

SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY sfcipa.org

East Palo Alto, Menlo Park, Palo Alto, San Mateo County Flood Control District, and the Santa Clara Valley Water District

#### Notice of Regular Meeting of the SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY BOARD City of Menlo Park Council Chambers 701 Laurel Street, Menlo Park, California

### October 24, 2013 at 4:00 p.m.

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#### AGENDA

- 1) ROLL CALL
- 2) APPROVAL OF MEETING MINUTES September 26, 2013 Board meeting
- 3) APPROVAL OF AGENDA
- 4) PUBLIC COMMENT Members of the public may speak for up to three minutes on items not on the Agenda. They may address the Board on any Agenda item when that item is considered by the Board.
- 5) REGULAR BUSINESS EXECUTIVE DIRECTOR'S REPORT
  - a) Authorize the Executive Director to execute a Contract Amendment with HDR, Inc. to evaluate and possibly design an extension of the Caltrans cell under East Bayshore Road, and for geotechnical and other services, for the S.F. Bay-Highway 101 project
  - b) Authorize the Executive Director to execute a Contract Amendment with ICF International to complete permit acquisition for the S.F. Bay-Highway 101 project
  - c) Authorize the Executive Director to execute a Master Services Agreement with HDR, Inc. to complete feasibility analysis, design and environmental documentation for the Strategy to Advance Flood protection, Ecosystems and Recreation along the Bay (SAFER Bay) project
  - d) Authorize the Executive Director to execute Task Order Number 1 within the Master Services Agreement with HDR, Inc. to complete feasibility analysis for the SAFER Bay project
  - e) Authorize the Executive Director to execute an Agreement with Facebook, Inc. to fund the SAFER Bay project adjacent to the Facebook headquarters campus
- 6) BOARD MEMBER MATTERS Non-agendized comments, requests, or announcements by Board members; no action may be taken.
- 7) ADJOURNMENT

PLEASE NOTE: This Board meeting Agenda can be viewed online by 4:00 p.m. on October 21, 2013 at <u>www.sfcjpa.org</u> -- click on the "Meetings" tab near the top. Supporting documents related to the Agenda items listed above will be available at the same online location by 4:00 p.m. on October 22, 2013.

NEXT MEETING: Regular Board meeting, November 21, 2013 at 4:00 p.m., East Palo Alto City Council Chambers

UPCOMING SPECIAL BOARD MEETING: Saturday, December 7, 2013, 9:30 a.m. - 1:30 p.m.

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Chairperson Burt called the meeting to order at 4:08 p.m. at the City of Palo Alto Council Chambers, Palo Alto, CA

#### DRAFT

1)	ROLL CALL	
,	Members Present:	Director Burt, City of Palo Alto Director Keith, City of Menlo Park Director Schmidt, Santa Clara Valley Water District Director Pine, San Mateo County
	Alternates Present:	Catherine Carlton; City of Menlo Park (in audience)
	Members Absent:	Director Abrica, City of East Palo Alto
	JPA Staff Present:	Len Materman, Executive Director Kevin Murray, Staff Miyko Harris-Parker, Staff
	Legal Counsel Present:	Greg Stepanicich
	Others Present:	Art Kramer, Palo Alto Resident; Trish Mulvey, Palo Alto resident; Jerry Hearn, Portola Valley resident; Eileen McLaughlin, CCCR; Sharon Jones, City of East Palo Alto; Ryan Zollicoffer, MPFPD; Jeff Norris, SMC Sheriff OES; Matthew Jones, ICF International; Melanie Richardson, SCVWD; Saeid Hosseini, SCVWD; Marty Hunt, PG&E Tamon Norimoto, PG&E Barry Sheppard, PG&E.

#### 2) APPROVAL OF MEETING MINUTES – July 25, 2013

Director Keith motioned to approve the July 25, 2013 Board meeting minutes. Director Schmidt seconded. July 25, 2013 Board meeting minutes approved unanimously 4-0.

#### 3) APPROVAL OF AGENDA

Director Keith motioned to approve the agenda. Director Pine seconded. Board meeting agenda approved unanimously 4-0.

#### 4) PUBLIC COMMENT

Jerry Hearn, Portola Valley resident provided the Board with an update on the Searsville Advisory Group. Mr. Hearn reported that the topic of discussion at the last meeting was about sediment with a presentation on accumulation of sediment behind the dam and potential movement of sediment downstream, that there are three options for dealing with sediment and it may impact the JPA's work. Mr. Hearn said that Stanford de-watered the pool area below the dam for a safety inspection and that the advisory group should be getting the results soon. Mr. Hearn also informed the Board about the removal of a steelhead passage barrier known as the Bonde Weir, and said it will be very interesting to see how the creek reshapes itself with the barrier gone. Mr. Hearn told the Board that there are now guarterly meetings of the Watershed Forum that there was a meeting last week with there was a great turn out with information being shared on all the creeks and information regarding grant funding.

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Director Keith asked for clarification on what the three options were for dealing with sediment. Mr. Hearn replied explaining that the options included removal of the sediment, maintaining the sediment, and siphoning the sediment, which would basically leave a dredge sitting in the middle of the reservoir.

#### 5) <u>REGULAR BUSINESS</u>

Discuss S.F. Bay-Highway 101 project construction planning

Mr. Materman gave an update to the Board on land agreements, regulatory permits, and the anticipated construction schedule focusing on the remainder of 2013 and what can be done. Mr. Materman reminded the Board that the SCVWD has taken the lead on addressing land rights issues on the Santa Clara County side and that they have been working with several land owners there. Mr. Materman provided the Board with an update on the East Palo Alto land matters noting that there has been a change in approach from what was discussed at the July Board meeting. Mr. Materman noted that in July, the Board authorized the Executive Director to negotiate a contract with HDR to provide real estate services to secure the title reports, prepare plats and legal descriptions and appraisals for easements needed on the East Palo Alto side. Mr. Materman explained that at the same time we were also exploring the idea of San Mateo County staff in the Real Estate Services Division providing these services to the SFCJPA. Mr. Materman stated that he was pleased to report that, for this project, San Mateo County staff have already secured the title reports completed plats and legal descriptions, and they will soon order the property appraisals, all at a lesser cost to the alternative of hiring a consultant to do this work. Mr. Materman noted that there are three private land easements needed on the East Palo Alto side: two require temporary construction easements, and one requires a temporary and a permanent easement, in addition to easements from the City of Palo Alto.

Mr. Materman provided a brief update on permitting noting that US Fish and Wildlife Service has recently stated that they have continued concerns over this project recreating a connection between the creek and baylands in the Faber Tract, and that he anticipates discussing this issue at an upcoming Board meeting.

Mr. Materman provided the Board with an update on the construction schedule, highlighting that soil for the new levees is now being imported and stored on the Palo Alto Golf Course on areas not currently used for golf. He also reported that PG&E has crews available to start to relocate the wood pole electric line in mid- October and that the work would continue for about six weeks.

Eileen McLaughlin, Citizens Committee to Complete the Refuge, apologized to Mr. Materman for the letter she sent that prompted agenda item 5e. Ms. McLaughlin then told the Board that the Citizens Committee agrees that there has to be a flood project and the concerns that they raised were not to get in the way of the project, but are concerns about the project and how things are moving along. Ms. McLaughlin stated that this is a complex project and that she thinks the SFCJPA staff is not large and she understands that they have a lot to do. Ms. McLaughlin said that she was surprised by some of Mr. Materman's comments, and stated that as of yesterday, the regulatory staff member on this project, Joseph Terry of the Fish and Wildlife Service has yet to receive a response from the July 3 letter and she does not know what the difference is from what he expects as a response from the data and information he requested that he has not received.

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Ms. McLaughlin stated that her group talks with staff at the regulatory agencies and she understands that the streambed alteration permit is not yet complete and she knows that last week Mr. Murray and Mr. Jones met with five regulatory agencies regarding this project and that the outcome of that was to set another meeting to discuss the alternatives. Ms. McLaughlin commented that the Executive Director's Report suggested that project details would be settled in 30 days and that it seems with five regulatory agencies on different schedules it may take longer than that. Ms. McLaughlin said that she continues to be concerned about the time line and that the timeline can't achieve what the community hopes will happen.

Mr. Murray clarified that the letter Ms. McLaughlin referred to was sent from the US Fish and Wildlife Service to the US Army Corps of Engineers, not directly to the SFCJPA. He continued that the Service provides a consultation to the Corps, who ultimately provides a federal permit. Mr. Murray stated that the SFCJPA will provide a formal response to the Army Corps of Engineers if needed, but that it is not part of the normal process. Mr. Murray stated that we speak with the Corps and with US Fish and Wildlife, and will be speaking with the Corps tomorrow.

Chairperson Burt asked if the Corps was following our timeline and if there are any projected issues with it. Mr. Murray responded saying that we cannot foresee what any issues might be, our feedback from the Corps at this point is that they are in agreement that the proposed project is the least environmentally damaging project available, and that they will take into consideration recommendations that come from their consultations from US Fish and Wildlife Service and NMFS. Chairperson Burt asked when the SFCJPA would submit a response to the Corps for the Fish and Wildlife issues. Mr. Murray said that we would be better able to answer that question after tomorrow's conversation with the Corps.

Matthew Jones, ICF International, reminded the Board that the letter from Fish and Wildlife Service presented a number of things we could do to address their concerns and some of the reasons we are having these meetings now is to talk through some of those approaches and we have presented some of our thoughts on how we would address those approaches. Mr. Jones said when we submit a response we want to fully meet their needs and present something that will allow them to progress and write what is called a Biological Opinion on the project which hopefully gets us to permits. Mr. Jones explained that in terms of responding and how we are going to coordinate with the Corps, we are having the discussion more to talk through some of those nuts and bolts so we can do it as expeditiously as possible. Chairperson Burt asked if it was fair to say depending on which alternative approach they give positive oral feedback on tomorrow that would influence how long it will take us to give our formal response. Mr. Jones concurred.

Mr. Materman said that we had to make a decision early on in the project – do we only exchange formal letters with regulatory agencies or do we sit down and honestly discuss the issues. Mr. Materman said we pursued the approach of verbally engaging the agencies and providing requested background data because in most professional settings this approach should be more effective, and because the written response time by these agencies is beyond their response schedule, as indicated in earlier comments. Mr. Materman concluded by saying in our recent meetings with regulators we have proposed new measures to address their concerns, and we may propose others, and that we are waiting to give our formal response when we have confidence that the regulators will be satisfied.

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Director Schmidt thanked Ms. McLaughlin for her comments, saying that he was the recipient of her emailed letter and that he forwarded the letter to Mr. Materman upon noticing that SFCJPA staff had not been copied. Director Schmidt commented that the most important thing is that comments are received and the sooner we receive them the better. Director Schmidt said that he understood there were some discussions last week with the regulatory agencies saying that we have been talking about process but not so much about substance and that they did not like an increased hydrological connection between the creek and Faber Tract and he questioned if that is still where they stand. Mr. Materman replied saying that it was their perception that the increased hydrological connection would occasionally impact species. He continued saying that some staff at the US Fish and Wildlife Service remained concerned that this project will cause creek water to impact sensitive species a couple of extra days every ten years.

Authorize the Executive Director to sign an Actual Cost Contract with Pacific Gas & Electric that commits the SFCJPA to reimburse PG&E for the cost to modify wood pole electrical line facilities to accommodate the S.F. Bay-highway 101 project

Mr. Materman asked the Board to authorize him to sign an Actual Cost Contract with Pacific Gas & Electric that commits the SFCJPA to reimburse PG&E for the cost to modify the wood pole electrical line to accommodate the S.F. Bay-Highway 101 project. Mr. Materman provided the Board with a brief summary of the modifications that would occur, noting that work could begin the week of October 14. He also provided a summary of the cost allocation and explained that grant funds from the State would pay for the PG&E work.

Director Keith asked for a definition of what PG&E considers betterment.

Tamon Norimoto, PG&E Governmental Relations, said that for this project PG&E thinks that it will be minimal for salvage or betterment, and that any salvage costs that come out would probably be offset by the hazardous materials cost of the wooden poles being removed. Director Keith asked if a ballpark figure could be given. Mr. Norimoto replied saying that he would have to get back to the Board on a number, even ballpark, but to set expectations he thinks we should expect it to be minimal. Mr. Materman clarified that betterment, (read from the contract) is defined as replacements costing more than the replaced facilities because of greater capacity, durability or efficiency, and he asked Mr. Norimoto to speak on that. Mr. Norimoto stated that PG&E does not have that number right now.

Director Keith asked for an update on her previous question from the last PG&E presentation regarding the height of the poles as they will be higher and she questioned if the pole height could be brought down. Barry Sheppard, PG&E, confirmed that the steel poles are about 15 feet taller than the current wood poles, and that he does not think the pole height can be brought down any lower as the height complies with state regulations. Mr. Murray explained that the increase in height was a requirement imposed on PG&E by the project, in order to allow for vertical clearance to install the floodwalls that will begin right below where these lines are crossing. Mr. Murray explained that the floodwall structures are very tall single pieces of material that are installed vertically into the ground where they will sit for the life of the project, and that they must be turned vertically to install them into the ground. Mr. Murray said that, previously, we did modify the installation techniques to reduce the height of the poles. Director Keith asked if we know how long it is going to take to install

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a section of the floodwall. Mr. Murray responded saying that we do not have that answer. Director Keith asked if there is a way to look into this. Mr. Murray said that staff will look into this and get back to the Board.

Director Schmidt asked if the replacement to steel poles is considered betterment, and asked if steel poles are better than the wood poles that are being replaced. Marty Hunt, PG&E, replied saying that the steel is just the standard for PG&E now.

Director Schmidt questioned what type of constraints there are to make sure this does not come back as a cost increase. Mr. Stepanicich said that the question is whether PG&E will agree to a cost not-to-exceed and that the Board should direct the question to the PG&E representatives present. Mr. Hunt responded saying that he is not prepared to answer that question as the PG&E staff that negotiate those contracts are not here. Mr. Stepanicich said that the PG&E contracts that he has seen in his experience have had the same language as the one being presented tonight but that we can take this up further with PG&E after today's Board meeting. Mr. Stepanicich explained that as the materials have already been ordered we are going to be liable for that cost; \$60,000 for the long-lead time material.

Director Schmidt noted that he did not see a termination clause in the contract. Mr. Norimoto stated that PG&E is committed to this particular project, they understand the importance of it and that the SFCJPA has PG&E's confirmation that they will be working with SFCJPA staff to ensure that costs are coming under budget and if there are any cost overruns or unexpected situations, PG&E will work with SFCJPA staff so that there are no surprises. Mr. Norimoto said that the standard language that PG&E has is what was provided to the SFCJPA and that PG&E has received this feedback before and that it is something that can be taken under consideration as we revise these types of contract agreements. Mr. Norimoto said that he does not think that PG&E can commit to changing this specific agreement, but that the SFCJPA has PG&E's commitment to be working closely with SFCJPA. Mr. Norimoto commented that PG&E and the SFCJPA have a good partnership and PG&E plans to keep it a good partnership throughout this project.

Director Pine noted that this is only a 6 to 7 week project and that with the next PG&E project we are going to need more certainty such as early notice of potential cost increase.

Director Keith stated that she concurs with her colleagues that she would like to see some sort of cost not-to-exceed amount, and other measures can be used to keep the cost down. Mr. Stepanicich said he would recommend better reporting methods, notice being given as soon as possible, and maintaining a schedule with a clear order of work. Director Keith asked for clarification of whether the Board would be approving the contract as is given the comments and requests made by the Board. Mr. Stepanicich said the contract would be approved with the following considerations: 1) the ability of PG&E to lower the height of the poles, 2) the cost containment and cost not-to-exceed provisions to potentially be added to the contract and some additional minor changes that have been discussed within the last 24 hours. Mr. Stepanicich said that the earlier contract will be superseded by this contract so there is only one single contract for the pole work.

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Director Keith made a motion to authorize the Executive Director to sign an Actual Cost Contract with Pacific Gas & Electric that commits the SFCJPA to reimburse PG&E for the costs to modify wood pole electrical line facilities to accommodate the S.F. Bay-highway 101 project subject to a determination by the Executive Director of whether the height of the poles can be reduced, and the Executive Director requesting the inclusion of a cost not-toexceed provision, and if that cannot be agreed upon that other cost control measures be added to the contract, the finalization of language be approved by Mr. Materman and Mr. Stepanicich, and the first line of language on section 7 on the payment provisions and another provision that says this contract for materials and construction supersedes the prior contract that was for materials. Director Schmidt seconded.

Director Schmidt clarified that we are giving Mr. Materman and Mr. Stepanicich discretion to go forward with a signed contract. Chairperson Burt and Director Keith concurred. Director Keith said that she would like for the Board to see the final copy. Mr. Materman and Mr. Stepanicich confirmed that the Board would see a final copy of the contract.

Motion to authorize the Executive Director to sign an Actual Cost Contract with Pacific Gas & Electric that commits the SFCJPA to reimburse PG&E for the cost to modify wood pole electrical line facilities to accommodate the S.F. Bay-Highway 101 project subject to a determination by the Executive Director of whether the height of the poles can be reduced, his request for the inclusion of a cost not-to-exceed provision to the contract and, if that cannot be agreed upon, that other cost control measures be added, with final language be approved by Mr. Materman and Mr. Stepanicich, and the first line of language on section 7 on the payment provisions and another provision that says this contract for materials and construction supersedes the prior contract that was for materials, passed unanimously, 4-0.

Authorize the Executive Director to sign Amendment 2 to the November 3, 2009 Agreement with the Santa Clara Valley Water District and San Mateo County Flood Control District to fund work beyond the scope of contracts for design and environmental review of the S. F. Bay-Highway 101 project

Mr. Materman asked the board to authorize him to sign an amendment to the November 3, 2009 agreement with Santa Clara Valley Water District and San Mateo County Flood Control District to fund work beyond the scope of contracts for design and environmental review of the S.F. Bay-Highway 101 project. Mr. Materman provided the Board with a brief background and summary noting the importance of moving forward in an expeditious manner.

Director Schmidt said that the SCVWD staff is supportive of this. Director Schmidt made a motion to authorize the Executive Director to sign Amendment 2 to the November 3, 2009 Agreement with the Santa Clara Valley Water District and San Mateo County Flood Control District to fund work beyond the scope of contracts for design and environmental review of the S. F. Bay-Highway 101 project. Chairperson Burt seconded. Mr. Stepanicich asked that the Board approve the request conditional to any minor changes to the proposed amendment. Melanie Richardson, SCVWD commented that the SCVWD attorney has reviewed the latest version and that there were some minor updates. Motion to authorize the Executive Director to sign Amendment 2 to the November 3, 2009 Agreement with the Santa Clara Valley Water District and San Mateo County Flood Control District to fund work

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beyond the scope of contracts for design and environmental review of the S. F. Bay-Highway 101 project approved unanimously 4-0 conditional upon additional minor changes.

SFCJPA Request for Proposals to enhance the existing flood early warning system Mr. Materman provided the board with a brief summary of the SFCJPA RFP for the flood early warning system. Mr. Materman noted that the SFCJPA was awarded funding from the California Department of Water Resources' Flood Emergency Project Grant Program, and that on the day we received the notice of funding award, the SFCJPA released the RFP for a consultant to assist with the project.

Jeff Norris, SMCSOES, told the Board that the San Mateo County Office of Emergency Services has been actively updating their system which includes upgrades to rain and stream gauges. Mr. Norris said that the new upgraded system could provide hours of early warning. Director Pine commended SFCJPA staff for pulling this together.

Discuss the process for responding to public correspondence with members of the Board Mr. Materman and the Board briefly discussed ways to respond to public correspondence with members of the Board. Director Schmidt said that he raised this issue as a result of the earlier discussed correspondence sent to him without a copy to SFCJPA staff. Board members concluded that correspondence sent to the Board should be responded to by way of a coordinated process that results in a formal response either from the Chair of the Board or the Executive Director, and that each member of the Board should use discretion when communicating with members of the public when correspondence is sent to them individually.

Discuss revisions to the SFCJPA Employee Handbook regarding implementation of the federal Affordable Care Act and other issues, which will be voted on at an upcoming meeting

Mr. Materman told the Board that a revised employee handbook would be presented to the Board at a future meeting to comply with new state and federal regulations including the federal Affordable Care Act.

6) BOARD AND ASSOCIATE MEMBER MATTERS - Non-agendized comments, requests, or announcements by Board and/or Associate members, no action may be taken Director Pine shared with the Board that he gave a presentation to BCDC last week and he asked Mr. Materman to attend. Director Pine said that it was really valuable for BCDC members to hear about the SFCJPA and that Mr. Materman did a nice job with the short time he had. Director Pine said that the SFCJPA is a leader in how we are planning to deal with sea level rise.

Director Keith stated that she asked Mr. Materman to speak to a group in the Willows next week.

#### 7) ADJOURMENT:

Chairperson Burt adjourned the meeting at 5:41 pm

Minutes Prepared by Clerk of the Board: Miyko Harris-Parker

With the help of Kevin Murray and Miyko Harris-Parker, I am pleased to submit the following:

#### a) Authorize the Executive Director to execute a Contract Amendment with HDR, Inc. to evaluate and possibly design an extension of the Caltrans cell under East Bayshore Road, and for geotechnical and other services, for the S.F. Bay-Highway 101 project

At its September 26, 2013 meeting, the Board authorized me to sign an amendment to the funding agreement between the SFCJPA, Santa Clara Valley Water District (SCVWD) and San Mateo County Flood Control District. The funds for this amendment were committed by the SCVWD. This amendment would provide for, among other things, a new amendment to the SFCJPA's contract with HDR, Inc. our design consultant for the SF Bay–Highway 101 project.

The not-to-exceed amount of this additional scope of work is \$280,500. The vast majority of this – \$225,000 or 80% of the total – is for the purpose of facilitating the acquisition of a necessary property interest on the Palo Alto side of the project. The SCVWD, which is taking the lead on property related matters on that side, is requesting that HDR perform an analysis to determine the feasibility of extending the fourth cell of the Caltrans East Bayshore Road bridge underneath the ground surface of the property immediately downstream of the Road. Should this analysis demonstrate that such a design modification would be technically feasible, HDR would then provide design services for this feature.

This HDR contract amendment will also provide for additional geotechnical engineering services totaling about \$50,000 or 18% of the amendment. In the previous scope of work, HDR provided for geotechnical investigations and analysis sufficient for design and construction of new levees and floodwalls. It has been determined that additional analysis must be done at the specific sites where the new East Palo Alto Sanitary District sewer line and PG&E gas transmission line will intersect the new levees due to anticipated settlement. SCVWD has also requested that HDR may need to complete additional geotechnical analysis necessary for the completion of the plans and specifications for the project.

We intend for this contract amendment with HDR to provide for completed Plans, Specifications and Estimates and additional hydraulic analysis needed to support permit applications to enable construction of the project.

<u>Proposed Board Action</u>: Authorize the Executive Director to execute a Contract Amendment with HDR, Inc. (enclosed) to evaluate and possibly design an extension of the Caltrans cell under East Bayshore Road, and for geotechnical and other services, for the S.F. Bay-Highway 101 project

# b) Authorize the Executive Director to execute a Contract Amendment with ICF International to complete permit acquisition for the S.F. Bay-Highway 101 project

In addition to the work described above in item 5.a, the funding agreement amendment authorized by the Board in September provided funds for additional environmental consultant services to coordinate discussions with regulatory permit agencies, finalize permits and environmental compliance documentation.

On February 1, 2013, the SFCJPA and ICF modified the scope of work of the original contract to allow for the use of surplus funding in the contract left over in savings from the preparation of the Draft and Final EIR so that ICF could prepare the initial draft and final permit application to the four agencies with permitting authority over the project.

Since we submitted the project permit application packages in March, regulatory agencies have requested revisions to the project and/or supplemental information to these application packages. To allow for continued assistance with regulatory agency comments received recently, and the need for further negotiations with the regulatory staff, the proposed contract amendment will add an amount not to exceed \$50,000 to the existing contract with ICF International.

<u>Proposed Board Action</u>: Authorize the Executive Director to execute the enclosed Contract Amendment with ICF International to complete permit acquisition for the S.F. Bay-Highway 101 project.

# c) Authorize the Executive Director to execute a Master Services Agreement with HDR, Inc. to complete feasibility analysis, design and environmental documentation for the Strategy to Advance Flood protection, Ecosystems and Recreation along the Bay (SAFER Bay) project

In December 2012, the SFCJPA was awarded two grants from the California Department of Water Resources (DWR) Local Levee Assistance Program for the SAFER Bay project. The SFCJPA also secured additional funding from the City of East Palo Alto, City of Menlo Park, and the US Fish and Wildlife Service to provide the non-State match funding to the DWR grants. The objectives of this project along the bayfront areas of the Cities of East Palo Alto and Menlo Park include providing flood protection against a 100-year tidal event with Sea Level Rise, enabling ecosystem restoration efforts envisioned by the South Bay Salt Ponds Restoration Project and increased recreational opportunities along the Bay Trail.

The planned project activities include conducting an assessment of alternative alignments; surveys, geotechnical investigations, hydraulic and drainage analysis, developing the most feasible alternative within a report, design, certifying environmental documentation, and securing a Conditional Letter of Map Revision to remove properties from the FEMA floodplain.

In early July, the SFCJPA released a Request for Proposals (RFP) with the intent of hiring a consultant team to conduct the project activities listed in the above paragraph within the geographic region that includes the Bay-front areas of the Cities of East Palo Alto and Menlo Park. Optional services listed in the RFP included additional activities of support for securing regulatory permits and right-of-way, support during the bidding and construction phases, and securing a final letter of map revision upon the completion of construction. Other optional services related to the geographic scope of the project to include the levee around Facebook's headquarters campus, PG&E's Ravenswood Substation located north of Highway 84, and areas of Palo Alto from San Francisquito Creek south to Matadero Creek or south to the Mountain View border.

Several consultant teams submitted proposals for the project, and after a proposal review and interview process conducted by the SFCJPA with participation of staff from East Palo Alto, Menlo Park and Palo Alto, the consultant team composed of the firms HDR, ESA, and HT Harvey was ranked highest based on the established evaluation criteria.

While the optional service related to the Facebook levee is now part of the project and no longer an optional service (see agenda item 5.e. below), the other optional services mentioned above related to project geography and activities remain optional pending future funding arrangements with other agencies. Because of this, the SFCJPA and HDR have developed a Master Service Agreement (MSA) to provide a vehicle for all of the work contemplated for the project to be done within a not-to-exceed amount as described on the following table.

Task	HDR	Sub-consultants	Total		
Tasks 1-4					
Project management	40,880	4,368	45,248		
Alignment ID	22,446	4,998	27,444		
Survey	1,907	78,960	80,867		
Geotech	175,849	0	175,849		
Hydraulics	1,930	34,650	36,580		
Interior drainage	7,004	25,158	32,162 161,827		
Feasibility Report (FR)	64,365	97,462			
Total Phase 1/Task Order 1	314,380	245,596	\$559,976		
Tasks 6-15					
Project management	39,991	8,421	48,412		
Topographic mapping	4,461	43,050	47,511		
30% design	320,197	60,739	380,936		
60% design	92,979	57,528	150,507		
90% design	92,521	47,059	139,580		
100% design	70,452	40,505	110,957		
Certification documents	7,264	15,876	23,140		
Conditional Letter of Map Revision (CLOMR)	4,169	9,366	13,535		
EIR	14,337	419,113	433,450		
Mitigation & Monitor. Plan	2,240	46,635	48,875		
Total Phase 2	648,611	748,292	\$1,396,903		
Optional Tasks 5 and 16-20			\$2,300,884		
Contingency			\$42,237		
Total amount of MSA			\$4,300,000		

At this Board meeting, I am seeking authorization to enter in to the enclosed MSA with HDR. Under this MSA, which sets the upper limit of the contract at \$4,300,000, no work shall commence or be billed for until the SFCJPA specifically authorizes the work under that Task Order. Thus, Board action on this item will not commit the SFCJPA to any costs related to the Project; the MSA simply sets up the framework and contractual relationship with the consultant. Detailed Task Orders, beginning with Task Order #1 in the following agenda item, will be issued on a periodic basis to direct the consultant's work. This type of agreement will allow for flexibility in determining the scope and scale of the consultant's work as the project progresses.

<u>Proposed Board Action</u>: Authorize the Executive Director to execute a Master Services Agreement with HDR, Inc. (enclosed) to complete feasibility analysis, design and environmental documentation for the Strategy to Advance Flood protection, Ecosystems and Recreation along the Bay (SAFER Bay) 101 project.

#### d) Authorize the Executive Director to execute Task Order Number 1 within the Master Services Agreement with HDR, Inc. to complete feasibility analysis for the SAFER Bay project

As a companion to the MSA for which I requested authorization from the Board in item 5.c. above, I am also requesting that the Board authorize me to execute Task Order Number 1, attached, which will commit \$559,976 to fund the completion of Tasks 1-4 in the MSA listed on page 3 of this Executive Directors Report. Funding to support the completion of these tasks is available through local sources and grant funding, therefore issuance of Task Order Number 1 will not represent a direct expense to the SFCJPA operational budget.

Under this Task Order, the consultant team will identify potential flood protection feature alignments; complete preliminary engineering evaluations, including surveys, geotechnical investigations, hydraulic and drainage analysis, of the potential alignments; and submit a Feasibility Report that provides for a recommended project alternative, including project feature types, permitting requirements, and estimated costs for design and construction. The estimated schedule for completion of the tasks under Task Order Number 1 is six months from the time that a Notice to Proceed is issued.

<u>Proposed Board Action</u>: Authorize the Executive Director to execute Task Order Number 1 (enclosed) within the Master Services Agreement with HDR, Inc. to complete feasibility analysis for the SAFER Bay project.

# e) Authorize the Executive Director to execute an Agreement with Facebook, Inc. to fund the SAFER Bay project adjacent to the Facebook headquarters campus

The headquarters campus of Facebook, Inc. is located at 1 Hacker Way in Menlo Park. According to FEMA, this approximately 57 acre site lies within the Bay's tidal 100-year floodplain and is subject to flooding during extreme tide events, which are projected to increase with continued Sea Level Rise. While the campus sits in the general project area, it sticks out into the Ravenswood Ponds marshlands, and thus the alignment of our flood protection features would likely not have protected it.

Over seven months ago, through doors that were opened with the help of Board chair Pat Burt and the former executive director of the Bay Conservation and Development Commission, Will Travis, I began meeting with staff at Facebook to discuss the SAFER Bay project and Facebook's connection to it. The result of these conversations is that Facebook desires that the planning and design of an improved levee between its headquarters campus and the Bay be done as part of the SAFER Bay Project with the goal of removing the campus from the 100-year tidal floodplain, including projected sea level rise over a 50-year period in a manner that complies with the National Flood Insurance Program.

As described in the attached funding agreement between the SFCJPA and Facebook, Inc., in exchange for the Facebook levee being incorporated into all project activities and Tasks, Facebook will contribute \$275,000 towards the effort to be paid in three installments over the project period.

<u>Proposed Board Action</u>: Authorize the Executive Director to execute the enclosed Agreement with Facebook, Inc. to fund the SAFER Bay project adjacent to the Facebook headquarters campus.

Submitted by:

Len Materman Executive Director

Agenda Item 5.a.

Draft

HDR Contract Amendment #3

#### AMENDMENT NO. 3 TO AGREEMENT FOR DESIGN SERVICES FOR FLOODWATERCONVEYANCE IMPROVEMENT ON SAN FRANCISQUITO CREEK

#### BETWEEN THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY AND HDR, INC.

This Amendment No. 3 ("Amendment"), effective as of the date it is fully executed by the parties, amends the terms of the Consultant Agreement ("Agreement") between the SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY ("Authority") and HDR, INC. [a Nebraska corporation] ("Consultant"), dated November 3, 2009, amended on August 9, 2011, through the execution of Amendment No. 1 and again on October 24, 2013, through the execution of Amendment No. 2. Capitalized terms not otherwise defined will have the meaning set forth in the Agreement.

**WHEREAS**, the parties desire to amend the Agreement to modify the Project budget in order to finalize Plans, Specifications and Cost Estimates; and

**WHEREAS**, the desired modification to the Project budget will change the Not To Exceed amounts of certain tasks within Exhibit C, Compensation, and will change the total Not To Exceed amount as described in Amendments No. 1 and No. 2 to the Agreement; and

**WHEREAS**, the parties desire to amend the term of the Agreement, extending it through June 30, 2014.

**NOW, THEREFORE,** in consideration for the mutual promises and agreements contained herein and notwithstanding anything to the contrary in the Agreement or Amendments No. 1 or No. 2, Consultant and Authority hereby agree as follows:

- 1. Exhibit A, Scope of Services, is amended to include services described in ATTACHMENT 1, Modifications to Exhibit A, attached hereto and incorporated herein by this reference as though set forth in full.
- 2. Exhibit B, Schedule of Performance, is amended to extend the Agreement to June 30, 2014.
- 3. Exhibit C, Compensation, is amended to add a total of \$280,500 to Tasks 2, 3, 4, and 5 as shown in ATTACHMENT 2, Revised Project Budget, attached hereto and incorporated herein by this reference as though set forth in full.
- 4. All other terms and conditions stated in the original Agreement and Amendments No. 1 and No. 2 remain in full force and effect.

(remainder of page intentionally left blank and signatures follow on next page)

#### AMENDMENT NO. 3 TO AGREEMENT FOR DESIGN SERVICES FOR FLOODWATER CONVEYANCE IMPROVEMENT ON SAN FRANCISQUITO CREEK

IN WITNESS WHEREOF, the parties have set forth below their consent to the terms and conditions of this amendment No. 3 through the signatures of their duly authorized representatives.

SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY

HDR Engineering, Inc., [a Nebraska corporation]

Len Materman Executive Director Amy Gilleran Senior Vice President

Date

Date

(remainder of page intentionally left blank)

#### AMENDMENT NO. 3 TO AGREEMENT FOR DESIGN SERVICES FOR FLOODWATER CONVEYANCE IMPROVEMENT ON SAN FRANCISQUITO CREEK

#### ATTACHMENT 1—MODIFICATIONS TO EXHIBIT A

Exhibit A, Scope of Services, is revised to include the work items described below within Task 2, Design Concept Review/Concurrence; Task 3, Geotechnical Investigation; Task 4, Detailed Project Design and PS&E; and Task 5, Optional Services.

#### 1.0 PROJECT MANAGEMENT

1.1 General Project Management

This task includes Project management time associated with the lengthened duration of the Project, including coordination between HDR, the Santa Clara Valley Water District ("District") and the Authority to define expectations and clarify Project goals.

1.2 Project Work Plan and Schedule

No additional efforts required under this subtask.

1.3 Meetings and Project Coordination

No additional efforts required under this subtask.

1.4 Quality Assurance and Quality Control

Under the original contract, HDR prepared a Quality Control Plan (QCP) according to the District's Quality Control Guidelines and HDR's standard practices of work. This plan will be updated to incorporate the additional scope items in this proposal.

#### 2.0 DESIGN CONCEPT REVIEW, CONCURRENCE

2.1 Re-evaluate the HDR Technical Memo "Evaluation of HWY 101 Extension, San Francisquito Creek Conveyance Feasibility," dated December 30, 2010.

This is to determine the feasibility of extending the fourth cell of the Caltrans East Bayshore Road bridge underneath the ground surface of the Yeaman/Johnson property located at 2023 and 2025 East Bayshore Road, Palo Alto, CA 94303 based on the current Caltrans design.

- 2.1.1 Review Caltrans' design dated December 10, 2012, or most current.
- 2.1.2 Perform revised engineering calculations to re-evaluate the extension of the fourth cell.
- 2.1.3 Size the culvert.
- 2.1.4 Perform new hydraulic modeling to confirm flow and upstream/downstream impacts.
- 2.1.5 Identify at-grade impacts to the Yeaman/Johnson property.

- 2.1.6 Revise the Technical Memo prepared by Consultant and dated December 30, 2010.
- 2.1.7 Inform the Authority and Water District of the progress of the re-evaluation weekly by e-mail to both.

Deliverables:

Revised draft Technical Memo for review and comment Final Technical Memo incorporating comments as agreed upon by Auhthority and Water District

#### 3.0 GEOTECHNICAL INVESTIGATION

Add the following to the Geotechnical Services Scope of Work:

3.1 Consultant shall conduct field investigation and geotechnical engineering evaluation and recommendations for the planned realignments of the East Palo Alto Sanitary District sanitary sewer siphon and PG&E gas transmission line through the San Francisquito Creek crossing (\$25K).

The purpose of this work is to collect subsurface geotechnical data and prepare a technical memorandum documenting the geotechnical findings and recommendations related to the relocation of the EPASD sanitary sewer. Additionally the Consultant shall provide geotechnical data collected under this scope of work to PG&E for their design of the gas transmission line realignment. Our evaluation will be based on data collected from the planned cone penetration tests (CPTs), past site investigations, and available underground utility relocation drawings. This Scope of Work includes performing subsurface site investigations, engineering assessment of collected data and available background documents, and preparation of a letter report summarizing our findings and recommendations. Task specifics are provided below.

3.1.1 Site Investigation

Consultant has reviewed the geotechnical information contained in their files and provided in the May 2012 Geotechnical Evaluation Report and the 50% plans provided by the engineers for EPASD Freyer and Laureta for the EPASD Siphon Replacement Project and the alignment of the gas main shown in PG&E Line 101 MP. 12.30-12.95 San Francisquito Creek Relocation Piping plans, provided by the Authority.

- 3.1.1.1 Consultant shall perform up to five (5) Cone Penetration Tests (CPTs) approximately 40-feet deep, to supplement the existing available subsurface data. Consultant shall obtain access clearances and drilling permits for all field work. The planned exploration locations shall take into account the realignment of the PG&E gas transmission line.
- 3.1.1.2 Consultant shall develop a stratigraphy in the area of the ESPSD underground utility relocation.

SFCJPA/HDR, Inc. Design Services Agreement October 2013 3.1.1.3 Consultant shall evaluate the body of information available and provide an engineering assessment of the proposed utility EPASD realignment design, including but not limited to recommendations and comments relative to underground utility relocation, including settlement, pipeline bedding and backfill material requirements, existing alignment abandonment, and construction considerations.

Deliverable:

A draft and final technical memorandum summarizing the results of the geotechnical evaluation which will include discussion of the general subsurface conditions in the areas of the proposed utility realignments. Consultant shall discuss the information with Freyer and Laureta prior to submitting the draft memorandum.

#### 4.0 DETAILED PROJECT DESIGN AND PS&E

Add the following to the Detailed Project Design and PS&E Scope of Work:

4.1 Optional Work: Cell Extension Design

If Feasibility Assessment under Task 2.1 validates the concept is viable, upon written authorization from the Authority, Consultant shall revise Project Plans and Specifications for the Cell Extension.

Consultant shall:

- 4.1.1 Revise civil 3D modeling.
- 4.1.2 Add approximately 6 new sheets.
- 4.1.3 Make minor revisions to 107 sheets.
- 4.1.4 Prepare new estimates.
- 4.1.5 Revise the O&M manual.
- 4.1.6 Revise the basis of design document.
- 4.1.7 Revise the specifications.
- 4.1.8 Obtain additional geotechnical information if necessary (per Task 5, Optional Services).
- 4.1.9 Coordinate with the Authority, Water District, and Caltrans.

Deliverables:

- 1. Revised Plans and Specifications.
- 2. Revised Design Basis Document.

3. Revised O&M Manual.

#### 5.0 OPTIONAL SERVICES

Add the following to Optional Services Scope of Work:

- 5.1 Perform additional geotechnical field exploration and data analysis as requested by the Authority.
  - 5.1.1 The Authority may require and Consultant will perform Supplemental Services during the Agreement term on an as-needed basis that supplements the Tasks specified in this Agreement. Prior to performing any Supplemental Services, Consultant must obtain written authorization from the Authority. Written authorization will state the agreed-upon scope of the services requested and schedule. These services may include additional investigation relating to the design and construction of the PG&E gas transmission line.
  - 5.1.2 Possible Optional Services, may include, but not be limited to, the following:
    - 5.1.2.1 Additional CPTs.
    - 5.1.2.2 Soil borings: Consultant shall drill the borings in such fashion as to allow for the retrieval of high quality samples for testing. The exploration depths will depend on the location and anticipated subsurface conditions at the exploration locations.
    - 5.1.2.3 Additional data analysis and evaluation.

#### Deliverable:

Draft and final Technical memoranda summarizing the results of the geotechnical evaluation, which will include discussions of subsurface conditions in the area and recommendations for design, construction, and/or inspection as requested.

5.2 Perform additional hydraulic modeling services as needed to inform the Authority and provided supporting materials during negotiations with permitting agencies.

#### Deliverable:

Draft and final Technical Memorandum summarizing the results of the requested hydraulic analysis and impacts of any proposed design changes or design feature omissions based on the results of the analysis.

#### AMENDMENT NO. 3 TO AGREEMENT FOR DESIGN SERVICES FOR FLOODWATER CONVEYANCE IMPROVEMENT ON SAN FRANCISQUITO CREEK

#### ATTACHMENT 2—REVISED PROJECT BUDGET

Task	Description	NTE Amount	Additional Cost	Amendment NTE	
1	Project Management	\$156,247		\$156,247	
2	Design Concept Review / Concurrence	\$142,673	\$35,000	\$177,673	
3	Geotechnical Investigation	\$173,422	\$25,000	\$198,422	
4	Detailed Project Design and PS&E	\$546,724	\$190,000	\$736,724	
5	Optional Services	\$15,024	\$30,500	\$45,524	
	Agreement Total NTE Amount	\$1,034,090	\$280,500	\$1,314,590	

Amendment No. 3 revises the Project Budget to increase Not-to-Exceed amounts as shown.

Agenda Item 5.b.

Draft

ICF Contract Amendment #1



October 17, 2013

San Francisquito Creek Joint Powers Authority 615 B Menlo Avenue Menlo Park, CA 94025 Attn: Kevin Murray

#### Subject: Augment for Additional Permitting Support for San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Francisco Bay to Highway 101

Dear Kevin:

Attached please find our scope of work and cost estimate for additional permitting assistance to the SFCJPA. ICF International (ICF) is requesting additional funding to respond to extensive agency comments and assist in remaining permit negotiations. In the previous scope of work (SOW) dated February 1, 2013, ICF International (ICF) assumed that ICF would prepare the initial permit applications and each agency would receive one draft and one final permit application. However, each agency has requested several rounds of revisions to the project information and a large amount of supplemental information to the application packages, resulting in multiple submittals. This has also resulted in additional time spent on meetings and agency coordination; the previous SOW assumed up to two meetings with each agency would be necessary. The following additional tasks under Task 9 (Permitting) of the currently authorized project are needed to continue, and barring unforeseen issues, complete the regulatory permitting process:

Task 9.5: Ongoing Project meetings and agency coordination

Task 9.6: Respond to agency comments on the latest draft applications

Subtask 9.6a: BCDC Major Permit Subtask 9.6b: RWQCB 401 Certification Subtask 9.6c: USACE 404 Permit

Subtask 9.6d: CDFW 1602 LSAA

Subtask 9.6e: USFWS/NMFS Consultation

The total estimated cost for these tasks is \$47,273. Please confirm by e-mail or in writing at your earliest convenience to confirm you agree with the proposed roles and responsibilities. If there are any questions concerning the proposed work, please feel free to contact me at 408/216-2815 or by email (<u>matthew.jones@icfi.com</u>).

The following items are attached.

- Scope of Work (Attachment A)
- Cost Estimate (Attachment B)

If there are any questions concerning this invoice or the work performed, please feel free to contact me at 408/216-2815 or by email (<u>matthew.jones@icfi.com</u>).

Sincerely,

-2 U

Matthew Jones Project Director

cc: Kevin MacKay, ICF Alexa La Plante, ICF

## Scope of Work Additional Permitting Support San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation San Francisco Bay to Highway 101 Project

# Introduction

SFCJPA is proposing the San Francisquito Creek Flood Reduction, Ecosystem Restoration, and Recreation Project, San Francisco Bay to Highway 101 (Project) to improve flood protection, habitat, and recreational opportunities within the Project reach.

Under this Task Order, ICF will respond to agency comments and complete the necessary components of applications to the San Francisco Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), the U.S. Army Corps of Engineers (USACE), and San Francisco Bay Conservation and Development Commission (BCDC) for the project.

# **Assumptions and Uncertainties**

ICF has made the following assumptions in developing the scope of work.

- ICF will utilize and incorporate pertinent information developed under prior Task Orders into supporting documents or the permit applications themselves, including biological and cultural resource information.
- For each permit letter of incomplete or information request, a draft and final response will be provided. The draft will serve for review and comment by SFCJPA and appropriate member agencies. The final will incorporate the SFCJPA comments and be provided to the applicant for signature. Upon receipt of the signed application, ICF will compile and send out the complete submittals to each agency. One printed copy and a complete PDF will be provided to the applicant for filing.
- All permit fees have already been paid, and therefore no permit fees are included in the cost estimate (Attachment B).
- USACE will utilize the biological assessments prepared under the previous scope of work to initiate Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). No additional biological surveys or report preparation will be required.
- ICF has included budget for two rounds of permit applications under this Task Order. Additional rounds of revisions may result in the need for additional budget for the project.
- Significant revisions to the permitting approach based on agency input are not included in this scope. Additional work related to this effort may result in the need for additional budget for the project.
- ICF will submit written responses to all agency comments.

### **Tasks and Deliverables**

#### Task 9.5: Project meetings and agency coordination

#### Objective

This task entails agency meeting support to complete the regulatory permit applications for the project.

#### Methods

ICF will prepare and transmit materials and set up and attend in-person meetings and conference calls, as necessary and requested by the SFCJPA, to facilitate regulatory permitting. Multiple meetings with SFCJPA and RWQCB, EPA, USFWS, CDFW, USACE, and NMFS, are anticipated to discuss the proposed project and permitting issues.

#### Methods

A minimum of 2 meetings (4 hours each, including travel time) per agency as well as 2 all-agency meetings are assumed to be part of this task. Ongoing agency coordination for permit development is also assumed as part of this project. Both the Project Director and the Task Manager have allotted hours for these tasks.

#### Task 9.6: Respond to agency comments on the latest draft applications

#### Objective

After receiving the second round of packages, the RWQCB, CDFW, and BCDC requested additional information, including calculations and figures, before authorizing final permit application. ICF, coordinating with the project engineers and SFCJPA, will prepare and submit a third round of applications. As described in Task 1, ICF will consult with organizations or individuals as necessary when responding to comments. Additionally, time has been allocated to deal with potential USACE comments which have not been received, but are anticipated. In all cases, we have tried to conservatively estimate the maximum necessary effort to expeditiously resolve remaining permit issues and questions.

#### Subtask 9.6a: BCDC Major Permit

#### Methods

ICF will update the BCDC Application Form and attach additional sheets that include additional details as requested by BCDC.

#### Deliverables

- Draft revised application for SFCJPA review and comment.
- Revised application for action by the BCDC.

#### Subtask 9.6b: RWQCB 401 Certification

#### Methods

The Water Quality Certification Application submitted by the SFCJPA on March 12, 2013, including supplemental information received on August 2, 2013 was deemed complete in an email from Margarete Beth of the San Francisco RWQCB on September 4, 2013. However, this email included a list of questions that need further response to ensure that the project complies with State and RWQCB policies. ICF will provide the requested details in a letter response to RWQCB.

#### Deliverables

- Draft letter response to RWQCB comments for SFCJPA review and comment
- Letter response to questions from RWQCB.

#### Subtask 9.6c: USACE 404 Permit

#### Methods

ICF will update the Section 404 Individual Application and provide an additional document that respond to CDFW's comments. The USACE has not officially responded to the latest draft application, but they will likely comment on it in the future. Therefore, this task assumes that USACE will comment on the existing draft in the future. If USACE does not comment, this task will not need to be performed and no associated work will be billed.

#### Deliverables

- Draft revised 404 Individual Permit for SFCJPA review and comment
- Revised Section 404 Individual Permit Application for review and comment by USACE.

#### Subtask 9.6d: CDFW 1602 LSAA

#### Methods

ICF will update the Notification for Lake or Streambed Alteration Application and attach additional sheets that respond to CDFW's comments. Additional section details were requested for the project description (Section 10), project impacts (Section 11A-D); and measures to protect fish, wildlife, and plants (Section 12).

#### Deliverables

- Draft revised notification for SFCJPA review and comment.
- Revised notification of lake and streambed alteration for action by CDFW.

#### Subtask 9.6e: USFWS/NMFS Consultation

#### Methods

The USACE submitted by the Biological Assessments for the Project to USFWS and NMFS on April 29, 2013. The USFWS submitted a formal information request on July 3, 2013. Additional meetings with USFWS have identified material issues that need to be addressed in consultation with the agency and incorporated in a formal response. ICF will provide the requested information and capture the SFCJPA's response in a letter to USFWS. Additionally, NMFS has submitted many minor requests throughout the process that we anticipate will continue through the consultation.

#### Deliverables

- Draft letter response to USFWS comments for SFCJPA review and comment
- Letter response to questions from USFWS.
- Coordination of other informal responses to NMFS and USFWS, as needed

### Costs

The total estimated cost to finalize the permit applications is \$47,273, which exceeds the current remaining budget in ICF's contract with the SFCJPA for the Project. The breakdown in costs is as follows and shown in detail in Attachment B.

### Assumptions:

Direct travel costs are not included, but travel time (in hours) is incorporated, in the cost estimate.

# Attachment B Cost Estimate Additional Permitting Assistance

#### Table 1. Cost Estimate for Additional SFCJPA Bay to 101 Permitting Support

	Consulting Staff						Production Staff					
Employee Name	Jones Mat	La Plante Ale	Edell Tor	Burns Jil	Stratten Dan		Ortega Car	Rumburg Dan				
Project Role	Project Director	Project Management	Permitting Specialist	Biologist	GIS/CADD		Pub Specialist	Reprographics				
Task Labor Classification	Droi Dir	Cr. Consult I		Assoc		Cubtotol		A day in To sh	Cubtotal	Labor Total	Direct	Total Drian
20001 0100011001001	Proj Dir 60	Sr Consult I 40			Sr Consult I	Subtotal \$17,960	Editor	Admin Tech	Subtotal \$0	Labor Total \$17,960	Expenses	Total Price
Task 9.5. Project Meetings and Agency Coordination Task 9.6. Respond to Existing Agency Comments	00	40	4	4		۶۱۲,960 \$0			\$0 \$0	۹۱۲,960 \$0		
Subtask 9.6a. BCDC Major Permit	4	8		24	10	φ <u>υ</u> \$5,810	2	2	\$260	φ <u>υ</u> \$6,070		
Subtask 9.6b. RWQCB 401 Certification	4	8	24	_ ·	8	\$5,800	- 2	- 2	\$260	\$6,060		
Subtask 9.6c. USACE 404 Permit	4	8	16		10	\$5,050	2	2	\$260	\$5,310		
Subtask 9.6d. CDFW 1602 LSAA	4	8	24		8	\$5,800	2	2	\$260	\$6,060		
Subtask 9.6e. USFWS/NMFS Consultation	16	4		8	8	\$5,620			\$0	\$5,620		
Total hours	92	76	68	36	44		8	8				
ICF E&P 2013 Billing Rates	\$200	\$125	\$125	\$115	\$125		\$80	\$50				
Subtotals	\$18,400	\$9,500	\$8,500	\$4,140	\$5,500	\$46,040	\$640	\$400	\$1,040	\$47,080		
Direct Expenses												
523.02 Reproductions											\$100	
523.04 Postage and Delivery											\$75	
Mark up on all non-labor costs and subcontractors:	10%										\$18	
Direct expense subtotal											\$193	A
Total price												\$47,273

#### AMENDMENT NO. 1 TO AGREEMENT FOR ENVIRONMENTAL SERVICES FOR FLOODWATER CONVEYANCE IMPROVEMENT ON SAN FRANCISQUITO CREEK

#### BETWEEN THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY AND ICF JONES AND STOKES, INC.

This Amendment No.1 ("Amendment"), effective as of the date it is fully executed by the parties, amends the terms of the Consultant Agreement ("Agreement") between THE SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY (Authority) and ICF Jones & Stokes Inc. ("Consultant"), dated November 3, 2009. Capitalized terms not otherwise defined will have the meaning set forth in the Agreement.

**WHEREAS**, the parties desire to amend the Agreement for Consultant to provide additional environmental planning services to finalize permits, environmental compliance documentation, and coordinate agency negotiations; and

**NOW, THEREFORE,** in consideration for the mutual promises and agreements contained herein and notwithstanding anything to the contrary in the Agreement, Consultant and the Authority hereby agree as follows:

- 1. Exhibit A, Scope of Services, is amended to include tasks described in Attachment A, attached hereto and incorporated herein by this reference as though set forth in full.
- 2. Exhibit C, Compensation, is amended to include costs described in Attachment B, attached hereto and incorporated herein by this reference as though set forth in full.
- 3. All other terms and conditions stated in the original Agreement remain in full force and effect.

#### AUTHORITY

#### CONSULTANT

By: Title: Date:

Ву
Title:
Date:

Agenda Item 5.c.

# Draft

# SAFER Bay

Master Service Agreement with HDR, Inc.

#### MASTER SERVICE AGREEMENT

#### For the

#### Strategy to Advance Flood protection, Ecosystems and Recreation along the Bay (SAFER Bay) Project Evaluation, Design and Environmental Services

This MASTER SERVICE AGREEMENT (MSA) is made as of October 24, 2013, by and between the

San Francisquito Creek Joint Powers Authority, a California joint powers authority ("Authority"), and

HDR Engineering, Inc., a Nebraska corporation ("Consultant").

WHEREAS, Authority has advertised publicly the availability of a contract and seeks the services of a consultant to perform tasks related to the evaluation, feasibility, design, environmental documentation, and permitting of the SAFER Bay Project (Project), which is intended to provide protection against coastal flooding and enable ecosystem restoration and recreational enhancements in San Mateo County, CA, along San Francisco Bay in the Cities of East Palo Alto and Menlo Park, and

WHEREAS, the geographic area of the Project may be extended to an additional portion of San Mateo County during the performance of the services described herein, and

WHEREAS, the geographic area of the Project may be extended to portions of Santa Clara County during the performance of the services described herein, and

WHEREAS, this MSA provides for a contractual vehicle for services to be provided to the Authority by Consultant, and

WHEREAS, Consultant has provided a Master Scope of Services (Exhibit A) organized by task, in order to complete the work contemplated by this MSA, and

WHEREAS, no work under this MSA by Consultant shall commence or be billable to Authority on any task without prior written authorization by Authority by way of a Task Order approved by the Executive Director of the Authority, as authorized by the Board of Directors of the Authority, and issued to Consultant by way of a Notice to Proceed signed by the Contract Administrator of the Authority.

#### RECITALS

A. Authority has retained Consultant to perform evaluation, feasibility, design, environmental documentation, and permitting services for the Project.

B. Authority desires to utilize the services of Consultant as an independent contractor to provide services as described herein and subject to the required authorization set forth in this MSA.

C. Consultant represents that it is fully qualified to perform such services by virtue of its experience and the training, education and expertise of its principals and employees.

NOW, THEREFORE, in consideration of performance by the parties of the promises, covenants, and conditions herein contained, the parties hereto agree as follows:

#### 1. Consultant's Services.

A. Scope and Level of Services. The nature, scope, and level of the specific services to be performed by Consultant are as set forth in Exhibit A attached hereto. No work for any task within Exhibit A by Consultant shall commence or be billable to Authority without prior written authorization by Authority by way of a Task Order approved by the Executive Director of the Authority, as authorized by the Board of Directors of the Authority.

B. Time of Performance. The services shall be performed on a timely, regular basis in accordance with the Schedule of Performance set forth in each Task Order issued by Authority.

C. Standard of Care. As a material inducement to Authority to enter into this Agreement, Consultant hereby represents that it has the qualifications and experience necessary to undertake the services to be provided pursuant to this Agreement, and will perform the services to a standard of reasonable professional care, for similar services on similar projects of like size and nature performed.

D. Compliance with Law. All services rendered hereunder by Consultant shall be provided in accordance with all ordinances, resolutions, statutes, rules, and regulations of Authority and any federal, state or local governmental agency having jurisdiction in effect at the time service is rendered.

#### 2. Term of Agreement.

A. This Agreement is effective on the date set forth in the initial paragraph of this Agreement and shall remain in effect until the services required hereunder have been completed satisfactorily by Consultant unless earlier terminated pursuant to Section 13.

**3. Compensation**. Authority agrees to compensate Consultant for its services according to the fee schedule set forth by way of each approved Task Order. The compensation limit available through this MSA is \$4,300,000.00. This limit has been established to provide for services beyond the funding resources available to the Authority at the time of the execution of this MSA, to provide for services in the additional geographic areas described in the Scope of Services as optional tasks, specifically in Santa Clara County and around the PG&E Ravenswood Substation along Highway 84 in San Mateo County. In no event shall the total compensation and costs payable to Consultant under this Agreement exceed the sum of \$4,300,000.00 unless specifically approved in advance, in writing, by Authority.

#### 4. Representatives.

A. Project Manager. Sergio Jimenez is hereby designated as the representative of Consultant authorized to act in its behalf with respect to the services specified herein. It is expressly understood that the experience, knowledge, capability and reputation of the foregoing Project Manager were a substantial inducement for Authority to enter into this Agreement. Therefore, the foregoing Project Manager shall be responsible during the term of this Agreement for directing all activities of Consultant and devoting sufficient time to personally supervise the services hereunder. The Project Manager may not be changed by Consultant without the express written approval of Authority such approval shall not be unreasonably withheld.

B. Contract Administrator. The Contract Administrator and Authority's representative shall be Kevin Murray, or in his absence, an individual designated in writing by the Executive Director of Authority. If no Contract Administrator is so designated, the Executive Director shall be the Contract Administrator. It shall be Consultant's responsibility to keep the Contract Administrator informed of the progress of the performance of the services, and Consultant shall refer any decisions that must be made by Authority to the Contract Administrator. Unless otherwise specified herein, any approval of Authority required hereunder shall mean the approval of the Contract Administrator.

**5. Standard of Performance**. Consultant shall perform all work to the recognized professional standards relating to levee and flood wall design and pursuant to the above stated Standard of Care. Consultant hereby covenants that it shall follow the professional standards used by a competent practitioner in performing all services required hereunder.

6. Ownership of Work Product. All reports, documents or other written material developed by Consultant in the performance of this Agreement with the exception of those standard details and specifications regularly used by the Consultant in its normal course of business shall upon payment of all amounts rightfully owed by the Authority to the Consultant herein be and remain the property of Authority without restriction or limitation upon its use or dissemination by Authority. Any reuse or modification of such Documents for purposes other than those intended by the Consultant herein shall be at the Authority's sole risk and without liability to the Consultant.

7. Status as Independent Contractor. Consultant is, and shall at all times remain as to Authority, a wholly independent contractor. Consultant shall have no power to incur any debt, obligation, or liability on behalf of Authority or otherwise act on behalf of Authority as an agent. Neither Authority nor any of its agents shall have control over the conduct of Consultant or any of Consultant's employees, except as set forth in this Agreement. Consultant shall not, at any time, or in any manner, represent that it or any of its agents or employees are in any manner employees of Authority. Consultant agrees to pay all required taxes on amounts paid to Consultant under this Agreement, and to indemnify and hold Authority harmless from any and all taxes, assessments, penalties, and interest asserted against Authority by reason of the independent contractor relationship created by this Agreement. Consultant shall fully comply with the workers' compensation law regarding Consultant and Consultant's employees. Consultant further agrees to indemnify and hold Authority harmless from any failure of Consultant to comply with applicable worker's compensation laws. Authority shall have the right to offset against the amount of any fees due to Consultant under this Agreement any amount due to Authority from Consultant as a result of Consultant's failure to promptly pay to Authority any reimbursement or indemnification arising under this Section.

8. Confidentiality. Consultant, in the course of its duties, may have access to financial, accounting, statistical, and personal data of private individuals and employees of Authority. Consultant covenants that all data, documents, discussion, or other information developed or received by Consultant or provided for performance of this Agreement are deemed confidential and shall not be disclosed by Consultant without written authorization by Authority. Authority shall grant such authorization if disclosure is required by law. Upon request, all Authority data shall be returned to Authority upon the termination of this Agreement. Consultant's covenant under this section shall survive the termination of this Agreement. It is hereby agreed that the following information is not considered to be confidential under this Agreement:

- a) Information already in the public domain;
- b) Information disclosed to Consultant by a third party who is not under a confidentiality obligation;
- c) Information developed by or in the custody of Consultant before entering into this Agreement;
- d) Information developed by Consultant through its work with other clients; and
- e) Information required to be disclosed by law or regulation, including, but not limited to, subpoena, court order or administrative order.

**9. Conflict of Interest**. Consultant covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which may be affected by the services to be performed by Consultant under this Agreement, or which would conflict in any manner with the performance of its services hereunder. Consultant further covenants that, in performance of this Agreement, no person

having any such interest shall be employed by it. Furthermore, Consultant shall avoid the appearance of having any interest that would conflict in any manner with the performance of its services pursuant to this Agreement. Consultant agrees not to accept any employment or representation during the term of this Agreement which is or may likely make Consultant "financially interested" (as provided in California Government Code Sections 1090 and 87100) in any decision made by Authority on any matter in connection with which Consultant has been retained pursuant to this Agreement. Nothing in this section shall, however, preclude Consultant from accepting other engagements with Authority.

#### 10. Indemnification.

A. Consultant shall, hold harmless and indemnify the Authority, its Board members, officers, employees, and agents, its constituent local public entities, and its constituent members' respective officers, employees, and agents (collectively, "Indemnitees"), from any claim, demand, damage, liability, loss, cost or expense, including defense costs, for any damage whatsoever, including but not limited to death or injury to any person and injury to any property, to the extent actually resulting from willful misconduct, negligent acts, errors or omissions of Consultant or any of its officers, employees, or agents.

B. Authority does not, and shall not, waive any rights that they may possess against Consultant because of the acceptance by Authority, or the deposit with Authority, of any insurance policy or certificate required pursuant to this Agreement. This hold harmless and indemnification provision shall apply regardless of whether or not any insurance policies are determined to be applicable to the claim, demand, damage, liability, loss, cost or expense. Consultant agrees that Consultant's covenant under this section shall survive the termination of this Agreement.

#### 11. Insurance.

A. Liability Insurance. Consultant shall procure and maintain for the duration of this Agreement 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 Consultant, its employees, agents, representatives, or subcontractors.

- B. Minimum Scope of Insurance. Coverage shall be at least as broad as:
  - (1) Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001) or the equivalent.
  - (2) Insurance Services Office form number CA 0001 (Ed. 1/87) covering Automobile Liability, code 1 (any auto) or the equivalent.
  - (3) Worker's Compensation insurance as required by the State of California and Employer's Liability Insurance.
- C. Minimum Limits of Insurance. Consultant shall maintain limits no less than:
  - (1) General Liability: \$1,000,000 per occurrence for bodily injury, personal injury and property damage. Any general aggregate limit shall apply separately to this Agreement or the general limit shall be twice the required occurrence limit.
  - (2) Automobile Liability: \$1,000,000 per accident for bodily injury and property damage.
  - (3) Employer's Liability: \$1,000,000 per accident for bodily injury or disease.

D. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by Authority. At the option of Authority's Executive Director, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects to Authority, its officers, officials, employees and agents; or Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

E. Other Insurance Provisions. The general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

- (1) Indemnitees are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of Consultant; products and completed operations of Consultant; premises owned, occupied or used by Consultant; or automobiles owned, leased, hired or borrowed by Consultant. The coverage shall contain no special limitations on the scope of protection afforded to Authority, its officers, employees and agents.
- (2) For any claims related to this Agreement, Consultant's insurance coverage shall be primary insurance as respects Authority. Any insurance or self-insurance maintained by Authority shall be excess of Consultant's insurance and shall not contribute with it.
- (3) Any failure to comply with reporting or other provisions of the policies, including breaches of warranties shall not affect coverage provided to Authority, their officers, employees, and agents.
- (4) Consultant'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.
- (5) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, or cancelled by either party, except after 30 days prior written notice by certified mail, return receipt requested, has been given to Authority.

F. Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII unless waived by Authority's Risk Manager.

G. Verification of Coverage. Consultant shall furnish Authority with original endorsements effecting coverage required by this section. The endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. The endorsements are to be on forms provided by Authority. All endorsements are to be received and approved by Authority before work commences. As an alternative to Authority forms, Consultant may elect to have its insurer provide complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these insurance specifications.

H. Subcontractors. Consultant shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

**12. Cooperation**. In the event any claim or action is brought against Authority relating to Consultant's performance or services rendered under this Agreement, Consultant shall render any reasonable assistance and cooperation that Authority might require.

**13. Termination.** Authority shall have the right to terminate the services of Consultant at any time, without cause, on 5 calendar days written notice to Consultant. As a condition precedent to termination for cause Consultant shall have five days to cure such cause. In the event this Agreement is terminated by Authority, Consultant shall be paid for any services properly performed to the last working day the Agreement is in effect, and Consultant shall have no other claim against Authority by reason of such termination, including, but not limited to, any claim for compensation.

**14. Suspension**. Authority may, in writing, order Consultant to suspend all or any part of the Consultant's services under this Agreement for the convenience of Authority or for work stoppages beyond the control of Authority or Consultant. Subject to the provisions of this Agreement relating to termination, a suspension of the work does not void this Agreement. In the event that work is suspended for a period exceeding 120 days, the schedule and cost for completion of the work will be adjusted by mutual consent of the parties.

**15. Notices**. Any notices, bills, invoices, or reports required by this Agreement shall be deemed received on (a) the day of delivery if delivered by hand during receiving party's regular business hours or by facsimile before or during receiving party's regular business hours; or (b) on the second business day following deposit in the United States mail, postage prepaid, to the addresses heretofore below, or to such other addresses as the parties may, from time to time, designate in writing pursuant to the provisions of this section.

Authority:	Consultant:
SFCJPA	HDR
615-B Menlo Avenue	2121 N. California Blvd, Suite 475
Menlo Park, CA 94025	Walnut Creek, CA 94596
Attention: Kevin Murray	Attention: Sergio Jimenez

**16. Non-Discrimination and Equal Employment Opportunity**. In the performance of this Agreement, Consultant shall not discriminate against any employee, subcontractor, or applicant for employment because of race, color, creed, religion, sex, marital status, national origin, ancestry, age, physical or mental handicap, medical condition, or sexual orientation. Consultant will take affirmative action to ensure that employees are treated without regard to their race, color, creed, religion, sex, marital status, national origin, ancestry, age, physical or mental handicap, medical condition, or sexual or mental handicap,

**17. Assignability; Subcontracting**. Neither party shall assign, transfer, or subcontract any interest in this Agreement or the performance of any of obligation hereunder, without the prior written consent of the other party, and any attempt by a party to so assign, transfer, or subcontract any rights, duties, or obligations arising hereunder shall be void and of no effect.

**18.** Compliance with Laws. Consultant shall comply with all applicable laws, ordinances, codes and regulations of the federal, state, and local governments.

**19.** Non-Waiver of Terms, Rights and Remedies. Waiver by either party of any one or more of the conditions of performance under this Agreement shall not be a waiver of any other condition of performance under this Agreement. In no event shall the making by Authority of any payment to Consultant constitute or be construed as a waiver by Authority of any breach of this Agreement, or any default which may then exist on the part of Consultant, and the making of any such payment by Authority shall in no way impair or prejudice any right or remedy available to Authority with regard to such breach or default.

**20. Attorney's Fees**. In the event that either party to this Agreement shall commence any legal action or proceeding to enforce or interpret the provisions of this Agreement, the prevailing party in such action or proceeding shall be entitled to recover its costs of suit, including reasonable attorney's fees. The venue for any litigation shall be San Mateo County or Santa Clara County.

**21. Exhibits; Precedence**. All documents referenced as exhibits in this Agreement are hereby incorporated in this Agreement.

**22.** Entire Agreement. This Agreement, and any other documents incorporated herein by specific reference, represent the entire and integrated agreement between Authority and Consultant. This Agreement supersedes all prior oral or written negotiations, representations or agreements. This Agreement may not be amended, nor any provision or breach hereof waived, except in a writing signed by the parties to this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

"Authority"

"Consultant"

San Francisquito Creek Joint Powers Authority

HDR ENGINEERING, INC.

By:\_\_\_\_\_

By:

Len Materman, Executive Director

Amy Gilleran, Senior Vice President

## Exhibit A – SAFER Bay Master Scope of Services

#### **Task 1: Project Management**

HDR will manage the project and its team members to ensure adherence to the scope, budget, and schedule, as well as conformance with appropriate engineering standards and practices. HDR will hold regular coordination and progress meetings with our Team members and SFCJPA to ensure all are apprised of project status, upcoming deliverables and activities. We will maintain communication by phone, email, and in-person meetings. This task includes the development of a document control system, project guide, and quality control plan. Through our project management process, the HDR Team will provide SFCJPA with monthly status updates, notification of any changes in scope or budget, and necessary corrective actions. Quarterly status reports will be prepared in a manner consistent with DWR grant reimbursement requirements.

**Deliverables:** Monthly and Quarterly status reports, Quality Control Plan, Project Guide, Meeting notes and agenda

**Assumptions:** Status meetings will be held at SFCJPA offices. Regular team meetings will be via conference call.

#### **Task 2: Identify Potential Flood Control Feature Alignments**

The HDR Team will work collaboratively with SFCJPA, its member agencies, and stakeholders to evaluate and screen viable alternative alignments in the project area north of San Francisquito Creek to Redwood City, including the Facebook campus and PG&E Ravenswood Substation. The evaluation of alignment alternatives will include consideration of the potential impact of site and project features such as geologic and subsurface conditions, constructability including levee subgrade preparation requirements, condition of existing levees that are to be built upon, locations of existing utilities and other structures, real estate and encroachments constraints, opportunities for restoration, mitigation, recreation, and construction cost. The preliminary evaluation will be based on SFCJPA objectives, and will be compliant with US Army Corps of Engineers (USACE), FEMA and California Department of Water Resources (DWR) requirements. The evaluation will result in a preliminary array of alignments to be carried forward to the feasibility stage of the project. A Preliminary Alternatives Report will be provided that summarizes evaluation and identification of a viable set of preliminary alternatives to carry forward into the Feasibility Study phase. This report will include an initial assessment of utilities, lands, encroachments and other potential conflicts and challenges to the project. The activities required during development of the Preliminary Alternatives Report will be expedited in order to inform the SFCJPA on the opportunities associated with the optional tasks, and allow early communication with project stakeholders. In addition to the Preliminary Alternatives Report, a Data Needs Memorandum, based on identification of the preliminary alignments, will be provided to support Task 3.

Deliverables: Preliminary Alternatives Report, Data Needs Memorandum

#### **Assumptions:**

- Up to 4 different alignments will be considered for each project reach, for up to 12 total alignments. The preliminary alternatives evaluation will identify up to 4 overall viable alternatives.
- Attend one half-day meeting (or equivalent effort) with the SFCJPA and stakeholders for discussion of potential alignments and restoration features.

## **Task 3: Preliminary Engineering Evaluations**

#### Subtask 3.1: Surveying

The HDR Team will review existing LiDAR and topographic survey information in the project area for quality and coverage, and will attempt to develop conversions for each data set so that all data are reasonably co-registered within the project's horizontal and vertical reference systems, sufficient for planning level use. Record assessor's parcel map Geographic Information System data will be procured and imported into AutoCAD to serve as a backdrop for the project Landnet.

Research will be performed to gather public record maps for highways, state lands and major residential subdivisions. This information will be analyzed to develop a preliminary location, and added to the Landnet. We will also perform research with local utility agencies to obtain record map information for utilities, and the approximate location shown within the Landnet.

Minimal field surveys will be performed, as needed, in order to perform QC checks of existing data, establish survey boundary monumentation, and identify specific utilities and structures of specific interest. This information will be combined with other collected data into an AutoCAD drawing.

**Deliverables:** Survey Report, Planning Level Topographic Mapping in CAD format, Utility and Encroachment Survey Report

## Assumptions:

- 5 days of surveys are budgeted to perform the above and work will be coordinated with SFCJPA. Note that access may be required to some private lands, and assistance will be needed to obtain access permission.
- Further research and field surveys will be required to determine boundary and utility locations for later stages of the project.
- Planning level topography will rely on existing survey and data coverages. No new aerial or field mapping will be provided.

#### Subtask 3.2: Geotechnical Evaluation and Investigations

Under Phase 1, we will conduct a geotechnical investigation to a level sufficient to develop preliminary geotechnical recommendations to support the Feasibility Study. After the Feasibility Study is completed and a preferred alignment is selected, we would undertake a supplemental geotechnical study under Phase 2. The Phase 2 work will include additional field explorations, laboratory testing, and analysis, and the preparation of a Final Geotechnical Report. The focus of the Phase 2 investigation would be to gather information and perform additional analyses for areas where there are data gaps.

**Review of Information and Site Reconnaissance** - HDR will review available published information and information provided to us by SFCJPA on geologic and geotechnical information in the site area, including geotechnical reports and logs of subsurface explorations. We will perform a site reconnaissance, and note physical site features that could impact the project from a geotechnical perspective.

**Field Investigation** - Undertake a subsurface exploration program along the proposed project alignment and alternative alignments. Prior to conducting the field work, we will prepare a Field Work Plan and Health and Safety Plan, obtain the applicable encroachment and drilling permits, check site access, and check for the presence of underground utilities by contacting Underground Service Alert (USA). We will retain and coordinate with appropriate exploration subcontractors to select suitable exploration equipment to access the desired exploration locations, to the extent that is reasonable and practical.

Our scope and fee do not include measures such as mobilizing barges or rafts, or preparing temporary pads to explore hard-to-access and potentially sensitive areas such as marshes or ponds. Drill cuttings and fluids will be generated from the borings. We will contain drill cuttings and fluids in drums, and transport them to a nearby temporary storage area provided by SFCJPA. Following chemical testing of samples of the drummed materials, we would arrange to have the materials transported to a suitable disposal facility. Our scope and fee assume that the subsurface materials encountered are free of contaminants. If that is not the case, additional scope and fee would be needed for soil handling and disposal.

**Laboratory Testing** - A laboratory testing subcontractor will be retained to perform geotechnical laboratory tests on selected samples obtained from the borings. Testing will include moisture content, density, Atterberg limits, gradation, consolidation, and shear strength, as appropriate.

**Geotechnical Engineering Analyses and Evaluations** - Engineering analyses to develop geotechnical conclusions and recommendations for the proposed project will be performed. We will perform stability and seepage analyses for up to seven cross sections. For each cross section location, stability, and seepage analyses will be performed for one levee geometry and one design water surface elevation for the following conditions, which we judge are potentially the most critical loading conditions that may occur during the design life of the levees: 1) Stability at the end of levee construction, 2) Stability under rapid flood loading conditions, 3) Stability under rapid drawdown loading conditions (when floodwaters recede), 4) Seepage (both levee through seepage and underseepage), and 5) Stability under seismic loading, including estimated magnitudes of liquefaction induced levee settlement over time. Our scope and fee do not include the development and implementation of liquefaction mitigation measures, such as soil improvement. Should such conditions be encountered, the SFCJPA would need to weigh the cost and benefit of liquefaction mitigation measures versus the risks. This issue would need to be addressed as a separate topic, if it arises, and we have not included a scope for it herein.

Deliverables: Feasibility Level Geotechnical Report

## Assumptions:

- Level of effort assumes useful existing geotechnical data are available and will be provided by SFCJPA.
- Field exploration program based on performing up to 14 borings or CPTs to 40 to 50 feet.
- It is assumed that the new and existing data together would provide on average, an exploration every 2,000 feet along levee crest plus some explorations beyond the levee alignment.
- Also assumes geotechnical analysis for up to 7 cross sections, for Feasibility Level Geotechnical Report.

## Subtask 3.3: Coastal Hydraulics

The HDR Team will prepare a Design Conditions Memorandum to support the feasibility level analyses of the alternative alignments developed under Task 2. Design conditions will be based on prior studies including USACE Shoreline, FEMA Bay Modeling, and SBSPRP. The evaluation will document the design elevation for 50-year project lifespan with a sensitivity test for anticipated geomorphic changes to the shoreline. Specific activities under Task 3.3 will include:

- Prepare a proposed methodology document for review and approval by SFCJPA, FEMA, USACE.
- Identify climate change Relative SLR scenarios for study using latest guidance from National Academy of Science, USACE, National Oceanic and Atmospheric Administration, and United States Geological Survey. The scenarios will consider vertical land motions based on benchmark re-leveling and more recent IPSAR.
- Establish water levels, winds and waves for the study area starting with FEMA Regional Bay and recent USACE evaluations. Develop 50-year time series of water levels, winds and waves at several selected offshore locations incident to flood protection levee reaches.
- Compare water levels time series and Extreme Value Analysis (EVA) extrapolations based on transfer of Presidio water levels versus FMEA Regional Bay model (by Danish Hydraulics Institute). Convert nearshore waves to offshore values without bottom friction for comparison. Compare wave time series for offshore locations and EVA extrapolations for extreme values. Numerical wave models or parametric equations will be utilized.
- For each levee reach within project area, we will run simple wave runup time series with wind setup and friction for one location in each reach. We will identify approximate "no-overtopping crest elevation" for range of SLRs. Apply two to four selected "events" (still water level, wind setup wind waves) with WHAFIS profile model to ascertain design crest elevations (total water level + freeboard with SLR allowance) for each reach, for suite of sub-reach variations / options / scenarios.
- Assess erosion potential and identify recommended approach.

**Deliverables:** Coastal Hydraulics Design Conditions Memorandum which documents the analyses and findings.

Assumptions: Technical studies from partnering agencies (FEMA, USGS, USACE) will be provided.

## Subtask 3.4: Interior Drainage

The HDR Team will review the interior landside levee drainage system to asses how the proposed levee alignment will impact current drainage patterns and whether the existing drainage system is likely to have sufficient capacity to provide flood protection at levels that will meet FEMA certification, once the levees are in place. We will review available record drawings to determine volume of flow collected along the proposed/existing levee alignment and discharged into the salt ponds, other information on drainage infrastructure that is provide to us by public agencies, and perform site visits to observe and confirm specific drainage-related features. We may conclude from our evaluation there is insufficient information to readily characterize the existing layout, capacity, and function of the interior drainage system, and identify appropriate design stormwater flow rates.

**Deliverables:** Interior Drainage Design Conditions Memorandum describing existing drainage conditions, gaps in drainage hydrology assessments, and potential coastal levee impacts to those conditions.

#### Assumptions:

- Sufficient information will be available to readily characterize the existing layout, capacity and function of the interior drainage system and identify appropriate design stormwater flow rates.
- It is assumed hydraulic modeling of the drainage system is not required.
- SFCJPA and member agencies will provide relevant record drawings of existing drainage system.

#### Subtask 3.5: Interior Drainage Optional Task

Once protection is provided against coastal and fluvial flood sources, the appropriate flood map for FEMA will be determined the local drainage. At this time, it is not known if the existing drainage can meet FEMA certification standards. If the existing conditions assessment suggests that drainage issues may preclude certification, than the JPA may consider the some or all of the following optional tasks:

- Develop new or revise existing hydrology and hydraulic models of the drainage system(s) to estimate design drainage flow rates
- Develop new or revise existing hydrology and hydraulic models to quantify drainage capacity relative to FEMA certification standards and, if necessary to design drainage system improvement
- Consider potential drainage system vulnerability to projected future climate change conditions for SLR, watershed hydrology, and/or groundwater levels
- Conduct interior flood mapping of existing or proposed conditions

## Task 4: Feasibility Study

#### Subtask 4.1: Project Alignments

Based on evaluations conducted in Task 3, the HDR Team will conduct a feasibility assessment of the potential alignments established during Task 2 (less the PG&E Ravenswood Substation, which may be awarded at a later time under a separate Task Order). As noted above, these alternatives will take into account the existing conditions, opportunities, and constraints associated with the ecosystem habitat of adjacent lands, recreation, and connectivity associated with the Bay Trail and other facilities, and utility and transportation corridors. Alternative evaluations will be based on criteria, constraints, and objectives developed and confirmed with SFCJPA and its member agencies. To assess opportunities and constraints, our Team will also prepare a Biotic Opportunities and Constraints Report. The Biotic Opportunities and Constraints Report will analyze preliminary biotic resource impacts associated with up to four potential project alignments, and will contain descriptions of existing habitat conditions (including a reconnaissance-level habitat map) and other information that will be incorporated into CEQA and permitting documentation in the subsequent tasks.

For each of the project alignments, the feasibility report will include documentation of design considerations, flood control, restoration and recreation features, utility and real estate impacts, preliminary assessment of environmental impacts, and potential construction phasing. The feasibility report will include feasibility level designs (plans and typical sections) for each of the alternatives identified in Task 2. The Feasibility Report will include economic, quantitative, and qualitative evaluations of each of the (up to 4) alternatives required to identify the recommended project/alignment to carry forward into design (Task 8). The report will document the basis for selection of the alternative and identify preliminary design criteria.

## Subtask 4.2: Mitigation and Permitting

For each of the potential alignments determined in Task 2, the HDR Team will provide input on possible environmental resource area opportunities and constraints; identify possible permits; identify additional technical studies to support the environmental and permitting documentation; and recommend the appropriate level of environmental clearance documentation, including an assessment of federal involvement and associated NEPA requirements. The HDR Team will review available documentation, run data base searches for documented biological and cultural resources, and use the IS Environmental Checklist as a guide to qualitatively review other resource topics. The results will be incorporated into the Feasibility Study to inform the decision on the preferred alignment.

During this process, the HDR Team will collaborate with SFCJPA to analyze trade-offs between impacts, costs, and other design objectives and criteria. We will compare the opportunities and constraints associated with various biotic and regulatory compliance issues associated with each alignment.

Early regulatory agency coordination is an important component of streamlined environmental compliance; therefore the HDR Team will assist the SFCJPA to communicate with agency staff during the feasibility study phase of the project to ensure that agency input is integrated into alternatives development and mitigation. Prior to initiating regulatory agency meetings, our ecologists will assist the SFCJPA in communications with key managers for SBSPRP (e.g., John Bourgeois) and USFWS Don Edwards National Wildlife Refuge (e.g., Eric Mruz) to establish the tidal marsh habitat mitigation concept(s) that will compensate for project impacts via the SBSPRP. We will utilize the preliminary wetland impact/mitigation quantities developed in our Biotic Constraints and Opportunities Report above and our understanding of the SBSPRP to inform this discussion. We (with the SFCJPA) will then bring the SBSPRP mitigation concept developed from these discussions along with on-site T-zone habitat enhancements on the outboard levee slope to the regulatory agencies for their early input.

Our team's ecologists will assist the SFCJPA in communications with the regulatory agencies to get agency staff assigned to this specific project prior to meetings, such that we communicate with the agency staff that will ultimately issue permits for the project. We will attend meetings with the SFCJPA, USFWS, USACE, CDFW, RWQCB, and BCDC on project design and potential mitigation. Because agency feedback will be incorporated into the project's design and mitigation package, attendance of multiple interagency meetings may be necessary. Such meetings will be designed to best facilitate various parts of the overall regulatory process, for example USACE, USFWS, and CDFW meetings for FESA/CESA regulated species (e.g., California clapper rail, salt marsh harvest mouse, western snowy plover) or USACE, RWQCB, and BCDC meetings for tidal wetlands impacts and mitigation considerations under Sections 404 and 401 of the Clean Water Act (CWA).

## Subtask 4.3: Cost Estimate

The HDR Team will prepare an initial opinion of probable construction quantities and costs for each alignment alternative. This will include a description of cost assumptions, and will be broken out into soft costs and construction costs. Cost estimates will be American Association of Cost Engineering (AACE) Class 4.

**Deliverables:** Draft and Final Feasibility Report, including preliminary plans, estimates, schedule.

## **Assumptions:**

- Up to four alternative alignments will be evaluated.
- Geomorphic change will be based on analysis by SBSP or other nearby reference restoration sites.
- Attendance at one meeting with the SFCJPA to review Mitigation and Permitting options.
- One round of revisions to the Draft Feasibility Report based upon one set of consolidated SFCJPA comments.
- Up to 2 meetings with SBSPRP managers and up to 3 regulatory agency meetings.

#### Task 5: Additional alignment alternatives (optional task)

These additional alignment alternatives expand the reach of shoreline would be evaluated for coastal flood protection. Since the additional shoreline has specific opportunities and constraints, additional scope and budget is required. The degree to which these additional alignments can use information from the prior tasks varies significantly; hence the estimated level of effort varies too. In the scope and budget estimates for these tasks, we assume this work is done concurrently with and integrated with Tasks 1-4 to maximize shared effort and minimize additional cost. If any of the subtasks in this task are pursued independently, the budget would be larger. Also note that since Task 5.2 and Task 5.3 include an overlapping reach (south from San Francisquito Creek to Matadero Creek), only one of these subtasks would need to be selected and funded.

#### Subtask 5.1: PG&E's Ravenswood Substation

The scope outlined in Tasks 3 and 4 will be extended to include consideration of a levee around the PG&E Ravenswood Substation. We will consider alignments that include a ring levee around PG&E property, and a levee extending along Highway 84 coupled with a levee around the PG&E property. This task will include additional geotechnical investigation for the added levee length, additional coastal hydraulics analyses, evaluation of potential levee alignments and closure features. Development of text, figures and cost estimates will be coordinated with Tasks 3 and 4, and submitted with those task deliverables. It is assumed that PG&E is willing to consider levees and/or closure structures on its property.

#### Subtask 5.2: From San Francisquito Creek South (Palo Alto north of Matadero)

The scope outlined in Tasks 1-4 will be extended to include consideration flood protection from San Francisquito Creek to Matadero Creek. The alignment of this levee has a likely route that will extend from Friendship Bridge, along San Francisquito Creek, around the golf course, airport, and wastewater treatment plant, coupled with a second segment along Matadero Creek between East Bayshore Road and the landfill. While this reach of shoreline can use some of the regional background information collected as part of Tasks 1-4, it has substantially different physical setting and set of involved stakeholders and agencies. For this reason, we recommend a separate, but parallel process be conducted for the shoreline south of San Francisquito Creek. The regional coastal hydraulics should still be largely applicable, but additional geotechnical investigation and nearshore wave modeling will need to be conducted specific to this reach. In addition, this reach has an entirely different set of interior drainage facilities.

**Deliverables:** Feasibility Report, including preliminary plans, estimates, schedule.

#### **Assumptions:**

- Up to four alternative alignments will be evaluated.
- Geomorphic change will be based on analysis by SBSP or other nearby reference restoration sites.
- Attendance at one meeting with the SFCJPA to review Mitigation and Permitting options.
- Matadero Creek and its north bank flood protection measures are sufficient to prevent coastal flooding from south of the creek from impacting the area north of the creek.

#### Subtask 5.3: From San Francisquito Creek South (Palo Alto-Mountain View border)

The scope outlined in Tasks 1-4 will be extended to include consideration flood protection from San Francisquito Creek to the Mountain View border. While the northern portion of this alignment has a very likely route (from Friendship Bridge, along San Francisquito Creek, around golf course, airport, and water treatment plant), the alignment in the southern portion may have different routes as a function of the landfill, marsh restoration, and the levee alignment for the Palo Alto Flood Basin south of Matadero Creek. While we recognize that the reach north of Matadero Creek may offer the opportunity to remove a substantial developed area from the FEMA floodplain, we recommend that the entire reach of Palo Alto shoreline be considered simultaneously, at least at the feasibility level, rather than limiting to just north of Matadero Creek.

While much of this project area's shoreline has high density development that significantly constrains the levee alignment corridor, the Palo Alto Flood Basin is a minimally-developed portion of the shoreline that warrants a broader planning effort. We recognize and support the City of Palo Alto's goal of preserving the function of the flood basin as part of its overall floodplain management strategy for the Matadero, Barron, and Adobe Creek watersheds. However, because of the potential for sea level rise to significantly impact local groundwater, the flood basin's gravity-based drainage, as well as make long-term operations and maintenance of the outboard levees increasingly expensive, we think an alternative configuration may be feasible.

For example, a viable configuration for the flood basin may consist of adding an interior levee to split the basin into a landward detention basin and an outboard restored tidal marsh. The landward detention basin could expand upon the Palo Alto Marsh Enhancement Project, which uses reclaimed wastewater to create a freshwater/brackish marsh. The detention area may require the addition of pumping facilities to avoid impacts on creek drainage; this pumping would also address the reduced gravity drainage resulting from sea level rise. The outboard restored tidal marsh would blend with the existing tidal marsh to the north and the proposed SBSP tidal marsh restoration to the south. The marsh would front the coastal levee, thereby offering wave dissipation and erosion protection for the levee.

While this configuration may require new infrastructure (e.g. pumps), these costs may be offset by a significantly shorter the length of levee needed to protect the south Palo Alto and Mountain View shoreline and reduced long term operations and maintenance costs.

While this reach of shoreline can use some of the regional background information collected as part of Tasks 1-4, it has substantially different physical setting and set of involved stakeholders and agencies. For that reason, we recommend a separate, but parallel process be conducted for the shoreline south of San Francisquito Creek. The regional coastal hydraulics should still be largely applicable, but nearshore wave modeling will need to be conducted specific to this reach. In addition, this reach has an entirely different set of interior drainage facilities. Because of the flood basin provides detention for the creeks, the feasibility study will need to include creek hydrology and hydraulics as part of the evaluations.

**Deliverables:** Feasibility Report, including preliminary plans, estimates, schedule.

## **Assumptions:**

- Up to four alternative alignments will be evaluated.
- Geomorphic change will be based on analysis by SBSP or other nearby reference restoration sites.
- Existing hydrologic and hydraulic models of the Matadero, Barron, and Adobe Creek watersheds and channels are sufficient for feasibility evaluations.

#### Task 6: Project Management

The HDR Team will update the Project Guide developed under Task 1 and incorporate Phase 2 activities. Phase 2 Project Management will include:

- Continued communication and coordination with the HDR Team, SFCJPA and stakeholders
- Continued document control
- Monthly progress meetings and status reports
- Continued technical review of documents and deliverables.

Deliverables: Updated Project Guide, monthly status reports

**Assumptions:** Status meetings will be help at SFCJPA offices. Regular team meetings will be via conference call.

## Task 7: Base Mapping

The HDR Team will produce new topographic and digital orthophoto mapping at a scale of 1"= 50' (1:600). New stereo aerial photography will be acquired and provide as a significant source for up to date planimetrics, accurate terrain modeling and high resolution (0.25 ft.) color, digital orthophoto imagery. Aerial photo coverage is planned to include optional areas noted in Tasks 5.3 and 5.4.

The new aerial photography will also be applied to review existing topographic data, such as; LiDAR, photogrammetric terrain and field surveys; and to update or supplement the terrain data where needed. Survey data produced under Task 3.1 and new field measurements and cross-section data, as outlined in the RFP, will be incorporated into the new mapping. Airborne GPS (AGPS) will be used for the primary control of the aerial photography.

In addition to the use of AGPS, approximately 20 ground control points will be surveyed for controlling the stereo photography. Where practical, surveyed locations of existing - photo identifiable features, project control and cross-sections will be re-employed to reduce the photo control survey and associated costs and strengthen the aerotriangulation.

**Deliverables:** Survey Control Report, Topographic Survey, Base Maps, orthophotos, digital terrain model

## **Assumptions:**

- Orthophoto imagery will be provided in GeoTIFF and compressed MrSID file formats.
- A buffered zone of approximately 50 feet (Westerly) and 500 feet (Easterly) will be applied to alignments for the purpose of defining the general mapping limits.
- However, the detailed limits will be reviewed with SFCJPA prior to the mapping efforts to ensure that coverage incorporates items deemed significant and minimizes collection of features that are deemed non-essential.
- Orthophoto mapping limits will be developed to provide additional referential imagery, up to 100 feet beyond the topographic mapping.

## Task 8: 30% Plans, Specifications and Estimates (PS&E)

The HDR Team will generate finished construction drawings, specifications, and estimate of probable construction costs suitable for bidding and construction. This task includes revegetation PSE for native plant dominated T-zone habitat on the outboard levee slope (including horizontal levees) adjacent to the Faber Tract, Laumeister Tract, and Cooley Landing Salt Pond Restoration site. PS&E will be completed for the recommended levee alignment identified during Task 4, Feasibility Study. PS&E for additional alignments (Tasks 5.1 through 5.3) may be awarded separately under optional tasks 20.1 through 20.3. PS&E submittals will be reviewed by JPA and associated member agencies at the 30, 60 and 90 percent levels. The HDR Team will revise PS&E, incorporating the comments from each review. The preparation of PS&E shall include plans, details, cross sections, technical specifications, quantity calculations, and preliminary and final estimates of probable construction costs.

## Subtask 8.1: Design Phase Geotechnical Evaluations and Report

HDR will undertake the second phase of our geotechnical study, following the selection of the preferred alternative, to support preparation of final design and specification. Phase 2 services will include supplemental field explorations, laboratory testing, and analyses similar to those performed

during Phase 1, and the updating of our Feasibility Level Geotechnical Report. This would result in a Final Geotechnical Report with recommendations appropriate for project design. The level of effort needed for the Phase 2 geotechnical study will depend on the alignment selected and its considerations, the extent of the data gaps that exist following the completion of the Phase 1 work, and the variation in site and subsurface conditions encountered. HDR recommends this estimate be re-visited following the completion of Phase 1, and adjusted accordingly if needed.

## Subtask 8.2: 30% Plans

A 30% design package will be prepared for the recommended alternative identified in the Task 4 Feasibility Study. In addition to supplemental geotechnical evaluations, additional hydraulic modeling may be run to confirm elevations.

Drawings will be prepared using 2011 Auto Cad Civil 3D software. A preliminary sheet listing for the 30% design is presented in Table 1. Drawings will be prepared per Santa Clara Valley Water District design standards.

Drawing Title	Approximate Sheets No.							
	Final Bid Set	30% Plans						
Title, Vicinity Map, Drawing List, Abbreviations & Legend, General Notes	5 Sheets	5 Sheets						
Site Plan	1 Sheet	1 Sheet						
Survey Control	32 Sheets	16 Sheets						
Demolition	22 Sheets	0 Sheets						
Levee Typical Sections	35 Sheets	20 Sheets						
Levee Plan and Profile (40 Scale)	255 Sheets	255 Sheets						
Levee Cross Sections	260 Sheets	0 Sheets						
Levee Details	20 Sheets	0 Sheets						
Utility Plan	50 Sheets	40 Sheets						
Roadway and Traffic Control	20 Sheets	0 Sheets						
Levee Revegetation	35 Sheets	35 Sheets						
TOTAL	735 Sheets	372 Sheets						

## Table 1 – Preliminary Drawing List, 30%

## Subtask 8.3: Technical Specifications

Technical specifications at the 30% submittal will include an outline of anticipated technical sections only.

## Subtask 8.4: Opinion of Probable Construction Costs

The HDR Team will prepare a 30% opinion of probable construction costs (OPCC). Quantity take-off calculations and opinion of probable construction costs will be prepared in a Microsoft Excel<sup>™</sup> spreadsheet. This OPCC will include a contingency factor of 25%.

**Deliverables:** Final Geotechnical Report, 30% Plans, (Half-size drawings only) Electronic format will be submitted, 30% OPCC, Table of Contents for Technical Specification.

#### Assumptions:

- Drawings will include design for the recommended alternative identified during Task 4.
- Analysis of additional alternatives will be beyond the scope of this task.
- Real estate costs will not be included in the OPCC.

#### Task 9: 60% PS&E

After the 30% documents are reviewed, the HDR Team will further develop the design to address comments provided by the SFCJPA and member agencies, and to provide additional detail not provided in the 30% submittal. Responses to comments will be provided to the SFCJPA; any non-concur responses will be resolved with the SFCJPA before significant progress on the 60% design.

#### Subtask 9.1: 60% Plans

Plans will be prepared to provide additional detail not provided by the 30% design. A preliminary sheet listing for the 60% design is presented in Table 2. Drawings will be prepared per Santa Clara Valley Water District design standards. Drawings will be prepared using 2011 Auto CAD Civil 3D software as previously submitted.

#### Table 2 – Preliminary Drawing List, 60%

Drawing Title	Approximate Sheets No.							
	Final Bid Set	60% Plans						
Title, Vicinity Map, Drawing List, Abbreviations & Legend, General Notes	5 Sheets	5 Sheets						
Site Plan	1 Sheet	1 Sheet						
Survey Control	32 Sheets	16 Sheets						
Demolition	22 Sheets	15 Sheets						
Levee Typical Sections	35 Sheets	35 Sheets						
Levee Plan and Profile (40 Scale)	255 Sheets	255 Sheets						
Levee Cross Sections	260 Sheets	260 Sheets						
Levee Details	20 Sheets	10 Sheets						
Utility Plan	50 Sheets	50 Sheets						
Roadway and Traffic Control	20 Sheets	10 Sheets						
Levee Revegetation	35 Sheets	35 Sheets						
TOTAL	735 Sheets	692 Sheets						

## Subtask 9.2: Technical Specifications

The 60% technical specification submittal will consist of preliminary specifications for major design features and general specifications (front-end documents).

## Subtask 9.3: Opinion of Probable Construction Costs

HDR will prepare a more detailed OPCC in Microsoft Excel<sup>™</sup> spreadsheet format. A draft bid schedule will be prepared for the 60% submittal. The OPCC will include a contingency of 20%.

**Deliverables:** 60% Plans, (Half-size drawings only) Electronic format will be submitted, 60% OPCC and bid schedule, Table of Contents, General Specifications, Preliminary Specifications for Major Design Features.

#### Assumptions:

- Real estate costs will not be included in the OPCC.
- Drawings will include design progressed from the 30% submittal along with results from the preliminary hydrology and hydraulics modeling performed by the Team.
- The plan set will consist of 2 separate volumes.
- The 60% design submittal will serve as the "design freeze" point. Since at the 60% design the majority of drawings are substantially complete, any changes in design elements or project features following submittal of the 60% design will require a revision to the scope, budget, and schedule.

#### Task 10: 90% PS&E

After the 60% documents are reviewed, HDR will further develop the design to address comments provided by the SFCJPA and member agencies, and to provide additional detail not provided in the 60% submittal. Responses to comments will be provided to the SFCJPA; any non-concur responses will be resolved with the SFCJPA before significant progress on the 90% design. The 90% design documents are intended to include a level of detail required for a contractor to be able to construct all the flood control features for this project.

#### Subtask 10.1: 90% Plans

Plans will be prepared to provide additional detail not provided by the 60% design. All sheets will be provided at the 90% design. These are summarized in Table 3. Drawings will be prepared per Santa Clara Valley Water District design standards. Drawings will be prepared using 2011 Auto CAD Civil 3D software as previously submitted.

Drawing Title	Approximate She	ets No.
	Final Bid Set	90% Plans
Title, Vicinity Map, Drawing List, Abbreviations & Legend, General Notes	5 Sheets	5 Sheets
Site Plan	1 Sheet	1 Sheet
Survey Control	32 Sheets	36 Sheets
Demolition	22 Sheets	22 Sheets
Levee Typical Sections	35 Sheets	35 Sheets
Levee Plan and Profile (40 Scale)	255 Sheets	255 Sheets
Levee Cross Sections	260 Sheets	260 Sheets
Levee Details	20 Sheets	20 Sheets
Utility Plan	50 Sheets	50 Sheets
Roadway and Traffic Control	20 Sheets	20 Sheets
Levee Revegetation	35 Sheets	35 Sheets
TOTAL	735 Sheets	735 Sheets

#### Table 2 – Preliminary Drawing List, 90%

## Subtask 10.2: Technical Specifications

The 90% technical specification submittal will consist of a full set of specifications, General specifications (front-end documents), Special Provisions, and a bid schedule.

## Subtask 10.3: Opinion of Probable Construction Costs

HDR will prepare a detailed OPCC in Microsoft Excel<sup>™</sup> spreadsheet format. A bid schedule will be prepared for the 90% submittal. The 90% OPCC will include a contingency of 10%.

**Deliverables:** 90% Plans, (Half-size drawings only) Electronic format will be submitted, 90% OPCC and Bid Schedule, Table of Contents, General Specifications, Specifications for Design Features, Special Provisions.

#### **Assumptions:**

- Real estate costs will not be included in the OPCC.
- The plan set will consist of 2 separate volumes.

#### Task 11: 100% PS&E

After the 90% documents are reviewed, HDR will develop a 100% set of Plans, Specifications, and OPCC. The 100% documents will revise the 90% submittal by addressing errors identified during the 90% review; however any changes to the design features will require an amendment to the scope of work at the 100% design level. Responses to comments will be provided to the SFCJPA; any non-concur responses will be resolved with the SFCJPA before significant progress on the 100% design.

#### Subtask 11.1: 100% Plans

The 100% design set will incorporate any errors identified in the 90% review. Drawings will be prepared per Santa Clara Valley Water District design standards. Drawings will be prepared using 2011 Auto CAD Civil 3D software as previously submitted.

Drawing Title	Approximate Sheets No.						
	Final Bid Set	100% Plans					
Title, Vicinity Map, Drawing List, Abbreviations & Legend, General Notes	5 Sheets	5 Sheets					
Site Plan	1 Sheet	1 Sheet					
Survey Control	32 Sheets	36 Sheets					
Demolition	22 Sheets	22 Sheets					
Levee Typical Sections	35 Sheets	35 Sheets					
Levee Plan and Profile (40 Scale)	255 Sheets	255 Sheets					
Levee Cross Sections	260 Sheets	260 Sheets					
Levee Details	20 Sheets	20 Sheets					
Utility Plan	50 Sheets	50 Sheets					
Roadway and Traffic Control	20 Sheets	20 Sheets					
Levee Revegetation	35 Sheets	35 Sheets					
TOTAL	735 Sheets	735 Sheets					

#### Table 2 – Preliminary Drawing List, 100%

## Subtask 11.2: Technical Specifications

The 100% technical specification submittal will consist of a full set of specifications, General specifications (front-end documents), Special Provisions and a final bid schedule.

#### Subtask 11.3: Opinion of Probable Construction Costs

HDR will prepare a detailed OPCC in Microsoft Excel<sup>™</sup> spreadsheet format. A bid schedule will be prepared for the 100% submittal. The 100% OPCC will include a contingency of 10%.

**Deliverables:** 100% Plans, (Half-size drawings only) Electronic format will be submitted ,100% OPCC and Bid Schedule, Table of Contents, General Specifications, Specifications for Design Features, Special Provisions.

#### Assumptions:

- Real estate costs will not be included in the OPCC.
- The plan set will consist of 2 separate volumes.

#### **Task 12: Certification Reports**

The HDR Team will update the reports and other documents prepared under previous tasks, and compile the supporting calculations, to develop a set of documents for submission to comply with CFR 44 65.10. This will include the Final Design Report, Geotechnical Report, O&M Manual, hydraulic and relevant engineering calculations, and appropriate supporting documents.

#### **Deliverables:** Certification reports

#### Task 13: Conditional Letter of Map Revision (CLOMR)

The HDR Team will assist SFCJPA in preparation of a Conditional Letter of Map Revision for submittal to FEMA after completion of final design to secure conditional FEMA approval for removing protected properties from the Special Flood Hazard Area when construction is complete.

The CLOMR process allows a community to determine in advance whether and how a proposed project would affect flood maps in compliance with NFIP regulations. A CLOMR is FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the Special Flood Hazard Area (SFHA) and Base Flood Elevations (BFEs).

Tasks below outline the process that HDR recommends to create the best possible chance of receiving an approved CLOMR submittal.

#### Subtask 13.1: Pre-preparation Consultation with FEMA Region IX

HDR will consult with FEMA Region IX officers on the project scope to uncover any fatal flaws, clarify requirements, and eliminate as many uncertainties that may present future obstacles in receiving an approved CLOMR package.

## Subtask 13.2: Comply with FEMA's Endangered Species Act (ESA) Requirements (Procedural Memorandum 64)

FEMA requires documented ESA compliance prior to issuance of a CLOMR. FEMA must receive confirmation of ESA compliance from U.S. Fish and Wildlife Services (USFWS) and the National Marine Fisheries Service (NMFS). HDR will assist in coordination between the Services and complete and submit required application documentation.

#### Subtask 13.3: Prepare and Submit CLOMR Application

This subtask includes preparing the FEMA forms for the CLOMR submittal and compiling supporting data, including model documentation, drawings, models, work maps, and levee and floodwall design plans (satisfying Code of Federal Regulations Section 65.10).

The process for obtaining a CLOMR requires submittal of standard forms, relevant project plans and data for review by FEMA's consultants. The completion of Forms 1, 2, 3, 4, and 5 may be required for this CLOMR submittal. A brief description of the required information is listed for each form below.

## Form 1 – Overview and Concurrence Form

- Provides a project overview and revision information.
- The applicant(s) must provide a current fee of \$6,050.00 for review of a CLOMR of this scope. The fees are established by Congress.
- The Chief Executive Officers (CEOs) of the communities in which the project is proposed must submit a signed declaration that they support the application.
- The certification of documentation by a Registered Professional Engineer and/or Land Surveyor is also required.

## Form 2 – Riverine Hydrology and Hydraulics Form

- Describes reasons for revised hydrologic results; compares the effective to the revised discharges; and discusses the methodology used for the new analysis. The updated hydrologic model and backup data are submitted in support.
- Describes the hydraulic modeling methodology used, the tie-ins of revisions to effective model, and comparisons of the effective to the revised model results.
- Provides certification documentation of the topographic map data, including an annotated FIRM panel showing revised floodplains including tie-in with effective floodplains; and metadata and project data with digital mapping.

#### Form 3 – Riverine Structures Form

- Provides the name, type, location, and appropriate cross-section labels for all new structures.
- Indicates all accessory structures included with channelization; provides channel design criteria (capacity and type of flow); and indicates areas affected by sediment transport. Certified engineering drawings are included.
- Provide reasons for revised bridge modeling and indicate the model used to analyze the hydraulics; attach plans of the structure certified by a registered professional engineer.
- Indicates new or redesigned levee/floodwall system elements and the amount of freeboard; lists closure devices for all openings through levee system; summarizes information where embankment protection is required; summarizes the analysis of the levee foundation and analysis of potential settling of the levee; summarizes the analysis of potential flooding from interior drainage; provides a summary of the operational plan and criteria, including an indication whether the maintenance plan for levee is in compliance with NFIP; and submit the applicable Operation and Maintenance Plan.

#### Form 4 – Coastal Analysis Form

• Provides the basic information on the scope and methodology of coastal analyses that are prepared in support of the revision request.

## Form 5 – Coastal Structures Form

- Provides the basic information regarding hydraulic structures constructed along the coast.
- This form is used for revisions request that involve proposed levees and floodwalls.

Once the CLOMR package is submitted, it is reviewed for completeness, and any additional information that is required must be provided by the applicants before technical review can begin. Review begins when the information is deemed complete. Typically, there are requests for additional information or revision after the review has begun.

#### Subtask 13.4: Coordinate with FEMA's Consultant During Review

HDR will coordinate with FEMA and their Review Consultant regarding the CLOMR submittal. It is anticipated that coordination with FEMA's Consultant will require conducting a completeness check; responding to interim comments/questions; and revising and resubmitting updated documents. It is typical for the Review Consultant to request additional information during the review process.

HDR will review and respond to one comprehensive set of comments.

## Subtask 13.5: Public Outreach regarding CLOMR Results

It is likely that public outreach will be needed in the course releasing the CLOMR/LOMR. The JPA may require an informational presentation of the CLOMR process; the respective NFIP jurisdictions may require public hearings to approve the proposed CLOMR; and FEMA may require notification of affected parties and a subsequent public hearing. HDR's current public outreach specialist on the project is available to assist the team and the JPA with these efforts.

Deliverables: Conditional Letter of Map Revision Submittal Package

## **Assumptions:**

- It is assumed that all permitting documents and models required for submission of the CLOMR submittal and FEMA's PM 64 requirements will be readily available. This task does not include additional fee for hydraulic modeling, environmental permitting, interior drainage, and/or design analysis for any of the proposed flood control facilities. It is assumed that all modeling and design efforts are included under other tasks.
- HDR will attend two coordination meetings with FEMA and/or JPA staff regarding the CLOMR application.
- CLOMR processing fees will be paid separately by the JPA directly to FEMA. The processing fee is \$6,050.
- It is assumed that the JPA will coordinate required signatures for the final CLOMR deliverable. The CEO of each jurisdiction (Cities of East Palo Alto and Menlo Park, County of San Mateo, and potentially County of Santa Clara and Santa Clara Valley Water District) will need to sign.
- Certification for the topographic data sources must be provided to FEMA. It is assumed that the certification documentation for topographic data will be developed and provided by Towill.
- It is assumed that an in-depth sediment transport analysis quantifying sediment loads, aggregation depths or scour depths, will not be required by FEMA's CLOMR submittal. Only the collection of existing documentation on sediment transport will be included.
- A Detailed Analysis will be conducted computing 100-Year floodplain boundaries and BFEs. A floodway analysis will not be conducted.
- HDR will review and respond to one comprehensive set of comments received from FEMA.
- If FEMA requires notification of affected parties, additional costs for publication of hearing notices in both jurisdictions will be incurred.
- The level of outreach required by FEMA is currently unknown and dependent upon their review comments.
- A total of one public outreach meeting/ workshop is included within this task.
- This task will not address deferred maintenance or public works issues unrelated to the levee/floodwall construction.

## Task 14: Environmental Review

## Subtask 14.1: Review Existing Documentation

A portion of the proposed levee reach was addressed in the 2007 SBSPRP EIS/EIR at a programmatic level. Other work has been completed in the SAFER Bay project area. We will work with SFCJPA to identify available existing data and will review the data for accuracy and will identify any data gaps and recommendations for addressing identified gaps. This assessment will include identification of additional technical studies needed to support the CEQA analysis including those identified as part of Task 4, Feasibility Study, for the preferred alternative, and a recommendation on any NEPA compliance documentation. Deliverables:

## Deliverables: Data Gaps Memorandum

## Subtask 14.2: Technical Studies

Based on the technical studies identified under subtask 14.1, the HDR Team will conduct the necessary field investigations and prepare the studies necessary to support the CEQA analysis including, cultural resources Section 106, greenhouse gas and air quality emission modeling, construction noise modeling, and biological resources survey report.

## Subtask 14.2a: Cultural Resources Report

The HDR Team will complete all surveys, assessments, and documentation required for CEQA/NEPA cultural resource evaluation and Section 106 of the National Historic Preservation Act compliance. Such efforts will include an archeological literature and records search of the California Historical Resource Information System (CHRIS), a search of the Sacred Lands Files (SLF) of the Native American Heritage Commission (NAHC), contact with potentially interested Native American Tribes (e.g., the Amah Mutsun Tribal Band), and an archaeological survey of the Area of Potential Effect (APE). The cultural resources report will be used for CEQA/NEPA and Section 106 purposes to determine the presence of cultural resources on the project site and to determine the level of effects on such resources.

#### Deliverables: Cultural Resources report.

#### Subtask 14.3: Environmental Impact Report

#### Subtask 14.3.1: Initial Study and Notice of Preparation

Following selection of the preferred alternative and identification of inclusion of any of the alignment alternatives, the HDR Team will develop a detailed project description for review and comment. Following one round of comments and revisions, the project description will be used to prepare an IS Environmental Checklist to confirm the appropriate level of environmental review. This scope of work assumes that there will be potentially significant impacts and that an EIR is the appropriate environmental clearance document. Therefore, the IS will be used to focus the environmental resource topics to be addressed in the EIR to those topics that could result in a potentially significant impact. An administrative draft IS will be prepared for SFCJPA review and comment. Following one round of comments and revisions, we will revise the IS, prepare the NOP and publish the Notice of Preparation (NOP) with the IS. The HDR team will work with the SFCJPA to prepare a distribution list. This scope assumes that the SFCJPA will distribute the NOP and do the posting. The HDR Team will prepare the Notice of Completion (NOC) and submit the document to the State Clearinghouse to initiate the 30 day comment period. The HDR Team will coordinate with the SFCJPA to prepare the materials for and participate in one scoping meeting during the NOP comment period.

#### Subtask 14.3.2: Draft EIR

The HDR Team will prepare a Draft EIR in compliance with the CEQA Guidelines. The Draft EIR will provide detailed information regarding the existing environmental and regulatory setting (existing conditions) and will address potential project-specific and cumulative environmental impacts associated with the construction and operation of the Project for resource topics identified for further analysis in the NOP. If significant impacts are identified (based on standards of significance found in Appendix G of the CEQA Guidelines), mitigation measures will be proposed to reduce those impacts to a less-than-significant level, to the extent it is feasible to do so. The EIR will include an analysis of up to three alternatives that could potentially avoid identified significant impacts of the project, including, the No Project and two additional alternatives. In addition, the EIR will also include other statutory sections required by CEQA including: summary of cumulative impacts, growth inducing impacts, summary of significant unavoidable impacts, and significant irreversible changes.

Our team will use existing data to the maximum extent feasible to describe the existing conditions in the project area and in characterizing impacts and developing mitigation measures. We will review the data for accuracy and will augment it when appropriate. We anticipate being able to incorporate by reference information from the SBSPRP EIS/EIR, as appropriate. Results for the technical studies conducted under subtask 14.2 will be incorporated. The project description will be refined, as needed as result of the scoping process. Throughout the EIR process, the HDR Team will build the administrative record consistent with an agreed to format.

The HDR Team will prepare an Administrative Draft EIR for SFCJPA review and comment. Our scope of work assumes monthly conference calls and 1 review meeting for the ADEIR and Screencheck EIR.

## Subtask 14.3.2.1: Introduction and Project Description

The HDR Team will develop Introduction and Project Description sections that meet CEQA legal requirements, and provide the appropriate level of detail for the EIR. This will establish the foundation for the impact analysis in the EIR. The project description will include project background, project objectives, a description of proposed components, and will describe each component in sufficient detail to facilitate determination of the nature and scale of environmental impacts, including area of disturbance and construction equipment scenarios identified as part of the Feasibility Study and PS&E efforts. The project description will also identify discretionary approvals the agencies that would be expected to use the EIR to support issuance of those approvals.

#### Subtask 14.3.2.2: Geology and Soils

Analysis will summarize regional reports on geologic conditions within the service area; conduct site visits; identify special problems such as potential liquefaction and shrink/swell; describe proposed grading and methods to handle differential settlement; describe erosion hazards; prepare setting, summarize regulatory framework, determine impacts and level of significance, and identify mitigation measures to reduce impacts.

## Subtask 14.3.2.3: Hydrology/Flooding

Analysis will identify impacts to surface waters associated with construction of project components, including the following tasks: identify local and coastal flood hazard zones using FEMA maps; describe extent and general character of hydrological conditions; assess existing runoff conditions and character of surface water features; evaluate impact of facility construction and grading on surface runoff and changes in drainage patterns; discuss effectiveness of existing site drainage plan; ESA will review and summarize available sources on water levels, sea level rise, waves, run-up and overtopping from published reports, studies and maps, including the USACE South San Francisco Bay Shoreline Study, state, and federal sea level rise planning guidance. Analysis will include a discussion of the existing and post-project flooding potential over the 50-year project lifespan, and will include a review of proposed levee configurations to assess the ability of the project to meet FEMA requirements. For the flooding assessment, we will review guidance including the 2007 State Hazard Mitigation Plan, FEMA's 2008 Draft Final Guidelines for Pacific Coast Flood Studies, and other recent documents and plans. HDR team will obtain and review standard requirements (storm drainage criteria, flood criteria, etc.), and impacts or mitigation input from agencies.

#### Subtask 14.3.2.4: Water Quality

Analysis will summarize the relevant regulatory framework; describe ambient water quality of the receiving waters; discuss quality of current and potential stormwater runoff; identify mitigation measures for stormwater quality protection for incorporation in to the Storm Water Pollution Prevention Plan (SWPPP); assess the extent of salinity changes and potential to permanently affect habitat conditions at receiving water locations; determine potential impacts and level of significance; identify mitigation measures, if possible, to reduce impacts.

#### Subtask 14.3.2.5: Land Use/Recreation

Analysis will review existing land uses in the study area; review applicable plans, policies and objectives of local, regional and state public agencies having jurisdiction over the project; discuss project consistency with plans, policies and CEQA guidelines; discuss compatibility with surrounding uses; identify facility impacts to existing recreational uses, and potential enhancements to recreational access;; identify measures to mitigate identified impacts.

## Subtask 14.3.2.6: Biological Resources

The HDR Team will prepare the biological resources section of the EIR document. The effort for this task will leverage work performed in Task 4, including the characterization of existing biotic resource information for the Project site. This task will also develop feasible conceptual mitigation measures for biotic resource impacts, drawing upon the tidal marsh habitat mitigation package developed with regulatory agency input in Task 4.

The HDR Team will visit the site to update existing conditions assessed under Task 4.1, if needed. We will review background information from the U.S. Geological Survey quadrangle maps, USFWS National Wetland Inventory Maps, the California Natural Diversity Database, species data compiled by the California Native Plant Society, the National Audubon Society, or other public interest groups, resource agency data (USFWS, CDFW, etc.). This task includes characterization of existing biological conditions on the site to a level sufficient for CEQA analysis, assesses impacts related to project implementation, and describes conceptual mitigation measures to reduce potentially significant impacts to less than significant levels. Our existing conditions characterization will draw heavily upon the numerous environmental documents that have been prepared for other projects on in the vicinity, most notably documents pertaining to the SBSPRP. We will include preparation of a Project vicinity map and biotic habitats map. We anticipate that some components of Tasks 4.2, 14, and 16 will develop concurrently, thus the Biological Resources chapter of the IS/EID will incorporate mitigation measures related to special-status wildlife that are acceptable to resource agencies.

#### Subtask 14.3.2.7: Cultural Resources

Analysis will incorporate results of the Cultural Resources Survey Report conducted under Task 15.7. The analysis will incorporate findings of the site reconnaissance; describe the regulatory framework, cultural setting, and known resources; determine potential impacts and level of significance and identify mitigation measures as appropriate.

#### Subtask 14.3.2.8: Noise

Analysis will describe the existing noise environment; discuss relevant noise policies, regulations and standards; discuss noise levels likely to be generated during construction activities and potential for construction to adversely affect adjacent land uses or violate noise control ordinances; describe typical noise generated by the project and potential for noise to adversely affect adjacent uses and consistency with noise compatibility guidelines. Identify practical, feasible mitigation measures for noise impacts identified for the project.

#### Subtask 14.3.2.9: Air Quality

The study area lies within the San Francisco Bay Area Basin which is in "nonattainment" status for state standards for ozone and particulate matter. The analysis will focus on the temporary effects of construction traffic, assuming that electric pumps will be used for plant expansion. Task include: describe the federal, state and local regulatory agencies and the BAAQMD's CEQA Guidelines; discuss current air quality in the project area based on data from the monitoring station closest to the project site; discuss emissions likely to be generated during construction and evaluate potential for construction dust to cause local violations of particulate standards; discuss types of emission related to vehicle traffic; and identify practical, feasible mitigation measures for air quality impacts identified for the project.

#### Subtask 14.3.2.10: Traffic

Analysis will review and summarize available city, county and state traffic information for local roads, highway and freeways; describe the circulation setting; identify bicycle, pedestrian and transit corridors; determine level of service and significance criteria for study area roadways and intersections; determine temporary daily construction impacts during weekday AM and PM peak hour; evaluate effects on pedestrian, bicycle and transit facilities; discuss site circulation and access; and identify mitigation measures, prioritized in terms of safety and level of service.

#### Subtask 14.3.2.11: Hazardous Materials

Analysis will summarize applicable federal, state and local hazardous waste regulations; review and summarize available databases to identify known areas of hazardous material contamination that could affect proposed facilities; review available soil testing reports at existing facilities; identify and discuss known contamination of soil and groundwater; discuss and evaluate impacts on general public health and safety, potential exposure to workers and waste disposal handlers; prepare setting, determine impacts, level of significance and mitigation measures to reduce potential health and safety impacts to less than significant levels.

#### Subtask 14.3.2.12: Public Services/Utilities

Analysis will summarize potential for utility disruption and service disruption within the project area. Analysis will review major utilities that could be affected by construction, potential short-term impacts to public services, and potential effects to emergency response, and establish mitigation measures to reduce potential impacts to less than significant levels.

#### Subtask 14.3.2.13: Aesthetics

Analysis will generally describe important elements of the visual quality in the regional and local area surrounding the project site and the site itself, including any publicly accessible scenic vistas; qualitatively discuss the visual impacts of the project, including effects from existing public viewing areas; and identify mitigation measures that would reduce any significant visual impacts of the proposed project. Our scope of work does not include visual rendering(s) of proposed facilities.

#### Subtask 14.3.2.14: Growth Inducement

Project implementation is not anticipated to affect growth levels, rates, or distribution; however, he analysis will review the potential for provision of regional flood protection to contribute to regional growth beyond the adopted General Plans, or to change anticipated land use patterns or practices within the affected area.

#### Subtask 14.3.2.15: Alternatives

The EIR will include review of a range of Alternatives to meet CEQA requirements. Our scope of work assumes review of 3 alternatives. In general, analysis will include:

- 1) **Alternatives to the Project.** This will include review of alternative methods to addressing flood control and coastal flood protection, including the No Project Alternative.
- 2) Alternatives of the Project: Review of up to 2 alternatives identified in the Feasibility Study. Analysis provided in the EIR will be summarized for each of these alternatives, and a review of their ability to meet the project objectives will be provided, including their ability to reduce or minimize environmental impacts.

Our scope of work assumes we will receive one consolidated set of comments on the Administrative Draft EIR from the JPA. The project team will revise the Administrative Draft EIR and prepare a screencheck version of the Draft EIR for SFCJPA to review to confirm that that comments have been addressed prior to publication. Our scope of work assumes that screencheck draft comments will be limited to minor edits.

This scope assumes that the SFCJPA will distribute the Draft EIR using the distribution list developed under subtask 14.2 and do the posting. The HDR Team will prepare the NOC and submit the document to the State Clearinghouse to initiate the 45 day comment period. The HDR Team will coordinate with the SFCJPA to prepare the materials for and participate in one public hearing during the Draft EIR comment period.

#### Subtask 14.3.3: Final EIR and Mitigation Monitoring and Reporting Program

Following the close of the comment period, the HDR Team will respond to comments and prepare an Administrative Final EIR for SFCJPA review and comment. The Final EIR will include comment letters and responses to comments received; summary of text changes (in response to comments or staff initiated); and the Mitigation Monitoring and Reporting Program (MMRP) (in table format specifying mitigation measures, timing of the action and parties responsible for implementation and monitoring). The MMRP, to be prepared in accordance with the CEQA Guidelines (Section 15097),can be prepared and circulated with the Draft EIR. Following receiving one consolidated set of comments from the JPA, we will revise the Administrative Final EIR and prepare a screencheck version of the Final EIR for the SFCJPA to review that all comments have been addressed prior to publication. Our scope of work assumes one review meeting for the administrative draft and screencheck Final EIR.

## Subtask 14.3.4: Findings of Fact, Statement of Overriding Considerations, Notice of Determination

The HDR Team will prepare draft Findings of Fact and Statement of Overriding Considerations (if there are any significant and unavoidable impacts) (Findings) for SFCJPA to review and comment. Following receiving a consolidated set of comments, we will revise the draft Findings and prepare a screencheck version of the Findings for the SFCJPA to review that all comments have been addressed prior to finalizing the document for consideration by the SFCJPA Board. The HDR Team will attend the Board meeting for certification of the EIR. Following certification of the EIR and project approval, we will prepare the Notice of Determination (NOD). This scope assumes that the SFCJPA post the NOD and pay any required California Department of Fish and Wildlife (CDFW) fees.

**Deliverables:** Draft Project Description; administrative draft IS; Notice of Completions (NOC); 15 printed copies of the NOP/IS and 1 electronic copy; presentation materials for scoping meeting; Administrative Draft EIR; Screencheck Draft EIR; Draft EIR; 15 printed copies of the Draft EIR and 1 electronic copy; presentation materials for Draft EIR hearing; Administrative Final EIR; screencheck Final EIR; Final EIR; Draft Findings; Final Findings; Notice of Determination (NOD).

## **Assumptions:**

- SFJPA will provide one set of consolidated comments on all internal review draft submittals.
- All submittals will be in electronic format unless otherwise noted.
- NEPA documentation is not included in this scope of work. In the event compliance with NEPA is identified as required in consultation with SFCJPA, the HDR Team will prepare a scope of work and cost estimate.
- The decision to include an analysis of any of the alternative alignments at an equal level to the preferred alignment will be made prior to issuing the NOP so all potential project elements can be addressed in one EIR. The additional scope for including any alternative alignments will be negotiated separately, if requested by SFCJPA.
- Protocol-level surveys for special-status species are not included.
- Because the formal USACE wetland delineation will not have been conducted until the
  optional permitting phase, wetland impact estimation will be conducted using general habitat
  mapping rather than a formal wetland delineation. Therefore, it is likely that wetland impacts
  will be overestimated during the CEQA phase by as much as several acres over the extent of
  the levee alignment.
- We assume that it will be possible to mitigate impacts to wetlands and special-status species habitat via the SBSPRP, and potentially on site via T-zone revegetation on the outboard levee slope outside and possibly within the SBSPRP footprint.
- Up to three project alternatives, including the No Project and No Action Alternatives, will be evaluated in the EIR at a CEQA level of review.
- The HDR Team will attend one scoping meeting, one Draft EIR hearing, and one certification hearing.
- Additional meetings/hearings will be negotiated separately, if requested by SFCJPA.
- SFCJPA will post availability of and distribute all CEQA document.
- It is assumed that SFCJPA will pay any required CDFW fees.

## Task 15: Habitat Mitigation and Monitoring Plan

The HDR Team will prepare a Habitat Mitigation and Monitoring Plan (MMP). The MMP is a required component of the permit application packages (see Task 16) and is therefore a distinctly different report from the CEQA-related MMRP covered above in Task 14. The MMP will describe the project's impacts to regulated habitats and species, present the conceptual habitat mitigation plan, and include an ecological monitoring plan to objectively evaluate mitigation performance.

The MMP will provide the following information in accordance with the USACE San Francisco and Sacramento Districts Mitigation and Monitoring Proposal Guidelines (2004):

- 1. Brief summary of the proposed project
- 2. Summary of habitat impacts and proposed mitigation ratios
- 3. Location of mitigation site(s) and description of existing site conditions (both physical and biotic), including photo-documentation
- 4. Conceptual mitigation plan
- 5. Monitoring plan (including final and performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule)
- 6. Remedial measures/adaptive management plan for mitigation elements that do not meet performance or final success criteria
- 7. Appendix with photo-documentation of project site (pre-impact) and mitigation site(s) (pre-impact)

Deliverables: Draft MMP for SFCJPA review; Final MMP.

#### **Assumptions:**

- We assume that it will be possible to mitigate impacts to wetlands and special-status species habitat via the SBSPRP, and potentially on site via T-zone revegetation on the outboard levee slope outside and possibly within the SBSPRP footprint.
- We assume one round of revisions to the Draft MMP based upon one set of consolidated SFCJPA comments.
- This task also assumes that the wetland mitigation design will be developed only to a preliminary, conceptual level.

#### Task 16: Regulatory Permit Acquisition (optional task)

The HDR Team will prepare and submit permit applications to the applicable agencies including USFWS, NMFS, USACE, RWQCB, the BCDC, and CDFW. As described under Task 4.2, prior to permit acquisition, regulatory agencies will be approached to obtain input on design and conceptual mitigation such that permit acquisition will be as efficient as possible.

## Subtask 16.1: Biological Assessment (BA) and Section 7 Consultation

Prepare a draft BA describing the project's impacts on species listed as threatened or endangered, or proposed for such listing, under the Federal Endangered Species Act. The document will contain a description of the project; life history information on all these species; information on the known or potential occurrence of these species on and adjacent to the project site; a description of potential effects on these species; a description of measures to be incorporated into the Project to avoid and minimize impacts to these species; and a description of mitigation proposed to offset Project impacts.

We anticipate that the BA and consultation will focus primarily on the project's potential impacts to salt marsh harvest mice and California clapper rail related to levee construction. By drawing on our experience working with salt marsh harvest mice, we will assess the likelihood of take occurring through project actions and provide minimization and mitigation measures that have been successfully implemented on other projects. For instance, we will likely propose measures that include biological monitoring of vegetation removal and of construction activities that may result in take of this species. We may also propose to trap and remove salt marsh harvest mice prior to vegetation removal, as this will substantially reduce the likelihood of take during project activities and may be necessary to obtain CDFW approval to implement the Project. We will also address potential impacts to California clapper rail and propose measures to avoid take of that species. Due to the proximity of suitable clapper rail breeding habitat to potential levee alignments, measures will most likely include the avoidance of the clapper rail breeding season, although we will explore all suitable options while preparing the BA. We also anticipate the need to address potential impacts to western snowy plover, Central California Coast steelhead, green sturgeon, and critical habitat for these species in the document, due the proximity of known occurrences of these species. The BA will also include an Essential Fish Habitat (EFH) Assessment for purposes of Magnuson-Stevens Fishery Conservation and Management Act compliance. The EFH Assessment will describe the fish that are subject to established management plans; the habitats on and adjacent to the proposed levee alignments that are considered EFH; the project's effects on EFH; a description of measures incorporated into the Project to avoid and minimize impacts to EFH; and a description of any mitigation (if necessary) proposed to offset project impacts to EFH.

The HDR Team will submit the BA to the USACE and assist the USACE as needed in preparing a letter addressed to the USFWS and NMFS to accompany the document. We will then coordinate with the USFWS and NMFS as necessary during the Section 7 consultation between those agencies and the USACE with the intent of obtaining BOs from those agencies. We will coordinate with agencies, the SFCJPA, the SBSPRP, and other stakeholders to develop necessary mitigation for the project.

As described above under Task 4.2, we will also engage the CDFW to obtain the Department's opinion regarding whether the project will result in the take of species listed or proposed under the California Endangered Species Act. The state-listed species with the greatest potential to be affected by the project is the salt marsh harvest mouse and we anticipate that most discussions with the CDFW will involve avoiding take of that species. In addition to protection under the CESA, salt marsh harvest mice and California clapper rails are a fully protected species in California. This status requires that no take of the species can occur and thus the CDFW will likely require that mitigation measures ensure that the project does not result in take of those species. Thus, the CDFW may necessitate trapping and removal of salt marsh harvest mice prior to vegetation removal and levee construction. Also, the CDFW may determine take of the recently listed longfin smelt could occur as a result of activities associated with project activities, although that is less likely.

The CDFW may provide a Consistency Determination for portions of the project. However, as noted above, the CDFW cannot authorize take of a fully protected species (e.g., salt marsh harvest mice, California clapper rails), so the emphasis of consultations with CDFW will likely focus on measures to insure no animals are killed during construction. Alternatively, the CDFW may require submittal of a 2081 permit application requesting an Incidental Take Permit from the CDFW, although this is less likely. If necessary, the 2081 permit application would contain a description of the Project; life history information on the covered species; information on the known or potential occurrence of the covered species on and adjacent to the Project site; a description of potential effects on the covered species; a description of measures to be incorporated into the Project to avoid and minimize impacts to the covered species; and a description of mitigation proposed to offset Project impacts. The budget for this task assumes that a 2081 is not necessary.

#### Subtask 16.2: USACE 404 Individual Permit and Section 10 Letter of Permission

Based on the size and potential impact area of the Project, it is assumed that the Project cannot be processed under an existing USACE nationwide permit (NWP), and that the proposed work will require an Individual Permit. The Individual Permit application requires a substantially greater level of effort compared to the NWP, in part, because it requires an alternatives analysis to illustrate the Least Environmentally Damaging Alternative (LEDPA) for the project. The HDR Team will prepare an Individual Permit application and alternatives analysis for submission to the USACE. These materials include copies of relevant sections of the EIR (e.g. archeology/cultural resources, biology), all correspondence with the USACE, RWQCB, USFWS, NMFS, CDFW, and BCDC staff, National Flood Insurance Program (NFIP) and Conditional Letter of Map Revision (CLOMR) information pursuant to the proposed improvements, wetland and wildlife impact assessment, proposed mitigation approach, detailed project drawings, and the Application for Department of the Army Permit (ENG Form 4345).

The alternatives analysis will be prepared in consultation with Project engineers, pursuant to the EPA Section 404(b)(1) Guidelines (40 CFR 230). The Corps uses the alternatives analysis to evaluate the proposed activities and determine the LEDPA. The EPA's Guidelines restrict discharges into aquatic areas where less environmentally damaging, practicable alternatives exist.

During preparation of the alternative analysis, Project engineers will provide 2-3 design alternatives to the preferred project to be analyzed (in addition to the no project alternative). This information will include detailed descriptions of each alternative, cost estimates and impact zones. These will be analyzed to determine if the preferred alternative is the most appropriate design in terms of project design functions and least environmental impact. Preparation of off-site alternatives is not anticipated, due to the required location for the project purpose of flood control improvement in the East Palo Alto, Menlo Park and Palo Alto areas.

## Subtask 16.3: RWQRB 401 Water Quality Certification Application

The HDR Team will prepare an application for Section 401 Water Quality Certification for submittal to the RWQCB. We assume an Individual Permit will be required under this process; however, the complete package will provide much of the same information that is to be submitted to the USACE as described above. In addition, RWQCB requires a processing fee for handling the application. The amount of this fee is based upon the size of the fill activity proposed and as such is not included in this current scope.

## Subtask 16.4: BCDC Major Permit

The HDR Team will prepare an application for a BCDC major permit. This task will require the limits of BCDC jurisdiction be identified and mapped as discussed in Task 4.1. A figure shall be prepared as part of the application that will show specific elements such as the bay, the shoreline and a line 100 feet inland from the shoreline which delineates the limit of BCDC jurisdiction. BCDC requires a processing fee for handling the application, also not included in this scope.

## Subtask 16.5: CDFW 1602 Lake and Streambed Alteration Agreement

The HDR Team will prepare permit materials in support of a 1602 notification package for submittal to CDFW. This includes completion of Form FG 2023, all copies of environmental documentation, all correspondence with USACE, RWQCB, CDFW, BCDC, NMFS, and USFWS staff, an impact assessment, and project drawings. In addition, CDFW requires a processing fee for handling applications, not included in this scope.

#### Subtask 16.6: California State Lands Commission Land-use Lease

The HDR Team assist the SFCJPA with jurisdiction determination for the project as it relates to the State Lands Commission's sovereign lands (navigable and tidal waterways). Assuming that at least a portion of the project footprint lies within the Commission's jurisdiction, we will then prepare a land use lease application for the SFCJPA to submit to the Commission. Our scope of work assumes 58 hours for this task; additional resources may be necessary depending upon the extent of State Lands Commission jurisdiction over the proposed project.

Subtask 16.7: State Historic Preservation Office National Historic Preservation Act, Section 106 As indicated above under Subtask 14.2a, The Cultural Resource report prepared for the CEQA/NEPA evaluation will also be used for compliance with Section 106 of the National Historic Preservation Act.

## Subtask 16.8: Wetland Delineation

As part of the permit application materials, the USACE will require that the extent and distribution of wetlands and other waters within the boundaries of the Task 2 baseline levee alignment be documented in a wetland delineation technical report. To this end, we will conduct a wetland delineation to identify potential waters of the U.S. (both Section 404 and Section 10 Waters of the U.S.) within the project limits that may be subject to the jurisdiction of the USACE. This level of effort will require the collection of data in the field relative to vegetation, soils, and hydrology in order to document site conditions. All work will be completed according to methodologies outlined in the USACE Wetland Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (2008), and guidance provided by the USACE in a technical memorandum titled, Information Needed for Verification of Corps Jurisdiction (2012). Additionally, BCDC jurisdiction does not correspond in all locations to USACE jurisdiction, so the limits of both agency jurisdiction will be mapped using a Trimble GPS unit, with sub-meter accuracy.

We will prepare a draft report on the results of the field surveys for USACE jurisdictional waters for submittal to the USACE. We will also produce a GIS-based map layer for team use for BCDC jurisdictional bay waters, shoreline, and shoreline band jurisdiction, and CDFW riparian jurisdiction. All work will be conducted at a level of effort sufficient to allow verification of the delineation by USACE staff, and the BCDC/CDFW map layer will be suitable for BCDC and CDFW impact assessments, agency coordination, and later permitting purposes. We will then meet with USACE staff on the project site to verify the delineation of jurisdictional waters of the U.S. Revisions will be made to the delineation report and accompanying maps, if necessary, after the site visit with a USACE representative.

The HDR Team will work to obtain the USACE, RWQCB, BCDC, and CDFG permits for the Project. We will submit a first-review administrative draft USACE permit package for review and comment to the SFCJPA. This scope assumes that edits will be minimal. After incorporation of any changes, the package will be submitted to the USACE. This task includes time to correspond (i.e., telephone calls, email, faxes) with the USACE in order to monitor the progress of the permit review. In addition, since the project will require work within Section 10 tidal waters, the project will require a Letter of Permission from the USACE. Therefore, the permit application package will include a request for the USACE to provide a Letter of Permission. This task includes one round of minor revisions to the permit package and supporting documents based on SFCJPA review.

**Deliverables:** BA and 2081 Permit application, USACE, RWQCB, BCDC, and CDFW permits, State Lands Commission lease application, Cultural Resources Report, Letter of Permission from USACE, Wetland Delineation Report, verified site delineation maps, and BCDC/CDFW map layer.

## **Assumptions:**

- Existing studies of potentially historic architectural resources are sufficient and no additional surveys or evaluation will be required.
- Recordation of no more than one cultural site (if found during the surface survey) will be necessary.
- Recordations and evaluations of more than one site will be scoped separately.
- The proposal assumes that 4 meetings, both on the site and in these agencies' respective offices, will be necessary during the Section 7 consultation.
- It is assumed that no 2081 permit will be necessary from CDFW.
- Permit fees for the RWQCB, BCDC, and CDFW and permits will be supplied by SFCJPA at a later date.

## Task 17: Right-of-Way Acquisition (optional task)

The HDR Team will assist SFCJPA in Right-of-Way Acquisition activities. The HDR Team will provide support for title and escrow activities, right-of-way engineering, appraisals, acquisition and negotiation, and file close out.

## Assumptions:

- HDR will provide the SFCJPA with the following items on a per parcel cost- one preliminary title report, one legal description and plat map, one appraisal and one appraisal summary statement.
- HDR will provide these items as a pass-through cost to SFCJPA, without any markup.
- If requested by SFCJPA, HDR can coordinate the preparation of Environmental Site Assessment reports for the proposed acquisition areas.
- SFCJPA will provide approved and offer-package ready acquisition document templates. If SFCJPA directs HDR to provide acquisition template documents to SFCJPA for approval by its legal counsel, they will be provided by HDR on a Time and Expense basis.
- HDR's fee does not include relocation of business or residential displaces, and/or personal property relocation. If these services are required, HDR will provide a cost to complete fee amendment to SFCJPA for these services.

## Task 18: Bidding and Construction Support Services (optional task)

The HDR Team will assist SFCJPA with the bidding process, including providing addenda clarification and responding to technical questions related to the contract documents from potential bidders. During pre-construction and construction, the HDR Team will:

- Attend pre-construction conference, respond to questions, and prepare conformance documents
- Attend resolution meetings
- Assist SFCJPA in providing responses to inquiries, change orders, Requests for Information (RFIs), and/or re-design work addenda, and letters of clarifications; and
- Provide clarifications/interpretations of plans and specifications
- Perform shop drawing review and submittal reviews as requested

- Assist SFCJPA or a designated construction manager with the preparation of contract change orders;
- Perform periodic site visitations and review of construction activities as requested
- Provide recommendations for changes required by design discrepancies, utility conflicts, or other unforeseen circumstances, which may develop during construction
- Provide assistance to final walk-through inspection

Deliverables: Conformance Documents, Resident Engineer Files (as appropriate)

## Task 19: Letter of Map Revision (LOMR) (optional task)

The HDR Team will assist SFCJPA in preparation of a LOMR for submittal to FEMA after completion of project construction in order to secure FEMA approval for removing protected properties from the Special Flood Hazard Area.

A Letter of Map Revision (LOMR) is an official revision, by letter, to an effective NFIP map. A LOMR may change flood insurance risk zones, floodplain and/or floodway boundary delineations, planimetric features, and/or BFE. The letter becomes effective on the date sent.

#### Subtask 19.1: Update and Submit LOMR Application

This subtask includes updating the FEMA forms for the LOMR submittal and compiling any supporting data, model documentation, drawings, models, work maps, and levee and floodwall design plans that may have changed during the construction phase of the project(satisfying Code of Federal Regulations Section 65.10).

The process for obtaining a LOMR is the same as the CLOMR process where standard forms, relevant project plans and data, will be submitted for review by FEMA's consultants. The completion of Forms 1, 2, 3, 4, and 5 may be required for this CLOMR submittal. A brief description of the required information is listed for each form below is included in the CLOMR task.

#### Subtask 19.2: Coordinate with FEMA's Consultant during Review

HDR will coordinate with FEMA and their Review Consultant regarding the LOMR submittal. It is anticipated that coordination with FEMA's Consultant will require conducting a completeness check; responding to interim comments/questions; and revising and resubmitting updated documents. It is typical for the Review Consultant to request additional information during the review process.

HDR will review and respond to one comprehensive set of comments.

## Subtask 19.3: Public Outreach regarding CLOMR Results

It is likely that public outreach will be needed in the course releasing the LOMR. The JPA may require an informational presentation of the LOMR process; the respective NFIP jurisdictions may require public hearings to approve the proposed CLOMR; and FEMA may require notification of affected parties and a subsequent public hearing. HDR's current public outreach specialist on the project is available to assist the team and the JPA with these efforts.

#### Deliverables: Letter of Map Revision Submittal Package

#### **Assumptions:**

- It is assumed that all permitting documents and models required for submission of the LOMR submittal and FEMA's PM 64 requirements will be readily available. This task does not include additional fee for hydraulic modeling, environmental permitting, interior drainage, and/or design analysis for any of the proposed flood control facilities. It is assumed that all modeling and design efforts are included under other tasks.
- HDR will attend one coordination meeting with FEMA and/or JPA staff regarding the LOMR application.
- LOMR processing fees will be paid separately by the JPA directly to FEMA.

- It is assumed that the JPA will coordinate required signatures for the final LOMR deliverable. The CEO of each jurisdiction (Cities of East Palo Alto and Menlo Park, County of San Mateo, and potentially County of Santa Clara and Santa Clara Valley Water District) will need to sign.
- It is assumed that an in-depth sediment transport analysis quantifying sediment loads, aggregation depths or scour depths, will not be required by FEMA's LOMR submittal. Only the collection of existing documentation on sediment transport will be included.
- A Detailed Analysis will be conducted computing 100-Year floodplain boundaries and BFEs. A floodway analysis will not be conducted.
- HDR will review and respond to one comprehensive set of comments received from FEMA.
- If FEMA requires notification of affected parties, additional costs for publication of hearing notices in both jurisdictions will be incurred.
- The level of outreach required by FEMA is currently unknown and dependent upon their review comments.
- A total of one public outreach meeting/ workshop is included within this task.
- This task will not address deferred maintenance or public works issues unrelated to the levee/floodwall construction.

## Task 20: Additional Alignment Alternatives (optional task)

For each of the additional alignment alternatives that will be included with the scope of services, the HDR Team will complete all tasks under Phase 2, as appropriate, and incorporate the additional alignment alternatives into the project deliverables and activities. For the purpose of developing a scope for this option, the alignment consistent with optional task 5.3 is assumed. Activities, deliverables, and assumptions will be consistent with Tasks 7 through 18.

Agenda Item 5.d.

## Draft

# SAFER Bay

Master Service Agreement Task Order #1

## **TASK ORDER NO. 1** TO MASTER SERVICE AGREEMENT FOR THE SAFER BAY PROJECT — EVALUATION, DESIGN AND ENVIRONMENTAL SERVICES

This Task Order No. 1 ("Task Order") is made and entered into by and between the San Francisquito Creek Joint Powers Authority, a California joint powers authority (the "Authority") and HDR Engineering, Inc., a Nebraska corporation ("Consultant").

## RECITAL

Α. Authority and Consultant entered into an agreement entitled Master Service Agreement for the Strategy to Advance Flood Protection, Ecosystems and Recreation along the Bay (SAFER BAY) Project, Evaluation, Design and Environmental Services and dated ("Agreement"), by which the Consultant agreed to perform services in accordance with Task Orders issued by the Authority.

## NOW, THEREFORE, THE PARTIES HEREBY AGREE AS FOLLOWS:

**INCORPORATION BY REFERENCE.** This Task Order hereby incorporates by 1. reference all terms and conditions set forth in the Agreement.

SCOPE OF TASK ORDER. Consultant shall perform the services described in 2. Exhibit "A," attached hereto and incorporated herein by reference, in accordance with the terms and conditions of the Agreement.

3. **PAYMENT.** For services performed by Consultant in accordance with the fee schedule, Exhibit "B," attached hereto and incorporated herein by reference, Authority will compensate Consultant in accordance with the terms and conditions of the Agreement, in an amount not to exceed \$559,976.00

4. **SIGNATURES**. The individuals executing this Task Order represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute this Task Order on behalf of the respective legal entities of the Consultant and the Authority.

**IN WITNESS WHEREOF**, the Authority and Consultant do hereby agree to the full performance of the terms set forth herein.

**AUTHORITY** 

## CONSULTANT

By:		
Title:		
Date:		

Ву	
Title:	

Date:

## SAFER Bay - Task Order 1

#### **Task 1: Project Management**

HDR will manage the project and its team members to ensure adherence to the scope, budget, and schedule, as well as conformance with appropriate engineering standards and practices. HDR will hold regular coordination and progress meetings with our Team members and SFCJPA to ensure all are apprised of project status, upcoming deliverables and activities. We will maintain communication by phone, email, and in-person meetings. This task includes the development of a document control system, project guide, and quality control plan. Through our project management process, the HDR Team will provide SFCJPA with monthly status updates, notification of any changes in scope or budget, and necessary corrective actions. Quarterly status reports will be prepared in a manner consistent with DWR grant reimbursement requirements.

**Deliverables:** Monthly and Quarterly status reports, Quality Control Plan, Project Guide, Meeting notes and agenda

**Assumptions:** Status meetings will be help at SFCJPA offices. Regular team meetings will be via conference call.

#### **Task 2: Identify Potential Flood Control Feature Alignments**

The HDR Team will work collaboratively with SFCJPA, its member agencies, and stakeholders to evaluate and screen viable alternative alignments in the project area north of San Francisquito Creek, and including the Facebook campus and PG&E Ravenswood Substation. The evaluation of alignment alternatives will include consideration of the potential impact of site and project features such as geologic and subsurface conditions, constructability including levee subgrade preparation requirements, condition of existing levees that are to be built upon, locations of existing utilities and other structures, real estate and encroachments constraints, opportunities for restoration, mitigation, recreation, and construction cost. The preliminary evaluation will be based on SFCJPA objectives, and will be compliant with USACE, FEMA and DWR requirements. The evaluation will result in a preliminary array of alignments to be carried forward to the feasibility stage of the project. A Preliminary Alternatives Report will be provided that summarizes evaluation and identification of a viable set of preliminary alternatives to carry forward into the Feasibility Study phase. This report will include an initial assessment of utilities, lands, encroachments and other potential conflicts and challenges to the project. The activities required during development of the Preliminary Alternatives Report will be expedited in order to inform the SFCJPA on the opportunities associated with the optional tasks, and allow early communication with project stakeholders. In addition to the Preliminary Alternatives Report, a Data Needs Memorandum, based on identification of the preliminary alignments, will be provided to support Task 3.

Deliverables: Preliminary Alternatives Report, Data Needs Memorandum

#### **Assumptions:**

- Up to 4 different alignments will be considered for each project reach, for up to 12 total alignments. The preliminary alternatives evaluation will identify up to 4 overall viable alternatives.
- Attend one half-day meeting (or equivalent effort) with the SFCJPA and stakeholders for discussion of potential alignments and restoration features.

#### Task 3: Preliminary Engineering Evaluations

#### Subtask 3.1: Surveying

The HDR Team will review existing LiDAR and topographic survey information in the project area for quality and coverage, and will attempt to develop conversions for each data set so that all data are reasonably co-registered within the project's horizontal and vertical reference systems, sufficient for planning level use. Record assessor's parcel map Geographic Information System data will be

procured and imported into AutoCAD to serve as a backdrop for the project Landnet. Research will be performed to gather public record maps for highways, state lands and major residential subdivisions. This information will be analyzed to develop a preliminary location, and added to the Landnet. We will also perform research with local utility agencies to obtain record map information for utilities, and the approximate location shown within the Landnet.

Minimal field surveys will be performed, as needed, in order to perform QC checks of existing data, establish survey boundary monumentation, and identify specific utilities and structures of specific interest. This information will be combined with other collected data into an AutoCAD drawing.

**Deliverables:** Survey Report, Planning Level Topographic Mapping in CAD format, Utility and Encroachment Survey Report

## Assumptions:

- 5 days of surveys are budgeted to perform the above and work will be coordinated with SFCJPA. Note that access may be required to some private lands, and assistance will be needed to obtain access permission.
- Further research and field surveys will be required to determine boundary and utility locations for later stages of the project.
- Planning level topography will rely on existing survey and data coverages. No new aerial or field mapping will be provided.

## Subtask 3.2: Geotechnical Evaluation and Investigations

Under Phase 1, we will conduct a geotechnical investigation to a level sufficient to develop preliminary geotechnical recommendations to support the Feasibility Study. After the Feasibility Study is completed and a preferred alignment is selected, we would undertake a supplemental geotechnical study under Phase 2. The Phase 2 work will include additional field explorations, laboratory testing, and analysis, and the preparation of a Final Geotechnical Report. The focus of the Phase 2 investigation would be to gather information and perform additional analyses for areas where there are data gaps.

**Review of Information and Site Reconnaissance** - HDR will review available published information and information provided to us by SFCJPA on geologic and geotechnical information in the site area, including geotechnical reports and logs of subsurface explorations. We will perform a site reconnaissance, and note physical site features that could impact the project from a geotechnical perspective.

**Field Investigation** - Undertake a subsurface exploration program along the proposed project alignment and alternative alignments. Prior to conducting the field work, we will prepare a Field Work Plan and Health and Safety Plan, obtain the applicable encroachment and drilling permits, check site access, and check for the presence of underground utilities by contacting Underground Service Alert (USA). We will retain and coordinate with appropriate exploration subcontractors to select suitable exploration equipment to access the desired exploration locations, to the extent that is reasonable and practical. Our scope and fee do not include measures such as mobilizing barges or rafts, or preparing temporary pads to explore hard-to-access and potentially sensitive areas such as marshes or ponds. Drill cuttings and fluids will be generated from the borings. We will contain drill cuttings and fluids in drums, and transport them to a nearby temporary storage area provided by SFCJPA. Following chemical testing of samples of the drummed materials, we would arrange to have the materials transported to a suitable disposal facility. Our scope and fee assume that the subsurface materials encountered are free of contaminants. If that is not the case, additional scope and fee would be needed for soil handling and disposal.

**Laboratory Testing** - A laboratory testing subcontractor will be retained to perform geotechnical laboratory tests on selected samples obtained from the borings. Testing will include moisture content, density, Atterberg limits, gradation, consolidation, and shear strength, as appropriate.

**Geotechnical Engineering Analyses and Evaluations** - Engineering analyses to develop geotechnical conclusions and recommendations for the proposed project will be performed. We will perform stability and seepage analyses for up to seven cross sections. For each cross section location, stability, and seepage analyses will be performed for one levee geometry and one design water surface elevation for the following conditions, which we judge are potentially the most critical loading conditions that may occur during the design life of the levees: 1) Stability at the end of levee construction, 2) Stability under rapid flood loading conditions, 3) Stability under rapid drawdown loading conditions (when floodwaters recede), 4) Seepage (both levee through seepage and underseepage), and 5) Stability under seismic loading, including estimated magnitudes of liquefaction induced levee settlement and lateral deformation. We will also perform analyses to estimate magnitudes of levee settlement over time. Our scope and fee do not include the development and implementation of liquefaction mitigation measures, such as soil improvement. Should such conditions be encountered, the SFCJPA would need to weigh the cost and benefit of liquefaction mitigation measures versus the risks. This issue would need to be addressed as a separate topic, if it arises, and we have not included a scope for it herein.

Deliverables: Feasibility Level Geotechnical Report

## Assumptions:

- Level of effort assumes useful existing geotechnical data are available and will be provided by SFCJPA.
- Field exploration program based on performing up to 14 borings or CPTs to 40 to 50 feet.
- It is assumed that the new and existing data together would provide on average, an exploration every 2,000 feet along levee crest plus some explorations beyond the levee alignment.
- Also assumes geotechnical analysis for up to 7 cross sections, for Feasibility Level Geotechnical Report.

## Subtask 3.3: Coastal Hydraulics

The HDR Team will prepare a Design Conditions Memorandum to support the feasibility level analyses of the alternative alignments developed under Task 2. Design conditions will be based on prior studies including USACE Shoreline, FEMA Bay Modeling, and SBSPRP. The evaluation will document the design elevation for 50-year project lifespan with a sensitivity test for anticipated geomorphic changes to the shoreline. Specific activities under Task 3.3 will include:

- Prepare a proposed methodology document for review and approval by SFCJPA, FEMA, USACE.
- Identify climate change Relative SLR scenarios for study using latest guidance from National Academy of Science, USACE, National Oceanic and Atmospheric Administration, and United States Geological Survey. The scenarios will consider vertical land motions based on benchmark re-leveling and more recent IPSAR.
- Establish water levels, winds and waves for the study area starting with FEMA Regional Bay and recent USACE evaluations. Develop 50-year time series of water levels, winds and waves at several selected offshore locations incident to flood protection levee reaches.
- Compare water levels time series and Extreme Value Analysis (EVA) extrapolations based on transfer of Presidio water levels versus FMEA Regional Bay model (by Danish Hydraulics Institute). Convert nearshore waves to offshore values without bottom friction for comparison. Compare wave time series for offshore locations and EVA extrapolations for extreme values. Numerical wave models or parametric equations will be utilized.
- For each levee reach within project area, we will run simple wave runup time series with wind setup and friction for one location in each reach. We will identify approximate "no-overtopping crest elevation" for range of SLRs. Apply two to four selected "events" (still water level, wind setup wind waves) with WHAFIS profile model to ascertain design crest elevations (total water level + freeboard with SLR allowance) for each reach, for suite of sub-reach variations / options / scenarios.
- Assess erosion potential and identify recommended approach.

**Deliverables:** Coastal Hydraulics Design Conditions Memorandum which documents the analyses and findings.

## Assumptions: Technical studies from partnering agencies (FEMA, USGS, USACE) will be provided.

## Subtask 3.4: Interior Drainage

The HDR Team will review the interior landside levee drainage system to asses how the proposed levee alignment will impact current drainage patterns and whether the existing drainage system is likely to have sufficient capacity to provide flood protection at levels that will meet FEMA certification, once the levees are in place. We will review available record drawings to determine volume of flow collected along the proposed/existing levee alignment and discharged into the salt ponds, other information on drainage infrastructure that is provide to us by public agencies, and perform site visits to observe and confirm specific drainage-related features. We may conclude from our evaluation there is insufficient information to readily characterize the existing layout, capacity, and function of the interior drainage system, and identify appropriate design stormwater flow rates.

**Deliverables:** Interior Drainage Design Conditions Memorandum describing existing drainage conditions, gaps in drainage hydrology assessments, and potential coastal levee impacts to those conditions.

#### **Assumptions:**

- Sufficient information will be available to readily characterize the existing layout, capacity and function of the interior drainage system and identify appropriate design stormwater flow rates.
- It is assumed hydraulic modeling of the drainage system is not required.
- SFCJPA and member agencies will provide relevant record drawings of existing drainage system.

#### Subtask 3.5: Interior Drainage Optional Task

Once protection is provided against coastal and fluvial flood sources, the appropriate flood map for FEMA will be determined the local drainage. At this time, it is not known if the existing drainage can meet FEMA certification standards. If the existing conditions assessment suggests that drainage issues may preclude certification, than the JPA may consider the some or all of the following optional tasks:

- Develop new or revise existing hydrology and hydraulic models of the drainage system(s) to estimate design drainage flow rates
- Develop new or revise existing hydrology and hydraulic models to quantify drainage capacity relative to FEMA certification standards and, if necessary to design drainage system improvement
- Consider potential drainage system vulnerability to projected future climate change conditions for SLR, watershed hydrology, and/or groundwater levels
- Conduct interior flood mapping of existing or proposed conditions

## Task 4: Feasibility Study

## Subtask 4.1: Project Alignments

Based on evaluations conducted in Task 3, the HDR Team will conduct a feasibility assessment of the potential alignments established during Task 2 (less the PG&E Ravenswood Substation, which may be awarded at a later time under a separate Task Order). As noted above, these alternatives will take into account the existing conditions, opportunities, and constraints associated with the ecosystem habitat of adjacent lands, recreation, and connectivity associated with the Bay Trail and other facilities, and utility and transportation corridors. Alternative evaluations will be based on criteria, constraints, and objectives developed and confirmed with SFCJPA and its member agencies. To assess opportunities and constraints, our Team will also prepare a Biotic Opportunities and Constraints Report. The Biotic Opportunities and Constraints Report will analyze preliminary biotic resource impacts associated with up to four potential project alignments, and will contain descriptions of existing habitat conditions (including a reconnaissance-level habitat map) and other information that will be incorporated into CEQA and permitting documentation in the subsequent tasks.

For each of the project alignments, the feasibility report will include documentation of design considerations, flood control, restoration and recreation features, utility and real estate impacts, preliminary assessment of environmental impacts, and potential construction phasing. The feasibility report will include feasibility level designs (plans and typical sections) for each of the alternatives identified in Task 2.

The Feasibility Report will include economic, quantitative, and qualitative evaluations of each of the (up to 4) alternatives required to identify the recommended project/alignment to carry forward into design. The report will document the basis for selection of the alternative and identify preliminary design criteria.

## Subtask 4.2: Mitigation and Permitting

For each of the potential alignments determined in Task 2, the HDR Team will provide input on possible environmental resource area opportunities and constraints; identify possible permits; identify additional technical studies to support the environmental and permitting documentation; and recommend the appropriate level of environmental clearance documentation, including an assessment of federal involvement and associated NEPA requirements. The HDR Team will review available documentation, run data base searches for documented biological and cultural resources, and use the IS Environmental Checklist as a guide to qualitatively review other resource topics. The results will be incorporated into the Feasibility Study to inform the decision on the preferred alignment.

During this process, the HDR Team will collaborate with SFCJPA to analyze trade-offs between impacts, costs, and other design objectives and criteria. We will compare the opportunities and constraints associated with various biotic and regulatory compliance issues associated with each alignment.

Early regulatory agency coordination is an important component of streamlined environmental compliance; therefore the HDR Team will assist the SFCJPA to communicate with agency staff during the feasibility study phase of the project to ensure that agency input is integrated into alternatives development and mitigation. Prior to initiating regulatory agency meetings, our ecologists will assist the SFCJPA in communications with key managers for SBSPRP and USFWS Don Edwards National Wildlife Refuge to establish the tidal marsh habitat mitigation concept(s) that will compensate for project impacts via the SBSPRP. We will utilize the preliminary wetland impact/mitigation quantities developed in our Biotic Constraints and Opportunities Report above and our understanding of the SBSPRP to inform this discussion. We (with the SFCJPA) will then bring the SBSPRP mitigation concept developed from these discussions along with on-site T-zone habitat enhancements on the outboard levee slope to the regulatory agencies for their early input.

Our team's ecologists will assist the SFCJPA in communications with the regulatory agencies to get agency staff assigned to this specific project prior to meetings, such that we communicate with the agency staff that will ultimately issue permits for the project. We will attend meetings with the SFCJPA, USFWS, USACE, CDFW, RWQCB, and BCDC on project design and potential mitigation. Because agency feedback will be incorporated into the project's design and mitigation package, attendance of multiple interagency meetings may be necessary. Such meetings will be designed to best facilitate various parts of the overall regulatory process, for example USACE, USFWS, and CDFW meetings for FESA/CESA regulated species (e.g., California clapper rail, salt marsh harvest mouse, western snowy plover) or USACE, RWQCB, and BCDC meetings for tidal wetlands impacts and mitigation considerations under Sections 404 and 401 of the Clean Water Act (CWA).

## Subtask 4.3: Cost Estimate

The HDR Team will prepare an initial opinion of probable construction quantities and costs for each alignment alternative. This will include a description of cost assumptions, and will be broken out into soft costs and construction costs. Cost estimates will be American Association of Cost Engineering (AACE) Class 4.

**Deliverables:** Draft and Final Feasibility Report, including preliminary plans, estimates, schedule.

## Assumptions:

- Up to four alternative alignments will be evaluated.
- Geomorphic change will be based on analysis by SBSP or other nearby reference restoration sites.
- Attendance at one meeting with the SFCJPA to review Mitigation and Permitting options.
- One round of revisions to the Draft Feasibility Report based upon one set of consolidated SFCJPA comments.
- Up to 2 meetings with SBSPRP managers and up to 3 regulatory agency meetings.

#### San Francisquito Creek Flood Improvement Capital Project Task Order #1

HN .	Principal / QA/QC	РМ	Sr. Engineer	Engineer	Jr. Engine	er Sr. H&H	H&H Engine	er Utlities	Drafting	Controller	Clerical	Task	Task	Tech.	Other		TOTAL	AL Subconsultants								Subconsultants Total			TOTAL			
SAFER Bay Project - SFCJPA	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	2013	Totals	Totals	Charge	ODC	Total	HDR		E	6A			HT Ha	arvey			Towi		Sub Total	Markup	TOTAL	FEE
	\$245.00	\$235.00	\$190.00	\$155.00	\$140.00	\$210.00	\$140.00	\$115.00	\$135.00	\$120.00	\$100.00	Hrs	\$	\$3.70	9%	ODC	Labor + ODC	Hours	Cost \$	ODC	Total	Hours	Cost \$	ODC	Total	Hours	Cost \$	ODC Total	T I I	5%	SUBS	
Task Order 1																																
Task 1 - Project Management	8 hrs									50 hrs	73 hrs		\$37,820	\$840	\$2,220	\$3,060	\$40,880	20 hrs	\$ 3,860	\$ 300	\$ 4,160	-	\$-	\$ -	\$-	-	\$-	\$ - \$ -	\$4,160	\$208	\$4,368	\$45,248
Task 2 - Identify Potential Alignments	6 hrs			32 hr	6		32 hr	s	40 hrs			134.0 hrs	\$21,950	\$496		\$496	\$22,446	24 hrs	\$ 4,760	\$ -	\$ 4,760	-	\$-	\$ -	\$-	-	\$-	\$ - \$ -	\$4,760	\$238	\$4,998	\$27,444
Task 3 - Preliminary Engineering Evaluations	18 hrs	136 hrs	-	260 hr	s 328 h	irs 8 hr	s 16 hr	'S -	32 hrs	-	24 hrs	822.0 hrs	\$133,230	\$3,041	\$50,418	\$53,459	\$186,689	354 hrs	\$ 56,860	\$ 100	\$ 56,960	-	\$ -	\$ -	\$-	490 hrs	\$ 74,200	\$ 1,000 \$ 75,200	\$132,160	\$6,608	\$138,768	\$325,457
3.1 Surveying	6 hrs										4 hrs	10.0 hrs	\$1,870	\$37	\$0	\$37	\$1,907	-	\$ -	\$ -	\$-	-	\$-	\$ -	\$-	490 hrs	\$ 74,200	\$ 1,000 \$ 75,200	\$75,200	\$3,760	\$78,960	\$80,867
3.2 Geotechnical Eval & Investigations	6 hrs	124 hrs		260 hr	s 328 h	irs			32 hrs		20 hrs	770.0 hrs	\$123,150	\$2,849	\$49,850	\$52,699	\$175,849	-	\$ -	\$ -	\$-	-	\$-	\$ -	\$-	-	\$-	\$ - \$ -	\$0	\$0	\$0	\$175,849
3.3 Coastal Hydraulics	2 hrs	6 hrs										8.0 hrs	\$1,900	\$30	\$0	\$30	\$1,930	203 hrs	\$ 32,900	\$ 100	\$ 33,000	-	\$-	\$ -	\$-	-	\$-	\$ - \$ -	\$33,000	\$1,650	\$34,650	\$36,580
3.4 Interior Drainage	4 hrs	6 hrs				8 hr	s 16 hr	'S				34.0 hrs	\$6,310	\$126	\$567.90	\$694	\$7,004	151 hrs	\$ 23,960	\$ -	\$ 23,960	-	\$-	\$ -	\$-	-	\$-	\$ - \$ -	\$23,960	\$1,198	\$25,158	\$32,162
Task 4 - Feasibility Study	10 hrs	34 hrs	48 hr:	s 112 hr:	s 56 h	irs -	12 hr	rs 8 hr	s 80 hrs	-	8 hrs	368.0 hrs	\$58,960	\$1,362	\$4,044	\$5,405	\$64,365	230 hrs	\$ 38,523	\$ 1,020	\$ 39,543	355 hrs	\$ 52,985	\$ 293	\$ 53,278	-	\$ -	\$ - \$ -	\$92,821	\$4,641	\$97,462	\$161,827
4.1 Project Alignments	6 hrs	24 hrs	28 hr:	s 56 hr:	6		12 hr	rs 8hr	s 80 hrs		8 hrs	222.0 hrs	\$35,310	\$821	\$0	\$821	\$36,131	109 hrs	\$ 18,210	\$ 100	\$ 18,310	251 hrs	\$ 35,783	\$ 198	\$ 35,981	-	\$ -	\$ - \$ -	\$54,291	\$2,715	\$57,006	\$93,137
4.2 Mitigation and Permitting		4 hrs										4.0 hrs	\$940	\$15	\$84.60	\$99	\$1,039	121 hrs	\$ 20,313	\$ 920	\$ 21,233	48 hrs	\$ 9,190	\$ 51	\$ 9,241	-	\$-	\$ - \$ -	\$30,474	\$1,524	\$31,998	\$33,037
4.3 Cost Estimate	4 hrs	6 hrs	20 hr:	s 56 hr:	s 56 h	irs						142.0 hrs	\$22,710	\$525	\$3,959	\$4,484	\$27,194	-	\$ -	\$ -	\$-	56 hrs	\$ 8,012	\$ 44	\$ 8,056	-	\$ -	\$ - \$ -	\$8,056	\$403	\$8,459	\$35,653
Total Basic Services Hours	42 hrs	290 hrs	48 hrs	s 404 hrs	384 h	rs 8hr	s 60 hr:	s 8 hr	5 152 hrs	50 hrs	105 hrs	1551 hrs						628 hrs				355 hrs				490 hrs						
Total Basic Services Fee	\$10,290	\$68,150	\$9,120	\$62,62	\$53,76	60 \$1,68	0 \$8,40	0 \$92	\$20,520	\$6,000	\$10,500		\$251,960	\$5,739	\$56,681	\$62,420	\$314,380		\$ 104,003	\$ 1,420	\$ 105,423		\$52,985	\$293	\$53,278		\$74,200	\$1,000 \$75,200	\$233,901	\$11,695	\$245,596	\$559,976

Agenda Item 5.e.

# Draft

# SAFER Bay

Funding Agreement with Facebook, Inc.

## Agreement between the San Francisquito Creek Joint Powers Authority and Facebook, Inc. To Fund Feasibility Studies, Design and Environmental Documentation of the SAFER Bay Project Adjacent to the Facebook Headquarters

This Agreement ("Agreement") is made and entered into as of October 25, 2013, by and between the SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY, a California joint powers authority ("Authority"), and FACEBOOK, INC., a Delaware corporation ("Facebook"), collectively referred to as Parties, or individually as Party.

The purpose of this Agreement is to provide funding for feasibility studies, design and environmental documentation of new or improved facilities that are part of, and tie into, the Authority's Strategy to Advance Flood protection, Ecosystems and Recreation along the Bay ("SAFER Bay Project").

## RECITALS

A. San Francisquito Creek has a history of flooding the communities of East Palo Alto, Menlo Park and Palo Alto. The latest flooding occurred in East Palo Alto in December of 2012, with the most damaging flood occurring in 1998. Following the flood of 1998, the cities of East Palo Alto, Menlo Park and Palo Alto along with the San Mateo County Flood Control District and the Santa Clara Valley Water District formed the San Francisquito Creek Joint Powers Authority on May 18, 1999. The Authority and its partners are engaged in a series of projects to reduce the likelihood that floodwaters will exit the Creek.

B. Almost 40% of properties in the Creek's 100-year (1%) floodplain also lie within the 100-year tidal floodplain of San Francisco Bay (the "Bay"). The levees separating East Palo Alto, Menlo Park, and Palo Alto from the Bay do not meet Federal government standards for design and stability, and thus are not certified to protect properties from extreme tides or keep properties out of the National Flood Insurance Program ("NFIP") administered by the Federal Emergency Management Agency ("FEMA"). Consequently, a significant residual risk exists where the creek and coast floodplains overlap.

C. To reduce this risk to people and property, and to reduce the annual cost of NFIP premiums, the Authority recently secured local, state, and federal funds to conduct evaluation, geotechnical investigations, feasibility analysis, design, and environmental documentation of new flood protection facilities along the Bay in southern San Mateo County (the "Project"). The Project's primary objective is to remove properties from the 100-year tidal floodplain, including projected sea level rise over a 50-year period, in a manner that conforms to the requirements of NFIP. The Authority's primary partners in the Project are the cities of Menlo Park and East Palo Alto.

D. The Authority also intends for the Project to expand opportunities for recreation and community connectivity provided by regional and local trails, and to enable the enhancement of historic marshlands, including those that are part of the South Bay Salt Pond Restoration Project.

E. Facebook's headquarters are located at 1 Hacker Way in Menlo Park, California ("Facebook Campus"). According to FEMA, this approximately 57 acre site lies within the Bay's tidal 100-year floodplain and is subject to flooding during extreme tide events, which are projected to increase with continued sea level rise.

F. Facebook desires that the planning and design of an improved levee between the Facebook Campus and the Bay (the "Facebook Levee") be done as part of the SAFER Bay Project. The parties intend, among other things, for the improved Facebook Levee to remove the Facebook Campus from the 100-year tidal floodplain, including projected sea level rise over a 50-year period in a manner that complies with NFIP.

G. The Authority desires that Facebook contribute funds towards the Project as set forth in the following Provisions.

## PROVISIONS

## 1. Project Activities and Objectives

The Authority agrees to include protection of the Facebook Campus and planning and design of the Facebook Levee as part of the Project.

The Project's activities include the following:

Phase 1: alternatives analysis, survey, geotechnical investigations, hydraulic and drainage analysis, and feasibility report; and

Phase 2: topographic mapping, design, Conditional Letter of Map Revision from FEMA, Environmental Impact Report, and a mitigation and monitoring plan.

The objectives of the Project include: 1) protecting properties and infrastructure in the coastal floodplain within East Palo Alto and Menlo Park between San Francisquito Creek and the Redwood City border (specifically including the Facebook Campus) resulting from a 100-year tide, including projected sea level rise; 2) enhancing habitat along the Project reach, particularly habitat for threatened and endangered species; 3) enhancing recreational uses; and 4) minimizing operational and maintenance requirements.

The Authority agrees to complete the Project.

## 2. Obligations of the Parties

• Funding Amount: Facebook will contribute a total of \$275,000.00 to help fund the Project. Facebook has no obligation to contribute any additional funds to the Project.

• Project Administration: The Authority will administer funding from Facebook and other sources to complete the Project.

• Representations by Authority: Authority represents and warrants that: it has secured sufficient funding to perform the Project activities described in Provision 1 of this Agreement.

## 3. Method of and Timing of Transaction

Within sixty (60) days of the execution of this Agreement, Facebook will pay the Authority the amount of \$100,000.00. Upon completion of the feasibility report at the conclusion of Phase 1, the Authority will issue a request for \$100,000.00 to Facebook. Within sixty (60) days of receipt of the request for payment from the Authority, Facebook will provide a check to the Authority in the amount of \$100,000.00. Upon completion of the Project, the Authority will issue a request for \$75,000.00 to Facebook. Within sixty (60) days of receipt of the request for \$75,000.00 to Facebook. Within sixty (60) days of receipt of the request for \$75,000.00 to Facebook. Within sixty (60) days of receipt of the request for \$75,000.00 to Facebook. Within sixty (60) days of receipt of the request for payment from Authority, Facebook will provide a check to the Authority in the amount of \$75,000.00.

## 4. Meetings

From time to time, at Facebook's request, the Authority will meet with Facebook to discuss the status of the Project and any related activities or inquiries.

## 5. Retention of Records, Right to Monitor and Audit

Unless a longer period of time is required by law or any agreement funding the Project, the Authority will maintain all records related to the transaction that is the subject of this Agreement and/or the Project for five (5) years after this Agreement is terminated. The records shall remain available, for the duration of the retention period, for examination by Facebook.

## 6. Agreement Term

A. This Agreement shall automatically terminate one hundred and eighty (180) days after the completion of the Project. This Agreement does not provide for construction, ongoing maintenance and operational needs.

B. If any Party fails to perform any of its material obligations under this Agreement, in addition to all other remedies provided by law, the other Party may terminate this Agreement but only after giving written notice of the failure of performance to the Party committing the failure. Such notice shall explain the alleged failure of performance and provide a reasonable opportunity for the failure to be cured which in no case will be less than thirty (30) days. If the failure of performance is not satisfactorily cured within the cure period, the Agreement may be terminated upon the delivery of a written notice of terminated or cancelled prior to completion due to the Authority's failure to secure all funds necessary to complete the Project, Facebook will be relieved of any further payment obligations under this Agreement and will be entitled to a full refund of all amounts it previously paid to the Authority under this Agreement that were not spent by the Authority at the time this Agreement is terminated...

C. Facebook's Director of Facilities and the Executive Director of the Authority are empowered to terminate this Agreement on behalf of their respective companies/agencies in accordance with the provisions of this Agreement.

## 7. Publicity

The Authority understands and agrees that it may not use Facebook's logo or trademarks without Facebook's prior specific written permission in each instance. The Authority also will not issue any press releases regarding Facebook's involvement in the Project without Facebook's prior specific written permission. This section shall not be construed to limit the Authority's response to inquiries from the press, other media or the public about the Project and Facebook's involvement in the Project. Further, Facebook acknowledges that the Authority is a public agency subject to the Brown Act and Public Records Act and must publicly disclose contracts it enters into and the names of participants in projects that it is managing and implementing, and that it has a responsibility to discuss with the public all aspects of its work.

## 8. Notices

Any notice or other communication required or permitted to be given hereunder shall not be effective unless it is given in writing and shall be delivered (a) in person, (b) by certified mail, postage prepaid, return receipt requested, or (c) by a commercial overnight courier that guarantees next day delivery and provides a receipt, and addressed to the Parties at the addresses stated below, or at such other address as either Party may hereafter notify the other Party in writing:

Authority:	San Francisquito Creek Joint Powers Authority 615-B Menlo Avenue Menlo Park, California 94025 Attention: Executive Director
Facebook:	Facebook, Inc. 1 Hacker Way Menlo Park, CA 94025 Attention: Director of Facilities
with a copy to:	Facebook, Inc. 1 Hacker Way Menlo Park, CA 94025 Attention: Real Estate Counsel

Service of any such notice or other communications so made shall be deemed effective on the day of actual delivery (whether accepted or refused) as evidenced by: a) confirmed in-person delivery by the addressee or other representative of the Party authorized to accept delivery on behalf of the addressee, b) as shown by the addressee's return receipt if by certified mail, or c) as confirmed by the courier service if by courier; provided, however, that if such actual delivery occurs after 5:00 p.m. (local time where received) or on a non-business day, then such notice or demand so made shall be deemed effective on the first business day immediately following the day of actual delivery. No communications via electronic mail shall be effective to give any notice, request, direction, demand, consent, waiver, approval or other communications hereunder.

## 9. Severability

In the event any portion of this Agreement is declared by any court of competent jurisdiction to be invalid, illegal or unenforceable, such portion shall be severed from this Agreement and the remaining parts hereof shall remain in full force and effect as fully as though such invalid, illegal or unenforceable portion had never been part of this Agreement.

## 10. <u>Governing Law and Compliance with Laws</u>

The Parties agree that California law governs this Agreement. In the performance of this Agreement each Party will comply with all applicable laws, ordinances, codes and regulations of the federal, state, and applicable local government.

## 11. Venue

In the event that suit shall be brought by any Party to this contract, the Parties agree that venue shall be exclusively vested in the state courts of either the County of San Mateo or where otherwise appropriate, exclusively in the United States District Court, Northern District of California.

## 12. Assignability and Subcontracting

Neither Party shall assign this Agreement or any portion thereof to a third party or subcontract with a third party to provide services required under this Agreement without the prior written consent of the other Party. Notwithstanding the foregoing, (a) the Authority may contract with an accounting firm, financial institution, or escrow company in order to fulfill its financial obligations under Section 2 and 3 and (b) Facebook may assign this Agreement to an entity controlled by, controlling or under common control with Facebook.

## 13. Ownership of Materials

All reports, documents, or other materials prepared by/for or received by the Authority or any other person engaged directly or indirectly by the Authority in connection with the Project (the "Deliverables") shall be and remain the property of the Authority. The Authority will deliver copies to Facebook of any and all of the Deliverables related to the Facebook Campus and/or Facebook's portion of the Project upon Facebook's request; provided, however, that the Authority will not be obligated to provide Facebook with any Deliverables that (a) the Authority's counsel creates for the Authority and (b) are subject to the attorney-client privilege. Facebook will have the right to use, incorporate, modify, supplement, and reproduce any and all Deliverables related to the Facebook Campus and/or Facebook's portion of the Project or that the Authority otherwise delivers to Facebook; provided, however, that the Authority shall not be responsible or liable for the manner in which Facebook may use or modify the Deliverables it receives from the Authority.

## 14. Entire Agreement

This Agreement constitutes the entire Agreement between the Authority and Facebook with respect to the subject matter hereof and supersedes all prior offers and negotiations, oral and written. This Agreement may not be amended or modified in any respect whatsoever except by an instrument in writing signed by authorized representatives of the Authority and Facebook.

#### 15. Further Actions

The Authority and Facebook agree to execute all instruments and documents, and to take all actions, as may be reasonably required to consummate the transaction contemplated by this Agreement.

#### 16. <u>Counterparts</u>

This Agreement may be executed in any number of counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, taken together, shall be deemed to be one and the same instrument.

## 17. Non Waiver

A Party's waiver of any term, condition, or covenant, or breach of any term, condition or covenant will not be construed as a waiver of any other term, condition or covenant.

#### 18. Third Parties

This Agreement is entered into only for the benefit of the Parties executing this Agreement and not for the benefit of any other individual, entity, or person.

IN WITNESS WHEREOF, the Authority and Facebook have executed this Funding Agreement as of the date and year first written above.

APPROVED AS TO FORM:

## SAN FRANCISQUITO CREEK JOINT POWERS AUTHORITY, a California joint powers authority

Greg Stepanicich General Counsel By: \_\_\_\_\_ Len Materman Executive Director

APPROVED AS TO FORM:

FACEBOOK, INC.

By: \_\_\_\_\_ (Name) (Title)