PLACE: West Sacramento Chamber of Commerce Meeting Room
1420 Merkley Avenue, Suite 6, West Sacramento, CA

DATE: Thursday, June 30, 2011

TIME: 10:00 AM Special Meeting

Meeting Agenda

1. Agenda Approval

2. Public Comment

3. June 9, 2011 Minutes

4. Continuation of Public Hearing and Consideration of Resolutions 11-06-01 and 11-06-02 Authorizing an Eminent Domain Action to Acquire Real Property for the West Sacramento Levee Improvement Program, the Rivers EIP – Yolo County APN’s 014-690-089 and 014-690-090.

5. Consideration of Resolution 11-06-03 Concerning the Acquisition of Temporary Construction Easement from Certain Residentially-Zoned Parcels Within the Rivers EIP Area, and Authorizing and Directing the General Manager to Make Such Offers and Acquire the Temporary Rights for the Construction of the Project.

6. Consideration of Resolution 11-06-04 Concerning License Agreements with the State for Rights to Construct the Rivers and CHP EIP Projects, and Authorizing and Delegating to the General Manager the Authority to Enter into such Agreements.

7. Consideration of Approval of Plans and Specifications and Award of the Early
8. Implementation Project CHP Site to Teichert Construction.

9. Consideration of Approval of Plans and Specifications and Award of the Early Implementation Project The Rivers Phase 1 to Raito, Inc.

10. Consideration of Approval of a Professional Services Contract with HDR Engineering, Inc. for Engineering Services During Construction Supporting the West Sacramento Levee Improvement Program.

11. Consideration of Approval of Task Order No. 3 of the Design Services Contract with HDR Engineering, Inc. for the Sacramento River Southport Early Implementation Project.

12. Informational Items

13. Adjourn

** In accordance to the Brown Act, any documents related to agenda items that are made available to the Board before the meeting will be available for review by the public at 1420 Merkley Ave., Suite 4, West Sacramento, CA 95691, 8:00 am to 4:00 pm, Monday through Friday.
OBJECTIVE
This report requests that the JPA Board continue the public hearing for consideration of Resolutions 11-06-01 and 11-06-02 and reschedule the date of the public hearing until a date uncertain.

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board continue the public hearing of Resolutions 11-06-01 and 11-06-02 without comment until a date uncertain.

BACKGROUND
In late 2005, the City of West Sacramento adopted a comprehensive flood control strategy for the purposes of improving the City’s flood protection system, thereby meeting new Federal standards for evaluating levee integrity. By the fall of 2006, WSAFCA had begun funding the initial stages of a levee study. In August of 2007, upon completion of the study, the City Council hired HDR Engineering, Inc. to facilitate the environmental, design and permitting for the first phase of improvements. The result of this process identified the first round of construction sites.

In the levee improvement program, outlined in WSAFCA’s Draft Alternatives Analysis report dated November 13, 2009, three reaches of the City’s levee system were identified as priorities for immediate improvement. One of those reaches was the Sacramento River North levee. In October of 2010, HDR completed 100% construction drawings for the Rivers EIP, a portion of the Sacramento River North levee.

WSAFCA has prepared an environmental impact report (EIR) under CEQA, and an environmental impact statement (EIS) under NEPA for the Rivers EIP which includes evaluation of the project specific impacts of the Rivers EIP Project. The board certified that document on March 10, 2011. At that same meeting WSAFCA also approved and formalized the offers on the all parcels zoned open space in the project. WSAFCA’s right-of-way agent, Bender Rosenthal, Inc. (BRI) has made offers on all those properties. Construction of the Rivers EIP improvements is scheduled to begin in July of this year.

On March 24, 2011 WSAFCA approved Resolution 11-03-02 setting just compensation and approving offers for a permanent levee operation and maintenance easements across two vacant residentially-zoned parcels, owned by Glen and Deborah Campora (APN 014-690-090) and Simona Copaciucu (APN 014-690-089). The parcels are subdivided parcels configured for a single family home, which are designed to be constructed, per their existing Central Valley Flood Protection Board (CVFPB) Permit on the water ward side of the levee. The 100% designed documents, referenced above, showed that a permanent levee easement is necessary across the southern boundaries of this parcel, more specifically where the likely utility connections and access points to River Crest Drive would be. The intended residential use conflicted with the template easement document contained in the Exhibits Binder, dated December 2009, for the State-Federal Flood Control System Modification Program, EIP process, as it was written. Staff worked with Department of Water Resources, the overseers for the EIP program and received approval to modify the template easement document to reflect the intended uses on these two parcels. As a result, the easement explicitly addresses uses consistent with a residential lot: driveways, landscaping and utilities. The proposed easement language was shared with BRI for
the appraisal process. WSAFCA was granted approval to use the modified easement. The appraisal on which WSAFCA based its offer was completed on March 11, 2011. On April 8 and 12, 2011, BRI mailed a final offer packet to the owners. The packets included a written offer satisfying Government Code section 7267.2, which requires WSAFCA to make an offer in writing for the property of at least its appraised fair market value prior to adopting a resolution of necessity.

On May 25, 2011, WSAFCA issued a Notice of Hearing for a Resolution of Necessity to the owners of record, (Campora and Copaci) notifying it that a hearing is scheduled on June 9, 2011 at 10:30 am before WSAFCA. In a report from closed session, WSAFCA decided to continue the public hearing until June 30, 2010.

**ANALYSIS**

**Strategic Plan Integration**

N/A

**Alternatives**
The following alternatives are presented for WSAFCA’s consideration:

1. Continue the public hearing to a date uncertain
3. Direct staff to discontinue work on this transaction.

Alternative 1 is staff’s recommendation. Staff does not recommend Alternative 2, as significant details of the proposed transaction are still under negotiation. Staff does not recommend Alternative 3, because the proposed transaction is necessary for the implementation the Rivers Phase 1 EIP.

**Coordination and Review**

N/A

**Fiscal Impact**

N/A

**ATTACHMENT**

None
OBJECTIVE
The objective of the report is to obtain the West Sacramento Area Flood Control Agency’s (WSAFCA) approval to make an offer to purchase certain temporary property rights on a residentially-zoned parcel from private owner within the boundary of the Rivers EIP area, based on appraised value, and to delegate authority the General Manager conduct all business appropriate and necessary to acquire the property rights.

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board:
   1) Adopt Resolution 11-06-03

BACKGROUND
In late 2005, the City of West Sacramento adopted a comprehensive flood control strategy for the purposes of improving the City’s flood protection system, thereby meeting new Federal standards for evaluating levee integrity. By the fall of 2006, the WSAFCA had begun funding the initial stages of a levee study. In August of 2007, upon completion of the study, the City Council hired HDR Engineering, Inc. to facilitate the environmental, design and permitting for the first phase of improvements. The result of this process identified the first round of construction sites.

In the levee improvement program, outlined in WSAFCA’s Draft Alternatives Analysis report dated November 13, 2009, three reaches of the City’s levee system were identified as priorities for immediate improvement. One of those reaches was the Sacramento River North levee. In October of 2010, HDR completed 100% construction drawings for the Rivers EIP, a portion of the Sacramento River North levee.

WSAFCA has prepared environmental impact report (EIR) under CEQA, and an environmental impact statement (EIS) under NEPA for the Rivers EIP which includes evaluation of the project specific impacts of the Rivers EIP Project. The board certified that document on March 10, 2011. At that same meeting WSAFCA also approved and formalized the offers on all parcels zoned open space in the project. WSAFCA’s right-of-way agent, Bender Rosenthal, Inc. (BRI) has made offers all those properties. Construction of the Rivers EIP improvements is scheduled to begin in July of this year.

On March 24, 2011 WSAFCA approved Resolution 11-03-02 setting just compensation and approving an offer for a permanent levee operation and maintenance easement consisting of approximately 6,954 square feet of a 0.31 acre unoccupied residentially-zoned parcel owned in fee by the Glen and Deborah Campora within the Rivers EIP. The vacant residentially-zoned parcel (APN 014-690-090) is a subdivided parcel and configured for a single family home, which are designed to be constructed, per an existing Central Valley Flood Protection Board (CVFPB) Permit on the water ward side of the levee. The 100% designed documents, referenced above, showed that a permanent levee easement is necessary across the southern boundaries of this parcel, more specifically where the likely utility connections and access points to River Crest Drive would be. The intended residential use conflicted with the template easement document contained in the Exhibits Binder, dated December 2009, for the State-Federal Flood Control System Modification Program, EIP process, as it was written. Staff worked with Department of Water Resources, the overseers for the EIP program and received approval to modify the template easement document to reflect to intended uses on these two parcels.
As a result, the easement explicitly addresses uses consistent with a residential lot: driveways, landscaping and utilities. The proposed easement language was shared with BRI for the appraisal process. WSAFCA was granted approval to use the modified easement. The appraisal on which WSAFCA based its offer was completed on March 11, 2011. On April 12, 2011, BRI mailed a final offer packet to the owner of the Campora Property. The packet included a written offer satisfying Government Code section 7267.2, which requires WSAFCA to make an offer in writing for the property of at least its appraised fair market value prior to adopting a resolution of necessity.

On May 25, 2011, WSAFCA issued a Notice of Hearing for a Resolution of Necessity to the owners of record, (Campora) notifying it that a hearing is scheduled on June 9, 2011 at 10:30 am before WSAFCA. In a report from closed session WSAFCA decided to continue the public hearing until June 30, 2010.

ANALYSIS
The Rivers EIP levee improvements initially were approximately 4,500 feet long and included approximately 1,500 feet along River Crest Drive, in The Rivers residential development. As the project design was developed, engineering analysis revealed that levee improvements other than a seepage cut-off wall may be preferable along River Crest Drive. To determine the best solution, further analysis is required. The time required for that analysis would have delayed the entire project. Instead of delaying the project, the decision was made to remove the portion along River Crest Drive from the project. The eastern 1/3rd, approximately 1,500 feet, was truncated from the project, the Project is now approximately 3,000 feet long and the eastern edge of the Project is now at the intersection of River Crest Drive and Westlake Drive. Deficiencies at this site include geometry, stability, through-seepage, and under-seepage. To address these deficiencies, The Rivers EIP design calls for a combination of slurry cutoff wall and land sideslope flattening.

On June 9, 2011 BRI contacted Glen Campora and scheduled an inspection of his parcel (APN 014-690-090) that was conducted on June 16, 2011 for the purposes of preparing an appraisal for a temporary construction easement. The temporary rights are for purposes of constructing the slurry cutoff wall and performing the land side slope flattening on the property to the south of the Campora parcel. The temporary construction easement area covers approximately 4,138 square feet of the 0.31-acre parcel. Resolution 11-06-03 established compensation based on appraised value for the Glen and Deborah Campora (APN 014-690-090) parcel at $2,000 for a term of 7 months beginning on July 1, 2011.

Strategic Plan Integration
Strategic flood control planning supports the city strategic planning principles of providing a place where people feel safe and secure, provides for a financially sound city government, and is a top priority of the 2008, 2009 and 2010 Policy Agenda.

Alternatives
1. WSAFCA adopts Resolution 11-06-03. The General Manager is authorized to proceed with making offers to the property owner consistent with the summary appraisal reports, to conduct negotiations, execute a temporary construction easement, close escrow and accept any property interest in the properties.

2. WSAFCA may choose to make modifications to the Resolution or its attachments. WSAFCA may direct staff to make those changes in conjunction with legal counsel. This is not recommended as it reduces the amount of time for the property owners to review the offer.

3. The WSAFCA may choose not adopt this resolution. This is not recommended because it will prevent the timely acquisition of the property rights needed for the construction of the project.

Alternative 1 is the staff recommendation. Staff does not recommend the alternative approaches because they could potentially delay or even prevent construction from occurring this year.
Coordination and Review
This report was coordinated with WSAFCA, the City's Finance Department, and legal counsel for WSAFCA and the City.

Budget/Cost Impact
The total value of the offers for the proposed temporary rights for the residentially-zoned parcel is $2,000. Appropriations for these acquisitions were included in the current Capital Improvements Project Budget, funded by a combination of property flood assessment revenue, bond proceeds, and the City of West Sacramento. Ninety-five percent of the costs are eligible for reimbursement through the State-Federal Flood Control Systems Modification Program's Land Acquisition Process.

ATTACHMENT
Resolution 11-06-03
RESOLUTION 11-06-03

A RESOLUTION OF THE WEST SACRAMENTO AREA FLOOD CONTROL AGENCY ("WSAFCA") CONSIDERATION OF RESOLUTION 11-06-03 CONCERNING THE ACQUISITION OF A TEMPORARY CONSTRUCTION EASEMENT FROM A CERTAIN RESIDENTIALLY-ZONED PARCEL WITHIN THE RIVERS EARLY IMPLEMENTATION PROJECT (EIP) AREA, AND AUTHORIZING AND DIRECTING THE GENERAL MANAGER TO MAKE SUCH AN OFFER AND ACQUIRE THE TEMPORARY RIGHTS FOR THE CONSTRUCTION OF THE PROJECT

WHEREAS, WSAFCA is a Joint Powers Authority comprised of the City of West Sacramento, Reclamation District (RD) 900 and RD 537 for the purposes of constructing the improvements necessary to enhance the levee system along the Sacramento River, and

WHEREAS, WSAFCA commissioned a levee study to evaluate the entire West Sacramento Levee System,

WHEREAS, the study determined that substantial improvements to the system must be made to meet the new Federal criteria and protect the lives and livelihoods of those living and working in West Sacramento; and

WHEREAS, in August of 2007, the City Council of the City of West Sacramento approved a contract with HDR Engineering, Inc. for environmental, design and permitting to prepare an EIP to guide the first phase of improvements, selecting the sites based on the primarily on those providing the greatest public safety, with the least negative effects; and

WHEREAS, based on that criterion HDR identified a series of necessary improvements along Reach 2; and

WHEREAS, in October 2010, HDR completed its 100% construction drawings for the levee improvements for a portion of Reach 2, known as the Rivers EIP, which included the geometry for the extent of the real property interest to be acquired in support of the levee improvements, and

WHEREAS, the Glen and Deborah Campora is the fee title owner of parcel, APN 014-690-090 within the Rivers EIP, as generally shown on the APN map attached hereto as Exhibit "A"; and

WHEREAS, WSAFCA has had an environmental impact report ("EIR") under CEQA, and an environmental impact statement ("EIS") under NEPA, prepared for the Rivers EIP which includes evaluation of the project-specific impacts and measures to mitigate the potentially significant adverse impacts of the Rivers EIP Project ("EIR/EIS"); and

WHEREAS, by Resolution 11-03-01, WSAFCA has certified the EIR/EIS prepared for the Rivers EIP, which includes evaluation of the project specific impacts and measures to mitigate the potentially significant adverse impacts of the Rivers EIP Project; and
WHEREAS, the flood control improvements contemplated under the Rivers EIP require that WSAFCA obtain lands for construction and maintenance of levee and ancillary recreational improvements, and riparian habitat restoration; and

WHEREAS, Resolution 11-03-02 approved an offer for a permanent levee operation and maintenance easement consisting of approximately 6,954 square feet of a 0.31 acre unoccupied residentially-zoned parcel owned in fee by the Glen and Deborah Campora within the Rivers EIP; and

WHEREAS, acquisition of the temporary construction easement being attached hereto and incorporated herein as Exhibit B for property located at 1020 River Crest Drive, West Sacramento, California, Yolo County APN 014-690-090, consisting of approximately 4,138 square feet of a 0.31 acre unoccupied residentially-zoned parcel located along the Sacramento River within the City of West Sacramento, is necessary for the construction of the Rivers EIP; and

NOW, THEREFORE, BE IT RESOLVED by West Sacramento Area Flood Control Agency that:

Section 1: WSAFCA hereby finds that the recitals set forth above are true and correct, and incorporate these recitals herein by reference.

Section 2: WSAFCA's General Manager or his/her designee is hereby authorized to execute and deliver any and all documents, do any and all things, and take any and all actions that may be necessary or advisable, in their discretion, in order to make offers to purchase the necessary temporary real property rights substantially in the form shown on Exhibit B. The offers shall not exceed the appraised fair market value as determined by the summary appraisal reports prepared by BRI.

Section 3: WSAFCA's General Manager is hereby authorized to execute a temporary construction easement, close escrow or accept any property interest of the Properties (or any portion thereof).

PASSED AND ADOPTED by the West Sacramento Area Flood Control on this 30th day of June, 2011, by the following vote:

AYES:
NOES:
ABSENT:

[Signature]
William E. Denton, President

ATTEST:

[Signature]
Kenneth A. Ruzich, General Manager

APPROVED AS TO FORM:

[Signature]
James M. Day, Jr., WSAFCA Attorney
Exhibit A
(APN Book/Page)
Exhibit B
(Temporary Construction Easement)
AGREEMENT FOR
RIGHT OF ENTRY AND TEMPORARY CONSTRUCTION EASEMENT

This Agreement for Right of Entry and Temporary Construction Easement (this “Agreement”) is made this ___ day of ________, 2011, by and between _______________________________________________________________________, hereafter referred to as “Grantor,” and the WEST SACRAMENTO AREA FLOOD CONTROL AGENCY, hereinafter referred to as “WSAFCA,” for a right of entry and temporary construction easement over, upon and across a portion of that real property in the City of West Sacramento, State of California, as described herein.

WITNESSETH:

WHEREAS, WSAFCA is a Joint Powers Authority comprised of the City of West Sacramento, Reclamation District (RD) 900, and RD 537 for the purposes of constructing the improvements necessary to enhance the levee system protecting the City of West Sacramento; and

WHEREAS, WSAFCA has been granted the authority to accomplish the purposes and projects necessary to achieve and maintain at least a 200-year level of flood protection, through the development, design, acquisition, and construction of such projects as are required to provide the necessary flood protection for the protection of the public and property within WSAFCA’s boundaries, which are coextensive with those of the City of West Sacramento; and
WHEREAS, WSAFCA commissioned a levee study to evaluate the entire West Sacramento Levee System,

WHEREAS, the study determined that substantial improvements to the system must be made to meet the new Federal criteria and protect the lives and livelihoods of those living and working in West Sacramento; and

WHEREAS, in August of 2007, the City Council of the City of West Sacramento approved a contract with HDR Engineering, Inc. for environmental, design and permitting to prepare an EIP to guide the first phase of improvements, selecting the sites based on the primarily on those providing the greatest public safety, with the least negative effects; and

WHEREAS, based on that criterion HDR identified a series of necessary improvements along Southern portion of the Sacramento River between the Sacramento By-pass and the American River known as Reach 2; and

WHEREAS, in October 2010, HDR completed its 100% construction drawings for the levee improvements for a portion of Reach 2, known as the Rivers Phase 1 EIP, which included the geometry for the extent of the real property interest to be acquired in support of the levee improvements, (the “Project”); and

WHEREAS, Glen and Deborah Campora are the fee title owners of parcel, APN 014-690-090 (“the Properties”), within the Rivers EIP, as described in attached hereto as Exhibit “A”; and

WHEREAS, WSAFCA proposes to construct the Project within the River Phase 1 EIP in accordance with 100% construction drawings; and

WHEREAS, WSAFCA has certified the environmental impact report (EIR) under CEQA, and an environmental impact statement (EIS) under NEPA, prepared for the Rivers Phase 1 EIP which includes evaluation of the project specific impacts of the Rivers Phase 1 EIP Project.

NOW, THEREFORE, for valuable consideration the receipt of which is hereby acknowledged, the parties agree as follows:

1. **GRANT OF TEMPORARY CONSTRUCTION EASEMENT.** Subject to the terms and conditions set forth herein, Grantor hereby grants to WSAFCA, a non-exclusive temporary construction easement (“TCE”) on, over, under and across the portion of the Property, 4,138 square feet, more particularly depicted in Exhibit “B” attached hereto (the “Easement Area”), for the purpose of allowing WSAFCA, its employees, representatives, agents and contractors (collectively, “Agents”) access onto and use of the Easement Area to conduct, at the WSAFCA’s sole cost and expense, some or all of the following activities (collectively, the “Construction Activities”): (a) levee clearing and grubbing,
stripping, degrade, disposal of degrade and demolition; (b) construction of a soil cement bentonite cutoff wall to be installed approximately along the centerline of the levee; (c) and reconstruction of the levee and conforming the grade of the Easement Area to original grade.

Under this TCE, WSAFCA's use of the Easement Area shall be non-exclusive. In exercising its rights hereunder, WSAFCA shall not unreasonably interfere with Grantor's use and enjoyment of the Property, and shall use its reasonable best efforts to minimize disruption to existing development and tenancies during its Construction Activities; provided, however, WSAFCA, from time to time during the "Term" (as defined below), may exclude persons or other uses of all or a portion of the Easement Area if, in WSAFCA's sole discretion, the presence of said persons or other uses would be hazardous or would hinder WSAFCA's activities related to the Project. However, WSAFCA shall at all times maintain vehicle access to the adjacent street for Grantor and Grantor's invitees if vehicle access is not otherwise available from portions of Grantor's property outside the Easement Area.

2. In connection with WSAFCA's entry onto or use of the Easement Area, WSAFCA agrees that:

   (a) WSAFCA shall perform all such use and/or construction in strict accordance with plans and permits approved by applicable governmental authorities, as well as with all applicable laws;

   (b) WSAFCA shall be solely responsible for the implementation of proper erosion control in connection with any such use or construction by WSAFCA;

   (c) WSAFCA and/or its contractors shall not do or perform any work or activities other than those specifically set forth above;

   (d) WSAFCA and/or its contractors shall use the Easement Area in its present condition and Grantor shall not be obligated to make Easement Area safe or suitable for use by WSAFCA or otherwise prepare the Easement Area or access to the Easement Area in any manner whatsoever;

   (e) WSAFCA shall be solely responsible for contacting all appropriate agencies, as necessary, to locate underground utilities and structures prior to commencement of work and will not place any materials on or over such utilities or structures. WSAFCA shall be responsible for any and all costs associated with its entry onto or use of the Easement Area, including but not limited to the costs for placement of temporary utilities, construction water, dust control and temporary fencing. WSAFCA hereby acknowledges and agrees that placement or storage on the Easement Area of any hazardous materials expressly is prohibited, and that neither Grantor nor any of its affiliates shall have any responsibility or liability for the security of any materials or equipment placed or
stored by WSAFCA on the Easement Area, all of which shall be the sole responsibility of WSAFCA.

3. **TERM.** The term of this Agreement (the “Term”) shall commence on the ___ day of __________, 20__ and shall terminate upon completion of the Construction Activities but in no event later than 12 months from commencement.

4. **GRANTOR’S RIGHTS OF USE.** Grantor retains the right to use the Easement Area in any manner that does not interfere with WSAFCA’s rights hereunder.

5. **INDEMNIFICATION.** WSAFCA shall defend, pay, indemnify and hold harmless Grantor and its officers, officials, members, managers, employees, agents, invitees, and volunteers (as applicable) from all claims, suits, actions, damages, demands, costs or expenses of any kind or nature by or in favor of anyone whomsoever and from and against any and all costs and expenses, including without limitation court costs and reasonable attorney’s fees, resulting from or in connection with (a) any breach by WSAFCA of its obligations under Sections 7 and 8 below; and/or (b) loss of life, bodily or personal injury or property damage arising directly or indirectly out of or from or on account of or occasioned wholly or in part by the WSAFCA’s or its Agents’ Construction Activities on the Property, except to the extent such loss or damage is caused by the negligence or willful misconduct of the indemnified party.

6. **INSURANCE.** During the Term, WSAFCA shall require that its Agents performing work with the Easement Area (i) maintain policies for insurance as required of “Contractor” on Exhibit “C” attached hereto and incorporated herein by this reference, which policies shall have limits in no less than the amounts specified in Exhibit “B” and which shall otherwise meet the requirements set forth therein; and (ii) name Grantor as an additional insured on all liability insurance policies required under such Exhibit “B”.

7. **REPRESENTATIONS AND WARRANTIES.** Grantor represents and warrants that Grantor is the owner of the Property and has the exclusive right and power to enter into this Agreement and grant the TCE as provided herein.

8. **ENVIRONMENTAL FINES AND PENALTIES.** WSAFCA shall assume sole responsibility for and payment of any fines or penalties levied on the WSAFCA or Grantor by any local, state or federal authority (“Authority”) for breaches by the WSAFCA or its Agents of Authority’s environmental regulations resulting from WSAFCA’s activities on the Property, except and in proportion to the extent caused by the negligence or willful misconduct of Grantor or its respective officers, directors, agents, employees or consultants. In addition, WSAFCA understands and acknowledges that during the course of the Construction Activities the environmental regulations implemented or imposed by the authority on the WSAFCA and Grantor may change and WSAFCA specifically agrees to comply with any future environmental regulations implemented or imposed by the
Authority on the WSAFCA or Grantor. The provisions of this Section shall survive the expiration of the Term of termination of this Agreement.

9. PERMITTING AND COMPLIANCE WITH LAWS. WSAFCA shall be responsible for all permitting and compliance with Construction Activities. WSAFCA shall assume full responsibility for any notices, violations, fines and other regulatory actions taken against the Property as a result of the Construction Activities.

10. NOTICES. All notices required by this Agreement shall be in writing and personally delivered or sent by certified mail, postage prepaid, return receipt requested.

Notice required to be given to the WSAFCA shall be addressed as follows:

WSAFCA
1420 Merkely Ave
West Sacramento, CA 95691
ATTN: General Manager

Notice required to be given to the Grantor shall be addressed as follows:

Glen and Deborah Campora
8622 Banff Vista Drive
Elk Grove, CA 95605

Either party may change the address stated herein by giving notice in writing to the other Party, and thereafter notices shall be addressed and transmitted to the new address. All notices shall be deemed received on the earlier of the date that personal delivery is effected or the date shown on the return receipt.

10. MECHANIC'S LIENS. WSAFCA agrees to pay when due all costs of labor, services and materials supplied in prosecution of the work done by or on behalf of WSAFCA on the Easement Area under this Agreement. WSAFCA shall keep the Easement Area free and clear of all mechanic's liens and other such liens arising on account of such work. WSAFCA agrees to indemnify Grantor against any such claims or liens and to reimburse Grantor for all costs and expenses, attorneys' fees including allocated costs of Grantor's in-house counsel, and court costs, incurred by Grantor in defending against such claims or liens, whether or not any legal action is commenced. In the event that such a claim is filed, WSAFCA and/or its contractors agree to furnish Grantor adequate security for the amount of the claim and all estimated costs and interest. If a final judgment establishing the validity or existence of a lien against the Easement Area for any amount is entered, WSAFCA shall promptly pay and satisfy such judgment and cause such lien to be fully released.
11. **LEGAL COSTS.** Should any legal action or proceeding be brought by either party hereto for breach of this Agreement or to enforce any provisions herein, the prevailing party shall be entitled to recover its reasonable costs and expenses including, without limitation, attorney's and experts' fees and costs.

12. **CHOICE OF LAW.** This Agreement is made under and will in all respects be interpreted, enforced, and governed by the laws of the State of California, without regard to rules regarding conflict of interest law. Any legal action or proceedings to enforce or interpret this Agreement shall be brought in Yolo County, California.

13. **NO ASSIGNMENT.** This Agreement and the obligations of the WSAFCA hereunder may not be assigned by the WSAFCA without the prior written consent of Grantor.

14. **SUCCESSORS.** This instrument shall bind and inure to the benefit of the respective heirs, personal representatives, successors and permitted assigns of the parties hereto.

15. **ENTIRE AGREEMENT.** This Agreement constitutes the entire agreement between WSAFCA and Grantor pertaining to the subject matter contained herein, and supersedes any prior discussions, negotiations, and agreements, whether oral or written. Any amendment hereto, shall not be effective unless it is in writing and signed by both WSAFCA and Grantor.

16. **COUNTERPARTS.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The parties authorize each other to detach and combine, or cause to be detached and combined, original signature pages and consolidate them into a single identical original for recordation of this Agreement in the Official Records of Yolo County, California.

17. **RECORDATION OF AGREEMENT.** Although not required, either party may desire to record this Agreement. In such event, the party desiring to record the Agreement shall prepare a legal description of the Easement Area and provide said description to the non-recording party for its review and approval, which approval shall not be unreasonably withheld or delayed. The legal description shall be attached as "Exhibit D" to this Agreement prior to recordation. The recording party shall be solely responsible for the cost of preparing the legal description and recording this Agreement.

18. **QUITCLAIM DEED.** Upon the expiration of the Term or any earlier termination of this Agreement, and promptly upon request by Grantor, the WSAFCA shall execute and deliver to Grantor a quitclaim deed in recordable form and otherwise reasonably satisfactory to Grantor, so as to eliminate any rights of the WSAFCA or its Agents to the Easement Area under this Agreement.
GRANTOR:

_________________________  _______________________
Glen Campora            Deborah Campora

Date:____________________, 2011  Date:____________________, 2011

GRANTEE: West Sacramento Area Flood Control Agency, a Joint Powers Authority

______________________________  Date:____________________, 2011
William E. Denton, President

ATTEST:          APPROVED AS TO FORM:

_________________________          _______________________
Kenneth A. Ruzich, General Manager  James M. Day, Jr., WSAFCA
   Attorney

State of California  )

)  County of __________  )

On _________________ before me, ________________________________, a notary public, personally appeared ________________________, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to
the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OR PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature__________________________________________ (Seal)

State of California )
                     )
County of __________ )

On ____________ before me, ____________________________________, a notary public, personally appeared ______________________, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OR PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature__________________________________________ (Seal)
Exhibit A

Legal Description of the Parcel
EXHIBIT "A"
LEGAL DESCRIPTION

THE LAND DESCRIBED HEREIN IS SITUATED IN THE STATE OF CALIFORNIA, COUNTY OF YOLO, CITY OF WEST SACRAMENTO, AND IS DESCRIBED AS FOLLOWS:

LOT 1, AS SHOWN UPON SUBDIVISION NO. 3853, UNIT NO. A, LIGHTHOUSE MARINA AND COUNTRY CLUB, FILED FEBRUARY 25, 1982 IN BOOK 17 OF MAPS, PAGES 1 THROUGH 18, INCLUSIVE, YOLO COUNTY RECORDS, AND AMENDED BY CERTIFICATE OF CORRECTION RECORDED SEPTEMBER 7, 1993 IN BOOK 2538 OF OFFICIAL RECORDS AT PAGE 340, YOLO COUNTY OFFICIAL RECORDS.

EXCEPTING THEREFROM THAT PortION THEREOF DESCRIBED IN DEED FROM AMERICAN HOME LTD., A CALIFORNIA PARTNERSHIP, RECORDED FEBRUARY 23, 1979 IN BOOK 1353 OF OFFICIAL RECORDS AT PAGE 506, YOLO COUNTY RECORDS. ALL MINERALS, OIL, GAS AND OTHER HYDROCARBON SUBSTANCES WITHIN OR UNDERLYING THE LAND BELOW A DEPTH OF 500 FEET FROM THE SURFACE THEREOF.

ASSSESSOR'S PARCEL NUMBER: 014-690-060

CLTA Preliminary Report
Exhibit B

Depiction of the Easement Area
6.01 INSURANCE

Insurance Requirements

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor's bid.

A. Neither the Contractor nor any Subcontractors shall commence any work until all required insurance has been obtained at their own expense. Such insurance must have the approval of the City as to limit, form, and amount, and shall be placed with insurers with a current A.M. Best's rating of no less than A-VII.

B. Any insurance bearing on adequacy of performance shall be maintained after completion of the project for the full guarantee period.

C. Prior to execution of the Contract, the Contractor shall furnish the City with original endorsements effecting coverage for all policies required by the Contract. The endorsements shall be signed by a person authorized by the insurer to bind coverage on its behalf. The endorsements are to be on forms provided or approved by the City. The City may require the Contractor or any subcontractor to furnish complete certified copies of all insurance policies affecting the coverage required by the Contract.

D. All of the Contractor's policies shall contain an endorsement providing that written notice shall be given to the City at least sixty (60) calendar days prior to termination, cancellation, or reduction of coverage in the policy.

E. Any policy or policies of insurance that the Contractor elects to carry as insurance against loss or damage to its construction equipment and tools shall include a provision therein providing a waiver of the insurer's right to subrogation against the City and the Engineer.

F. The requirements as to the types, limits, and the City's approval of insurance coverage to be maintained by the Contractor are not intended to and shall not in any manner limit or qualify the liabilities and obligations assumed by the Contractor under the Contract.

G. In addition to any other remedy the City may have, if the Contractor or any of the subcontractors fails to maintain the insurance coverage as required in this Section, the City may obtain such insurance coverage as is not being maintained, in form and amount substantially the same as required herein, and the City may deduct the cost of such insurance from any amounts due or which may become due the Contractor under this Contract.
H. The Contractor and all Subcontractors shall, at their expense, maintain in effect at all times during the performance of work under the Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers and under forms of policy satisfactory to the City. The maintenance by the Contractor and all Subcontractors of the following coverage and limits of insurance is a material element of this Contract. The failure of the Contractor or any Subcontractor to maintain or renew coverage or to provide evidence of renewal may be treated by the City as a material breach of this contract.

1. Worker's Compensation and Employer's Liability Insurance

a. Worker's Compensation

The Contractor and all Subcontractors shall maintain insurance to protect the Contractor or subcontractor from all claims under Worker's Compensation and Employer's Liability Acts, including Longshoremen's and Harbor Workers' Act. Such coverage shall be maintained, in type and amount, in strict compliance with all applicable State and Federal statutes and regulations. The Contractor shall execute a certificate in compliance with Labor Code Section 1861, on the form provided in the Contract Documents.

b. Claims Against City

If an injury occurs to any employee of the Contractor or any of the Subcontractors for which the employee or its dependents, in the event of its death, may be entitled to compensation from the City under the provisions of the said Acts, or for which compensation is claimed from the City, there will be retained out of the sums due the Contractor under this Contract, an amount sufficient to cover such compensation as fixed by said Acts, until such compensation is paid or it is determined that no compensation is due. If the City is required to pay such compensation, the amount so paid will be deducted and retained from such sums due, or to become due, the Contractor.

2. Commercial General and Automobile Liability Insurance

The Contractor shall maintain in effect at all times during the performance of the work hereunder not less than the following coverage's and limits of Commercial General and Automobile Liability insurance:
a. Form and Amount

The insurance shall include, but shall not be limited to, protection against claims arising from death, bodily injury, personal injury, or damage to property resulting from actions, failures to act, operations or equipment of the insured, or by its employees, agents or consultants, or by anyone directly or indirectly employed by the insured. The amount of insurance coverage shall not be less than $1,000,000.00 per occurrence with an aggregate no less than two (2) times the required per occurrence limit applying to bodily injury, personal injury, and property damage, or any combination of the three. Any deductibles must be declared to and approved by the City. At the option of the City, either: the insurer shall reduce or eliminate such deductibles as respects the entity, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration expenses, and defense expenses.

The commercial general and automobile liability insurance coverage shall also include the following:

b. Additional Requirements

i) Provision or endorsement naming the City, the Engineer and its consultants, and each of their officers, employees, and agents, each as additional insureds with respect to any potential liability arising out of the performance of any work under the Contract, and providing that such insurance is primary insurance as respects the interest of the City and Engineer, and its consultants, and each of their officers, employees, and agents and that any other insurance, risk pool membership, or other liability protection maintained by the City or maintained by the Engineer is excess to the insurance required hereunder, and will not be called upon to contribute to any loss unless and until all limits available under the contractor's and subcontractor's insurance policy/policies have been paid.

ii) "Cross Liability" or "Severability of Interest" clause.

iii) Broad Form Property Damage, Personal Injury, Contractual Liability, Protective Liability, and Completed Operations coverage's, and elimination of any exclusion regarding loss or damage to property caused by explosion or resulting from collapse of buildings or structures or damage to property underground, commonly referred to by insurers as the "XC7" hazards.

iv) Provision or endorsement stating that such insurance, subject to all of its other terms and conditions, applies to the liability assumed by the Contractor under the Contract, including without limitation, that set forth in Section 6.02, Indemnity and Litigation Costs.
v) Provision or endorsement stating that any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the City, its officers, officials, employees, or volunteers.

vi) The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

3. Builder's Risk or Installation Floater "All-Risk" Insurance

Before commencement of the Work, the Contractor shall submit written evidence that it has obtained for the period of the Contract, Builder's Risk "All-Risk" Completed Value Insurance and/or Inland Marine "All-Risk" Installation Floater Insurance, as may be applicable, upon the entire project which is the subject of this Contract, including completed work and work in progress. The policy or policies of insurance shall name the Contractor, City, and Engineer as insureds as their respective interests may appear, and shall include an insurer's waiver of subrogation rights in favor of each. Such insurance may have a deductible clause, but the amount of the deductible shall be subject to the approval of the City, except that the deductible on earthquake coverage may be in accordance with the underwriter's requirements.

6.02 INDEMNITY AND LITIGATION COST

A. Promptly upon execution of the Contract, the Contractor specifically obligates himself and hereby agrees to protect, hold free and harmless, defend and indemnify the City, the Engineer and his consultants, and each of their officers, employees and agents, from any and all liability, losses, damages, expenses, causes of action, claims or judgments, including attorney's fees, which arise out of or are in any way connected with the Contractor's, or his subcontractors' or suppliers', performance of work under this Contract or failure to comply with any of the obligations contained in the Contract. This indemnity shall imply no reciprocal right of the Contractor in any action on the contract pursuant to California Civil Code section 1717 or section 1717.5. To the fullest extent legally permissible, this indemnity, defense and hold harmless agreement by the Contractor shall apply to any and all acts or omissions, whether active or passive, on the part of the Contractor or his agents, employees, representatives, or Subcontractor's agents, employees and representatives, resulting in claim or liability, irrespective of whether or not any acts or omissions of the parties to be indemnified hereunder may also have been a contributing factor to the liability, except such loss or damage which was caused by the active negligence, the sole negligence, or the willful misconduct of the City.
Exhibit D

Legal Description of the Easement Area

(To be subsequently attached if recorded)
OBJECTIVE
The objective of the report is to obtain the West Sacramento Area Flood Control Agency's (WSAFCA) approval to make offers to enter into license agreements with the State of California and the Sacramento San Joaquin Drainage District (SSJDD) for use of their property rights or property within the boundary of the Rivers EIP and CHP EIP project areas.

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board:
1) Adopt Resolution 11-06-04

BACKGROUND
In late 2005, the City of West Sacramento adopted a comprehensive flood control strategy for the purposes of improving the City’s flood protection system, thereby meeting new Federal standards for evaluating levee integrity. By the fall of 2006, the WSAFCA had begun funding the initial stages of a levee study. In August of 2007, upon completion of the study, the City Council hired HDR Engineering, Inc. to facilitate the environmental, design and permitting for the first phase of improvements. The result of this process identified the first round of construction sites.

In the levee improvement program, outlined in WSAFCA’s Draft Alternatives Analysis report dated November 13, 2009, three reaches of the City’s levees system were identified as priorities for immediate improvement. One of those reaches was the Sacramento River North levee; another was the CHP/Sacramento Bypass levee. In October of 2010, HDR completed in 100% construction drawings for the EIP projects.

WSAFCA has prepared environmental impact report (EIR) under CEQA, and an environmental impact statement (EIS) under NEPA for the Rivers EIP which includes evaluation of the project specific impacts of the Rivers EIP Project. The board certified that document on March 10, 2011. Construction of the Rivers EIP and CHP EIP improvements is scheduled to begin in July of this year.

ANALYSIS
WSAFCA needs to obtain three licenses to begin work on the CHP EIP and Rivers EIP projects by July 15, 2011. All three licenses have been submitted with the following project descriptions to the Department of Water Resources Property Management Group.

Sacramento By-pass/CHP Levee
WSAFCA will need to obtain two licenses from the SSJDD to complete the levee improvement project. The levee segment selected for improvement is approximately 6,000-feet. It extends from the Sacramento Weir 6,000 ft west along the south levee of the Sacramento Bypass. The area south of the project site is occupied by the California Highway Patrol (CHP) Academy. The project site consists of an earthen levee with a crown width of approximately 20 feet. The levee segment along the Sacramento Bypass has a landslide berm constructed as part of the USACE West Sacramento Project Levee Reconstruction Project Contract B, 1999.
Other Contract B levee improvements that fall within the extents of the CHP Academy EIP site include a waterside toe soil bentonite cutoff wall and an interior drain. The elevation of the existing levee along the Sacramento Bypass ranges from approximately 38.1 feet to 40.3 feet (NAVD88). In all cases, this elevation is more than 3 feet higher than the 200-year design water surface elevation for the Sacramento Bypass. The 200 year design elevation for the TOL is below the previously authorized and accepted TOL for the West Sacramento Project. The levee improvement plan includes levee reconstruction measures necessary to correct seepage and stability deficiencies. The project proposes slope flattening and installation of a cutoff wall to correct for stability and seepage deficiencies, respectively. Vegetation within the project extents will be modified, as needed, to comply with current Army Corps policy.

SSJDD is the fee title owner of the Sacramento Bypass properties (APNs 048-280-012; 015; 016). The uses planned for the site include: ingress/egress; slope flattening and installation of a cutoff wall to correct for stability and seepage deficiencies; removal of vegetation; temporary construction facilities; field offices for the contractor and construction manager; equipment and materials staging. The term of the license is from July 15, 2011 to December 31, 2011.

SSJDD holds a levee easement across a portion of the CHP property (APNs 014-060-008; 033). The easement was granted via Doc No. 2003-0008392. The term of the license is the same as above.

Rivers Phase 1 EIP
WSAFCA will need to obtain one license from the State of California to complete the levee improvement project. The levee segment selected for improvement is approximately 3,000-feet long and is located along the right bank of the Sacramento River, starting at the downstream end of the State of California Department of Water Resource Maintenance Yard located in the neighborhood of Bryte and terminates in the widened levee section just before the water side homes on River Crest Drive. The area surrounding the project site is primarily residential urban development. The current project site consists of an earthen levee with a crown width of approximately 20 feet and a waterside berm that varies in width from 100 to 400 feet. The elevation of the existing levee throughout the project extents ranges from approximately 39.8 feet to 44.1 feet (NAVD88). In all cases, this elevation is more than 3 feet higher than the 200-year design water surface elevation of 39.5 feet for this location in the Sacramento River. Numerous utility penetrations through the levee were identified within the project limits; and several waterside residences exist within the downstream portion of the site. The levee improvement plan includes a combination of levee reconstruction measures necessary to correct seepage, stability, levee geometry, vegetation, and encroachment issues. The primary levee reconstruction measures will include installation of a seepage cutoff barrier along the entire extent of the project, as well as levee grading, including slope flattening, to correct slope stability issues identified. Encroachments and vegetation within the project site will be removed or reconfigured, as necessary, to comply with current Army Corps and Central Valley Flood Protection Board policy.

The State of California is the fee title owner of APN 014-131-002, which is a Department of Water Resources Corp Yard. The uses planned for the Corp Yard site include: ingress/egress; temporary construction facilities; field offices for the contractor and construction manager; equipment and materials staging; trailer. The term of the license is from July 15, 2011 to December 31, 2011.

Strategic Plan Integration
Strategic flood control planning supports the city strategic planning principles of providing a place where people feel safe and secure, provides for a financially sound city government, and is a top priority of the 2008, 2009 and 2010 Policy Agenda.

Alternatives
1. WSAFCA adopts Resolution 11-06-04. The General Manager is granted the authority to enter into the necessary license agreements.
2. WSAFCA may choose to make modifications to the body of the Resolution or its attachments. WSAFCA may direct staff to make those changes in conjunction with legal counsel. This is not recommended as it could delay the commencement of construction.

3. WSAFCA may choose not adopt this resolution. This is not recommended as it would prevent construction of the EIP projects.

Alternative 1 is the staff recommendation. Staff does not recommend the alternative approaches because they could potentially delay or even prevent construction from occurring this year.

Coordination and Review
This report was coordinated with WSAFCA, the City’s Finance Department, and legal counsel for WSAFCA and the City.

Budget/Cost Impact
The total cost impact for the proposed licenses will be nominal; new insurance certificates will have to be issued.

ATTACHMENT
Resolution 11-06-04
RESOLUTION 11-06-04

A RESOLUTION OF THE WEST SACRAMENTO AREA FLOOD CONTROL AGENCY ("WSAFCA") CONSIDERATION OF RESOLUTION 11-06-04 CONCERNING LICENSE AGREEMENTS WITH THE STATE FOR RIGHTS TO CONSTRUCT WITHIN THE RIVERS EARLY IMPLEMENTATION PROJECT (EIP) AND THE CHP EIP PROJECT, AND AUTHORIZING AND DELEGATING TO THE GENERAL MANAGER THE AUTHORITY TO ENTER INTO SUCH AGREEMENTS

WHEREAS, WSAFCA is a Joint Powers Authority comprised of the City of West Sacramento, Reclamation District (RD) 900 and RD 537 for the purposes of constructing the improvements necessary to enhance the levee system along the Sacramento River, and

WHEREAS, WSAFCA commissioned a levee study to evaluate the entire West Sacramento Levee System, and

WHEREAS, the study determined that substantial improvements to the system must be made to meet the new Federal criteria and protect the lives and livelihoods of those living and working in West Sacramento; and

WHEREAS, in August of 2007, the City Council of the City of West Sacramento approved a contract with HDR Engineering, Inc. for environmental, design and permitting to prepare an EIP to guide the first phase of improvements, selecting the sites based on the primarily on those providing the greatest public safety, with the least negative effects; and

WHEREAS, based on that criterion HDR identified a series of necessary improvements along Reach 2; and

WHEREAS, in the Fall of 2010, HDR completed its 100% construction drawings for the levee improvements for two portions of the City’s levee system, which included the geometry for the extent of the real property interest and temporary rights to be acquired in support of the levee improvements projects Rivers Phase 1 EIP and CHP EIP, and

WHEREAS, the State of California is the fee title owner of APN 014-131-002, as generally shown on the exhibits attached hereto as Exhibit “A”; and

WHEREAS, the Sacramento San Joaquin Drainage District (SSJDD) is the fee title owner of the Sacramento Bypass properties (APNs 048-280-012; 015; 016), as generally shown on the exhibits attached hereto as Exhibit “B”; and

WHEREAS, SSJDD holds a levee easement across a portion of the CHP property (APNs 014-060-008; 033) as described in a recorded easement, Doc No. 2003-0008392 attached hereto as Exhibit “C”; and

WHEREAS, WSAFCA has had an environmental impact report ("EIR") under CEQA, and an environmental impact statement ("EIS") under NEPA, prepared for the Rivers EIP Project which includes evaluation of the project-specific impacts and measures to mitigate the potentially significant adverse impacts of the Rivers EIP Project ("EIR/EIS"); and
WHEREAS, by Resolution 11-03-01, WSAFCA has certified the EIR/EIS prepared for the Rivers EIP, which includes evaluation of the project specific impacts and measures to mitigate the potentially significant adverse impacts of the Rivers EIP Project; and

WHEREAS, the flood control improvements contemplated under the Rivers Phase 1EIP and the CHP EIP require that WSAFCA obtain lands for construction and maintenance of levee and ancillary recreational improvements, and riparian habitat restoration; and

WHEREAS, acquisition of the temporary rights to enter the SSJDD Sacramento Bypass properties, the CHP property covered by the SSJDD easement, and the State’s parcel, is necessary for the construction of the Rivers Phase 1 EIP and the CHP EIP; and

NOW, THEREFORE, BE IT RESOLVED by West Sacramento Area Flood Control Agency that:

Section 1: WSAFCA hereby finds that the recitals set forth above are true and correct, and incorporate these recitals herein by reference.

Section 2: WSAFCA’s General Manager or his/her designee is hereby authorized to execute and deliver any and all documents, do any and all things, and take any and all actions that may be necessary or advisable, in their discretion, in order to enter into license agreements for the State’s and SSJDD properties, shown/described in Exhibits “A”, “B” and “C” substantiality in the form as shown on Exhibit “D”.

PASSED AND ADOPTED by the West Sacramento Area Flood Control on this 30th day of June, 2011, by the following vote:

AYES: 
NOES: 
ABSENT:

__________________________________________
William E. Denton, President

ATTEST: 

APPROVED AS TO FORM:

__________________________________________
Kenneth A. Ruzich, General Manager

James M. Day, Jr., WSAFCA Attorney
Exhibit A
(State Property)
Exhibit B
(SSJDD Bypass Property)
Exhibit C
(SSJDD Easement)
# AGREEMENT AND GRANT OF EASEMENT

Levee Reconstruction and Maintenance

**THIS AGREEMENT AND GRANT OF EASEMENT** is made and entered into by and between the STATE OF CALIFORNIA, acting by and through its DIRECTOR OF THE DEPARTMENT OF GENERAL SERVICES, with the approval of, Department of California Highway Patrol (CHP), hereinafter called State and Sacramento and San Joaquin Drainage District acting by and through the Reclamation Board of the State of California, hereinafter called DWR. CHP, pursuant to the provisions of Section 14666 of the Government Code of the State of California, hereby grants unto DWR, its successors and assigns forever, an Exclusive Flood Control Easement over, on, under and across that certain real property located in the City of West Sacramento, County of Yolo, State of California as described in the attached Exhibit "A", consisting of one (1) page and by this reference made a part hereof, with the following specific rights:

**A.** Construct, reconstruct, enlarge, fence, plant with trees, shrubs and other vegetation, preserve and retain all vegetative growth desirable for project purposes, repair and use flood control works, which shall include, but not limited to, access, haul and patrol roads, levees, ditches, embankments, channels, berms, fences and appurtenant structures, and operate and maintain said flood control works in conformity with the Code of Federal Regulations, Corps of Engineers' Standard Operation and Maintenance Manual, and State of California Standards.

**B.** Clear and remove from said flood control works any and all natural or artificial obstructions, improvements, trees and vegetation necessary for construction, operation, maintenance, repair, reconstruction and emergency flood fight.

**C.** Locate or relocate roads and public utility facilities by DWR or others. DWR shall not have the right to grant real property rights to any third party.

**D.** Restrict the rights of DWR, its successors and assigns, without limitation, to explore, extract, remove, drill, mine or operate through the surface or upper 100 feet of the subsurface in exercise of Grantor's interest in any minerals, including oil and gas.

**E.** Restrict any use by others, which may interfere with any of the uses listed herein, or any use necessary or incidental thereto.

**THE PROVISIONS ON THE ATTACHED EXHIBIT "B" (consisting of 1 page) HEREOF, CONSTITUTE A PART OF THIS AGREEMENT**

<table>
<thead>
<tr>
<th>Dated</th>
<th>January 23, 2007</th>
</tr>
</thead>
</table>

**STATE OF CALIFORNIA**

**Department of General Services**

By [Signature]

Title: Senior Real Estate Officer

**APPROVED: Department of California Highway Patrol**

By [Signature]

Title: Commander, Facilities Section

**Sacramento and San Joaquin Drainage District acting through The Reclamation Board/DWR**

By [Signature]

Title: Chief, Division of Land and Right of Way

Department of Water Resources

**APPROVED AS TO LEGAL SUFFICIENCY:**

By [Signature]

Title: Council for The Reclamation Board
EXHIBIT "B"

PROVIDED, this Grant of Easement is subject to the following terms and conditions:

1. This Grant is subject to existing contracts, leases, licenses, easements, encumbrances, and claims which may affect said real property and the use of the word "Grant" herein shall not be construed as a covenant against the existence of any thereof.

2. CHP reserves the right to use said real property in any manner, provided such use does not unreasonably interfere with DWR's rights hereunder.

3. This Easement shall terminate in the event DWR fails for a continuous period of eighteen (18) months to use this Easement for the purposes herein granted. Upon such termination, DWR shall forthwith upon service of written demand, deliver to CHP, at no cost to CHP, a Quitclaim Deed to its right, title and interest hereunder. Should DWR fail or refuse to deliver said Quitclaim Deed, CHP may record, in the Recorder's Office of the County in which said real property is located, a written notice reciting said failure, and such recordation shall, after ten (10) days from the date of recordation of said notice, be conclusive evidence of such termination against DWR. DWR shall, upon CHP request, without cost to CHP, and within ninety (90) days from said CHP request, remove all property placed by or for DWR upon said real property and restore said premises as nearly as possible to the same condition as they were prior to the execution of this Easement. In the event DWR should fail to restore the premises in accordance with such request, CHP may do so at the risk of DWR, and all costs of such removal and restoration shall be paid by DWR upon demand.

4. In making any excavation on said property of CHP, DWR shall make the same in such manner as will cause the least injury to the surface of the ground around such excavation, and shall replace the earth so removed by it and restore the surface of the ground and any improvement thereon to as near the same condition as they were prior to such excavation as is practicable.

5. DWR understands that said Easement is adjacent to the CHP Training Academy and many of the activities on the site require strict security measures. DWR agrees to abide by the following conditions concerning DWR's access to said Easement:

   A. DWR shall at no time use the roads or routes on the CHP Training Academy property to access said easement.

   B. Use of said easement by DWR shall be restricted to that use reasonably necessary in connection with the operation, maintenance and repair of said flood control levee identified herein and shall in no way interfere with the use of the property by CHP. DWR agrees to remove all equipment used for these purposes from the property within twenty-four (24) hours of completion of work.

   C. DWR agrees not to stockpile gravel, rock, sand or any other materials, except for emergency purposes, during a flood fight event.

   D. Use of said easement shall be limited to DWR, its agents, assignees and contractors. DWR shall not consent to the use of any of said easement by members of the public.
6. In consideration for said transfer, DWR agrees to pay CHP the sum of Two Thousand Two Hundred Dollars ($2,200.00) from The Reclamation Board's General Fund, 0001, into the State of California General Fund, payable to the Department of General Services (DGS), within Sixty (60) days of the recordation of this document. In addition to the foregoing, DWR agrees to reimburse DGS for staff costs related to this transfer.
Exhibit “A”

All that real property located in projected Sections 29 and 30, Township 9 North, Range 4 East, M.D.M., County of Yolo, State of California, being portions of those parcels of land described in GRANT DEEDS to THE STATE OF CALIFORNIA, recorded May 18, 1971, in Book 977, pages 426 and 441, Official Records of said County, described as follows:

PARCEL 12895

Beginning at a point on the North line of PARCEL NO. 2 described on said page 426 which bears North 73° 02' 42" East 109.92 feet from the northwest corner thereof; THENCE FROM SAID POINT OF BEGINNING along said North line along the following 4 courses:
(1) North 73° 02' 42" East 59.06 feet;
(2) North 78° 34' 42" East 349.60 feet;
(3) North 79° 16' 02" East 490.21 feet; and
(4) North 82° 54' 22" East 337.55 feet to a point on the North line of PARCEL NO. 1 described on said page 426;
thence along the North line of said PARCEL NO. 1 North 70° 07' 18" East 1405.81 feet to the Northwest corner of PARCEL NO. 1 described on said page 441;
thence along said North line of PARCEL NO. 1 North 71° 01' 42" East 644.22 feet and North 70° 14' 53" East 2687.58 feet;
thence leaving said North line along the following 7 courses:
(1) South 19° 40' 41" East 13.86 feet;
(2) South 70° 19' 03" West 4734.57 feet;
(3) South 77° 53' 39" West 990.28 feet;
(4) South 70° 35' 45" West 189.69 feet;
(5) North 27° 26' 51" West 33.77 feet;
(6) North 83° 40' 15" West 48.71 feet; and
(7) North 27° 05' 14" West 30.62 feet to the Point of Beginning, containing 2.81 acres, more or less.

Bearings and distances used in the above description are based on the California Coordinate System, Zone II, 1983.
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Sacramento

On January 14, 2003, before me, Mary Haney, Notary Public, personally appeared Frank L. Conti.

☐ personally known to me
☐ proved to me on the basis of satisfactory evidence

I, Mary Haney, Notary Public, acknowledge to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Mary Haney

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document
Title or Type of Document: Agreement and Grant of Easement

Document Date: __________________________________________________________________ Number of Pages: __________

Signer(s) Other Than Named Above: __________________________________________________________________

Capacity(ies) Claimed by Signer
Signer's Name: __________________________________________________________________

☐ Individual
☐ Corporate Officer — Title(s): __________________________________________________________________
☐ Partner — ☐ Limited ☐ General
☐ Attorney in Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: __________________________________________________________________

Right Thumbprint of Signer
Top of Thumb here

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CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Yolo

On January 23, 2003 before me, Jeffrey J. Newbury, Notary Public
personally appeared Elden E. Fillion

Name(s) of Signer(s)

Personally known to me
☑ proved to me on the basis of satisfactory evidence
to be the person(s), whose name(s) is/are
subscribed to the within instrument and
acknowledged to me that he/she/they executed
the same in his/her/their authorized
capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s), or
the entity upon behalf of which the person(s)
acted, executed the instrument.

WITNESS my hand and official seal.

Jeffrey J. Newbury
Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and realignment of this form to another document.

Description of Attached Document
File #: R0002001

Title or Type of Document: Agreement & Grant of Easement

Document Date: January 23, 2003

Signer(s) Other Than Named Above:

Capacity(ies) Claimed by Signer

Signer's Name: __________________________________________

☑ Individual
☑ Corporate Officer — Title(s): _______________________________
☑ Partner — □ Limited □ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: ____________________________________

Signer is Representing: ____________________________________
CALIFORNIA

ALL-PURPOSE

ACKNOWLEDGEMENT

STATE OF CALIFORNIA

COUNTY OF

On December 5, 2002 before me, Crecynthia M. Lucas, Notary Public,
name, title of officer - e.g., "Jane Doe, Notary Public"

personally appeared, Brian M. Yamada

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s)
whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/
they executed the same in his/her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted,
exeuted the instrument.

WITNESS my hand and official seal.

Crecynthia M. Lucas (Seal)

NOTARY PUBLIC SIGNATURE

OPTIONAL INFORMATION

TITLE OR TYPE OF DOCUMENT ________________________________

DATE OF DOCUMENT __________________ NUMBER OF PAGES __________________

SIGNER(S) OTHER THAN NAMED ABOVE ________________________

008392 FEB 14 02
Exhibit D
(Template License)
STATE OF CALIFORNIA

DEPARTMENT OF WATER RESOURCES

CALIFORNIA NATURAL RESOURCES AGENCY

LICENSE

THE SACRAMENTO AND SAN JOAQUIN DRAINAGE DISTRICT, acting by and through the Central Valley Flood Protection Board of the State of California, hereinafter referred to as BOARD, licenses revocable, nonexclusive use of State property, hereinafter referred to as PREMISES, at the location and under conditions set forth in Sections 1, 2, and 3 of this License.

SECTION 1

LICENSEE:

LICENSEE ADDRESS AND PHONE:

STATE ADDRESS: The Central Valley Flood Protection Board
c/o Department of Water Resources
Division of Engineering
Real Estate Branch
Post Office Box 942836
Sacramento, California 94236-0001

LOCATION: County. See Section 3 (map)

LICENSED USE:

IMPROVEMENTS LICENSED FOR USE:

TERM:

LICENSE FEE: $ annual fee

INSURANCE REQUIRED: yes no

CONSENT OF TENANT REQUIRED: yes no

SPECIAL CONDITIONS:
SECTION 2

1. USE OF PREMISES: LICENSED USE is to be strictly construed. LICENSEE shall not use or permit use of any part of PREMISES for any purpose or purposes other than the use hereinabove specified. This License is revocable permission, grants no interest in real property to LICENSEE for the use herein licensed, and BOARD does not warrant that the land is capable of being used for the licensed use. This License and the uses licensed hereunder are not assignable.

LICENSEE shall exercise reasonable care that no damage shall occur to PREMISES and shall not do or permit any act or thing to be done upon the PREMISES which is a nuisance or which may disturb the quiet enjoyment by BOARD or interfere with the operations of BOARD or any tenant of property.

BOARD makes no warranty or representation as to its title to the area covered by this License. Licensed uses shall be subordinate to all existing easements, covenants, servitudes, licenses and rights of way for canals, ditches, levees, roads, highways, telegraph, telephone and electric power lines, railroads, pipeline and other purposes whether recorded or not and rights of others under any existing oil, gas, mineral lease or other leases or uses affecting the PREMISES or any portion thereof, whether recorded or not.

2. COMPLIANCE WITH LAW: LICENSEE shall, at its expense, promptly comply with any and all laws, ordinances, rules, regulations, requirements and orders whatever, present or future, of the national, State, county or municipal government which may in any way apply to the use, maintenance or occupation of or operations on the PREMISES by LICENSEE hereunder.

3. INDEMNIFICATION: This License is made upon the express condition that the State of California is to be held harmless from all liability and claims for damages by reason of any injury to any person or persons, including LICENSEE, or property of any kind whatsoever and to whomsoever belonging, including LICENSEE, from any cause or causes whatsoever while in, upon, or in any way connected with the PREMISES during the term of this License or any occupancy hereunder, except those arising out of the sole negligence of BOARD. LICENSEE agrees to defend, indemnify and save harmless the State of California, its officers, employees, contractors and agents from all liability, loss, cost or obligation on account of or arising out of any such injury or loss, however occurring.

4. DAMAGE: In the exercise of the rights herein granted, LICENSEE is responsible for any damage, destruction or loss occurring to the PREMISES or facilities of BOARD, its water contractors, lessees, LICENSEES, permittees or other members of the public. LICENSEE shall indemnify and save harmless BOARD for all such damage, destruction or loss, or at the option of BOARD, LICENSEE shall repair or replace said property to the satisfaction of BOARD.

5. FUTURE MOVING OF INSTALLATION: LICENSEE shall at the LICENSEE’s sole cost and expense, remove, alter, relocate or reconstruct all or any part of the work herein approved immediately upon the order of BOARD to do so, and in the manner prescribed thereby, should said work or any portion thereof not conform to the provisions of this order, or should said work or any portion thereof be injurious to or damage any works necessary to any plan of BOARD or the Legislature, or should it interfere with the successful execution, functioning or operation of any such plan of flood control, or should such removal, alteration, relocation or reconstruction be necessary under or in conjunction with any present or future flood control plans for the area in which the work herein approved is to be accomplished, and in case applicant delays acting upon any such order of BOARD. BOARD may proceed to perform the required work, and the cost thereof shall be paid by LICENSEE.

6. MAINTENANCE: The LICENSEE shall properly maintain any encroachment placed by LICENSEE on BOARD’s property.

7. INSURANCE: If required by Section 1, LICENSEE shall furnish to BOARD a Certificate of Insurance at the time the License is signed, stating that there is liability insurance presently in effect for LICENSEE with bodily injury and property damage limits of not less than $1,000,000 per occurrence. The certificate of insurance will provide:
a. That the insurer will not cancel the insured's coverage without thirty (30) days' prior written notice to BOARD.

b. That BOARD, its officers, agents, employees and servants are included as additional named insureds, but only insofar as the operations under this License are concerned.

c. That BOARD will not be responsible for any premiums or assessments on the policy.

d. That PREMISES included in this License is covered by the policy.

LICENSEE agrees that the bodily injury liability insurance herein provided for shall be in effect at all times during the term of this License. In the event said insurance coverage expires at any time or times during the term of this License, LICENSEE agrees to provide at least thirty (30) days prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of the License, or for a period of not less than one (1) year. In the event LICENSEE fails to keep insurance coverage in effect at all times as herein provided, BOARD may, in addition to any other remedies it may have, terminate this License upon the occurrence of such event.

8. HAZARDOUS MATERIALS: LICENSEE shall not possess, use or dispose of any hazardous materials or waste on BOARD's property, or cause to be possessed, used or disposed, without the express written consent of BOARD.

9. TERMINATION: Either party herein reserves the right to terminate this License upon providing written notice to the other party. This License is revocable by BOARD without cause or fault.

10. VACATION: LICENSEE agrees to vacate PREMISES within twenty-four (24) hours in the event of emergency as determined by BOARD.

11. TERMINATION AND RESTORATION OF THE PREMISES: Termination of this License in any manner as to all or any part of the PREMISES, shall not relieve LICENSEE from any obligation or liability theretofore accrued hereunder, nor prejudice, or in any way affect the right of BOARD to enforce any right or remedy it may have had before such termination. Upon any such termination, LICENSEE shall within three (3) days remove all of LICENSEE's improvements and personal property from the PREMISES and restore them to a condition satisfactory to BOARD. At its option, BOARD may remove the same and restore the PREMISES, and LICENSEE agrees to reimburse BOARD for the cost thereof upon demand.

12. DEFAULT, ENFORCEMENT, OR BREACH COSTS: LICENSEE shall pay, upon demand, all costs and expenses (including attorney's fees in a reasonable amount) incurred by BOARD to enforce any of the covenants, conditions and provisions of this License, or to dispossess LICENSEE, irrespective of whether or not court action shall be brought.

13. NOTIFICATION: Any notice or demand by either party to the other in connection with this License shall be deemed to be fully given or made when written and deposited in a sealed envelope in the United States mail, registered or certified and postage prepaid, and addressed to the party to whom given at the address specified in Section 1. Either party may change its address by giving the other party written notice of its new address as herein provided. BOARD may give notice by phone to LICENSEE in emergency situations which may require LICENSEE to vacate PREMISES within twenty-four (24) hours.
SACRAMENTO AND SAN JOAQUIN DRAINAGE DISTRICT, acting by and through the Central Valley Flood Protection Board of the State of California

ACCEPTED:

Licensee

Date: _____________________________

Date: _____________________________

APPROVED as to Legal Form and Sufficiency:

Address __________________________

Legal Counsel for the Central Valley Flood Protection Board

Date: _____________________________

Phone: _____________________________

Consent of Tenant(s)

We as tenant(s) of the land described in this License do hereby consent to the execution of said License for the purposes herein set forth.

Tenant: _____________________________

Tenant: _____________________________

Address: ___________________________

Address: ___________________________

Address: ___________________________

Address: ___________________________
SECTION 3 (MAP)
MEETING DATE:       June 30, 2011       ITEM #  7

SUBJECT:

APPROVAL OF PLANS AND SPECIFICATIONS AND CONSIDERATION OF AWARD OF THE CHP ACADEMY SITE EARLY IMPLEMENTATION PROJECT TO TEICHERT CONSTRUCTION

INITIATED OR REQUESTED BY:  REPORT COORDINATED OR PREPARED BY:

[X] Staff

[ ] JPA Board  [ ] Other

Michael W. Bessette, Flood Protection Manager

ATTACHMENT [X] Yes  [ ] No  [ ] INFORMATION  [ ] DIRECTION  [X] ACTION

OBJECTIVE

To approve the plans and specifications and award a construction contract for the CHP Academy Site Early Implementation Project to Teichert Construction.

RECOMMENDED ACTION

It is respectfully recommended that the JPA Board:

1) Approve Plans and Specifications for the CHP Academy Site Early Implementation Project.
2) Approve the Award of the Contract to the lowest responsive, responsible bidder, Teichert Construction, in the amount of $5,146,714.00.
3) Grant the General Manager or his designee authority to issue Contract Change Orders up to $514,671 (10%) and to issue Monthly Progress Payments to the Contractor.
4) Grant the General Manager authority to award and execute the contract once all required approvals, permits, and funding agreements have been received (United States Army Corp of Engineers 408 approval, Central Valley Flood Protection Board encroachment permit, and Construction Funding Agreement with the State of California).

BACKGROUND

The West Sacramento Area Flood Control Agency (WSAFCA) has undertaken an overall flood damage reduction program titled the West Sacramento Levee Improvement Program (WSLIP). The CHP Academy Site Early Implementation Project is the next project undertaken as part of this program. The purpose of the program is to achieve a minimum level of 200 year flood protection for the City of West Sacramento by improving up to 50 miles of levees that currently provide protection to the City. A 200 year flood is a flood that has a 0.5% chance of occurring in any given year.

WSAFCA has prepared an environmental impact report (EIR) under CEQA, and an environmental impact statement (EIS) under NEPA for the CHP Academy Site Early Implementation Project which includes evaluation of the project specific impacts of the CHP Academy Project. The WSAFCA board certified that document on March 10, 2011.

Sealed bids for the CHP Academy Site Early Implementation Project were received and opened on June 2, 2011. The results are as follows:

- Teichert Construction $5,146,714.00
- DeSilva Gates $5,675,047.00
- Nordic Industries $6,148,468.00
- Engineer’s Estimate $8,925,600.00

ANALYSIS

The CHP Academy Site Early Implementation Project is consistent with the goals of the West Sacramento Levee Improvement Program.
WSAFCA has reviewed the bid and has determined that the lowest responsive, responsible bidder is Teichert Construction. The Contractor's State License Board has confirmed that Teichert Construction holds the proper license to legally perform the work under this contract and it is current and in good standing.

Alternatives
1. Staff recommends that the JPA Board approve the award of the construction contract to Teichert Construction and grant the General Manager authority to award and execute the contract once all approvals, permits, and funding agreement have been received.

2. The Board may choose to make adjustments or modifications to the project.

3. The Board may choose not to award the project at this time and reject all bids. This is not a recommended action because this project is required to be completed prior to the end of October, 2011 due to restrictions on levee work during the wet season.

Budget/Cost Impact
The CHP Academy Site Early Implementation Project will be funded by the recently completed 2011 bond sale and by the State of California. A total of $7,139,385 (detailed below) is required for the engineering design support, construction, management, inspection, and contract administration to complete this project. A summary of the estimated project construction cost is provided below:

<table>
<thead>
<tr>
<th>ESTIMATED PROJECT COSTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Engineering and Project Management</td>
<td>$100,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$5,146,714</td>
</tr>
<tr>
<td>Potential Contract Change Order ¹</td>
<td>$514,671</td>
</tr>
<tr>
<td>Construction Management, Inspection, and Contract Administration</td>
<td>$1,378,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$7,139,385</strong></td>
</tr>
</tbody>
</table>

ATTACHMENT
Construction Contract and Bid Schedule

¹ Estimated 10% Percent of the Construction Cost.
CONTRACT

THIS AGREEMENT is made and entered into on the date below written, by and between THE WEST SACRAMENTO AREA FLOOD CONTROL AGENCY, hereinafter called the "WSAFCA" and A. TEICHERT & SON'S, Inc. dba TEICHERT CONSTRUCTION, hereinafter called the "Contractor".

In exchange for valuable considerations hereinafter mentioned, the Agency and Contractor agree as follows:

ARTICLE I. The Contractor agrees to furnish all labor, materials, tools and equipment and to perform all the work required to construct and complete in a good and workmanlike manner and in strict accordance with the Contract Documents, those certain improvements entitled:

"Levee Improvement Program EIP-CHP Academy Site"

Contract Documents for this project have been prepared by the Engineer of The West Sacramento Area Flood Control Agency, and hereinafter called the Engineer. All Contract Documents, and each and every provision thereof, relating to this Contract are hereby made a part of and incorporated by reference into this Contract. Such Contract Documents include the Invitation to Bid, Bidder's Bond, Contract, Faithful Performance Bond, Payment Bond, Contractor's Certificate Regarding Worker's Compensation, Specifications, the Federal and State-required provisions, the Technical Specifications and the Plans applicable to this work, and all Addendum and Change Orders as well as all modifications incorporated into said documents before the execution of this Contract. Any work called for in one Contract Document and not mentioned in others is to be performed and executed as if mentioned in all Contract Documents.

ARTICLE II. WSAFCA agrees to pay the Contractor for the performance of the Contract, subject to additions and deductions provided therein, the following prices, and the Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials, labor, tools and equipment, and for doing all the work contemplated and embraced in this Contract, and for all risks of every description connected with the work and for all expenses incurred by or in consequence of the suspension or discontinuance of the work, and for well and faithfully completing the work and the whole thereof in the manner and according to the Contract Documents and the requirements of the Engineer under them, namely:

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION</th>
<th>UNIT(S)</th>
<th>ESTIMATED QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Advanced Preparation</td>
<td>L.S.</td>
<td>1</td>
<td>$40,000</td>
<td>$40,000</td>
</tr>
<tr>
<td>2.</td>
<td>Mobilization/Demobilization</td>
<td>L.S.</td>
<td>1</td>
<td>$532,000</td>
<td>$532,000</td>
</tr>
<tr>
<td>3.</td>
<td>Environmenta controls, Including SWP3 Implantment</td>
<td>L.S.</td>
<td>1</td>
<td>$155,000</td>
<td>$155,000</td>
</tr>
<tr>
<td>4.</td>
<td>Levee Stripping</td>
<td>Acres</td>
<td>13.9</td>
<td>$3,900</td>
<td>$54,210</td>
</tr>
<tr>
<td>5.</td>
<td>Excavation (Segrade and slope flattening)</td>
<td>C.Y.</td>
<td>109,536</td>
<td>$6.50</td>
<td>$711,984</td>
</tr>
<tr>
<td>6.</td>
<td>Soil Bentonite Slurry Cutoff wall</td>
<td>S.F.</td>
<td>234,250</td>
<td>$5</td>
<td>$1,171,250</td>
</tr>
<tr>
<td>7.</td>
<td>Levee Embankment Construction</td>
<td>C.Y.</td>
<td>101,222</td>
<td>$5</td>
<td>$506,110</td>
</tr>
<tr>
<td>8.</td>
<td>Embankment Concrete Liner</td>
<td>L.S.</td>
<td>1</td>
<td>$1,670,000</td>
<td>$1,670,000</td>
</tr>
<tr>
<td>9.</td>
<td>Levee Roadwork &amp; Access ramps</td>
<td>L.S.</td>
<td>1</td>
<td>$245,000</td>
<td>$245,000</td>
</tr>
<tr>
<td>10.</td>
<td>Revegetation</td>
<td>Acres</td>
<td>13.9</td>
<td>$4,400</td>
<td>$61,160</td>
</tr>
<tr>
<td><strong>TOTAL BID PRICE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$5,146,714</strong></td>
</tr>
</tbody>
</table>

Note:  
EA. = Each;  
L.F. = Linear Feet;  
L.S. = Lump Sum  
S.F. = Square Feet;
ARTICLE III. WSAFCA shall make payments on the account of the Contract as specified in the General Conditions.

ARTICLE IV. The Contractor shall diligently prosecute the work to completion in accordance with the following schedule: All punch list items complete by December 15, 2011

ARTICLE V. The Contractor acknowledges that he has examined the prevailing rate of per diem wages as established by the U.S. Department of Housing and Urban Development and the California Director of Industrial Relations. The Contractor agrees to pay workers not less than the applicable prevailing rate of per diem wages, as set forth in these requirements.

IN WITNESS WHEREOF, the parties execute this Contract as follows:

A. Teicher & Son’s Inc, dba Teichert Construction

Signature

Printed Name

Title

Date

West Sacramento Area Flood Control Agency

Approved as to form:

James Day Jr., Agency Attorney

Attest:

Kenneth A. Ruzich, Agency General Manager
OBJECTIVE
To approve the plans and specifications and award a construction contract for the Rivers Phase 1 Site Early Implementation Project to Raito, Inc.

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board:

1) Approve Plans and Specifications for the Rivers Phase 1 Site Early Implementation Project.
2) Approve the Award of the Contract to the lowest responsive, responsible bidder, Raito, Inc., in the amount of $15,028,976.80.
3) Grant the General Manager or his designee authority to issue Contract Change Orders up to $1,502,898 (10%) and to issue Monthly Progress Payments to the Contractor.
4) Grant the General Manager authority to award and execute the contract once all required approvals, permits, and funding agreement have been received (United States Army Corp of Engineers 408 approval, Central Valley Flood Protection Board encroachment permit, and Construction Funding Agreement with the State of California).

BACKGROUND
The West Sacramento Area Flood Control Agency (WSAFCA) has undertaken an overall flood damage reduction program titled the West Sacramento Levee Improvement Program (WSLIP). The Early Implementation Project Rivers Phase 1 Site is the next project undertaken as part of this program. The purpose of the program is to achieve a minimum level of 200 year flood protection for the City of West Sacramento by improving up to 50 miles of levees that currently provide protection to the City. A 200 year flood is a flood that has a 0.5% chance of occurring in any given year.

WSAFCA has prepared an environmental impact report (EIR) under CEQA, and an environmental impact statement (EIS) under NEPA for the Rivers Phase 1 Site Early Implementation Project which includes evaluation of the project specific impacts of the Rivers Phase 1 Project. The WSAFCA board certified that document on March 10, 2011.

Sealed bids for the Rivers Phase 1 Site Early Implementation Project were received and opened on June 2, 2011. The results are as follows:

- Raito, Inc. $15,028,976.80
- Engineer's Estimate $17,100,000.00

ANALYSIS
The Rivers Phase 1 Site Early Implementation Project is consistent with the goals of the West Sacramento Levee Improvement Program.
Early Implementation Project Rivers Phase 1 Site
June 30, 2011
Page 2

WSAFCA has reviewed the bid and has determined that the lowest responsive, responsible bidder is Raito, Inc. The Contractor’s State License Board has confirmed that Raito, Inc. holds the proper license to legally perform the work under this contract and it is current and in good standing.

Alternatives
1. Staff recommends that the JPA Board approve the award of the construction contract to Raito, Inc. and grant the General Manager authority to award and execute the contract once all approvals, permits, and funding agreement have been received.

2. The Board may choose to make adjustments or modifications to the project.

3. The Board may choose not to award the project at this time and reject all bids. This is not a recommended action because this project is required to be completed prior to the end of October, 2011 due to restrictions on levee work during the wet season.

Budget/Cost Impact
The Rivers Phase 1 Site Early Implementation Project will be funded by the recently completed 2011 bond sale and by the State of California. A total of $18,009,875 (detailed below) is required for the engineering design support, construction, management, inspection, and contract administration to complete this project. A summary of the estimated project construction costs is provided below:

**ESTIMATED PROJECT COSTS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Engineering and Project Management</td>
<td>$100,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$15,028,977</td>
</tr>
<tr>
<td>Potential Contract Change Order¹</td>
<td>$1,502,898</td>
</tr>
<tr>
<td>Construction Management, Inspection, and Contract</td>
<td>$1,378,000</td>
</tr>
<tr>
<td>Administration</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$18,009,875</strong></td>
</tr>
</tbody>
</table>

**ATTACHMENT**

Construction Contract and Bid Schedule

¹Estimated 10% Percent of the Construction Cost.
CONTRACT

THIS AGREEMENT is made and entered into on the date below written, by and between THE WEST SACRAMENTO AREA FLOOD CONTROL AGENCY, hereinafter called the "WSAFCA" and RAITO, Inc., hereinafter called the "Contractor".

In exchange for valuable considerations hereinafter mentioned, the Agency and Contractor agree as follows:

ARTICLE I. The Contractor agrees to furnish all labor, materials, tools and equipment and to perform all the work required to construct and complete in a good and workmanlike manner and in strict accordance with the Contract Documents, those certain improvements entitled:

"Levee Improvement Program EIP-Rivers Phase 1 Site"

Contract Documents for this project have been prepared by the Engineer of The West Sacramento Area Flood Control Agency, and hereinafter called the Engineer. All Contract Documents, and each and every provision thereof, relating to this Contract are hereby made a part of and incorporated by reference into this Contract. Such Contract Documents include the Invitation to Bid, Bidder's Bond, Contract, Faithful Performance Bond, Payment Bond, Contractor's Certificate Regarding Worker's Compensation, Specifications, the Federal and State-required provisions, the Technical Specifications and the Plans applicable to this work, and all Addendum and Change Orders as well as all modifications incorporated into said documents before the execution of this Contract. Any work called for in one Contract Document and not mentioned in others is to be performed and executed as if mentioned in all Contract Documents.

ARTICLE II. WSAFCA agrees to pay the Contractor for the performance of the Contract, subject to additions and deductions provided therein, the following prices, and the Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials, labor, tools and equipment, and for doing all the work contemplated and embraced in this Contract, and for all risks of every description connected with the work and for all expenses incurred by or in consequence of the suspension or discontinuance of the work, and for well and faithfully completing the work and the whole thereof in the manner and according to the Contract Documents and the requirements of the Engineer under them, namely:

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION</th>
<th>UNIT S</th>
<th>ESTIMATED QUANTITY</th>
<th>UNIT PRICE</th>
<th>TOTAL PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Advanced Preparation</td>
<td>L.S.</td>
<td>1</td>
<td>$50,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>2.</td>
<td>Mobilization/Demobilization</td>
<td>L.S.</td>
<td>1</td>
<td>$1,182,000</td>
<td>$1,182,000</td>
</tr>
<tr>
<td>3.</td>
<td>Environment controls, Including SWP3 Implementation</td>
<td>L.S.</td>
<td>1</td>
<td>$185,500</td>
<td>$185,500</td>
</tr>
<tr>
<td>4.</td>
<td>Levee Clearing Grubbing and Stripping</td>
<td>Acres</td>
<td>9.7</td>
<td>$13,780</td>
<td>$133,666</td>
</tr>
<tr>
<td>5.</td>
<td>Excavation (degrade and slope flattening)</td>
<td>C.Y.</td>
<td>54,032</td>
<td>$43.70</td>
<td>$2,361,198.40</td>
</tr>
<tr>
<td>6.</td>
<td>Soil Cement Bentonite Slurry Cutoff wall</td>
<td>S.F.</td>
<td>334,950</td>
<td>$23.57</td>
<td>$7,894,771.50</td>
</tr>
<tr>
<td>7.</td>
<td>Levee Embankment Construction</td>
<td>C.Y.</td>
<td>45,170</td>
<td>$22.79</td>
<td>$1,029,424.30</td>
</tr>
<tr>
<td>8.</td>
<td>Levee Roadwork &amp; Access ramps</td>
<td>L.S.</td>
<td>1</td>
<td>$318,000</td>
<td>$318,000</td>
</tr>
<tr>
<td>9.</td>
<td>Recreation</td>
<td>L.S.</td>
<td>1</td>
<td>$188,680</td>
<td>$188,680</td>
</tr>
<tr>
<td>10.</td>
<td>Revegetation</td>
<td>Acres</td>
<td>9.7</td>
<td>$6,678</td>
<td>$64,776.60</td>
</tr>
</tbody>
</table>

TOTAL BID PRICE $15,028,976.80

Note: EA. = Each; L.F. = Linear Feet; L.S. = Lump Sum; S.F. = Square Feet;
Construction Contract
Rivers Phase 1 Site
June 30, 2011

ARTICLE III. WSAFCA shall make payments on the account of the Contract as specified in the General Conditions.

ARTICLE IV. The Contractor shall diligently prosecute the work to completion in accordance with the following schedule: **Slurry wall completion by October 7, 2011 and all punch list items complete by December 15, 2011**

ARTICLE V. The Contractor acknowledges that he has examined the prevailing rate of per diem wages as established by the U.S. Department of Housing and Urban Development and the California Director of Industrial Relations. The Contractor agrees to pay workers not less than the applicable prevailing rate of per diem wages, as set forth in these requirements.

IN WITNESS WHEREOF, the parties execute this Contract as follows:

Raito, Inc.

________________________
Signature

________________________
Printed Name

________________________
Title

________________________
Date

West Sacramento Area Flood Control Agency

Approved as to form:

________________________
James Day Jr., Agency Attorney

Attest:

________________________
Kenneth A. Ruzich, Agency General Manager
MEETING DATE: June 30, 2011 ITEM # 9

SUBJECT:
APPROVAL OF A PROFESSIONAL SERVICES CONTRACT WITH HDR ENGINEERING, INC. FOR ENGINEERING SERVICES DURING CONSTRUCTION SUPPORTING THE WEST SACRAMENTO LEVEE IMPROVEMENT PROGRAM

INITIATED OR REQUESTED BY: [ ] JPA Board [ X ] Staff
[ ] Other

REPORT COORDINATED OR PREPARED BY:
Michael W. Bessette, Flood Protection Manager

ATTACHMENT [ X ] Yes [ ] No [ ] INFORMATION [ ] DIRECTION [ X ] ACTION

OBJECTIVE
To approve a Professional Services Contract with HDR Engineering, Inc. for engineering services during construction supporting the West Sacramento Levee Improvement Program.

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board:
1. Approve a Professional Services Contract in the amount of $1,655,076.00 with HDR Engineering, Inc. for Engineering Services During Construction supporting the West Sacramento Levee Improvement Program; and
2. Authorize the General Manager or his designee to take any and all actions reasonably necessary to complete the work described in the Contract, including the approval of minor Contract amendments that, in the opinion of the General Manager, will not materially alter the purpose of the Contract nor increase the total compensation due under the Contract by more than 10% ($165,508.00).

BACKGROUND
The HDR team supporting the West Sacramento Levee Improvement Program has successfully completed the design phase for both the CHP Academy site and Rivers Phase 1 site Early Implementation Projects. Both projects have been put out to bid for construction contracts and bids were received on June 2, 2011. Both projects will have construction contracts awarded in late June or early July, with construction related activities beginning soon thereafter. In order to facilitate the efficient construction and thorough documentation of the construction process and built structures, including the completion of the Project Completion/Construction Documentation Report, the HDR team is required to provide engineering services during construction.

ANALYSIS
HDR’s proposed services include providing engineering services during construction, design revision where needed, characterization of degraded soil quality at the Rivers Phase 1 site, coordination of monitoring well installation, and production of key components of the projects construction documentation reports. These activities are divided over the I-Street Bridge-South site, Rivers Phase 1 site, and CHP Academy site EIP projects as detailed in the attached scope of work. All of these services are essential for the proper construction and documentation of the three EIP’s. HDR and Kleinfelder are the design engineer and geotechnical engineer of record, respectively, for all three projects and it is a requirement for proper project documentation that they provide these essential services for the projects.

Alternatives
Staff recommends that the JPA Board approve a Professional Services Contract with HDR Engineering, Inc. for Engineering Services During Construction. The Board may elect not to approve the contract at this time and/or may elect to rescope the proposed services. However, without the services defined in this proposed contract the project schedule will be impacted.
Budget/Cost Impact
The professional services contract with HDR Engineering, Inc. in the amount of $1,655,076.00 will be funded by a combination of 2011 bond proceeds and the State of California. WSAFCA successfully entered into a Construction Funding Agreement with the State in June, 2011. These proposed engineering services during construction are eligible and are included within the Construction Funding Agreement. The State will fund 90% of the costs for all projects listed in the Construction Funding Agreement.

ATTACHMENT
HDR Engineering Engineering Services During Construction Proposal
MEETING DATE: June 30, 2011              ITEM # 10

SUBJECT:
CONSIDERATION OF APPROVAL OF TASK ORDER NO. 3 OF THE DESIGN SERVICES CONTRACT
WITH HDR ENGINEERING, INC. FOR THE SACRAMENTO RIVER SOUTHPORT EARLY
IMPLEMENTATION PROJECT

INITIATED OR REQUESTED BY: [X] Staff
[ ] JPA Board
[ ] Other

REPORT COORDINATED OR PREPARED BY:

Michael W. Bessette, Flood Protection Manager

ATTACHMENT [X] Yes [ ] No [ ] INFORMATION [ ] DIRECTION [X] ACTION

OBJECTIVE
To approve Task Order No. 3 of the design services contract with HDR Engineering, Inc. for the Sacramento River Southport Early Implementation Project (EIP).

RECOMMENDED ACTION
It is respectfully recommended that the JPA Board:
1. Approve Task Order No. 3 of the design services contract in the amount of $2,720,464.00; and
2. Authorize the General Manager or his designee to take any and all actions reasonably necessary to complete the work described in Task Order No. 3, including the approval of minor Contract amendments that, in the opinion of the General Manager, will not materially alter the purpose of the Contract nor increase the total compensation due under the Contract by more than 10% ($272,046.00).

BACKGROUND
Upon selection of the Sacramento River West South Levee for evaluation and design as the next EIP Site, WSAFCA executed a contract with HDR Engineering, Inc. (HDR) for the provision of design services on August 12, 2010. The not-to-exceed value of this contract was set at $14,500,000 based on a proposal titled Sacramento River – Southport Early Implementation Project, Design Services Contract Proposal for the City of West Sacramento and dated July 30, 2010. The overall length of this levee reach combined with the broad range of potential levee alignments and project phasing options makes the development of a detailed scope of work for the entire design phase of such a project challenging. As a result, an Indefinite Delivery-Indefinite Quantity (ID-IQ) Contract was executed. This contract type allows for the development of individual task orders for review and approval by WSAFCA and the City prior to the commencement of each project phase and the associated identified work products.

The initial project phase, referred to as preliminary design, was developed with two distinct components. The first component, interim preliminary design, corresponds with Task Order No. 1. A Notice-to-Proceed for Task Order No. 1 was issued on September 10, 2010. The scope of work for this task order focused on completing a setback levee interim preliminary design process. The primary focus of this step was to identify hydraulic impacts, environmental effects, and geotechnical constraints that present obvious advantages or disadvantages associated with each setback levee alignment selected for consideration. Task Order No. 1 was completed at the end of January 2011 with the delivery of an Interim Preliminary Design Report.

The second component, final preliminary design, corresponds with Task Order No. 2. A Notice-to-Proceed for Task Order No. 2 was issued on February 11, 2011. The scope of work for that task order focused on comparing the one or more setback levee alternatives identified as feasible during interim preliminary design with strengthen-in-place and adjacent levee alternatives with the intent of selecting the three most attractive alternatives for further evaluation in the second project phase, project design. Task Order No. 2 is scheduled for completion in July 2011 with the delivery of a Final Preliminary Design Report.
Consideration of Approval of a Design Services Contract with HDR Engineering
June 30, 2011
Page 2

ANALYSIS
The main objectives of Task Order No. 3 are to develop 15% designs for a preferred project alternative and one project alternate and, in doing so, to provide adequate information about the potential impacts of project implementation to complete an Administrative Draft Environmental Impact Statement/Environmental Impact Report (ADEIS/EIR). A minimum of three alternatives, including one setback alignment, an in-place improvement, and an adjacent levee upgrade will be evaluated in the process. The term 'combined measure alternative' (CMA) is used to reflect the fact that each alternative is comprised of different corrective measures along the alignment.

Task Order No. 3 will require refining and modifying the Task Order No. 2 investigations of the hydraulic, geotechnical, environmental, and civil design constraints associated with each alternative. The level of technical evaluation will increase significantly in Task Order No. 3 as compared to those completed in Preliminary Design (Task Orders 1 and 2), particularly with regard to the acquisition of new field data and the complexity of numerical models applied to evaluate hydraulic and geomorphic effects of each alternative. In addition, engineering support will be provided in the form of materials preparation and meeting attendance as WSAFCA moves forward with project public outreach efforts.

Evaluations in each of these discipline areas, with the exception of those associated with characterizing flood-flow hydraulic conditions, will be completed as part of this task order. Flood-flow hydraulic conditions, system-wide and those specific to the project extents, will be completed under separate contract by MBK Engineers. That work will provide the hydraulic data, including design water surface elevations and boundary shears, needed for seepage, stability and erosion analyses.

HDR will continue to guide all of the discipline-specific design investigations, provide GIS database management support to the entire design team, coordinate production schedules, provide technical information in support of the ADEIS/EIR and synthesize technical findings into a 15% designs for a preferred project alternative and a project alternate.

Major components of Task Order No. 3 work includes; Geotechnical and Groundwater Investigations, Civil Engineering and Analysis, Environmental Documentation and Geomorphic Investigations, Quality Management, and Project Management.

Task Order No. 3 Period of Performance
The overall period of performance for Task Order No. 3 is estimated at 24 weeks. This period of performance is anticipated to start the week of June 30, 2011 with approval of Task Order No. 3 and end the week of November 28, 2011. In order to account for any minor adjustments in the product delivery or review schedule the recommended period of performance for this task order is through December 31, 2011.

Alternatives
Staff recommends that the JPA Board approve Task Order No. 3 with HDR Engineering, Inc. for the Sacramento River Southport Early Implementation Levee Improvement Project. The Board may elect not to approve Task Order 3 at this time and/or may elect to rescipe the proposed services. However, without the services defined in this proposed Task Order the project schedule will be impacted.

Budget/Cost Impact
The design services contract with HDR Engineering, Inc. in the amount of $14,430,000, including this Task Order No. 3 in the amount of $2,720,464 will be initially funded by a combination of property flood assessment revenue, 2011 bond proceeds, and the State of California. WSAFCA successfully entered into a Design Funding Agreement with the State in October, 2009. A portion of these proposed design costs are included within the existing Design Funding Agreement. The balance of the costs will be included in an amendment to the Design Funding Agreement with the State. Initially the State will fund 50% of the design costs and will “true up” these costs once a cost share percentage has been established on a project by project basis. We anticipate at least a 70 (State) - 30 (WSAFCA) cost share split for all projects listed in the Funding Agreement.

ATTACHMENT
HDR Engineering Task Order No. 3 Design Services Proposal
June 17, 2011

Mr. Michael W. Bessette, P.E.
Flood Protection Manager
City of West Sacramento
1110 West Capitol Avenue
West Sacramento, California 95691

Subject: West Sacramento Area Flood Control Agency—Southport Early Implementation Project, Design Services: Proposal for Final Project Design—Task Order No.3

Dear Mr. Bessette:

The Southport Early Implementation Project (EIP) has reached an important milestone as we bring preliminary design to a close and enter the project design phase. Throughout Task Order No.1 in the fall and Task Order No. 2 this past spring, our work shed light on an array of problems and opportunities associated with implementing a range of levee improvement alternatives. A summary of key findings from both efforts was presented to the West Sacramento Area Flood Control Agency (WSAFCA) on May 12, 2011 and a final Task Order No. 2 is currently in production to formally document those findings. That report will be finalized through a review, comment, and revision process in June 2011.

The enclosed proposal for Task Order No.3 has been developed based on the findings from the Final Preliminary Design effort. Input from key members of WSAFCA’s program management has been incorporated, as well. The total value of Task Order No.3 currently is estimated at $2,720,463. This third phase in the project is intended to culminate in the delivery of an administrative draft Environmental Impact Statement and Environmental Impact Report (ADEIS/EIR) and 15% designs for the preferred project alternative and one alternate. This proposal incorporates the cost-saving measures outlined in our Sacramento River-Southport Early Implementation Project Design Services contract that are intended to increase the City’s return on investment in the flood protection program. These measures include an HDR labor rate freeze at 2008 levels through the duration of Task Order No.3 and elimination of travel expenses including mileage, parking, and travel by out-of-town team members.

WSAFCA’s team is strong and committed to improving flood protection in the City of West Sacramento and it is a great pleasure to be able to contribute to this effort. Please feel free to contact our Project Manager, Mr. Michael Vecchio, at (916) 569-1026 with any questions you may have regarding this proposal.

Sincerely,

Robert M. Boling, P.E.
Senior Vice President

Michael Vecchio, P.E.
Project Manager
SOUTHPORT
EARLY IMPLEMENTATION PROJECT –
PROPOSAL FOR DESIGN SERVICES

Task Order No. 3

West Sacramento
Levee Improvement Program

June 17, 2011

West Sacramento, California

WSAFCA
West Sacramento Area Flood Control Agency

HDR
2365 Iron Point Road, Suite 300
Folsom, CA  95630
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   Attachment B – Geotechnical and Groundwater Investigations, Southport TO 3
   Attachment C – Environmental Documentation and Geomorphic Investigations
   Attachment D – Detailed Fee Estimate
1.0 PROJECT OVERVIEW

1.1 Background

The West Sacramento Area Flood Control Agency (WSAFCA) has set an example for other communities in many ways, and in the process has made significant progress in developing and implementing a successful flood protection program over the last five years. The program has completed a draft levee system self-assessment through publication of a Draft Problem Identification Report (PIR) and a Draft Alternatives Analysis (AA), which characterize the breadth and complexity of levee deficiencies facing the City. Upon realizing that the estimated program cost would exceed the funding capacity of WSAFCA and the State of California Department of Water Resources (DWR), the program has successfully initiated a General Reevaluation Report (GRR) with the U.S. Army Corps of Engineers (Corps) and DWR in an attempt to secure significant additional Federal resources and funding for implementation of the overall program.

In order to reduce flood risk while the GRR is under development, WSAFCA proceeded with a number of levee improvement projects in close partnership with DWR under the authority of the Early Implementation Program (EIP). The evaluation and design of the first four EIP Sites was initiated in 2007. The first of these four EIP sites was constructed in 2008. The design for two additional sites is complete and both are scheduled for construction in 2011. Finally, the fourth site currently is under construction through a contract managed by the Corps. The construction of this site is scheduled for completion in 2011.

The progress on these four EIP Sites led WSAFCA to decide in 2009 to initiate a screening process for the selection of the next levee reach for improvement under the EIP. Through a series of meetings in December 2009 and January 2010, representatives from WSAFCA, the City, and the Consultant team participated in a levee reach screening and selection process. This process, documented in a Draft Technical Memorandum titled West Sacramento Levee Improvement Program, Early Implementation Projects – 2011 Project Screening dated January 22nd 2010, resulted in the selection of the Sacramento River West South Levee to be considered next for early implementation. This levee reach, at WSAFCA’s direction, is referred to as the Southport levee throughout this project.

1.2 Contract for Services

Upon selection of the Southport levee for evaluation and design as the next EIP site, WSAFCA executed a contract with HDR Engineering, Inc. (HDR) for the provision of design services on August 12, 2010. The not-to-exceed value of this contract was set at $14,500,000 based on a proposal titled Sacramento River – Southport Early Implementation Project, Design Services Contract Proposal for the City of West Sacramento and dated July 30, 2010. The overall length of this levee reach combined with the broad range of potential levee alignments and project
phasing options makes the development of a detailed scope of work for the entire design phase of such a project challenging. As a result, an Indefinite Delivery-Indefinite Quantity (ID-IQ) Contract was executed. This contract type allows for the development of individual task orders for review and approval by WSAFCA and the City prior to the commencement of each project phase and the associated identified work products.

A Notice-to-Proceed for Task Order No. 1 (TO 1) was issued on September 10, 2010. The scope of work for this task order focused on completing a setback levee interim preliminary design process. The primary focus of this step was to identify hydraulic impacts, environmental effects, and geotechnical constraints that present obvious advantages or disadvantages associated with each setback levee alignment selected for consideration. Task Order No.2 (TO 2), initiated in February 2011, and coming to a close at this time, focused on comparing several setback levee alternatives to in-place and adjacent levee improvement alternatives.

1.3 Project Status

The initial project phase, referred to as preliminary design, was developed with two distinct components. The first component, interim preliminary design, corresponds to TO 1. The purpose of that project phase was to evaluate four setback levee alternatives with respect project costs and critical design questions. TO 1 was completed in January 2011 with the delivery of an Interim Preliminary Design Report.

The second component, final preliminary design, executed during TO 2, focused on comparing near and far setback levee alternatives to strengthen-in-place and adjacent levee alternatives. That effort will identify three alternatives for further evaluation in the next project phase—project design. TO 2 is scheduled for completion in June 2011 with the delivery of a Final Preliminary Design Report. Table 1 provides an outline of the overall project development process, as well as the current estimated timeline for project delivery.

### Table 1 - Southport EIP Project Phases

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Time Frame</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim Preliminary Design</td>
<td>Sep 2010 – Jan 2011</td>
<td>Identify setback levees for comparison with in-place and adjacent levee alternatives.</td>
</tr>
<tr>
<td>Final Preliminary Design</td>
<td>Jan 2011 – Jun 2011</td>
<td>Identify three alternatives for preliminary design evaluation.</td>
</tr>
<tr>
<td>(CURRENT PHASE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Design</td>
<td>Jun 2011 - Nov 2011</td>
<td>Identify one preferred project alternative and one alternate.</td>
</tr>
<tr>
<td>Estimates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>Apr 2013 -</td>
<td></td>
</tr>
</tbody>
</table>
2.0 SUMMARY OF SERVICES

The Preliminary Design Phase provided the design team with a significant opportunity to explore the opportunities and constraints associated with the potential implementation of a setback levee along all or a portion of the Southport levee reach. The Interim Preliminary Design Report included a list of recommendations from which the Final Preliminary Design scope of work (TO 2) was developed; similarly, the presentation of findings from TO 2 made to the WSAFCA Board on May 12, 2011 included recommendations that provide the basis for the Task Order No.3 (TO 3) scope of work.

The following sections describe the intent and requirements associated with each task or deliverable identified for completion as part of this task order.

2.1 Project Design

The main objectives of TO 3 are to develop 15% designs for a preferred project alternative and one project alternate and, in doing so, to provide adequate information about the potential impacts of project implementation to complete an Administrative Draft Environmental Impact Statement/Environmental Impact Report (ADEIS/EIR). A minimum of three alternatives, including one setback alignment, an in-place improvement, and an adjacent levee upgrade will be evaluated in the process. Exhibit 1 shows the three alternatives to be evaluated. The term ‘combined measure alternative’ (CMA) is used to reflect the fact that each alternative is comprised of different corrective measures along the alignment.

TO 3 will require refining and modifying the TO 2 investigations of the hydraulic, geotechnical, environmental, and civil design constraints associated with each alternative. The level of technical evaluation will increase significantly in TO 3 as compared to those completed in Preliminary Design (TO 1 and 2), particularly with regard to the acquisition of new field data and the complexity of numerical models applied to evaluate hydraulic and geomorphic effects of each alternative. In addition, engineering support will be provided in the form of materials preparation and meeting attendance as WSAFCA moves forward with project public outreach efforts.

Evaluations in each of these discipline areas, with the exception of those associated with characterizing flood-flow hydraulic conditions, will be completed as part of this task order. Flood-flow hydraulic conditions, system-wide and those specific to the project extents, will be completed under separate contract by MBK Engineers. That work will provide the hydraulic data, including design water surface elevations and boundary shears, needed for seepage, stability and erosion analyses.

System-wide impacts on water surface elevations during the 100-yr and 200-yr flood events (those event with a 1.0% and 0.5% annual chance of occurrence, respectively, during any given year) that implementation of each CMA may have will be evaluated, as well as potential impacts
to the flow split at the American River/Sacramento River confluence. To assess system wide hydraulic impacts, a without project condition simulation will be developed to provide a basis of comparison to with project conditions. Cumulative impact analysis will be performed also to account for future changes in reservoir operations at Folsom Dam. Assumptions related to upstream levee failures, upstream levee heights, reservoir operations and other projects outside of the Southport EIP site will be made for simulation of the without project and project conditions simulations for impact and design analysis. A more detailed hydrologic and hydraulic investigation work plan is included in Attachment A – Hydrologic and Hydraulic Investigations.

HDR will continue to guide all of the discipline-specific design investigations, provide GIS database management support to the entire design team, coordinate production schedules, provide technical information in support of the ADEIS/EIR and synthesize technical findings into a 15% designs for a preferred project alternative and a project alternate.

2.2 Geotechnical and Groundwater Investigations

The borrow source, potential settlement, seepage and stability evaluations completed in TO 2 will be refined using existing geotechnical data and new data proposed for acquisition as part of TO 3. New data acquisition in TO 3 is less than originally envisioned, owing to the utilization of remaining TO 1 capacity subsequently authorized by WSAFCA for collection of additional geotechnical data. That effort, initiated in April 2011, will provide data in support of TO 3 evaluations. The number and location of explorations proposed has been developed through careful review of existing data and that currently being collected, and coordination with WSAFCA representatives. These investigations will serve the important role of verifying the assumptions made in the preliminary design evaluation about the existing foundation conditions along setback levee alignments and will supplement the data base applied to further refine the seepage and stability models to be utilized going forward.

Several evaluations not addressed in either TO 1 or TO 2 will be initiated in TO 3, including the effects erosion of the waterside levee face and foundation may have on seepage and stability, and what design requirements they may dictate for the strengthen in place and adjacent levee alternatives. A second new evaluation will address what impact installation of cutoff walls for under seepage remediation may have on groundwater availability and quality in private wells. Nine monitoring wells will be installed, three at each of three cross-sections along the Southport EIP levee reach, to gain a better understanding of existing groundwater conditions and for use calibrating numerical models to applied in conjunction with this effort.

A more detailed scope of work has been developed by Blackburn Consulting Inc. (BCI) for proposed geotechnical investigations and by LSCE, Inc. for proposed groundwater studies. See Attachment B – Geotechnical and Groundwater Investigations, Southport EIP TO 3.
2.3 Civil Engineering and Analysis

The civil design considerations evaluated in TO 2—earthwork requirements, potential utility modifications, and transportation requirements—will be refined and modified for each levee improvement alternative in TO 3. An implementation plan, including construction phasing, staging areas, haul routes, and equipment emissions analyses, will be developed for each alternative. In addition, terrain models developed in TO 2 will be further refined to confirm earthwork volumes, evaluate modified storm water drainage requirements, and to provide geometry data needed for hydraulic and geomorphic numeric modeling applications. A utility work plan will be developed defining team member roles and responsibilities and a work flow to be applied when a utility must be modified or relocated.

Opinions of probable cost will be refined for each alternative evaluated in TO 3. The cost categories—lands and damages, long-term fiscal impacts, utility and structure relocation and modification, levee improvements, environmental mitigation requirements, and planning, design and construction management—will be carried over from previous efforts. A new project cost component that will be added in this TO is a storm water pollution prevention plan (SWPPP) risk evaluation and implementation plan consistent with increased requirements promulgated by the Regional Water Quality Control Board in the summer of 2010. This effort will be general and based on data obtained from the CHP Academy and Rivers EIP bids. More detailed plans and associated costs will be developed in the next phase of work. In addition, cost opinion unit rates and quantities will be revisited and revised, as appropriate, for each category in light of new data collected and evaluations completed for this task order.

The GIS database developed from existing and newly acquired data during TO 1 and 2 will continue to be expanded and utilized for exhibit production in support of the hydraulic, geotechnical, civil and environmental project components.

2.4 Environmental Documentation and Geomorphic Investigations

A big step regarding development of the environmental documentation needed to successfully implement Southport levee improvement project in 2013 is planned for TO 3. This effort will include facilitation of an EIS/EIR Workgroup to coordinate input from the WSAFCA and the Corps, conducting EIS/EIR noticing and public scoping, and development of an ADEIS/EIR to meet the requirements of the National Environmental Protection Act (NEPA) and the California Environmental Protection Act (CEQA), respectively.

Like the other major discipline-specific project components, environmental work completed under this task order will build off of the efforts completed to date. The heart of that work will be reflected in the ADEIS/EIR and environmental mitigation plans for each alternative, including finalizing development of a project description, alternative and document outline, definition of
the affected environment, and conducting an effects/impacts analysis, and production and distribution of the ADEIS/EIR.

A special focus will be placed upon development of conceptual restoration alternatives to meet project mitigation requirements and to define potential for restoration above and beyond these requirements. This effort will include working interactively with a workgroup containing agency representatives, and members from the civil design, hydraulic modeling and geomorphic modeling teams to define target species, associated habitat restoration goals and to test the sustainability of restorations scenarios.

A more detailed scope of work has been developed by cbec, inc., and is included as Attachment C – Environmental Documentation and Geomorphic Investigations.

2.5 Quality Management

Quality Control (QC) reviews are conducted to verify that the deliverable and supporting documents are complete and understandable, conform to appropriate standards, and meet HDR’s and WSAFCA’s expectations. QC reviews are performed both on products and deliverables developed by HDR staff, as well as on engineering products developed by our subconsultants. Reviews are conducted, generally, on two different levels: that of peer and senior technical review. A peer review is a check of the work by an individual of a similar level expertise, typically a member of the design team familiar with the day-to-day project operations and expectations. Senior technical review is an independent review in which the reviewer views the deliverable at hand in a narrow fashion with an eye toward its overall adequacy compared to the industry standard of practice. These reviews will be conducted by experienced senior personnel who are not otherwise involved in producing the documents, but who are fully qualified in the process and disciplines required. This provides an impartial assessment that considers both the technical details and the project objectives.

Overall, QC review activities include verifying one or more of the following: background information, assumptions, and data used in product development; use of proper formats; compliance with requirements; and calculation methods and/or numerical accuracy.

Aside from standard QC reviews, TO 3 will lead to the initial engagement of a Board of Senior Consultants (BOSC). The establishment and engagement of a BOSC is intended to satisfy the Safety Assurance Review (SAR) requirements described in Section 2035 in the Water Resource Development Act (WRDA) of 2007 and U. S Army Corps of Engineers’ EC 1105-2-410, Civil Works Review Policy. These Safety Assurance Reviews ensure that good science, sound engineering, and public health, safety, and welfare are the most important factors in guiding the engineering design and implementation of the WSLIP.
2.6 Project Management

HDR will continue to support the City and its Program Management Consultant Team in the communication and coordination of the current flood protection program to a broad variety of stakeholders with various interests. This coordination may be with the public, project stakeholders, or other agencies. In most cases, this coordination is focused on understanding and establishing a relationship between the City’s flood protection program and other existing or evolving State and Federal programs that may be of assistance to the City in achieving their goal of 200-year flood protection for the City.

Under some circumstances, this support may be related to the investigation of strategic financial opportunities or coordination with various potential project partners.
3.0 TASK ORDER SUMMARY

2.7 Task Order Budget

The design services summarized in this proposal correspond with categories outlined in the contract proposal titled *Sacramento River – Southport Early Implementation Project, Design Services Contract Proposal for the City of West Sacramento* and dated July 30, 2010. A summary of each of the five tasks covered in this proposal is included in Section 2.0 with detailed scopes of work for these tasks attached to this proposal. Table 2 (below) summarizes the combined value of these three tasks by contract proposal category. *The total estimated value of the tasks included in this proposal is $________.* A detailed cost spreadsheet for this task order proposal has been included as *Attachment D.*

Table 2 - Task Order No. 3 Budget Summary

<table>
<thead>
<tr>
<th>Proposal Category</th>
<th>Attachment</th>
<th>Lead Team Member</th>
<th>Value</th>
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</thead>
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<tr>
<td>Project Design</td>
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<td>HDR, MBK</td>
<td>$263,324</td>
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<td>Geotechnical and Groundwater Investigations</td>
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<td>BCI, LSCE</td>
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<td>Civil Engineering &amp; Analysis</td>
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<td>HDR</td>
<td>$501,401</td>
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<td>Environmental Documentation and Geomorphic Studies</td>
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<td>ICF, cbec</td>
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<td>Quality Management</td>
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<td>HDR</td>
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<td>Project Management</td>
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<td>HDR</td>
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<td></td>
<td></td>
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<td><strong>TOTAL:</strong> $2,720,464</td>
</tr>
</tbody>
</table>

1. MBK will complete the hydrologic and hydraulic evaluation under a separate contract with WSAFCA. Costs for that effort are not included in this proposal. Information related to that effort is presented in this document for purposes of providing technical continuity to the TO 3 proposal.

Table 3, on the following page, has been developed to assist in monitoring the cumulative cost of the task orders as they relate to the original contract proposal for the Southport EIP.
Table 3 - Cumulative Budget Summary

<table>
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<tr>
<th>Proposal Category</th>
<th>Original Estimate</th>
<th>T.O. #1 (Proposed)</th>
<th>T.O. #2 (Proposed)</th>
<th>T.O. #3 (Proposed)</th>
<th>Subtotal</th>
<th>Remaining</th>
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2.8 Task Order Period of Performance

The overall period of performance for TO 3 is estimated at 24 weeks. This period of performance is anticipated to start the week of June 13, 2011 with approval of TO 3 and end the week of November 28, 2011. In order to account for any minor adjustments in the product delivery or review schedule, the recommended period of performance for this task order is through December 31, 2011.
Exhibit 1

CMA 1 ADJACENT LEVEE WITH BERM
CMA 1 ADJACENT LEVEE WITH CUTOFF WALL
CMA 1 SETBACK LEVEE WITH CUTOFF WALL
CMA 2 ADJACENT LEVEE WITH CUTOFF WALL
CMA 2 SETBACK LEVEE WITH BERM
CMA 2 SETBACK LEVEE WITH CUTOFF WALL
CMA 3 SLOPE FLATTENING WITH BERM
CMA 3 SLOPE FLATTENING WITH CUTOFF WALL

Combined Measure Alternatives 1 - 3

May 2011

0 1,000 2,000 3,000 4,000
1 inch = 4,000 feet

Sources: Imagery-NAIP 2009; Levee Miles-DWR 1990.

Project Manager
M. VECCHIO, HDR

Designed
M. VECCHIO, HDR

Drawn
B. JONES, HDR

5

PROJECT STATIONING

COST EVALUATION SEGMENT

LEVEE MILES (DWR, 1990)
Attachment A - Hydrologic and Hydraulic Investigations
Purpose
The purpose of this Work Plan is to provide a framework for MBK Engineers to define the approach and methodology for Task Order 3 of the Southport EIP project.

Objective
The objective of the hydrologic and hydraulic analysis for TO 3 is to 1) Perform impact analysis of up to 3 combined measure alternatives (CMA) in support of the draft EIR/EIS and 2) initiate hydraulic design of the preferred alternative. The impact analysis will determine which CMA(s) have unacceptably high negative system wide impacts and which CMA has potential significant benefits. For the hydraulic design, we will begin looking focusing on reach and site specific design analysis and results. The H&H analysis defined in this Work Plan will be focused on answering the following:

1. Does a CMA create the hydraulic benefit of reduced water surface elevations?
2. Does a CMA induce undesirable changes in flow distribution, along the Sacramento River?
3. Does an CMA sustain hydraulic neutral conditions?
4. How would an CMA function in combination with the widening of the Sac Bypass and with the Joint Federal Project.
5. What are the localized and hydraulic impacts associated with the preferred CMA(s).
6. What are the localized velocities and water surface elevation for use in design of project features.

Approach
The approach for the H&H analysis for TO 3 will be to use existing 1-dimensional (1-D) hydraulic models of the Sacramento River Flood Control Project to assess hydraulic impacts of the various CMA(s). The 1-D model will primarily focus on water surface and flow distribution impacts on a “system wide” basis. We will also develop a 2-D hydraulic model to perform reach specific hydraulic analysis. The 2-D model can be used to determine impacts to velocity, analyze site specific grading and habitat enhancement, and for design analysis.
For the 1-D model, we propose to use the Corps of Engineers HEC-RAS model developed for the American River Common Features GRR. The current release of the HEC-RAS model is based on Comp Study topography, has a vertical datum of NGVD-29, and is calibrated to the January 1997 flood event. We have reviewed the adequacy of the Corps calibration and have determined that the model is adequate for use for impact analysis.

To assess system wide hydraulic impacts, a without project condition simulation will be developed to from which CMA(s) will be compared with. Cumulative impact analysis will be performed also to account for future changes in reservoir operations at Folsom Dam. Assumptions related to upstream levee failures, upstream levee heights, reservoir operations and other projects outside of the Southport EIP site will be made for simulation of the without project and project conditions simulations for impact and design analysis.

The CMA(s) analysis will simulate various setback levee distance from the river and various longitudinal lengths along the project site. Various alignments will be simulated in the HEC-RAS model by modifying the cross sections to reflect the setback levee distance and new setback area. The simulation of the setback area will be limited to limited spatial variation in vegetation enhancement and grading of the area on a macro level. Simulation of spatially varied vegetation, spatial varied levee removal, rock groins, dikes, etc. or features that are site specific will analyzed using the 2-D model.

A 2-D model of the Sacramento River in the vicinity of the project will be developed to perform reach specific hydraulic analysis. We are currently assessing which 2-D model software to utilize for development of the model but are considering the use of RiverFLO-2D or RMA-2. Both RiverFLO-2D and RMA-2 are finite element models.

The 2-D model will simulate a short reach of the Sacramento River from approximately I-Street to Freeport. The model will be able to simulate spatial vegetation types within the setback, spatial variation of existing levee removal/degrade, and site specific grading. Model output from the 2-D model will be used to assess reach specific impacts to velocity and water surface elevation and can be used for design of project features.

The 1-D and 2-D models will analyze the system wide and reach specific hydraulic impacts for large flood events (i.e. 100 and 200 year). Lower flood events (e.g. 2 year, FAF) analysis will be performed by models developed by CBEC. We will coordinate with CBEC to ensure consistency in model development,
assumptions, topographic and bathymetric data, and hydrologic data. Model output results from the 1-D and 2-D model can be used for input into the eco-hydrologic and sediment models developed by CBEC.

**Hydrology**

All simulations performed will utilize hydrology developed by the Corps for the Comp Study and updated hydrology developed by the Corps for individual watersheds. Simulations will be performed using the 200 year storm centering. Other flood frequency hydrology, such as the 2, 10, 25, 50, 100 and 500 year, will be simulated if needed.

**Data Needs**

Primary data needs for the H&H analysis are topography and bathymetry. Existing data will be utilized as to the extent possible. New cross sections will be inserted to the HEC-RAS model to reflect the setback alternatives. These cross sections will be cut from existing topography and bathymetry. Adjustments to vertical datum will be made as necessary.

Existing data for the project site include but not limited to West Sacramento LiDAR, DWR CVFED LiDAR, Comp Study topography, Comp Study Bathymetry, and DWR Urban Levee Evaluations bathymetry. Other data sources include the California Levee Database. We will be using topographic models developed by HDR to build the 2-D model. It is anticipated that limited new data collection will be needed as part of the TO 3.
Attachment B - Geotechnical and Groundwater Investigations
Blackburn Consulting (BCI) prepared this geotechnical work plan for Task Order #3 (TO3), Project Preliminary Design, for the Southport EIP. The primary goal of Project Preliminary Design is to evaluate potential alternatives toward selection of a preferred alternative that will be advanced into final design phases. The TO3 alternatives will include a combination of repair-in-place, adjacent levee and setback levee improvements.

The project is divided into seven Segments, identified from south to north as Segments “A” through “G”. Our TO2 analysis for these segments is in-progress and will include supplemental sonic drilling (TO1A) to obtain deep (130 ft) soils data below dense gravel layers. To-date, our studies have shown the following:

**Segment A**: Existing data indicates a relatively thick clay blanket below the sandy levee fill that provides an adequate average gradient with regards to underseepage. There are isolated sand lenses within the clay blanket and at the surface that have led to areas of “pinboils” in the past. A relatively shallow cutoff wall, extending 20-25 feet below the levee into the underlying clay layer, should provide adequate through seepage and underseepage control. Water-side slope flattening to 3:1 (H:V) to mitigate rapid-drawdown slope instability appears achievable without a significant crown shift.

**Segment B**: The relatively thick clay layer in Segment A appears to continue about 600 feet into Segment B, to about Station 55+00. The preliminary conclusions are therefore similar to that for Segment A but further analyses is necessary to confirm the effectiveness of a cutoff wall for underseepage. North of Station 55+00, the clay layer diminishes in thickness and a deep cutoff wall (perhaps terminating in stiff to hard silt at depth 60-80 feet below the base of the levee), shallow cutoff wall with pressure relief wells, or seepage berm is likely to be required. The supplemental TO2 drilling will provide further evaluation by two sonic borings, 110-130 feet deep, located 200-400 feet landside of the existing levee toe. A repair-in-place or adjacent levee is the preferred alternative in this segment, although a setback alignment will also be considered.

**Segment C**: A setback levee is preferred in this segment. A possible cutoff layer exists at depth 65-110 feet, however sonic borings advanced below the gravel layer are necessary to determine the existence or absence of the cutoff layer. Alternatively, a seepage berm, or combination berm with a shallow cutoff wall, may be feasible alternatives.

**Segment D**: A setback alignment is anticipated in this segment. Adequate clay layers appear to be present for a cutoff wall at depth of 20-25 feet below the levee, or possibly at depth 65 feet into a deeper clay layer.

**Segment E**: A setback levee around Bees Lakes is proposed in this segment. The south half (to about Station 200+00) is similar to Segment D, and a shallow cutoff wall to depth 20-25 feet below the levee may be adequate. North of Station 200+00, the cutoff wall will likely need to extend 65-75 feet into deeper layers of stiff to hard silt and clay, or a seepage berm may be needed to mitigate underseepage.
Segment F: This segment may include a setback and/or adjacent levee. The clay layer from Segment E at depth 65-75 feet may extend into the south half of this segment and a cutoff wall may be feasible. The northern half (north of about Station 240+00) contains more sand and the cutoff wall is less likely; a seepage berm, perhaps in combination with a shallow cutoff wall, may be required. Supplemental TO2 drilling will provide further evaluation by two sonic borings, 110-130 feet deep, located 200-400 feet landside of the existing levee toe.

Segment G: This segment will likely be an adjacent levee with deep cutoff wall or seepage berm, perhaps in combination with a shallow cutoff wall. Supplemental TO2 drilling will provide further evaluation with one sonic boring, 110-130 feet deep, located within 50 feet of the existing levee toe.

Substantial quantities of new borrow will be required for the new/widened levee embankments and seepage berms. Eight borrow areas and the upper 10 feet of the existing levee (anticipated degrade section) have been identified as potential sources of levee and/or seepage berm fill. These sources will be evaluated within TO3.

Task 1  Project Review and Coordination

BCI will review documents supplemental to those reviewed during our Task Order #2 work, including the TO2 Technical Memorandums prepared by other team members. BCI will coordinate with the HDR project team, USACE personnel, City of West Sacramento and (as necessary) DWR and the Board of Senior Consultants (BOSC) regarding the proposed exploration and testing. We will also consult RD900 regarding the recent high river stages and observed landside toe seepage. We will modify our TO3 exploration and testing, if needed, to reflect these discussions.

The supplemental drilling (5 sonic borings within Segments B, F and G, identified as TO1A) will be completed by the end of May. The data from these borings may also modify the following TO3 exploration and testing program.

Task 2  Field Work Preparation

BCI will field-review the preferred alignments and identify the locations selected for further subsurface exploration. The exploration program will include test drilling along the alignment alternatives; backhoe test pits within the prospective borrow sites; drilling/sampling along the existing levee crown (degrade section); and soil sampling along the water-side levee face. The drilling will include a combination of CPT, auger/rotary drilling and sonic drilling.

GIS coordinates will be identified for each exploration location and submitted to the City for review with respect to property lines and rights-of-entry issues. Prior to entry on any properties, BCI will contact the respective owners and comply with the Right of Entry agreements currently on file with the City. After clearance to enter properties, BCI will stake the exploration locations, notify Underground Service Alert (USA) for underground utilities and obtain the necessary Yolo County drilling permits.
Task 3  Exploration and Field Testing

Setback and Adjacent Levee Alignments

BCI will complete a combination of cone penetration tests (CPT) and sampled test borings (power auger, mud rotary and/or sonic) at the exploration locations shown on Exhibit G-. Based on our recent experience, the CPT and auger/rotary borings will likely extend to depths of 50-100 feet and terminate in dense gravel layers. The sonic borings will penetrate the gravel and extend to at least 130 feet.

The CPT’s will be performed first to assist in optimizing the data from the test drilling. We propose a total of 12 CPTs, 25 auger/rotary borings and 6 sonic borings. Combined with the previous explorations, this will provide a spacing of about 1,000 feet along a line about 400 feet landside of the existing levee toe in segments where a set back levee is preferred, a spacing of about 1,000 feet along the levee crown in Segments where an adjacent levee is proposed, and a spacing of about 1,000 feet landward of the setback or adjacent levee.

The CPTs will be advanced with heavy-duty equipment (25 or 30-ton rig). Measurements of cone bearing, sleeve friction, and pore water pressure will be recorded to provide a nearly continuous log of the soil profile. This data will be used in conjunction with the exploratory boring data to interpret soil behavior type, relative density, strength and other parameters.

The auger/rotary borings will be drilled with track or truck-mounted equipment. Soil samples will be obtained with hydraulically-pushed Shelby tubes (in very soft soils) or hammer-driven Standard Penetration Test (SPT) or California Modified samplers. These samples will be suitable for laboratory strength, consolidation and permeability testing.

The sonic borings will be drilled at locations where dense gravel/cobble layers are present and deep cutoff walls may be necessary. The sonic drilling can penetrate to depths of 150 feet and will provide a continuous sample of soil for visual and laboratory classification tests.

A BCI Engineer or Geologist will supervise the CPT drilling, log the test borings and direct the sampling operations consistent with current USACE guidelines. Ground water levels will be noted, where encountered. We assume that signs and cones will be adequate for temporary lane closures, if necessary.

BCI will backfill the CPTs/borings in accordance with County permit requirements. Some of the borings may be backfilled to within 20 feet of ground surface and then completed as monitoring wells to allow for groundwater measurements for ecosystem studies. This proposal assumes nine of the borings will be completed as wells at locations determined by others on the project development team. Well construction will include machine-slotted PVC inserted into the borehole and backfilled with sand, with a bentonite plug and concrete cap in the upper 4 feet to prevent surface infiltration. A schematic of the well construction is shown on Exhibit G-. 
Existing Levee Sampling for HDR Scour Analysis

BCI will obtain bulk soil samples along the lower portion of the existing water-side levee in support of erosion evaluations by HDR. BCI assumes a bulk sample of representative levee soil every 500 feet, for a total of approximately 60 samples. We will access these locations from the top of the levee and use hand equipment (augers or shovels) to obtain the samples.

Borrow Sites

We propose subsurface explorations at the eight borrow sites as shown on Exhibit G-. These sites are selected based on their potential to contain soils meeting USACE fill criteria for a zoned levee (“Type 1” and “Type 2” material) and are within a relatively short haul distance for construction. These sites are identified as follows:

- Riverpark 1
- Riverpark 2
- Liberty 1
- Liberty 2
- Liberty 3
- Newport 1
- Yarbrough 1
- Newport 2

We propose 5-10 backhoe test pits within each of the above sub-areas, as shown on Exhibits G- through G-. These locations may be modified based on ground conditions and site access conditions. The actual number of test pits may be reduced where existing data is more extensive (e.g., Liberty sites).

The test pits will extend to depth of about 7-10 ft (about where we expect groundwater). A BCI Engineer or Geologist will log the test pits, measure groundwater levels (if encountered) and obtain bulk samples for laboratory testing. We will notify HDR, ICF and the City prior to the site explorations, and expect an ICF archeologist will review selected test pits (and borings) as part of their environmental evaluation. The test pits will be backfilled with the native material and wheel-rolled for compaction at completion of the exploration.

We estimate a total of 60-65 test pits for this Task. We expect about 2-3 weeks of field work for this task, assuming reasonable access for a tracked backhoe. One or two additional sites may be identified during the course of this phase, and/or conditions may command extra work at some sites; therefore, we include a contingency for an additional four days of backhoe work, as needed. This work will be performed as soon as possible to provide early TO3 data for the Civil Design group.
Task 4  Laboratory Testing

BCI will perform the following laboratory tests on representative samples obtained from the drilling, test pits and hand samples.

Setback and Adjacent Levee Alignments
- Moisture Content and Unit Weight for settlement and liquefaction analyses.
- Undisturbed triaxial compression strength for slope stability analysis.
- Sieve Analysis and Plasticity Index for classification, liquefaction analyses and hydraulic conductivity correlations.
- Hydraulic conductivity for seepage analysis.
- Consolidation tests for settlement analyses.

Borrow Sites
- Remolded direct shear or triaxial compression strength for slope stability analysis.
- Sieve Analysis and Plasticity Index for classification and levee criteria.
- Maximum dry density tests for soil remolding parameters.
- Hydraulic conductivity for seepage analysis.

Existing Levee Soils for HDR Scour Analysis
- Sieve Analysis and Plasticity Index for soil classification and correlations.

Task 5  Preliminary Design Analysis

BCI will conduct preliminary engineering analysis based on protocol developed by BCI/HDR. Prior to any analyses, BCI will submit technical (soil) parameters and cross-section stratigraphy to HDR for review and comment. After concurrence for protocol, parameters and stratigraphy, BCI will complete the following analyses:

Setback and Adjacent Levee Alignments
Based on our current knowledge of the preferred alignments and preliminary TO2 findings, we estimate, and our fee estimate reflects, that engineering analysis will be necessary for 7 new cross-sections and 6 updated cross-sections. We will update our fee if this changes after TO2 is complete.
We will perform the following analysis on each cross-section:

- **Short-term (elastic), long-term (consolidation) and potential differential settlement along the proposed alternative alignments using FoSSA 2.0 software.** These results will utilize the site-specific data obtained from the laboratory testing for TO3 and be compared with the initial estimates obtained in TO1 and TO2. Assess the need for settlement mitigation such as preloading and assess the need for construction monitoring (piezometers and inclinometers) to determine completion of settlement and existence/non-existence of lateral squeezing of soft soils.

- **Seepage analyses using SEEP-W for preliminary design of cutoff walls, seepage berms or other means to control underseepage.** Laboratory results from both the borrow sites and the levee degrade (upper 10’ of existing levee) will be used to develop preliminary seepage berm dimensions.

- **Preliminary stability analyses using SLOPE-W for steady state, rapid draw-down and end-of-construction analyses for preliminary slope design and setback requirements.** New levee sections will be analyzed based on soil parameters from the potential borrow areas (Type 1 and Type 2 soils). Evaluate the potential for staged construction to mitigate slope instability during construction and the need for construction monitoring with piezometers to determine the magnitude of, and dissipation of detrimental pore pressures that could lead to instability during construction.

The seepage and slope stability analyses will include the 200-yr DWSE, 200-yr DWSE+1’ and hydraulic top of levee (HTOL), as appropriate.

**Borrow Sites**

- Confirm the anticipated soil conditions and depths as assumed in the TO1 (Interim Preliminary Design) study.
- Refine the borrow site limits presented in TO1.
- Evaluate groundwater depths with respect to the need for excavation
- Identify potential impacts to adjacent structures, levees, pipelines, etc.
- Review likely haul routes and provide input to HDR regarding impacts to existing roads/traffic.
- Provide input related to post-construction impacts of the borrow sites.
- Review and provide input with regards to disposal and stockpile sites.
- Discuss other criteria identified by the design team.
Task 6 Seismicity Evaluation

Kleinfelder completed a preliminary seismic evaluation in 2007 (Memorandum, June 2007) for Reach 1 (RM 57.2 section, at north end near barge canal). BCI will update and extend the Kleinfelder study for the preferred alignment based on the existing data and supplemental data obtained for this study. The evaluations will include the following:

- Review and update of significant seismic sources (generally late-Quaternary faults) within about 100 km of the project.
- Development of Site-Specific Ground Motions based on current attenuation relationships.
- Preliminary liquefaction analysis based on the test borings within the alternative alignments (assume 6 locations along the preferred alignment).
- Preliminary stability analysis of 3 selected levee sections along the preferred alignment under estimated earthquake loading conditions.
- Preliminary stability analysis of 3 selected levee sections along the preferred alignment under post-earthquake static loading conditions (using estimated residual undrained shear strengths of potential liquefiable layers).
- Preliminary magnitudes of slope deformation under seismic loading.

Task 7 Drafting, GIS and 3-D Modeling

Archiving explorations within a GIS data base will provide a quick, efficient way of reference and review by the design team, internal technical reviewers and the Board of Senior Consultants. The data base will be a valuable tool and easily updated as addition levee improvement projects are advanced within Southport.

BCI will use existing GIS files from HDR to prepare plan and profile sheets along the project alignment. The plan will show aerial imagery and geomorphology of the levee alignment, project stationing/segments and locations of all boring data within approximately 1,500 feet of the existing levee. The profiles will show “stick logs” of the boring data, including material classification, field blow counts, sampler size, percent fines, liquid limit, and plasticity index.

BCI will use ARCVIEW GIS software to link pdf’s of historic and BCI boring logs to the boring locations on the plan sheets. The links will allow quick review and analysis of subsurface units and will be used to create the 3 dimensional models.

3-D modeling of cross-sections can be a valuable tool in the selection of critical cross-sections and demonstration of subsurface stratigraphy modeling to internal reviewers and the Board of Senior Consultants.
The 3-D modeling will show the spatial distribution of individual geologic units. The software allows for animation (rotation) of views and cross sections created in various orientations. The 3-D views will extend from the river to approximately 1,500 feet west of the existing levee. To prepare the models BCI will:

- Input all historic and BCI logs into the appropriate format for analysis.
- Perform analysis of boring data to correlate units between borings for construction of a geological hierarchy.
- Perform 3 dimensional kriging and numerical analysis.
- Review the 3 dimensional model and designate areas for creation of fence diagrams and areas needing further exploration or analysis.

**Task 8  Project Preliminary Design Technical Memorandum**

BCI will prepare a Project Preliminary Design Technical Memorandum that will include:

- Description of Alternative Alignments and Borrow Sites
- Summary of Field Exploration and Laboratory Testing
- Site Geology and Subsurface Conditions
- “Stick-Log” Longitudinal Plan/Profile Drawings
- Geologic/Soils Cross-Sections and Engineering Parameters
- Seismic Data and Evaluation
- Preliminary Settlement, Liquefaction, Slope Stability and Seepage Analyses
- Preliminary assessment of the need for settlement mitigation
- Preliminary assessment of the need for staged construction
- Boring and Test Pit Logs
- Laboratory Test Results with Summary Table
- Assessment of each borrow site with respect to levee material, haul routes and other site impacts.
- Assessment of alternative alignments with respect to potential settlement, stability and underseepage.
- Limitations of Study.
- Draft report for review and comment prior to the final submittal.

BCI will submit an interim Technical Memorandum for the borrow area evaluation for use by other team members in their TO3 work. This will include a preliminary summary of the field exploration and conclusions regarding soil suitability for use as levee fill and seepage berm.
Task 9  Meeting Participation and Presentations

BCI will participate in design-team meetings and Board of Senior Consultants meetings, and provide geotechnical-related presentations as requested by HDR and WSAFCA throughout the course of the preliminary design phase. We will also discuss with the design team members the alignment alternatives to help define the overall criteria for selection of the preferred alternative to move forward in project design.

Schedule
We are presently completing the testing and analyses for TO2, with the final Technical Memorandum from that phase due in June 2011. We understand the TO3 final technical memorandum is scheduled for completion by November 2011.

To meet the deliverable deadline we intend to begin immediately with project coordination and permitting so as to complete the field exploration by the end of July 2011. We anticipate approximately 2 Months of laboratory testing and 2 months of analysis and report preparation. To accomplish this aggressive schedule, we assume that a partial notice-to-proceed will be issued no later than May 15, 2011 and that weather and other factors beyond our control will not cause significant delays.

The interim TM for the borrow sites will be submitted in July 2011. This schedule assumes the site explorations will be a first priority and completed in June 2011.
Southport EIP - Project Preliminary Design  
Task Order #3  
Geotechnical Cost Proposal  

May 10, 2011  

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### Southport EIP - Project Preliminary Design

**Task Order #3**

**Geotechnical Cost Proposal**

May 10, 2011

BCI File No. 1978.3

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### Southport EIP - Project Preliminary Design

**Task Order #3**

**Geotechnical Cost Proposal**

May 10, 2011

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**Total Fee For T.O. #3**

$716,750.00
MONITORING WELL SCHEMATIC
Southport EIP Project
West Sacramento, California

File No. 1978.3
May 2011
Figure

Foundation pad
Flush mounted security cover
Ground Surface

Concrete Cap
2ft. Bentonite Plug
Sand to 1ft. above slots

1.0 inch PVC well screen
(0.020 machine slotted)
Borehole
Backfilled with No. 40 Sand

Minimum 4-inch borehole
Bottom cap, drilled for drainage

Approximate Depth 20ft.
Screened Interval

NO SCALE
Level 1 Borrow Areas

- Type 1
- Type 1A
- Type 2
- Type 2A

COST EVALUATION SEGMENT

PROJECT STATIONING
LM2 LEVEE MILES (DWR, 1990)

Borrow Areas

Levee Improvement Program Southport Early Implementation Project

Project Manager: M. Vecchio, HDR
Designed: R. Sowers, BCI
Checked: B. Jones, HDR

Sources: Imagery-NAIP 2009; Levee Miles-DWR 1990; Borrow Areas-Blackburn 2010

1 inch = 2,000 feet

Project No.: 433218-107784-028
April 26, 2011
Site Map, Riverpark Borrow Site with Proposed BCI Test Pit Locations

Figure 1

NOTE: Potential levee fill areas, soil survey lines, and soil types developed by Blackburn Consulting 2010.

Source: Laboratory Note 1200, Riverpark DWR, 1990; Test Pit MD, Riverpark DWR, 1990; Site BCI Planning

WSAFCR
Levee Improvement Program
Southport Early Implementation Project

Project Manager: M. Vecchio, HDR
Project Engineer: R. Sowers, BCI
Project Manager: N. Hart, BCI
Project Manager: M. Robertson, BCI

Scale: 1:10,000

Levee Improvement Program
Southport Early Implementation Project

Project Manager: M. Vecchio, HDR
Project Engineer: R. Sowers, BCI
Project Manager: N. Hart, BCI
Project Manager: M. Robertson, BCI
Figure 2

**NOTE**: Potential levee fill areas, soil survey lines, and soil types developed by Blackburn Consulting 2010.
NOTE: Potential levee fill areas, soil survey lines, and soil types developed by Blackburn Consulting 2010.
NOTE: Potential levee fill areas, soil survey lines, and soil types developed by Blackburn Consulting 2010.
June 8, 2011  
Project No. 11-1-041  

Mr. Michael J. Vecchio  
HDR Engineering, Inc.  
1610 Arden Way, Suite 175  
Sacramento, CA  95815-4041  

SUBJECT:  SCOPE OF WORK, BUDGET, AND SCHEDULE TO EVALUATE POTENTIAL GROUNDWATER IMPACTS DUE TO SLURRY CUTOFF WALLS UNDER CONSIDERATION FOR THE SOUTHPORT LEVEE IN WEST SACRAMENTO  

Dear Mr. Vecchio:  

In response to your request, Luhdorff & Scalmanini, Consulting Engineers (LSCE) has prepared a scope of work to evaluate the potential groundwater impacts of slurry cutoff walls under consideration for portions of the Sacramento River Southport Levee in the City of West Sacramento. The slurry cutoff walls are among the levee improvement alternatives being considered for the Southport Levee by consultants to the West Sacramento Area Flood Control Agency (WSAFCA). We understand that our work would be conducted as a sub-consultant to HDR Engineering, Inc. (HDR) under Task Order No. 3 of the Southport Early Implementation Project (EIP). A scope of work, budget, and schedule to conduct this evaluation is included below.  

1.0 Approach  

The potential groundwater impacts of the slurry cutoff walls include the following:  

- Reduced groundwater recharge from the Sacramento River;  
- Lower groundwater elevations in the South Basin near the cutoff walls;  
- Impacts to the operation of wells located near the levee where the cutoff walls would be constructed; and  
- Groundwater quality degradation in the South Basin due to reduced inflow of good quality recharge from the River (losing conditions) and reduced outflow of higher salinity groundwater (gaining conditions).  

Prior to analyzing these potential impacts, water level data from wells in the West Sacramento area will be used to evaluate groundwater levels and flow under existing conditions. Of particular interest will be seasonal fluctuations in shallow groundwater levels near the Southport Levee, the relationship between shallow groundwater levels and River stage, the location of gaining and losing reaches, and the direction of groundwater flow.  

LSCE will attempt to establish baseline groundwater quality conditions by reviewing and summarizing available data for wells in the South Basin. Any impacts to groundwater quality
due to slurry cutoff walls would be expected to be small and will only be addressed qualitatively.

Slurry cutoff walls are currently under consideration to reduce seepage beneath four reaches of the Southport Levee (Reaches A, D, E, and G). Changes in groundwater levels and flow due to these slurry cutoff walls will be evaluated for each reach using a methodology developed for the Sacramento Area Flood Control Agency (SAFCA) in the Natomas Basin. That analysis was summarized in *Evaluation of Potential Groundwater Impacts Due to Proposed Construction for Natoma Levee Improvement Program* (LSCE, May 2009). As discussed below, the approach is based on the results of a two-dimensional numerical groundwater flow model (the SEEP/W model) and groundwater flow estimates developed using Darcy’s equation.

The evaluation of potential impacts on well yields will be based primarily on the SEEP/W model results. Groundwater level changes predicted by the model will be compared to normal seasonal water level fluctuations in the area and typical well depths and construction information shown on drillers’ logs provided by the California Department of Water Resources (DWR) to assess whether or not the groundwater level changes would have any significant impact on well operations.

### 2.0 Scope of Work

#### 2.1 Review of Data

As discussed below, available data on wells, groundwater levels, groundwater quality, and geologic conditions in the West Sacramento area will be reviewed and summarized in the two reports to be prepared for this project. The available data will be presented in tables, graphs, and maps as appropriate.

#### 2.1.1 Well Locations and Construction

All available well location and construction data for the West Sacramento area will be compiled and plotted on GIS maps. Data sources will include LSCE’s Yolo County database, DWR’s Water Data Library, the State Water Resources Control Board’s (SWRCB) Geotracker website, and reports on proposed levee improvements prepared by consultants to WSAFCA and the U.S. Army Corps of Engineers. Mapped well locations near the Southport Levee will be checked for completeness by comparing the mapped wells with the locations of residences and irrigated agricultural lands shown on aerial photographs or Google Earth. A field survey will likely be needed to determine the locations of some wells in this area.

LSCE’s Yolo County database currently contains information for 81 wells in the West Sacramento area. 43 of these are located in the South Basin; the other 38 are located in the North Basin. The locations and depths of these wells are shown on Figure 1. LSCE will update this database by contacting DWR to obtain drillers’ logs for wells that were constructed since the well database was developed. We will also contact Blackbum Engineering to request
any additional well location and construction information they have compiled. Other available data for piezometers and monitoring wells installed as part of previous levee investigations will be added to the database. This includes six monitoring wells installed west of Reaches B and C by Wallace Kuhl & Associates in 2004.

Well construction information will be especially important for domestic and other water supply wells located near reaches of the Southport Levee where slurry cutoff walls are under consideration. Because it is often difficult to match DWR drillers’ logs to actual wells, a site visit may be necessary for some wells. If no drillers’ log is available, LSCE will request permission from the well owner to measure the total well depth and obtain one or more water level measurements.

2.1.2 Groundwater Levels

All available groundwater level data will be obtained for wells in the West Sacramento area and added to LSCE’s Yolo County database, and the locations of wells with water level data will be identified on GIS maps. The wells currently in the database that have water level data are shown on Figure 1. Hydrographs will be prepared for wells with recent water level data so that short-term (seasonal) and longer-term water level fluctuations can be evaluated. We will request that MBK Engineers provide average daily Sacramento River stage estimates for each reach, and these will be included on hydrographs of shallow wells near the levee. The estimated stage will be compared to nearby groundwater level measurements to determine seasonal changes in gaining or losing conditions. If sufficient data are available for shallow wells, groundwater elevation contour maps will be prepared to show directions of groundwater flow and the locations of gaining and losing reaches along the Sacramento River.

An initial review of the water level data indicates that the available data may be too sparse to allow preparation of any groundwater elevation contour maps. If that is the case, an effort will be made to estimate seasonal groundwater flow directions near the Southport Levee by comparing groundwater elevations in wells located at different distances from the River and by comparing shallow groundwater levels with the estimated River stage. Hydraulic gradients will be estimated during this task for use in the groundwater flow calculations discussed below.

2.1.3 Groundwater Quality

Since impacts to groundwater quality due to slurry cutoff walls are not a major concern, evaluation of groundwater quality will be a minor component of this investigation. However, it will be important to establish baseline groundwater quality conditions in order to have a frame of reference for discussing potential changes to groundwater quality. The baseline data will also be needed in order to address any complaints from well owners that may occur during or after construction of cutoff walls and other levee improvements. The LSCE Yolo County database and the SWRCB’s Geotracker website will likely be the best sources of baseline groundwater quality data. Wells currently in the database that have water quality data are shown on Figure 2. If available, groundwater quality data from shallow wells will be
particularly useful. If such data do not exist, limited baseline sampling may be recommended during the project design phase (see Section 2.4).

### 2.1.4 Geologic Data

The original application of Darcy’s equation to estimate groundwater flow in the Natomas Basin with and without slurry cutoff walls utilized detailed stratigraphic profiles along the levees prepared by Kleinfelder and URS (LSCE, 2009). It appears that similar profiles may not be available for the SRWSL. In that case, LSCE will use available boring log data to estimate the percentage of coarse-grain sediments (sand and gravel) between the water table and the base of the slurry cutoff wall in each reach. This task will also include estimating the hydraulic conductivity of different aquifer materials present in the vicinity of the Southport Levee.

### 2.1.5 Groundwater Monitoring Network and Program

LSCE will prepare maps and tables to summarize the existing groundwater level and groundwater quality monitoring network and program. The monitoring network and program will then be evaluated in terms of its ability to meet current and future needs identified during the investigation. Current needs include the analysis of potential slurry cutoff wall impacts described in this scope of work. Future needs include the possibility that WSAFCA may need to respond to potential claims by well owners that the cutoff walls or other levee construction activities have affected the operation or water quality of their wells. Recommended changes to the groundwater monitoring network or program are discussed in Section 2.4.

### 2.2 Groundwater Flow Model

Kleinfelder and Blackburn Engineering have used the two-dimensional, finite-element SEEP/W groundwater flow model to estimate seepage beneath the Southport Levee under existing conditions. The model was used to indicate reaches where seepage mitigation would be needed due to high seepage gradients predicted to occur during flood events. A 2007 summary report containing Kleinfelder’s model results has been provided by HDR. That report shows results for steady state conditions based on predicted 100-year and 200-year River stage estimates. The report does not contain transient simulations or any simulations of the effect of slurry cutoff walls.

LSCE will contact Blackburn Engineering to determine whether transient simulations or simulations of potential cutoff wall impacts have been conducted. These simulations will be needed to show seasonal water level changes on the land and water sides of the levee with and without slurry cutoff walls. If these simulations are not available, we will request copies of the model input files in order to conduct the additional simulations. LSCE will also evaluate the application of the SEEP/W model, including aquifer properties and other parameters used in the model. If necessary, model inputs (primarily hydraulic gradients and hydraulic conductivities) used in the model will be modified before conducting additional simulations.
2.3 Evaluation of Cutoff Wall Impacts

Potential cutoff wall impacts will be evaluated using a combination of SEEP/W model results and groundwater flow estimates made using Darcy’s equation. The SEEP/W model results can be used to estimate the reduction in groundwater flow due to slurry cutoff walls. The actual volume of groundwater flow in each reach with and without cutoff walls will then be estimated using Darcy’s equation.

The evaluation of potential impacts to wells near the levee will be based primarily on the SEEP/W model results. Groundwater level changes predicted by the model will be compared to normal seasonal fluctuations in the area and typical well depths and construction information shown on drillers’ logs to determine whether any significant impact on well operations would be anticipated. Well operating characteristics to be evaluated include the available drawdown, pump setting depth, pumping water level, and pumping capacity.

2.4 Recommendations

LSCE will make recommendations to address any major issues identified during the course of this investigation. Recommendations will include addressing any deficiencies identified in the adequacy of the groundwater monitoring network or program to meet current or future needs. As discussed above, future needs would include WSAFCA’s ability to address potential claims by well owners that slurry cutoff walls or other levee construction activities have affected well operations or groundwater quality.

Recommended changes to the groundwater monitoring network or program could include more frequent water level measurements and water quality sampling in existing wells or the construction of new piezometers in certain areas. Baseline water quality sampling may also be recommended if sufficient data are not available to determine existing conditions near the Southport Levee. These recommendations could be addressed in 2012 during the project design phase.

If any potentially significant impacts are identified during the course of this investigation, recommendations would be made for ongoing monitoring to determine the occurrence of potential impacts. Recommendations would also include measures to mitigate potentially significant impacts. Such recommendations would be helpful for environmental documents prepared for the project.

2.5 Reports

2.5.1 Data Report

After the analysis of existing data is complete, LSCE will prepare a report to summarize the data and any initial recommendations concerning the groundwater monitoring network and program. We will plan to provide a draft of this report to HDR for review and comment in
August 2011. We would anticipate preparation of a final data report by September 2011 after addressing any comments received on the draft.

2.5.2 Final Report

After the investigation is complete, LSCE will prepare a final report to summarize the data, the model results, the groundwater flow estimates, the findings regarding the potential impacts of the proposed cutoff walls, and any recommendations developed during the course of the investigation. We will plan to provide a draft of this report to HDR for review and comment in October 2011. The final report would be completed in November 2011 after addressing any comments received on the draft.

2.6 Meetings and Project Management

We have budgeted for biweekly conference calls or meetings to discuss the status of the Southport EIP project. We have also included time for project management in this category.

2.7 Quality Management Plan

LSCE will submit a Quality Management Plan to HDR to identify the Quality Assurance (QA) and Quality Control (QC) measures that will be implemented for work on this project. All project deliverables will include a QC Certification stating that the internal QA and QC guidelines have been met.

3.0 Budget

The budget for this work is divided into 11 principal tasks:

1. Review of existing data and reports $14,400
2. Well mapping and well construction database $11,800
3. Evaluation of groundwater levels and flow $17,200
4. Evaluation of groundwater quality $5,900
5. Evaluation of geologic conditions $6,900
6. Data report (draft and final) $12,900
7. SEEP/W model review and simulations $19,400
8. Slurry cutoff wall impacts on groundwater $10,500
9. Recommendations $6,500
10. Final report (draft and final) $21,100
11. Meetings and project management $11,300

Total $137,900

Any additional tasks would be conducted on a time and materials basis in accordance with our regular Schedule of Fees for Engineering and Field Service, a copy of which is attached.
4.0 Schedule

At your request, we will plan to complete the analysis of existing data and a draft summary report by August 2011, and the report would be finalized by September 2011. We will plan to complete the analysis of impacts and prepare a draft version of our final report by October 2011. The report would be finalized in November 2011. Our ability to meet this schedule will be dependent on the start date and how quickly the data and model files can be obtained from Kleinfelder and other consultants.

If you have any questions, or wish to discuss any of the above, we would be pleased to respond.

Sincerely,

LUHDORFF AND SCALMANINI
CONSULTING ENGINEERS

Glenn Browning
Senior Hydrologist

Enclosures
Figure 1
West Sacramento Wells in LSCE Yolo County
Well Database with Water Level Data
Attachment C - Environmental Documentation and Geomorphic Investigations
ENVIRONMENTAL WORKPLAN

WSAFCA Southport EIP
Task Order No. 3

This scope of work describes the tasks proposed to be performed by ICF, from the end of Task Order No. 2 through a First Administrative Draft of the environmental document (described below), corresponding approximately to the period of June 30, 2011, through November 30, 2011.

Key Assumptions

The following key assumptions are made in developing this SOW:

- The WSLIP Southport element involves improvements to the flood protection system in the southeastern quadrant of the city. Improvements are targeted to include construction of a new setback levee, but may include a combination of levee widening, waterside erosion protection, landside berms, relief well systems, pump stations, slurry cut-off walls, and other seepage control and levee strengthening measures. ICF will continue to work with the engineering team to narrow the alternatives on a reach-specific basis.

- A joint document will be prepared for the project, meaning National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) compliance will be addressed in a combined Environmental Impact Statement/Environmental Impact Report (EIS/EIR).

- The EIS/EIR will identify and summarize other federal, state, and local regulatory compliance needs. It is anticipated that regulatory compliance efforts coordinated with the EIS/EIR documentation will likely include, but may not be limited to:
  - Clean Water Act (Section 404, Section 401, and Section 402);
  - Endangered Species Act (state and federal)
  - Fish and Wildlife Coordination Act;
  - National Historic Preservation Act, Section 106;
  - Rivers and Harbors Act, Section 10;
  - Rivers and Harbors Act, Section 14 (“Section 408 Permission”);
  - California Fish and Game Code, Sections 1600 et seq. and 2080 et seq.;
Surface Mining and Reclamation Act (SMARA); and

California Water Code, Title 23.

It is known that jurisdictional resources under each of these regulations are present (i.e., waters of the United States, navigable waterways, special-status fish and wildlife species, and listed or eligible archaeological and historic resources), and that the permitting effort will need to be robust. Due to the complexities of these authorizations and desire to expedite approvals, a permitting approach similar to a traditional U.S. Army Corps of Engineers’ (USACE) Civil Works process will be used, e.g., NEPA/CEQA processes and those for other authorizations will be coordinated and conducted in parallel rather than sequentially.

- The work will be substantially directed by USACE and West Sacramento Area Flood Control Agency (WSAFCA) as the NEPA and CEQA lead agencies, per the Statement of Responsibilities executed between ICF and these agencies.

- ICF will be provided with digital geo-referenced orthographic aerial photographs from within the last two years, topography, land use maps and plans, and schematic engineering information.

- It is assumed that data being supplied to ICF by the City of West Sacramento (City) already meets the City's metadata and mapping accuracy requirements. ICF will not be editing or cleaning up existing supplied data.

- ICF will be provided rights-of-entry to the project site in order to conduct necessary reconnaissance-level and project-level environmental surveys.

- The project description, including alternatives, will be finalized prior to beginning the preparation of impact analysis. Changes in the project description or the project site boundaries could result in the need for revisions to the SOW and budget.

**Task 1. Conduct Project Management**

**Objective**
To effectively coordinate project deliverables and contract execution toward WSAFCA’s success with the WSAFCA program team, the HDR consultant team, the internal ICF team, and USACE.

**Methods**
The project management task includes preparation for and attendance at monthly management meetings with WSAFCA, twice monthly policy and strategy consultant coordination meetings with WSAFCA, weekly environmental coordination meetings with WSAFCA, biweekly full team meetings led by HDR, biweekly focus group meetings led by HDR, and monthly check-in meetings between HDR and ICF, as well as staff, scope, schedule, and budget management.
Assumptions

- ICF facilitates the weekly environmental team meetings with WSAFCA and HDR, including development and distribution of an agenda, arranging a conference call-in, and development and distribution of a meeting summary with significant discussion items and actions.

Data Needs and Predecessors

None.

Deliverables

- Agendas and meeting summaries, as required.

Task 2. Facilitate EIS/EIR Workgroup

Objective

To address the intricacies of coordinating a joint EIS/EIR in a parallel timeframe, this task will integrate EIS/EIR schedule, data needs, and analysis with the development of the alternatives and other engineering aspects of the project.

Methods

The ICF team will provide strategic insight into alternatives refinement and screening, regulatory strategy, feedback to the engineering team, and agency coordination. Most importantly, this task involves participation in forums with other project management-level staff to provide guidance to aid efficient and effective data sharing and distribution, as well as implementation of the flood improvement project, including input on process, appropriate documentation, integration, scheduling, and environmental soundness.

The ICF team will attend up to 6 meetings with USACE and WSAFCA staff during the implementation of Task Order 3 to coordinate the approach to alternatives, actions to be analyzed, document format, text style, study methods, findings, mitigation measures, review logistics, noticing, comments, and responses, as well as other lead agency coordination issues. Additional activities to facilitate coordination may include attending up to three (3) site visits with resource agency staff to introduce them to the project, obtain comment and input regarding proposed project elements, and discuss avoidance, minimization, and mitigation strategies. ICF will lead the EIS/EIR Workgroup, including preparation of materials and agendas. ICF will report to the general technical coordination group about issues that need to be resolved and/or progress made.

Assumptions

None.

Data Needs and Predecessors

None.

Deliverables

- Preparation for and attendance of 2 ICF staff at up to 3 site visits.
- Preparation for and attendance of 2 ICF staff at up to 6 meetings.
Task 3. Conduct EIS/EIR Noticing and Public Scoping

Objective
To gather public input on the scope of project analysis and to comply with regulatory obligations of public noticing under CEQA and NEPA.

Methods
The noticing and scoping task involves preparation of a Notice of Preparation (NOP) on behalf of WSAFCA as the CEQA lead agency for distribution by ICF team. The NOP will include:

- a description of the project purpose and need;
- a description of possible alternatives to meet the project purpose and need;
- a description of the lead agency’s scoping process (including time and place of scoping meetings); and
- name and address of the lead agency contacts for the EIR (WSAFCA) and EIS (USACE).

ICF will deliver the NOP to the State Clearinghouse for filing. As it is customary that USACE prepares and files the Notice of Intent (NOI) per NEPA, ICF will support USACE as needed.

The ICF team will also assist with hosting two public scoping meetings on one day (one in the afternoon and one in the evening) designed to allow for informing and educating the public, as well as providing an avenue for public input. The ICF team will coordinate logistics for the event and handle publicity through the news media. Together with WSAFCA and USACE staff, the ICF team will prepare handouts, exhibits, presentation materials, and other informational materials as requested. The ICF team will also supply a meeting facilitator to organize and run the meeting as required, and technical and topical support.

The ICF team will organize the comments received in response to the public scoping meetings for the EIS/EIR into the following categories for comment letters: Federal government, state government, local government, groups/organizations, and individuals. The comments will be flagged topically for use by the project team and analysts to inform the EIS/EIR. The ICF team will meet with USACE and WSAFCA to review comments and determine appropriate action based on the comments, as the basis for direction to the resources analysts. The scoping report will be appended to the EIS/EIR document. The scoping report will contain copies of the public notices and advertisements, copies of the meeting materials, sign-in rosters, comments received, and a comment summary.

Assumptions
Each lead agency will compile its appropriate notice distribution list and provide it to ICF in a digital format suitable for Mail Merge with Microsoft Word.

Data Needs and Predecessors
- Approval by USACE and WSAFCA of noticing materials of proposed action/project and alternatives
- Approval by USACE and WSAFCA of noticing materials.

Deliverables
The ICF team will develop the following deliverables associated with this task:
- Draft and final NOI/NOP. 40 copies of the final and one electronic copy.
- Public information materials to support scoping meetings and public hearings as requested.
• Scoping report compiled from comments received during scoping
• Newspaper ads for publication in up to five newspapers.

Task 4. Complete Development of 1st Administrative Draft EIS/EIR

Building on efforts begun under Task Order 2, ICF will continue and complete preparation of a First Administrative Draft EIS/EIR in compliance with requirements of NEPA and CEQA and close coordination with WSAFCA and USACE.

Subtask 4.1 –Finalize Development and Refinement of Project Description, Alternatives, and Document Outline

Objective
To finalize team approval of a focused project-level range of alternatives and EIS/EIR document outline, essential elements of document preparation that provide the basis for the action and environmental effects analysis subsequently conducted in the EIS/EIR.

Methods
With substantial input from both USACE and WSAFCA, as well as the full project team, ICF staff will describe the project alternatives as chosen and defined by the project team in terms appropriate for an EIS/EIR. The Project Description will include all elements required under USACE NEPA regulations and CEQA guidelines. The description will include sufficient information, as required by CEQA and NEPA guidelines, to address the areas of potential environmental impact. The project description shall contain the following information at a project level.

• The location and boundaries of the proposed project shall be shown on a detailed map. The location of the project shall also appear on a regional map.
• A statement of objectives to frame the levee improvements and other alternative treatments for flood damage reduction. A clearly written statement of objectives will help the engineering team and WSAFCA to develop a reasonable range of alternatives to evaluate in the EIS/EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives shall include the underlying purpose of the project.
• A project-level description of the project's technical, economic, and environmental characteristics.
• A statement briefly describing the intended uses of the EIS/EIR. This statement shall include, to the extent that the information is known, a list of the agencies that are expected to use the EIS/EIR in their decision-making and a table of permits, triggers, and responsible agencies for other approvals required to implement the project.

Based on specific direction from WSAFCA and the program team, ICF will prepare a draft Project Description for review. Following review and comment, ICF will prepare the final Project Description on which the EIS/EIR will be based, including any environmental commitments to be incorporated in the project design and operation, such as appropriate best management practices (BMPs). The ICF team, in close collaboration with the full program team, will also facilitate development of up to two additional alternatives to the applicant-preferred alternative, as well as a no–action alternative. The ICF team will
work closely with the program team to refine alternatives that would reasonably achieve the objectives (i.e., purpose and need).

As appropriate, the alternatives will incorporate the findings of the prior Task Orders executed under this Master Agreement including the recreation and ecosystem restoration opportunities analysis, cultural constraints analysis, and preliminary environmental planning support. Once effects analysis has begun, subsequent changes in the project description or document outline may be outside this scope of work.

**Assumptions**

None.

**Data Needs and Predecessors**

Data needs and predecessors are described in the EIS/EIR data needs table presented to the Southport consultant team in February 2011, and revised in April 2011, under Task Order 2.

The HDR technical memorandum regarding alternatives development and selection to be completed under Task Order 2 will provide the basis for the development of an alternatives screening discussion to be presented in the EIS/EIR.

**Deliverables**

The ICF team will develop the following deliverables associated with this task:

- Draft and final Project Description of up to three alternatives and the no-action alternative;
- Draft and final document outline

**Subtask 4.2 – Define Affected Environment**

**Objective**

To define the baseline environmental settings and existing conditions, and to define and compare the anticipated environmental effects of the proposed action and its alternatives, including the no-action alternative, against the baseline pursuant to the NEPA regulations and state CEQA guidelines.

**Methods**

Using information compiled during Task Order 2 field surveys describing known conditions in the project area, as gathered by ICF and provided by other team members, ICF will prepare a draft Affected Environment that defines the present condition and future without-project conditions of each resource area to be analyzed, as required by USACE NEPA regulations and CEQA guidelines. The affected environment described will serve to define the baseline condition against which the impacts of all alternatives will be compared. Following review and comment by the project team, ICF will prepare the final Affected Environment on which the EIS/EIR effects analysis will be based.

**Assumptions**

It is assumed the area of affected environment to be described will include Level 2 borrow sites, such as the Yarborough area.

**Data Needs and Predecessors**

Data needs and predecessors are described in the EIS/EIR data needs table presented to the Southport consultant team in February 2011, and revised in April 2011, under Task Order 2.

**Deliverables**

The ICF team will develop the following deliverables associated with this task:
• Draft and final Affected Environment descriptions for each analyzed resource.

Subtask 4.3 – Conduct Effects/Impact Analysis; Produce and Distribute ADEIS/EIR #1

Objective
To determine and disclose the possible environmental effects over baseline that each project alternative may cause, and prepare the first complete administrative draft for full team review.

Methods
Based upon the project team-approved project alternatives and affected environment, the ICF team will prepare project-level effect and mitigation analyses pursuant to the NEPA regulations and CEQA guidelines. Each resource section will include a concise description of the methods used in the effect analysis and the standards used to determine whether an effect is significant.

Mitigation measures will be identified for all potentially significant effects, where feasible, to reduce the effect to a less-than-significant level. Effects that cannot be mitigated to a less-than-significant level will be identified as significant and unavoidable.

Throughout the effects analysis, ICF will solicit and lead project team input concerning appropriate impact thresholds, feasible mitigation measures, and opportunities for project design modifications to avoid potential impacts, where possible.

Assumptions
The project description, including alternatives, will be finalized prior to beginning the preparation of the effects analysis. Changes in the project description or the project site boundaries could result in the need for revisions to the SOW and budget.

Data needs and Predecessors
Data needs and predecessors are described in the EIS/EIR data needs table presented to the Southport consultant team in February 2011, and revised in April 2011, under Task Order 2.

Deliverables
The ICF team will develop the following deliverables associated with this task:

• 15 printed hardcopies of the ADEIS/EIR #1 for Project Team review
• PDFs of the ADEIS/EIR suitable for electronic transfer and review

Task 5. Facilitate Environmental Stakeholder Integration

Objective
This task aims at a primary purpose of including key stakeholders such that they understand, feel included in, and support the project. Through controversies that arose during the previous programmatic environmental document over levee vegetation impacts, an informal ad hoc stakeholder group of environmental non-governmental organizations (NGOs) emerged. WSAFCA committed to keep the group engaged in the Southport phase. This task provides for facilitation of that group. Beyond the NGOs, this task also includes early coordination with the resource and regulatory agencies to consider their input in early project planning, avoid controversy in the environmental document, and ultimately facilitate efficient permitting.

Methods
ICF staff will facilitate meetings related to environmental analysis and restoration design. This task includes participation in outreach efforts with WSAFCA, USACE, USFWS, NMFS, DFG, DWR, and NGOs participating in the early stages of the restoration and environmental aspects of the project. ICF will prepare an agenda, meeting materials such as summary project descriptions, and summary notes for each meeting. For the period of performance of this task order, ICF will participate in up to one field meeting and one separate in-office meeting with the NGOs and one field meeting and one separate in-office meeting with the agencies.

Assumptions

This task will be coordinated with other technical outreach efforts conducted by WSAFCA or HDR for engaging USACE, DWR, and CVFPB. HDR will prepare figures for use at the meetings.

Data Needs and Predecessors

None.

Deliverables

- Prepare for and attend up to 4 meetings (ICF staff attending variable depending on audience), including supporting materials
- Contact database for the NGOs and agencies

Task 6. Participate in Levee Offset Work Group

Objective

To regularly coordinate the development of offset restoration strategies with WSAFCA consultant team members in tandem with obtaining input from DWR regarding desired habitat outcomes and preferred modeling approaches.

Methods

ICF will attend up to eight meetings to regularly coordinate with WSAFCA consultant staff on the design the offset area. These meetings will allow the team to provide updates on interim results and data collected as it becomes available and provide for adjustments to direction in response to knowledge gained.

ICF will attend up to two meetings with DWR staff to present offset restoration strategies, the proposed modeling approach and predicted habitat outcomes, and to solicit input from DWR staff.

Deliverables

- Eight meetings with WSAFCA consultant team
- Two meetings with DWR and WSAFCA

Task 7. Develop Conceptual Restoration Alternatives
Objective
To further the restoration design within the setback (i.e., offset) area to support the environmental permitting processes as well as provide information to the project team about the way this restoration could be integrated into the overall levee project.

Methods
ICF will lead development of restoration concepts with a focus on potential mitigation areas or areas disturbed during construction of the applicant-preferred alternative. These concepts will take into account the civil design project alternative being prepared by HDR and hydraulic modeling outputs provided by the project team as well as information collected during Task Order 1 and Task Order 2. Up to two restoration concepts will be developed. Type 1 habitat restoration (intended to satisfy mitigation needs of the project) will be designed to include horizontal extents, a typical section, conceptual planting plan (in the form of a zone or “bubble” diagram), and design and construction costs, and a relative estimate of mitigation costs for off-site options. Type 2 (habitat available beyond WSAFCA’s mitigation needs) will be designed to include horizontal extents of area available.

ICF and cbec will work closely together to define the information needs and approaches for restoration design. This will include further development of target species including a definition of habitat goals and objectives, coordination on cbec’s modeling input and evaluation of output, and coordination to develop background data. Additionally, ICF will provide functional habitat relationships to cbec for modeling purposes (to enable cbec to develop appropriate hydrology). ICF will also coordinate with Blackburn and others as needed to incorporate data developed during Task Order 1, including that related to groundwater, soils, borrow sites, hydrodynamic modeling, etc. Biological and cultural resource baseline information developed in Task Orders 1 and 2 will also be considered in development of the restoration design concepts.

Assumptions
The project technical team will provide the parameters relative to inlets and outlets as well as information on the 2-year flow event.

It is assumed that HDR will produce GIS exhibits with the direction of ICF staff.

Deliverables
- Provide functional habitat relationships for modeling effort to cbec
- Review of modeling outputs provided by others
- Draft conceptual designs of up to 2 restoration approaches, including a memorandum explaining effectiveness of different habitat types within the restoration/mitigation area. The memorandum will also describe the potential target species and horizontal area available for restoration in the areas not used for mitigation.
- Final conceptual designs of up to 2 restoration approaches

Task 8. Recommend Ecological Modeling Approach

Objective
Based on the results of the modeling and subsequent restoration approaches developed in Task 7, identify a preferred ecological modeling approach to satisfy the mutual needs of DWR, USFWS, and NMFS.
Methods
ICF will meet with the WSAFCA project team to discuss the results of modeling conducted to support the development of restoration alternatives for the applicant-preferred alternative as outlined in Task 7, in addition to input received up to that point from DWR, USFWS, and NMFS through the levee offset work group and environmental stakeholder integration. If it is determined that ecosystem modeling is necessary, a preferred approach will be agreed upon. ICF will develop a memorandum outlining the modeling process conducted to date and a recommended approach for any further ecosystem modeling. For reference, potential ecological modeling approaches were outlined in ICF’s January 2011 white paper.

Deliverables
- One meeting with WSAFCA to determine and review approach
- Memorandum detailing recommendations for modeling approach

Task 9. Development of Permitting Workplan

Objective
To develop an overall permitting strategy based on input from Task 5, Stakeholder Input and project design and scheduling objectives and to initiate the Clean Water Act, Section 404; Endangered Species Act, Section 7; Fish and Wildlife Coordination Act; National Historic Preservation Act, Section 106; and California Fish and Game Code permitting processes.

Methods
Through participation in project management meetings, WSAFCA team meetings, and stakeholder meetings, ICF will develop an overall strategy for applying for and obtaining environmental permits. ICF will work iteratively with HDR to develop and/or obtain the appropriate level of project design detail that will enable the launch of permit documentation in Task Order 4.

ICF will coordinate with the Sacramento District Regulatory Branch (via the 408 coordinator) to initiate the Clean Water Act Section 404 permitting process, including preparation for and attendance at a start-up meeting.

Deliverables
- Memorandum outlining Permit Strategy
- Preparation for and attendance at a Clean Water Act 404 start-up meeting with USACE staff.
## Table 1. Cost Estimate for WSAFCA Southport TO3

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### Total Hours

| Total Hours | 232 | 426 | 362 | 292 | 78 | 18 | 40 | 30 | 200 | 22 | 68 | 64 | 80 | 56 | 98 | 116 | 64 | 76 | 64 | 26 | 112 | 92 | 128 | 56 | 112 | 34 | 40 | 52 | 52 | 136 | 178 | 156 |

### Equipment Rental

- $600

### Postage and Delivery

- $1,000

### Other Reimbursable Expenses

- $1,750

### Mark up on all non-labor costs and subcontractors: 10%

- $410

### Direct Expense Subtotal

- $4,510

### Total Direct Expenses

- $400,020

### Date printed: 05/18/2011 9:50

**Approved by Finance: { sh } HDR_Southport_TO_3_EIS_EIR_Cost_Rev_051811(client).xls**
ESTIMATED PROJECT BUDGET SUMMARY

West Sacramento Levees EIP - Task Order 3
cbec Project # 10-1043

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Labor Fee $242,610.00

Reimbursables $35,364.60

Subconsultant(s) $8,640.00

Total Project Budget $286,614.60
# ESTIMATED LABOR FEES

**West Sacramento Levees EIP - Task Order 3**  
**cbec Project # 10-1043**

Unless expressly provided within the contract, rates are subject to increase annually on January 1 of each year.

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## ESTIMATED REIMBURSABLE EXPENSES

**West Sacramento Levees EIP - Task Order 3**  
cbec Project # 10-1043

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**Subtotal Reimbursables** $32,745.00  
**Administrative Charge (8%)** $2,619.60  
**Total Reimbursables** $35,364.60
### ESTIMATED SUBCONSULTANT(S) FEES & EXPENSES

**West Sacramento Levees EIP - Task Order 3**  
cbec Project # 10-1043

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**Subtotal Subconsultants** $8,000.00  
**Administrative Charge (8%)** $640.00  
**Total Subconsultant(s)** $8,640.00
### SACRAMENTO RIVER SOUTHPORT DESIGN PROJECT - Task Order No. 3

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**Sub-Consultants Total:**

- **Blackburn Total:**
  - Hours: 500
  - Total Labor (H): 2,000
  - Total Expenses: $720,463.48

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5/31/2011 [WS - Southport Design Project_TO 3 - CRF Fee Estimate_20MAY2011 e contingency_r1.r]

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WEST SACRAMENTO AREA FLOOD CONTROL AGENCY

LEVEE IMPROVEMENT PROGRAM

FEE ESTIMATE SACRAMENTO RIVER SOUTHPORT DESIGN PROJECT - TASK ORDER NO. 3