhillips, PG&E, The Land Conservancy of San Luis Obispo County and the Rancho Nipomo Dana Adobe.

FINANCIAL CONSIDERATIONS

This is a multi-year project budgeted in the Road Fund at \$1,125,000. The estimated project costs, including Change Order Nos. 1-10 and the additional construction contingency is \$1,105,050. Funding for this project is from the South County Road Improvement Fee Account – Area 1 and an outside transportation grant from Prop 1B State-Local Partnership Program (SLPP). No budget adjustment is necessary at this time.

Please see Exhibit "A" for an estimated cost breakdown of the project.

RESULTS

Approval of the recommended actions authorizes the implementation and payment for the recommended improvements and repairs to the well and irrigation system onsite, and authorizes the Director to approve future change orders for proper completion of the work as contemplated, in conformance with state statutes. Completion of the required work will fulfill the County's California Environmental Quality Act (CEQA) obligations for impact to oak woodland habitats that resulted from the Willow Road Extension and Highway 101 Interchange Project in Nipomo. Completion of this project and fulfillment of the County's CEQA obligations will ultimately result in a safer, more livable community.

ATTACHMENTS

1. Vicinity Map
2. Exhibit A – Project Cost Estimates
3. Exhibit B - CCO No. 8 sup 1- CCO No. 10
4. Water Supply Alternatives Memo

File: Contract No. 300129.09.04

Reference: 16APR05-C-3

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