Meeting of the Central Valley Flood Protection Board March 27, 2015

Staff Report

Port of Stockton Navy Drive Bridge Replacement, San Joaquin County

1.0 - REQUESTED ITEM

Consider Central Valley Flood Protection Board (Board) approval to replace the existing Navy Drive Bridge over the San Joaquin River (Attachment A) by Draft Permit No. 19003 (Attachment B).

2.0 - APPLICANT

Port of Stockton

3.0 - PROJECT LOCATION

The Navy Drive (extension of McCloy Avenue) Bridge (Bridge No. 29C-0023) crosses the San Joaquin River and connects the Port of Stockton's western and eastern industrial complexes. The Port is located south of the Stockton Deep Water Channel, west of Interstate 5, and generally north of State Route 4 in the City of Stockton (approximate population of 292,000, 2010 census) in San Joaquin County (Attachment A). The San Joaquin River channel at the project location is a Board-regulated stream bound on both sides by private (non-federal) levees.

4.0 - PROJECT DESCRIPTION

The proposed project would replace the existing two-lane swing bridge with a fourlane bridge with removable center span. The existing bridge and abutments would be demolished and removed from the floodway. Rock slope protection (RSP) will be placed on the both banks of the river.

5.0 – AUTHORITY OF THE BOARD

California Water Code § 8534, 8590 – 8610.5, and 8700 – 8710

California Code of Regulations, Title 23 (Title 23)

- § 6, Need for a Permit
- § 108, Existing Encroachments
- § 112, Streams Regulated and Nonpermissible Work Periods
- § 116, Borrow and Excavation Activities Land and Channel
- § 121, Erosion Control
- § 128, Bridges

6.0 - AGENCY COMMENTS AND ENDORSEMENTS

The comments and endorsements associated with the project are as follows:

- The U.S. Army Corps of Engineers (USACE) Sacramento District non-federal project letter was received on February 2, 2015 for this application. The letter indicates that the USACE District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project. The letter is incorporated into the permit as Exhibit A.
- Reclamation Districts 403 and 404 (RDs) have conditionally endorsed the project (Attachment C), and intend to issue separate encroachment permits to the applicant. Because the Board has no local assurance agreement with the RDs for the non-project levees, and the RDs manage their own encroachment permitting programs, no conditions of the RD encroachment permits are incorporated into the Board permit. However, to ensure that the Board and RD permits are compatible, Board staff has coordinated with Mr. Chris Neudeck, District Engineer for both RD 403 and 404 as the respective permits have been developed, and will continue to do so to resolve any unanticipated inconsistencies through construction of the new bridge.

7.0 - PROJECT ANALYSIS

7.1 – Project Summary

The proposed bridge at Navy Drive/ McCloy Avenue over the San Joaquin River will be approximately 285 feet long, 70 feet wide, and have a deck depth of 4.75 feet. The proposed bridge includes three spans, two bents, and four lanes with a removable center span. The existing bridge and abutments would be demolished and removed from the floodway.

Each pier consists of a series of five (5) four-foot diameter cast-in-steel-shell concrete piles. Rock Slope Protection (RSP) will be placed on both sides of bank near the proposed bridge (Attachment D).

7.2 – Hydraulic Summary

The applicant initially submitted a hydraulic analysis report evaluating hydraulic impacts for the 100-year (16,500 cubic feet per second (cfs)) and 200-year (21,900 cfs) discharges. San Joaquin County requires that bridges spanning a floodway must have at least three (3) feet of freeboard above the 100-year flood elevation. This is also consistent with the Board's Title 23 standards. The State also requires that bridges in urban areas shall be designed for a 200-year level of protection by 2025.

For streams within the Board's regulatory jurisdiction that are outside of the federal flood project footprint, the Board is responsible to ensure that the stream channel (whether leveed or not) is able to safely pass the project design flood. To evaluate this requirement the hydraulic analysis was expanded to determine if the proposed bridge replacement project would adversely impact the channel's ability to pass the San Joaquin River project design flood of 18,000 cfs.

The following table shows that the HEC-RAS computed freeboard with the proposed bridge is sufficient at all three design flows.

Design Level	Design Flow (cfs)	Freeboard (feet)
100-year	16,500	12.28
Project Design Flood	18,000	12.28
200-year	21,900	11.57

Table 1- Computed Freeboard at Design Flows

The proposed removable center span will allow for unlimited vertical clearance in the open position. This configuration is designed to allow barge traffic to pass through the open bridge during an emergency to support upstream response and rehabilitation operations.

The HEC-RAS analysis predicted that the proposed bridge would slightly decrease the water surface elevation at the Project Design Flood by approximately 0.02 feet (from 7.84 to 7.82 feet) at the upstream cross-section (Attachment E).

Computed channel velocities at the upstream cross-section of the bridge at the Project Design Flood discharge were predicted to increase by 0.01 feet per second (fps) from 3.68 to 3.69 fps. The applicant has considered that this velocity is to be erosive based on the silty channel bed material. A minimum thickness of 3.3 feet of ¼-ton class RSP for the outer layer of RSP has been proposed to provide erosion protection.

Based on the hydraulic analysis provided, Board staff has determined that the proposed project is expected to result in no adverse hydraulic impacts to the San Joaquin River channel or floodway.

7.3 - Geotechnical Summary

The proposed bridge is supported by two abutments and two bents. Approximately 70-foot deep and 48-inch diameter concrete piles are proposed at the abutment and bent locations.

Board staff has reviewed geotechnical information provided by the Port of Stockton and has determined that the proposed project is expected to result in no adverse geotechnical impacts to the San Joaquin River channel or floodway.

All fills, excavation, RSP, and temporary structures will be completed in compliance with Draft Permit No. 19003 and all applicable Title 23 technical standards.

8.0 - CEQA ANALYSIS

Board staff has prepared the following California Environmental Quality Act (CEQA) findings:

The Board, as a Responsible Agency under CEQA, has reviewed the Initial Study, Mitigated Negative Declaration (IS/MND) and Mitigation Monitoring Plan (SCH No. 2013042040, April 2013) for the Navy Drive Bridge Replacement Project, prepared by the lead agency, Port of Stockton. These documents, including project design and the Mitigation Monitoring Plan, may be viewed or downloaded from the Central Valley Flood Protection Board website at

http://www.cvfpb.ca.gov/meetings/2015/02-27-2015.cfm under a link for this agenda item. The documents are also available for review in hard copy at the Board and County offices.

Board staff finds that although the proposed project could have a potentially significant effect on the environment, there will not be a significant effect in this

case because revisions in the project have been made by or agreed to by the project proponent. The project proponent has incorporated mandatory mitigation measures into the project plans to avoid identified impacts or to mitigate such impacts to a point where no significant impacts will occur. These mitigation measures are included in the project proponent's Mitigation Monitoring Plan and address impacts to aesthetics, air quality, biological resources, cultural resources, geology, hydrology, water quality, hazardous materials, noise and transportation. The description of the mitigation measures are further described in the adopted Mitigation Monitoring Plan.

The documents and other materials which constitute the record of the Central Valley Flood Board's proceedings in this matter are in the custody of Leslie Gallagher, Acting Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Rm. 151, Sacramento, California 95821.

9.0 - CALIFORNIA WATER CODE § 8610.5 CONSIDERATIONS

- Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:
 - The Board has considered all the evidence presented in this matter, including the applications for Permit No. 19003, all supporting hydraulic, geotechnical, and other technical documentation provided by Port of Stockton.
- The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.
 - In making its findings, the Board has used the best available science relating to the issues presented by all parties. On the important issue of hydraulic impacts Port of Stockton used the HEC-RAS one-dimensional flow models. These models are considered by many experts as the best available and applicable scientific tools for the purpose of modeling river hydraulics in this region.
- Effects of the decision on the facilities of the State Plan of Flood Control, and consistency of the proposed project with the Central Valley Flood Protection Plan as adopted by Board Resolution 2012-25 on June 29, 2012:
 - This project is expected to result in no adverse impacts on facilities of the State Plan of Flood Control, and is consistent with the adopted 2012 Central Valley Flood Protection Plan and current Title 23 standards because the

proposed project is predicted to result in no increase in water surface elevation, substantial increase in channel velocities, or adverse geotechnical impacts to the system.

 Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

Port of Stockton has determined that the proposed bridge replacement does not conflict with any future foreseeable projects, nor are there any calculated and known foreseeable impacts anticipated to affect the proposed project.

10.0 - STAFF RECOMMENDATION

Board staff recommends that the Board:

- adopt the CEQA findings;
- approve Draft Encroachment Permit No. 19003 (in substantially the form provided); and,
- <u>direct</u> the Executive Officer to take the necessary actions to execute the permit and file a Notice of Determination pursuant to CEQA with the State Clearinghouse.

11.0 - LIST OF ATTACHMENTS

A – Project Vicinity and Location Maps

B – Draft Permit No. 19003

Exhibit A – USACE Non-Fed Letter (dated February 2, 2015)

C - RD 403/ RD 404 Conditional Endorsements

D – Project Drawings

E – Hydraulic Profile Information

Prepared by: Sungho Lee, Engineer, Water Resources, Projects Section

Document Review: Nancy C. Moricz, Senior Engineer, Projects and Environmental Branch

Andrea Buckley, Senior Environmental Scientist Eric Butler, Projects and Environmental Branch Chief

Len Marino, Chief Engineer

Legal Review Leslie Gallagher, Chief Counsel





DRAFT

STATE OF CALIFORNIA THE RESOURCES AGENCY

THE CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 19003 BD

This Permit is issued to:

Port of Stockton 2201 W. Washington Street Stockton, California 95203

The Port of Stockton (Port) proposes to replace the existing Navy Drive Bridge (Bridge No. 29C-0023) over the San Joaquin River in the City of Stockton. The proposed project would replace the existing two-lane swing bridge with four-lane bridge with removable center span. The existing bridge and abutments would be demolished. Bridge construction will utilize either a temporary trestle or crane barges. The placement of the rock slope protection (RSP) requires installation of temporary cofferdams on each side of the river.

The Navy Drive (extension of McCloy Avenue) Bridge connects the Port's western and eastern industrial complexes. The Port is located south of the Stockton Deep Water Channel, west of Interstate 5, and generally north of State Route 4 in the City of Stockton (Section 8, T1N, R6E, MDB&M, Reclamation District 403 and 404, San Joaquin River, San Joaquin County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project as described above.

(SEAL)

Dated:			
	 	Executive Officer	-

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and The Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of The Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 days' notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by The Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of The Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 19003 BD

THIRTEEN: All work completed under this permit, as directed by the general and special conditions herein, shall be accomplished to ensure that the work is not injurious to adopted plans of flood control, regulated streams, and designated floodways under the Central Valley Flood Protection Board jurisdiction, as defined in California Code of Regulations, Title 23. This permit only applies to the completion of work in the project description located within, or adjacent to and having bearing on the Board jurisdiction, and which directly or indirectly affects the Board's jurisdiction. This special condition shall apply to all subsequent conditions herein.

LIABILITY AND INDEMNIFICATION

FOURTEEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the Central Valley Flood Protection Board, the Department of Water Resources, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, arising out of failure on the permittee's part to perform the obligations under this permit, the permittee shall defend and shall hold each of them harmless from each claim. This condition shall supersede condition TEN.

FIFTEEN: The permittee shall defend, indemnify, and hold the Central Valley Flood Protection Board

and the State of California, including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages related to the Board's approval of this permit, including but not limited to claims filed pursuant to the California Environmental Quality Act. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SIXTEEN: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend, indemnify, and hold the Central Valley Flood Protection Board and the State of California; including its agencies, departments, boards, commissions, and their respective officers, agents, employees, successors and assigns (collectively, the "State"), safe and harmless, of and from all claims and damages arising from the project undertaken pursuant to this permit, all to the extent allowed by law. The State expressly reserves the right to supplement or take over its defense, in its sole discretion.

SEVENTEEN: The Central Valley Flood Protection Board and the Department of Water Resources shall not be held liable for damages to the permitted encroachment(s) resulting from releases of water from reservoirs, flood fight, operation, maintenance, inspection, or emergency repair.

EIGHTEEN: If the permittee does not comply with the conditions of the permit and enforcement by the Central Valley Flood Protection Board is required, the permittee shall be responsible for bearing all costs associated with the enforcement action, including reasonable attorney's fees. Permittee acknowledges that State law allows the imposition of fines in enforcement matters.

PERMITTING AND AGENCY CONDITIONS

NINETEEN: The permittee shall comply with all conditions set forth in the letter from the U.S. Army Corps of Engineers District Engineer dated February 02, 2015, which is attached to this permit as Exhibit A and is incorporated by reference.

TWENTY: The permittee agrees to incur all costs for compliance with local, State, and Federal permitting. If any conditions issued by other agencies conflict with any of the conditions of this permit, then the permittee shall resolve conflicts between any of the terms and conditions that agencies might impose under the laws and regulations it administers and enforces.

PRE-CONSTRUCTION

TWENTY-ONE: The permittee shall contact the Central Valley Flood Protection Board by telephone at (916) 574-0609, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 20 working days prior to start of work may result in delay of the project.

TWENTY-TWO: The permittee shall provide construction supervision and inspection services acceptable to the Central Valley Flood Protection Board.

TWENTY-THREE: Prior to commencement of work, the permittee shall create a photo record, including associated descriptions of project conditions. The photo record shall be submitted to the Central Valley Flood Protection Board within thirty (30) calendar days of beginning the project.

TWENTY-FOUR: Thirty (30) calendar days prior to the start of any demolition and / or construction activities within the floodway or within the existing levee prism, the permittee shall submit two sets of detailed plans and specifications and supporting geotechnical and / or hydraulic impact analyses to the Board's Chief Engineer, for any and all temporary, in channel, or levee prism work that may have an impact during the flood season from November 1 through July 15. The Board may request additional information as needed and will seek comment from the U.S. Army Corps of Engineers and / or the local maintaining agency when necessary. The Board will provide written notification to the permittee if the review period is likely to exceed thirty (30) working days.

CONSTRUCTION

TWENTY-FIVE: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No work, other than that approved by this permit, shall be done in the project area without prior approval of the Central Valley Flood Protection Board.

TWENTY-SIX: All addenda and contract change orders made to the approved plans and / or specifications by the permittee after the Central Valley Flood Protection Board approval of this permit shall be submitted to the Board's Chief Engineer for review and approval prior to incorporation into the permitted project. The submittal shall include all supplemental plans, specifications, and necessary supporting geotechnical, hydrology and hydraulics, or other technical analyses. The Board shall acknowledge receipt of the addendum or change submittal in writing within ten (10) working days of receipt, and shall work with the permittee to review and respond to the request as quickly as possible. Time is of the essence. The Board may request additional information as needed and will seek comment from the U.S. Army Corps of Engineers and / or local maintaining agencies when necessary. The Board will provide written notification to the permittee if the review period is likely to exceed forty five (45) calendar days. Upon approval of submitted documents the permit shall be revised, if needed, prior to construction related to the proposed changes.

TWENTY-SEVEN: No construction work of any kind shall be done during the flood season from November 1st to July 15th without prior approval of the Central Valley Flood Protection Board.

TWENTY-EIGHT: All debris generated by this project shall be disposed outside of the San Joaquin River floodway.

TWENTY-NINE: No material stockpiles, temporary buildings, or equipment shall remain in the floodway during the flood season from November 1 to July 15.

THIRTY: The existing bridge to be replaced shall be completely removed and disposed of outside the limits of the levee section and floodway.

THIRTY-ONE: Piers, bents, and abutments being dismantled shall be removed to at least one (1) foot below the natural ground line and at least three (3) feet below the bottom of the low-water channel.

THIRTY-TWO: Rock slope revetment shall be uniformly placed and properly transitioned into the bank, levee slope, or adjacent original ground and in a manner which avoids segregation.

THIRTY-THREE: The recommended minimum thickness of revetment, measured perpendicular to the bank or levee slope is 18 inches below the usual water surface and 12 inches above the usual water surface.

THIRTY-FOUR: The revetment shall not contain any reinforcing steel, floatable, or objectionable material. Asphalt or other petroleum-based products may not be used as fill or erosion protection on the levee section or within the floodway.

THIRTY-FIVE: Density tests by a certified materials laboratory will be required to verify compaction of backfill within the San Joaquin River floodway.

THIRTY-SIX: Backfill material for excavations within the bank section and within 10 feet of bridge supports within the floodway shall be placed in 4- to 6-inch layers and compacted to a minimum of 90 percent relative compaction per ASTM Method D1557-91, or 97 percent per ASTM D 698-91, and above optimum moisture content.

THIRTY-SEVEN: Except with respect to the activities expressly allowed under this permit, the work area shall be restored to the condition that existed prior to start of work.

THIRTY-EIGHT: The permittee shall be responsible for all damages due to settlement, consolidation, or heave from any construction-induced activities.

VEGETATION / ENVIRONMENTAL MITIGATION

THIRTY-NINE: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to July 15.

FORTY: In the event that scour of channel bed injurious to the San Joaquin River floodway occurs as a result of the project, the permittee shall repair the eroded area and propose measures, to be approved by the Central Valley Flood Protection Board, to prevent further erosion.

POST-CONSTRUCTION

FORTY-ONE: The permittee shall be responsible for repair of any damages to the San Joaquin River floodway due to construction, operation, or maintenance of the proposed project.

FORTY-TWO: Within 120 days of completion of the project, the permittee shall submit to the Central Valley Flood Protection Board as-built drawings and a certification report, stamped and signed by a professional engineer registered in the State of California, certifying the work was performed and inspected in accordance with Board permit conditions and submitted drawings and specifications.

OPERATIONS AND MAINTENANCE

FORTY-THREE: The permittee shall be responsible for repair of any damages to the levee, channel, banks, floodway, or any other flood control facilities due to construction, operation, or maintenance of the proposed project.

FORTY-FOUR: The permittee shall maintain the permitted encroachment(s) within the utilized area in the manner required and as requested by the authorized representative of the Central Valley Flood Protection Board, the Department of Water Resources, or any other agency responsible for maintenance.

FORTY-FIVE: If the bridge is damaged to the extent that it may impair the channel or floodway capacity, it shall be repaired or removed prior to the next flood season.

FORTY-SIX: Drainage from the bridge or highway shall not be discharged directly into San Joaquin River without proper erosion control measures in-place.

FORTY-SEVEN: If the permitted structure results in any adverse hydraulic impact or scouring the permittee shall provide appropriate mitigation measures subject to review and approval of the Central Valley Flood Protection Board.

FORTY-EIGHT: All debris that may accumulate around the bridge piers and abutments within San Joaquin River shall be completely removed from the floodway following each flood season.

FORTY-NINE: The permitted encroachment(s) shall not interfere with the flood conveyance capability of the San Joaquin River floodway. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the San Joaquin River Flood Control project to interfere, the permittee shall be required, at the permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board. If the permittee does not comply, the Board may modify or remove the encroachment(s) at the permittee's expense.

FIFTY: At the request of either the permittee or the Central Valley Flood Protection Board the permittee and the Board shall conduct joint inspections of the project and the San Joaquin River floodway after significant flood events or flood seasons to assess the integrity and operation of the project, and to assess and respond to any adverse impacts on the floodway or adjacent properties.

PROJECT ABANDONMENT, CHANGE IN PLAN OF FLOOD CONTROL

FIFTY-ONE: If the project works, or any portion thereof, is to be abandoned in the future, the permittee shall abandon the project under direction of the Central Valley Flood Protection Board at the permittee's cost and expense.

FIFTY-TWO: The permittee may be required, at the permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted project works if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with implementation of the Central Valley Flood Protection Plan or other future flood control plan or project, or if damaged by any cause. If the

permittee does not comply, the Central Valley Flood Protection Board may perform this work at the permittee's expense.

END OF CONDITIONS



DEPARTMENT OF THE ARMY

U.S. ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT 1325 J STREET SACRAMENTO CA 95814-2922

REPLY TO ATTENTION OF

Flood Protection and Navigation Section (19003)

FEB 0 2 2015

Ms. Leslie M. Gallagher, Acting Executive Officer Central Valley Flood Protection Board 3310 El Camino Avenue, Room 151 Sacramento, California 95821

Dear Ms. Gallagher:

We have reviewed a permit application by the Port of Stockton (application number 19003). This project includes replacing the existing Bridge No. 29C-0023 over the San Joaquin River by demolishing the existing two lane swing bridge and abutments and constructing a four lane bridge with a removable center span. The project also includes placing rock slope protection which requires installing temporary cofferdams on each side of the river. The project is located two miles west of Interstate 5 on the Navy Drive/McCloy Avenue in the City of Stockton, at 37.946803°N 121.338651°W NAD83, San Joaquin County, California.

The District Engineer has no comments or recommendations regarding flood control because the proposed work does not affect a federally constructed project.

A Section 10 and/or Section 404 permit application (2008-1051) is in process for this work.

A copy of this letter is being furnished to Mr. Don Rasmussen, Chief, Flood Project Integrity and Inspection Branch, 3310 El Camino Avenue, Suite 200, Sacramento, CA 95821.

Sincerely.

Ryan Larson, P.E.

Chief, Flood Protection and Navigation Section

RECLAMATION DISTRICT NO. 404 (BOGGS TRACT)

235 East Weber Avenue, Stockton, CA 95202
Mailing Address:
P.O. Box 1461, Stockton, California 95201-1461
Telephone: (209) 465-5883
Fax: (209) 465-3956

TrusteesJason Cashman
Gary Lambdin
Dr. Mel Lytle

Secretary and Attorney
Dante Nomellini, Jr.
Engineer
Christopher H. Neudeck

May 14, 2014

Central Valley Flood Protection Board 3310 El Camino Avenue, Room 151 Sacramento, CA 95821

Re: Conditional Endorsement of Port of Stockton Navy Drive Bridge Replacement Project.

Dear Central Valley Flood Protection Board:

Please accept this letter as RD 404 indication of its conditional endorsement of the above-referenced project. RD 404's endorsement is conditional on RD 404's review of the final or near final plans and specifications and issuance of a formal encroachment permit based on that review. Attached hereto is a copy of a proposed DRAFT encroachment permit for this project which will be refined as necessary based on that review and ultimately considered by RD 404 at the conclusion of that review.

As indicated in the attached March 26, 2014 letter from RD 404's lead engineer, Christopher H. Neudeck, at this time RD 404 finds the 65% plans and specifications to be "conceptually acceptable" and does not foresee any unresolvable issues that would prevent RD 404's from ultimately issuing an encroachment permit for this project.

If you have any questions, please do not hesitate to contact Christopher H. Neudeck (at (209) 946-0268) or me at the above number.

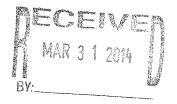
Very truly your

Dante John Nomellini, Jr. Secretary & Attorney for RD 404

Enclosures:

(1) Christopher H. Neudeck's March 26, 2014 letter to Michael Higgins.





Stephen K. Sinnock, P.E. Christopher H. Neudeck, P.E. Neal T. Colwell, P.E.

Kenneth L. Kjeldsen, P.E. - Retired

2022-0100 2035-0100

March 26, 2014

Michael Higgins Parsons 2495 Natomas Park Drive, Suite 600 Sacramento, CA 95833

Re: RD403/404 Encroachment Permit – Navy Drive Bridge

Dear Mr. Higgins,

Reclamation District No. 403 and Reclamation District No. 404 (RD 403 & RD 404) have reviewed the recently submitted 65% plans and accompanying permit drawings for the Navy Drive Bridge in Stockton. This letter will confirm that based on our review and subsequent correspondence Kjeldsen, Sinnock & Neudeck, Inc., as District Engineer for both RD 403 and RD 404, has agreed that the proposed 65% plans are conceptually acceptable to both Reclamation Districts.

A separate Permit Agreement from both RD 403 and RD 404 will be prepared incorporating the construction provisions previously discussed and will constitute approval of the project. The Permit Agreements will be submitted to each Reclamation District's respective Board of Trustees for final endorsement and execution.

Sincerely,

KJELDSEN, SINNOCK & NEUDECK, INC.

Christopher H. Neudeck

RD 403 District Engineer

RD 404 District Engineer

cc:

Dante J. Nomellini, Jr.

Thomas J. Shephard, Sr.

Trustees

Corporate Office: 711 N Pershing Avenue | Stockton, CA 95203 | 209-946-0268 | www.ksninc.com West Sacramento: 1355 Halyard Drive, Suite 180 | West Sacramento, CA 95691 | 916-403-5900

State of California

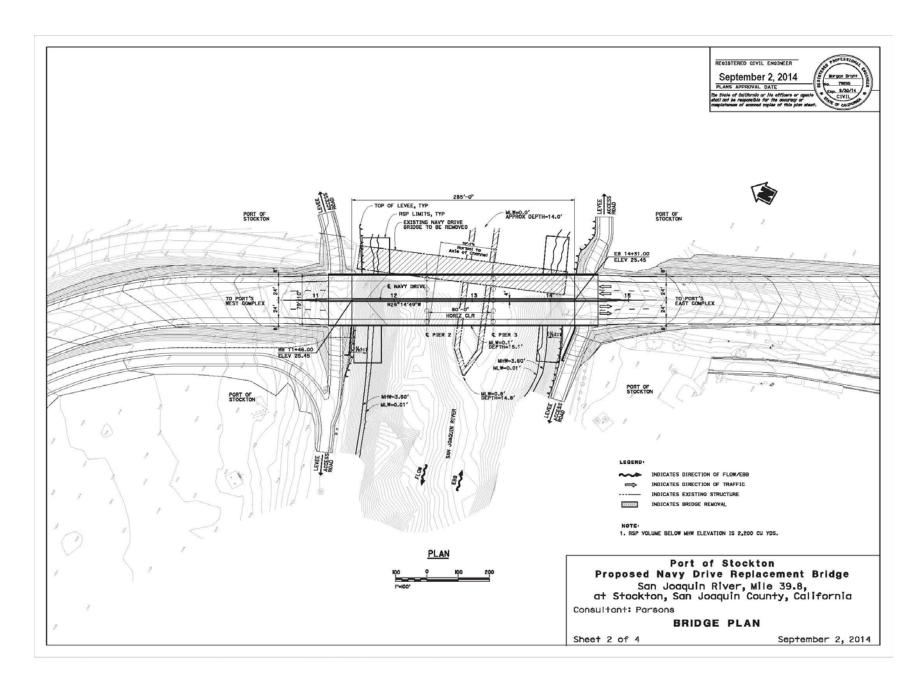
DEPARTMENT OF WATER RESOURCES CENTRAL VALLEY FLOOD PROTECTION BOARD

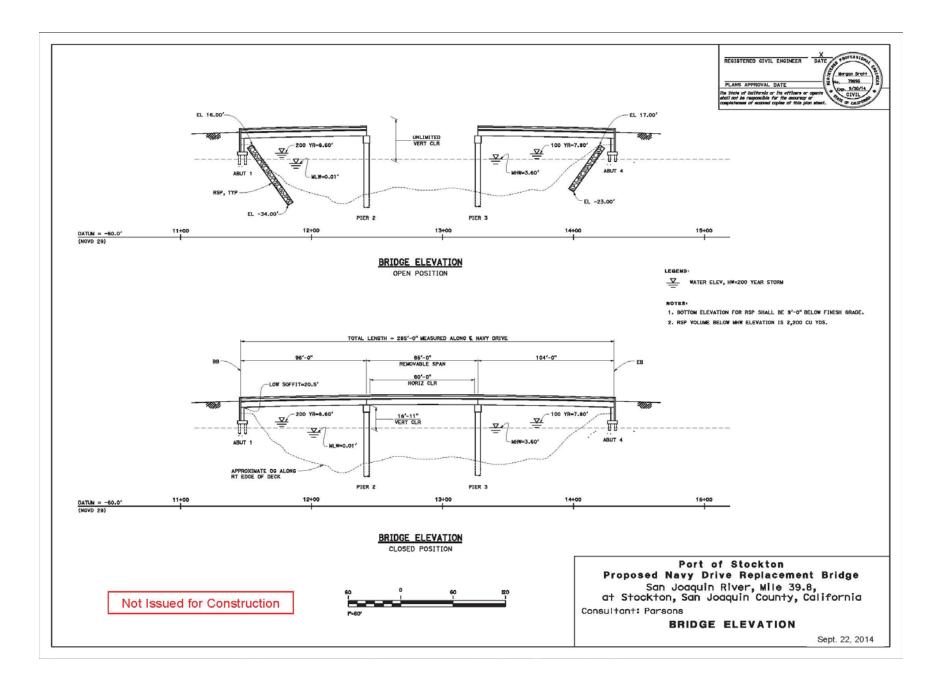
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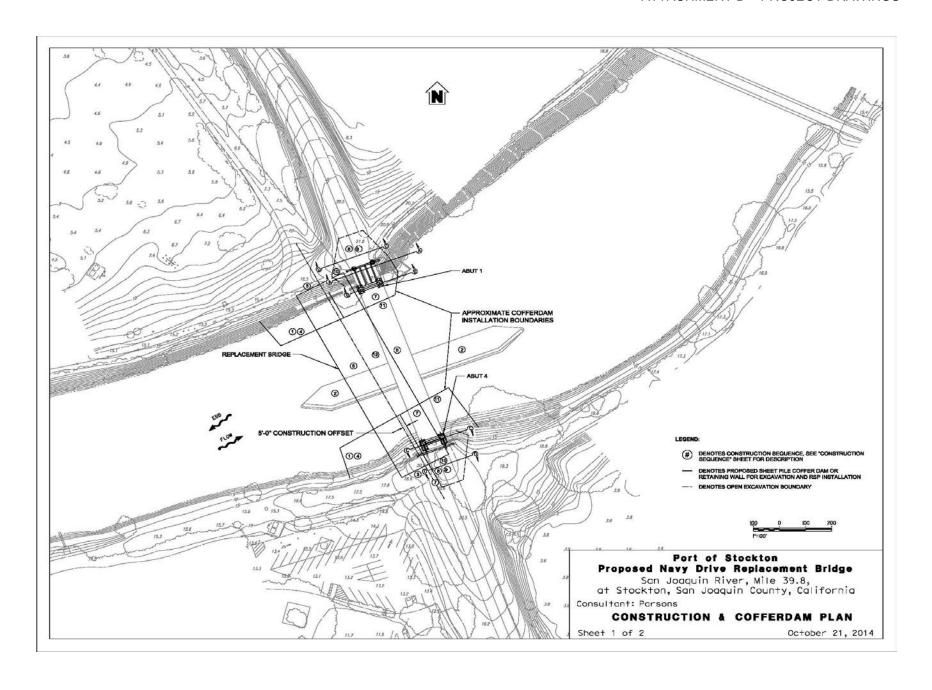
APPLICATION FOR A CENTRAL VALLEY FLOOD PROTECTION BOARD ENCROACHMENT PERMIT

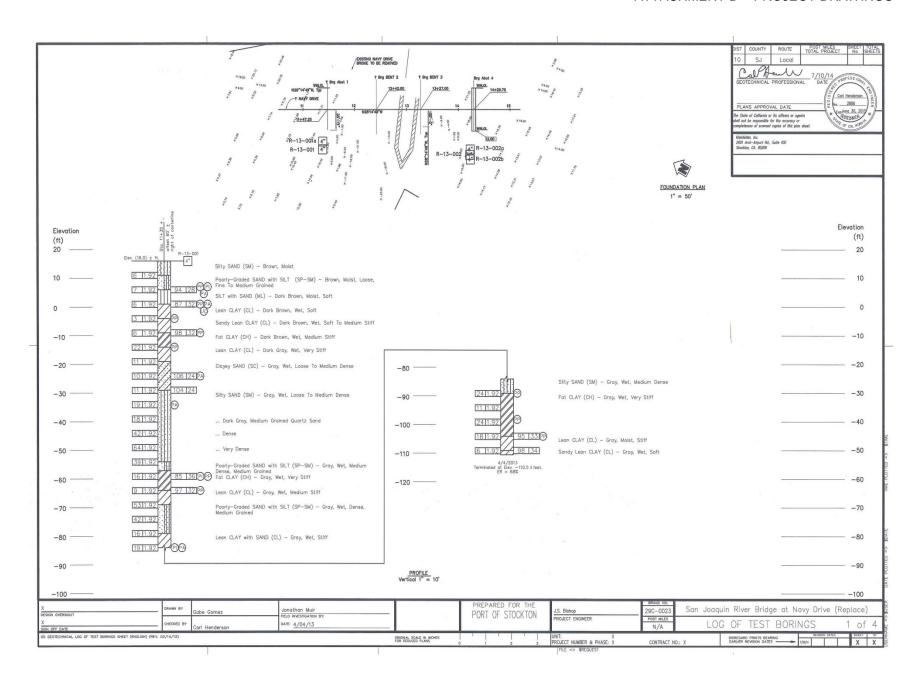
			Application No	
			(For O	ffice Use Only)
4 December of	200			
Description of proposed wo	ork being specific to include	e all items that will be cove	ered under the issued perr	nit.
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2 Project	D+ WH	TOHOW IN	0	
Location: Navg Dr.	(N) (S), Range	County, in Section	<u>D</u>	
Township: 1(N)	(N) (S) Range	(6(E)	(E)	
Latitude: N37 deg	56 47 Longitude:	Widl degrees 20'	19"	
	guin KIVEr, Levee:			
		TOV TO JUCKESIN	Floodway:	
APN: 162	-030-01			
3. Port of S	tockton	of 2201 W	6/ASHINLTM	1 5T.
Name of App	licant / Land Owner		Address	
Stochtaga	tockton plicant / Land Owner CA State	95203	229 94	6 0206
City	State	Zip Code	Telephor	ne Number
			with me	P chilita
			E·ma	il 2 7.15
1	1000		./	gor, ici
4. Mike Hr Name of Applic	06/N	of CH2M	HILL	
Name of Applic	ant's Representative		Company	
SACRAMENTO City	<u></u>	95833	20974	172221
City	State	Zip Code	79 79 Telephor	ie Number
			mkhael, hip	sing e
			E4fa	cham
5. Endorsement of the propo	sed project from the Local	Maintaining Agency (LMA):	
			,	
We, the Trustees of RD 4	Name of LMA	approve this	s plan, subject to the follow	wing conditions:
	/ Name of LIVIA			
Conditions listed on ba	ck of this form	Conditions Attached	☐ No Condition	15
. 0 .				RD 403
JE hy Thould	Lun 5-1-19	Thomas	1-1-1	11/4/14
Trustee /	Pate	Trustee		V Dayle
Mad &	a-1-14			•
Trustee Trustee	Date	Trustee		
/ /	Date	IIIISIEE		Date

an

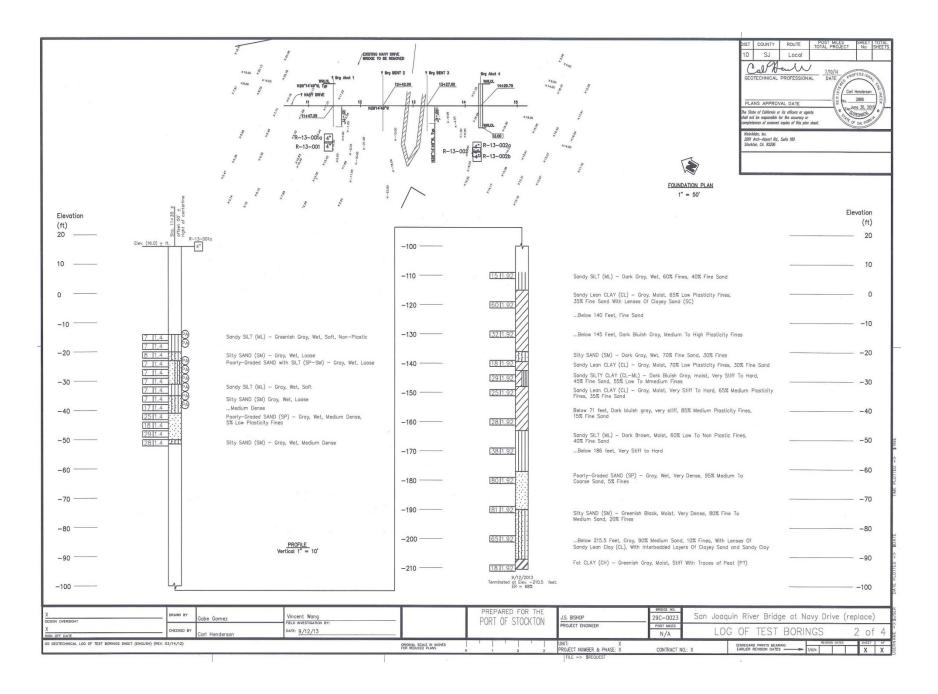




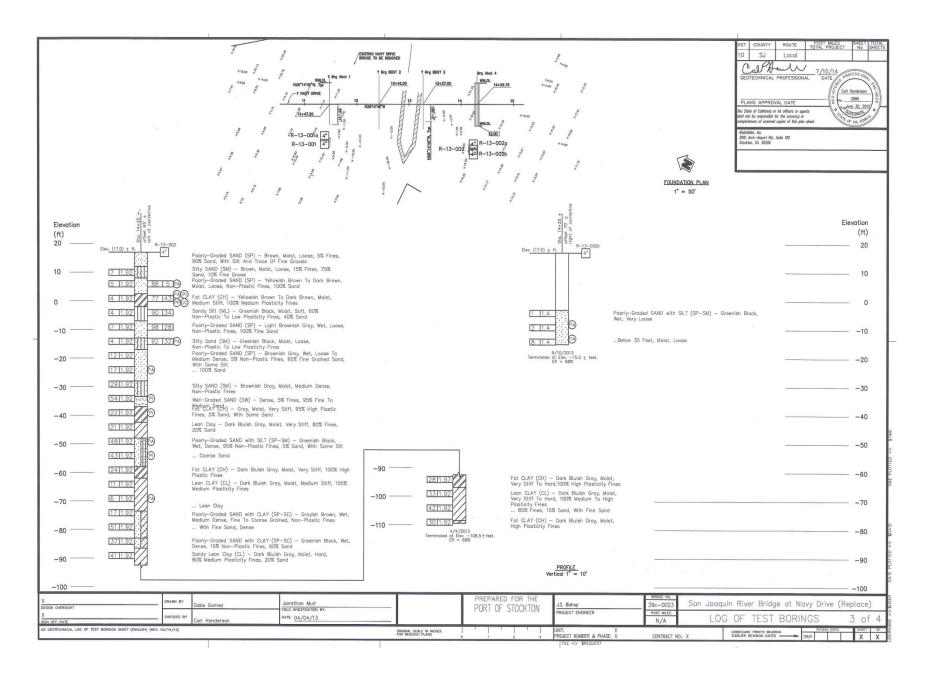




ATTACHMENT D - PROJECT DRAWINGS

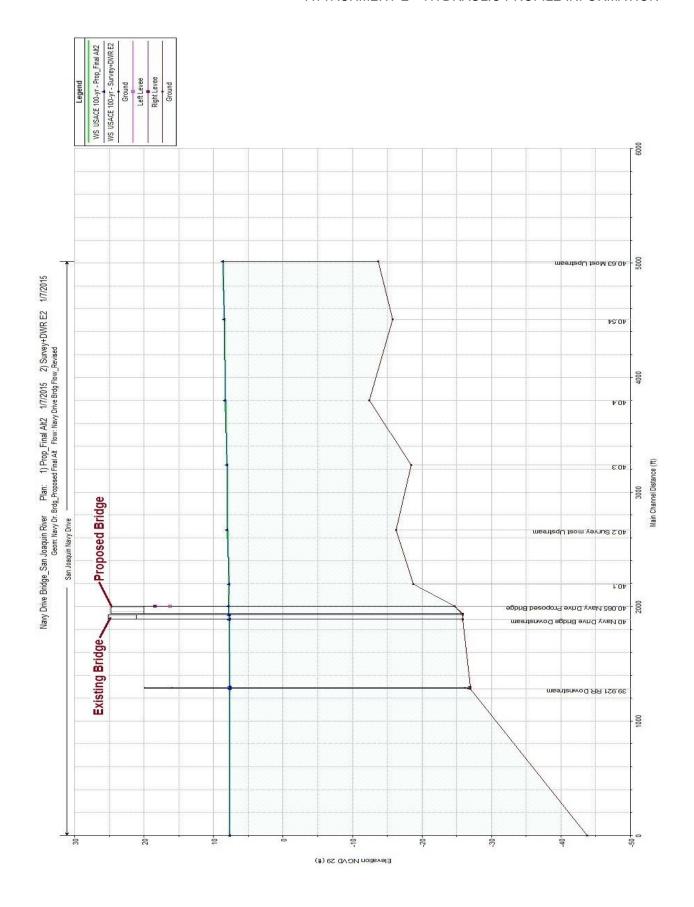


ATTACHMENT D - PROJECT DRAWINGS



ATTACHMENT D - PROJECT DRAWINGS

A COT LIGHT. ORIGINAL SOLAE IN NOVES INVITE: X DESTRUMB PRIOTE BEARING REVISE OF TEST BERNING S-SEET ((NOLISH) (Rev. XX/44/12)) ORIGINAL SOLAE IN NOVES INVITE: X DESTRUMB PRIOTE BEARING REVISE OF TEST BERNING S-SEET ((NOLISH) (Rev. XX/44/12))	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	District Num* orne Brig Bill 1 Brig Abut 1	Table 1 15 15 15 15 15 15 15 15 15 15 15 15 1	GEOTECHNICAL fi PLANS APPROV. The State of Collation or stoll and the responsible fi	AL DATE Its efficies or opening for the occurring or the
	(ft) 20	-100			(ft)
-120 -1	10 ——	-110 I	Sondy Lean CLAY With SILT (Stiff, To Hard, 30% Sand, 70	CL-ML) — Dark Grayish Blue, Moist, Very & Low Plasticity, Low Dry Strength Fines	10
-140		-120	40% Sand, 60% Fines		0
-20 1.5			Sandy Lean CLAY (CL) — Dar 30% Sand, 70% Low Plasticity	k Bluish Gray, Moist, Very Stiff To Hard, , Low Dry Strength Fines, Slightly Cemented	-10
-40 — -150 —	-20		Sandy SILT (ML) — Dark Gray Sandy Lean CLAY (CL) — Blu Medium Dry Strength Fines	Moist, Very Soft, 40% Sand, 60% Low Plasticity Fines sh Gray, Moist, 25% Fine Sand, 75% Low Plasticity,	
-50	-30Trace Coarse Grained - Subangula	-150 I	(37)1.92		-30
-60 -70 -80 -80 -70 -80 -80 -70 -80 -80 -80 -80 -80 -80 -80 -80 -80 -8	-40		Sandy SILT (ML) — Fine Grain 35% Sand, 65% Fines	ed, Bluish Gray, Moist, Very Stiff To Hard,	-40
-70 -80 -90 -10	-50	-170	36 1.92 : Silty SAND (SM) Dark Gray, N	oist, Dense, 60% Sand, 40% Fines	
PROFILE Wertical 1" = 10' Wert	-60	-180 [5211.92Fine to Medium Grained, 75	% Sand, 25% Fines	
PROFILE Vertical 1" = 10' PROFILE Vertical 1" =	-70	–190 ——— <u>50</u>		Medium to Coarse Grained, Dark Gray, Moist,	-70
PROFILE Vertical 1" = 10' Terminate del Eire, 290.5 feet. Terminate del Eire, 290.5 feet. PREPARED FOR THE PORT OF STOCKTON PROJECT ENGINEER PORT OF STOCKTON N/A LOG OF TEST BORINGS 4 of 4 CONTINUENCE OF TEST BORINGS 5 ACT (MOUSE) (Rev. 05/14/12)	-80	-200	Sondy Lean CLAY (CL) - Dar 80% Low Plasticity Fines, Low	c Gray, Molst, Hard, 20% Fine Sand, Dry Strength Fines, Cemented	-80
-100				osticity Fines, Cemented Modules	-90
SIGN OVERSION TO SECRET SHORMS SHEET (SIGNER) SHEET		ad 1" = 10"	ER = 68%		-100
ALOG DET LOST BORNOS S-SET (DNO.94) (DRV. 05/14/12) ORIGINAL SOLE IN NOISE O	Gabe Comez Jornes	Vetenkamp	DODT OF CTOCKTON J.S. Bishop	29c-0023 San Joaquin River Bridge	e at Navy Drive (Replace)
ORIONAL SOLE IN NOVES UNIT: X DISSIGNAD PRINTS BEARING NIVES WELL X	CHECKED BY DATE: 9 /		PROJECT ENGINEER	POST MILES	
FOR REDUCED FLANS 2 3 PROJECT NUMBER & PHASE; X CONTRACT NO.: X EARLIER REVISION DATES 1/M/M X X	UATE TO A T	GRIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: X PROJECT NUMBER & PHASE; X	DISPERADIT DEINTS DEADIN	NG REVISION DATES SHEET OF



ATTACHMENT E – HYDRAULIC PROFILE INFORMATION

							HEC-F	AS River	: San Joaqu	iin Reach: I	Navy Drive	Profile: L	ISACE OM	
Reach I	River Sta	Profile	Plan	Q Total	Length Chnl	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Ch
				(cfs)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Navy Drive	40.63	USACE 0&M	Prop_Final Alt2	18000.00	508.30	-13.73			8.86	0.000222	3.90	4613.83	293.72	0.17
Navy Drive	40.63	USACE 0&M	Existing	18000.00	508.30	-13,73	8.65		8.88	0.000221	3.90	4620.49	293.79	0.17
Navy Drive			Prop_Final Alt2	18000.00	705.78	-15.77			8.74	0.000255	4.33		-	
Navy Drive	40.54	USACE 0&M	Existing	18000.00	705.78	-15.77	8.47		8,76	0.000254	4.33	4158.51	247.11	0.19
Navy Drive	40.4	USACE 0&M	Prop_Final Alt2	18000.00	561.17	-12.40	8.28		8.54	0.000266	4.14	4344.79	288.63	0.19
Navy Drive	40.4	USACE 0&M	Existing	18000.00	561.17	-12.40	8.30		8.57	0.000265	4.14	4351.77	288.73	0.19
Navy Drive	40 3	HSACE O&M	Prop Final Alt2	18000.00	571.00	-18.45	8.03	·	8.38	0.000292	4.77	3777.51	213.17	0.20
Navy Drive		USACE 0&M		18000.00	571.00	-18.45			8.40		4.76			
Navy Drive	40.2	HISACE OFM	Prop Final Alt2	18000.00	473.00	-16.32	7.98		8.22	0.000175	3.87	4655.86	242.91	0.16
Navy Drive		USACE O&M		18000.00	473.00	-16.32			8.24	0.000173	3.86			0.16
Haly Dillo	10.2	OUNDE OUN	Lillowing	10000.00	410.00	10.02	0.01		0.21	0.000114	0.00	1001.00	210.01	3.10
Navy Drive	40.1	USACE 0&M	Prop_Final Alt2	18000.00	191.25	-18.77	7.76		8.10	0.000267	4.69	3841.86	206.88	0.19
Navy Drive	40.1	USACE 0&M	Existing	18000.00	191.25	-18.77	7.79		8.13	0.000266	4.68	3847.24	206,97	0.19
Navy Drive	40.08	USACE 0&M	Prop_Final Alt2	18000.00	1.10	-24.72	7.82	-9.39	8.03	0.000149	3.69	4882.38	241.56	0.14
Navy Drive		USACE O&M		18000.00	75.10				8.05	0.000148	3.68			
Navy Drive	40.0CE			Bridge								2.	-	
INAVY DIIVE	40.003			blidge						10				
Navy Drive	40.05	USACE 0&M	Prop Final Alt2	18000.00	44.00	-25.90	7.73		7.95	0.000159	3.76	4789.13	233.15	0.15
Navy Drive		USACE 0&M		18000.00	2.00	-25,90		-9.50	8.04		3.84		The second second	
Navy Drive	40	HSACE O&M	Prop Final Alt2	18000.00	586.22	-25.90	7.72		7.94	0.000159	3.76	4787.46	233.14	0.15
Navy Drive		USACE O&M		18000.00	586.22	-25,90		-9.50			3.86		The second second	
							7.50							
Navy Drive	0.00	THE RESERVE OF THE PARTY OF THE	Prop_Final Alt2	18000.00	4.00	-27.00		-10.82			3.24			1000000
Navy Drive	39.929	USACE 0&M	Existing	18000.00	4.00	-27.00	7.68	-10.82	7.85	0.000113	3.24	5561.36	267.69	0.13
Navy Drive	39.925			Bridge										
Navy Drive	39.921	USACE O&M	Prop Final Alt2	18000.00	1282.51	-27.00	7.62		7.79	0.000114	3.25	5545.39	267.48	0.13
Navy Drive		USACE 0&M		18000.00	1282.51	-27.00			7.79	0.000114	3.25		the second second	
Navy Drive	20.7	HOACE OOM	Prop Final Alt2	18000.00		-43.80	7.70	-37.64	7.70	0.000001	0.50	34576.87	781.27	0.01
Navy Drive		USACE 0&M		18000.00		-43.80 -43.80	1521523					34576.87	781.27	