

- TO: Mayor and Councilmembers
- **FROM:** Charles W. Ebeling, Public Works Director
- **CONTACT:** Gerald Comati, Project Manager
- **SUBJECT:** San Jose Creek Channel Fish-Passage Modification Project

RECOMMENDATIONS:

- A. Create a new Capital Improvement Program project titled the San Jose Creek Channel Fish-Passage Modification Project and authorize a new appropriation of \$665,000 from the General Fund to the new project account assigned by staff; and
- B. Authorize the City Manager to execute a Professional Design Services Agreement with Northwest Hydraulic Consultants (NHC) Inc, in an amount not to exceed \$340,921, for the San Jose Creek Channel Fish Passage Modification Project; and
- C. Authorize the City Manager to acquire a security to guarantee completion of the San Jose Creek Channel Fish Passage Modification Project pursuant to the Lake and Streambed Alteration Agreement between the City and the California Department of Fish & Wildlife for the Hollister Avenue Bridge Project.

BACKGROUND:

The San Jose Creek Channel Capacity Improvements and Fish-Passage Project began development in 2005 and completed construction in 2014. The purpose of the project was to increase the capacity of the existing San Jose Creek Channel to contain the regulatory 100-year flood event and thereby remove a generous portion of Old Town Goleta from the regulatory floodplain. The second purpose was to provide fish-passage though the concrete channel thereby providing a viable corridor for fish to migrate from the Goleta Slough to the natural creek, upstream of Hollister Avenue.

The conceptual and preliminary design for the channel improvement project extended from the downstream end of the channel (Goleta Slough) to the existing natural creek north of Hollister Avenue. Following completion in 2010 of the preliminary design, due to limitations in funding, the project was divided whereby the initial phase would complete improvements along most of the existing channel, ending approximately 300 feet downstream of Hollister Avenue. The second or completion phase project would complete the channel improvements for the remaining upstream portion of the channel as well as replace the Hollister Avenue Bridge.

To ensure a viable fish passage design and ensure approval from the California Department of Fish and Wildlife (CDFW) and the National Marine Fisheries (NMFS), the City in collaboration with CDFW, NMFS, US Army Corps of Engineers (USACOE) and the Santa Barbara County Flood Control District (SBCFCD) developed a hydraulic and physical model led by a specialist fish-passage engineer under contract with the City. The preliminary design was successfully completed in 2009. The fish-passage design consisted of a low flow (depressed) channel located along the east side of the new flood channel. To create stepped pools to allow fish to swim up the channel, the design included concrete and timber weirs placed at set intervals along the length of the channel. The timber weirs incorporated a design that was intended to break-away during high flow events (storm events) to not diminish the flood capacity of the facility.

Per the provisions of a Cooperative Agreement executed in 2010 between the City and the Santa Barbara County Flood Control District, the maintenance responsibility of the fish-passage facility would lie with the City while the remaining maintenance responsibilities for the San Jose Creek Channel would remain with the Flood Control District (the owner of the channel). The break-away timber weirs along with other removable timber elements (cross boards and drop-in boards) would require, by design, considerable maintenance by the City. In addition to the maintenance activities related to the replacement of the weirs that have been washed away plus the periodic installation and removal of portions of the fish-weir system, the fish-passage also requires regular maintenance to remove debris and sediment trapped between the weirs to function properly.

The initial channel improvement project required a Lake and Streambed Alteration (LSA) Agreement from CDFW. The LSA Agreement was approved in 2012 and construction of the initial channel project was completed in 2014. The LSA agreement clearly stipulated that the City was to maintain a functioning and viable fish-passage system and that if this were not achieved, the City would be responsible to make appropriate modifications. Following construction, the resource agencies and current City staff identified that the existing conditions were missing some of the fish-passage design elements that were discussed during the design approval process by the permitting agencies.

Additionally, in early 2019 the resource agencies and current City staff identified a significant amount of sediment and debris build up within the fish-passage area of the channel. At that time, City staff identified the concern and initiated the process to budget, design, and complete the debris removal maintenance work. Approximately 60,000 cubic yards of sediment was removed from the fish-passage channel in 2019. The City performed additional sediment removal in 2020 and has funds budgeted for FY 21-22.

DISCUSSION:

CDFW Lake and Streambed Alteration (LSA) Agreement

The City's Hollister Avenue Bridge project includes the completion phase of the San Jose Creek Channel and fish-passage improvements. The Hollister Avenue Bridge Project also requires a Lake and Streambed Alteration (LSA) Agreement from CDFW. During a design review of the project, CDFW raised concerns about the maintenance and function of the fish-passage system built under the initial channel improvements project. As a result, and consistent with provisions of the LSA agreement executed for the initial channel improvement project, CDFW and the National Marine Fisheries (NMFS) are requiring a fresh look at the fish-passage design including new hydraulic modeling, with the intent of designing and constructing a modified weir system that functions for fish-passage and is not so reliant on ongoing maintenance for both operations and sediment clean out.

The Public Works Department has engaged closely with CDFW and NMFS during the last six months to define a path forward. CDFW has submitted a Lake and Streambed Alteration Agreement (LSA) to the City for the Hollister Avenue Bridge project. The LSA contains conditions that require the City to construct modifications to the fish-passage system to the extent necessary to create a fish-passage that functions properly. Construction of the fish-passage modifications will be permitted to occur during or after construction of the Hollister Avenue Bridge Project. Without the CDFW's LSA Agreement for the Hollister Avenue Bridge Project, the project will not be able to proceed into the construction phase which in turn could result in a loss of grant funding.

Public Works has developed a scope and budget for the design, environmental, and permitting phase of the project, which has been approved by CDFW. The total cost estimate for this phase of the project (Preliminary Engineering Phase) is \$665,000. A condition of the CDFW's LSA Agreement requires the City to establish a security for the design and construction of the project. This security allows CDFW to complete the weir modifications should the City fail to meet the conditions of the LSA and complete construction of the fish-passage modifications. If the City does not agree with this process, the City will not receive the CDFW permit (Lake and Streambed Alteration Agreement) for the Hollister Avenue Bridge Project and the project will not be able to proceed into construction. The type of the security is still being negotiated with CDFW, and certain options may incur no cost for the City. The worst case scenario, in terms of cost, would be 1% of the cost of the San Jose Creek Channel Fish Passage Modification Project and funds for this scenario has been included in the Design line item of the project budget.

The City Departments of Public Works and Finance as well as the City Attorney's office have reviewed the LSA Agreement and provided comments and edits. Staff is continuing to work with CDFW to ensure that the LSA is completed.

San Jose Creek Channel Fish-Passage Modification Project

As a condition of the CDFW permit for the Hollister Avenue Bridge Project, the City is required to establish a new Public Works CIP project to design and construct the fish-passage weir modifications identified above. The name of the CIP project would be the San Jose Creek Channel Fish-Passage Modification Project (Project No. 9117). The project will be broken into phases consistent with the Project Delivery Process. Staff is requesting authorization from the City Council on the establishment of this CIP Project and appropriation of project funding as identified in the fiscal impact section below.

Professional Design Services Agreement with Northwest Hydraulic Consultants (NHC)

Northwest Hydraulic Consultants (NHC) is an engineering firm that specializes in fishpassage hydraulic modeling and design. Located in Canada, Washington State and California, NHC worked on the original fish-passage design for the San Jose Creek Channel Capacity Improvement and Fish Passage Project. The lead engineer on that effort was Mr. Ed Zapel. During the last two years, Ed has provided fish-passage design work for the Hollister Avenue Bridge Project. Public Works requested a proposal from NHC to provide design services and construction oversight for the San Jose Creek Channel Fish Passage Modification Project. Staff has reviewed and negotiated the scope and cost for these services and recommends approval of a new contract with NHC Inc for a not-to-exceed amount of \$340,921.

NEXT STEPS

Hollister Avenue Bridge Project:

- Approval of CDFW LSA Agreement February 2022.
- Project proceeds to construction Phase in 2022.

San Jose Creek channel Fish-Passage Modification Project:

- Establishment of a new CIP Project the "San Jose Creek Channel Fish-Passage Modification Project" and appropriation of project funding January 2022.
- Approval of agreement with Northwest Hydraulic Consultants for design, construction oversight and monitoring services January 2022.
- Preliminary Design January 2022 to April 2023.
- Environmental and Permitting January 2022 to April 2023.
- Construction June 2023 to October 2023.
- Monitoring October 2023 to June 2026.

FISCAL IMPACTS

Project Cost Estimate

The cost of completing the San Jose Creek Channel Fish-Passage Project is estimated in Table 1 below:

Expenditures		Funding	
Staff	\$25,000		
Environmental/Permitting (Consultant)	\$75,000		CCCCCCCCCCCC
Design	\$465,000	General Fund (101) \$665,000	
PM (Consultant)	\$100,000		
Construction	TBD	Construction Funding	TBD
Total:	\$665,000	Total:	\$665,000

 Table 1: Estimated San Jose Creek Channel Fish Passage Project Cost

Project Funding:

The San Jose Creek Channel Fish-Passage Modification Project is a proposed new CIP Project that requires appropriation of project funding. The table below summarizes the proposed FY 21/22 project budget amounts and funding source accounts for the San Jose Creek Channel Fish-Passage Modification Project (CIP No. 9117).

Project: San Jose Creek Channel Fish-Passage Modification Project (CIP No. 9117)					
Account	Fund Type	Appropriation	New Budget	Available Budget	
101-90-9117-57070 (Design/Env.)	General Fund	\$ 665,000	\$ 665,000	\$ 665,000	
Total		\$ 665,000	\$ 665,000	\$ 665,000	

Public Works is recommending that the City Council create a new CIP project titled the San Jose Creek Channel Fish-Passage Modification Project and authorize a new appropriation of \$665,000 from the General Fund Balance to the new project account assigned by staff. The funds will be used to develop a design of a modified fish-passage facility within San Jose Creek Channel, and secure environmental approval and permits for the project. Once the design has been developed, Public Works will return to the City Council with a project update along with a construction cost estimate and project schedule and to request appropriation of construction and post construction monitoring budget.

ALTERNATIVES:

The City Council may elect to not to create a new San Jose Creek Channel Fish-Passage Modification Project and not approve the agreement with Northwest Hydraulic Consultants for professional design services, and instead direct staff to not proceed with the San Jose Creek Channel Fish-Passage Modification Project. If this occurs, the City will not secure the required permit (LSA Agreement) from CDFW for the Hollister Avenue Bridge Project in which case that project will not be able to proceed into the construction phase. This would delay the delivery of the combined Ekwill-Fowler Project plus the Hollister Avenue Bridge project and could jeopardize grant funding. In addition, delaying replacement of the Hollister Avenue Bridge and associated channel improvements would continue to cause flood risk in Goleta Old Town.

Reviewed By:

Legal Review By:

Approved By:

Kristine Schmidt Assistant City Manager

nere Magan

Megan Garibaldi City Attorney

Michelle Greene **City Manager**

ATTACHMENTS:

- 1. Professional Design Services Agreement with Northwest Hydraulic Consultants Inc. (NHC) for the San Jose Creek Channel Fish-Passage Project.
- 2. San Jose Creek Channel Fish-Passage Modification Project PowerPoint Presentation. (Online Only)

ATTACHMENT 1

NHC Agmt SJC Fish Passage Modification Project

Project Name: San Jose Creek Channel Fish Passage Modification Project

AGREEMENT FOR PROFESSIONAL DESIGN SERVICES BETWEEN THE CITY OF GOLETA AND NORTHWEST HYDRAULIC CONSULTANT INC.

This AGREEMENT FOR PROFESSIONAL DESIGN SERVICES (herein referred to as "AGREEMENT") is made and entered into this 18th day of January 2022, by and between the **CITY OF GOLETA**, a municipal corporation (herein referred to as "CITY"), **NORTHWEST HYDRAULIC CONSULTANTS**, **INC**., (Washington State Corporation) (herein referred to as "CONSULTANT").

SECTION A. RECITALS

1. The CITY has a need for professional design services for the San Jose Creek Channel Fish Passage Modification Project; and

2. The CITY does not have the personnel able and/or available to perform the services required under this AGREEMENT, and therefore, the CITY desires to contract for professional services to accomplish this work; and

3. The CITY procured these services in compliance with Goleta Municipal Code Section 3.05.240 by the CONSULTANT's expertise and familiarity required for the project.

4. The City Council, on this 18th day of January 2022, approved this AGREEMENT and authorized the City Manager to execute the AGREEMENT.

SECTION B. TERMS

1. RETENTION AS CONSULTANT

CITY hereby retains CONSULTANT, and CONSULTANT hereby accepts such engagement, to perform the services described in Section 2. CONSULTANT warrants it has the qualifications, experience, and facilities to properly and timely perform said services.

2. DESCRIPTION OF SERVICES

The services to be performed by CONSULTANT are as follows:

Professional design Services in conjunction with the San Jose Creek Channel Fish Passage Modification Project. Services shall

> Public Works Department and Northwest Hydraulic Consultants, Inc. Page 1 of 20

generally include design and agency collaboration services related to fish-passage design along the San Jose Creek Channel as more particularly set forth in the Scope of Work, attached as Exhibit "A," and incorporated herein.

CONSULTANT shall deliver to CITY the deliverables defined in Exhibit "A."

3. COMPENSATION AND PAYMENT

(a) Maximum and Rate. The total compensation payable to CONSULTANT by CITY for the services under this AGREEMENT SHALL NOT EXCEED the sum of \$340,921 (herein "not to exceed amount"), and shall be earned as the work progresses on the following basis:

Hourly at the hourly rates and with reimbursement to CONSULTANT for those expenses set forth in CONSULTANT's Schedule of Fees marked Exhibit "B," attached and incorporated herein. The rates and expenses set forth in that exhibit shall be binding upon CONSULTANT until December 31, 2023, after which any change in said rates and expenses must be approved in writing by CITY's Project Manager as described in Section 5 (CITY is to be given 60 days notice of any rate increase request), provided the not to exceed amount is the total compensation due CONSULTANT for all work described under this AGREEMENT.

(b) <u>Payment</u>. CONSULTANT shall provide CITY with written verification of the actual compensation earned, which written verification shall be in a form satisfactory to CITY's Project Manager, as described in Section 5. Invoices shall be made no more frequently than on a monthly basis, and describe the work performed (including a list of hours worked by personnel classification). All payments shall be made within 30 days after CITY's approval of the invoice.

4. EXTRA SERVICES

CITY shall pay CONSULTANT for those CITY authorized extra services, not reasonably included within the services described in Section 2, as mutually agreed to writing in advance of the incurrence of extra services by CONSULTANT. Unless CITY and CONSULTANT have agreed in writing before the performance of extra services, no liability and no right to claim compensation for such extra services or expenses shall exist. The applicable hourly rates for extra services shall be at the hourly rates set forth in Exhibit B if one is included as part of this agreement. Any compensation for extra services shall be part of the total compensation and shall not increase the not to exceed amount identified in Section 3.

5. CITY PROJECT MANAGER AND SERVICES BY CITY

The services to be performed by CONSULTANT shall be accomplished under the general direction of, and coordinate with, CITY's "Project Manager", as that staff person is designated by CITY from time to time, and who presently is Gerald Comati. Project Manager shall have the authority to act on behalf of the CITY in administering this AGREEMENT but shall not be authorized to extend the term of the AGREEMENT or increase the not to exceed amount.

6. TERM, PROGRESS AND COMPLETION

The term of this AGREEMENT is from the date first written above to December 31, 2023, unless term of this AGREEMENT is extended, or the AGREEMENT is terminated as provided for herein.

CONSULTANT shall not commence work on the services to be performed until (i) CONSULTANT furnishes proof of insurance as required by Section 10 below, and (ii) CITY gives written authorization to proceed with the work provided by CITY's Project Manager.

7. OWNERSHIP OF DOCUMENTS

All drawings, designs, data, photographs, reports and other documentation (other than CONSULTANT's drafts, notes and internal memorandum), including duplication of same prepared by CONSULTANT in the performance of these services, are the property of CITY. CITY shall be entitled to immediate possession of the same upon completion of the work under this AGREEMENT, or at any earlier or later time when requested by CITY. CITY agrees to hold CONSULTANT harmless from all damages, claims, expenses, and losses arising out of any reuse of the plans and specifications for purposes other than those described in this AGREEMENT, unless written authorization of CONSULTANT is first obtained.

8. PERSONAL SERVICES/NO ASSIGNMENT/SUBCONTRACTOR

This AGREEMENT is for professional services which are personal to CITY. Ed Zapel is deemed to be specially experienced and is a key member of CONSULTANT's firm, and shall be directly involved in the performance of this work. This key person shall communicate with, and periodically report to, CITY on the progress of the work. Should any such individual be removed from assisting in this contracted work for any reason, CITY may terminate this AGREEMENT. This AGREEMENT may not be assigned or subcontracted without the City Manager's prior written consent.

9. HOLD HARMLESS AND INDEMNITY

Indemnification and Defense for Professional Service. To the (a) fullest extent permitted by law, Consultant shall indemnify, defend and hold harmless the CITY and any and all of its officials, employees and agents ("Indemnified Parties") from and against any and all claims, losses, liabilities, damages, costs and expenses, including attorney's fees and costs, to the extent they arise out of, pertain to, or relate to the negligence. recklessness. willful misconduct the CONSULTANT. or of CONSULTANT's duty to defend shall consist of reimbursement of defense costs incurred by CITY in direct proportion to the CONSULTANT's proportionate percentage of fault. CONSULTANT's percentage of fault shall be determined, as applicable, by a court of law, jury or arbitrator. In the event any loss, liability or damage is incurred by way of settlement or resolution without a court, jury or arbitrator having made a determination of the CONSULTANT's percentage of fault, the parties agree to mediation with a third party neutral to determine the CONSULTANT's proportionate percentage of fault for purposes of determining the amount of indemnity and defense cost reimbursement owed to the CITY.

(b) For All Other Liabilities. Notwithstanding the foregoing and without diminishing any rights of CITY, for any liability, claim, demand, allegation against CITY arising out of, related to, or pertaining to any act or omission of CONSULTANT, but which is not a design professional service, CONSULTANT shall defend, indemnify, and hold harmless CITY, its officials, employees, and agents ("Indemnified Parties") from and against any and all damages, costs, expenses (including reasonable attorney fees and expert witness fees), judgments, settlements, and/or arbitration awards, whether for personal or bodily injury, property damage, or economic injury, and arising out of, related to, any concurrent or contributory negligence on the part of the CITY, except for the sole or active negligence of, or willful misconduct of the CITY.

(c) No Waiver. CITY does not waive, nor shall be deemed to have waived, any indemnity, defense or hold harmless rights under this section because of the acceptance by CITY, or the deposit with CITY, of any insurance certificates or policies described in Section 10.

10. INSURANCE

CONSULTANT shall, at CONSULTANT's sole cost and expense, provide insurance as described herein. All insurance is to be placed with insurers authorized to do business in the State of California with an A.M. Best and Company rating of A- or better, Class VII or better, or as otherwise approved by CITY. Insurance shall include the following (or broader) coverage:

- a) Insurance Services Office Commercial Liability coverage "occurrence" form CG 00 01 or its exact equivalent with an edition date prior to 2004 and with minimum limits of \$1,000,000 per occurrence and \$2,000,000 general aggregate.
- b) Insurance Services Office form number CA 00 01 or equivalent covering Automobile Liability, including hired and non-owned automobile liability with a minimum limit of \$1,000,000 per accident. If the Service Provider owns no vehicles, this requirement may be satisfied by a non-owned and hired auto endorsement to Service Provider's commercial general liability policy.
- c) Workers' Compensation insurance complying with California worker's compensation laws, including statutory limits for workers' compensation and an Employer's Liability limit of \$1,000,000 per accident or disease.
- d) Professional liability insurance that covers the services to be performed in connection with this agreement, in the minimum amount of \$1,000,000 per claim.

Liability insurance policies required to be provided by CONSULTANT hereunder shall contain or be endorsed to contain the following provisions:

- a) Except for professional liability insurance, CITY, its employees, officials, agents and member agencies shall be covered as additional insureds. Coverage shall apply to any and all liability arising out of the work performed or related to the contract. Additional insured status under the general liability requirement shall be provided on Insurance Services Office Form CG 20 10, with an edition date prior to 2004, or its equivalent. Additional insured status for completed operations shall be provided either in the additional insured form or through another endorsement such as CG 20 37, or its equivalent.
- b) General and automobile liability insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability. Coverage will not be limited to CITY's vicarious liability.
- c) Professional liability insurance policies inception date, continuity date, or retroactive date must be before the effective date of this agreement. CONSULTANT agrees to maintain continuous coverage

through a period no less than three years after completion of the services required by this agreement.

- d) Except for professional liability insurance, liability coverage shall be primary and non-contributing with any insurance maintained by CITY.
- e) Evidence of coverage (including the workers' compensation and employer's liability policies) shall provide that coverage shall not be suspended, voided, canceled or reduced in coverage or in limits except after 30 days' prior written notice has been given to CITY. Such provision shall not include any limitation of liability of the insurer for failure to provide such notice.
- f) No liability insurance coverage provided to comply with this AGREEMENT shall prohibit CONSULTANT, or CONSULTANT's employees, or agents, from waiving the right of recovery prior to a loss. CONSULTANT waives its right of recovery against CITY.
- g) CONSULTANT agrees to deposit with CITY within fifteen days of Notice to Proceed of the Contract certificates of insurance and required endorsements.
- h) There shall be no recourse against CITY for payment of premiums or other amounts with respect to the insurance required to be provided by CONSULTANT hereunder. Any failure, actual or alleged, on the part of CITY to monitor compliance with these requirements will not be deemed as a waiver of any rights on the part of CITY. CITY has no additional obligations by virtue of requiring the insurance set forth herein. In the event any policy of insurance required under this AGREEMENT does not comply with these requirements or is canceled and not replaced, CITY has the right but not the duty to obtain the insurance it deems necessary and any premium paid by CITY will be promptly reimbursed by CONSULTANT or CITY will withhold amounts sufficient to pay premium from CONSULTANT payments.
- i) CONSULTANT agrees to provide immediate notice to CITY of any claim or loss against CONSULTANT arising out of the work performed under this AGREEMENT. CITY assumes no obligation or liability by such notice, but has the right (but not the duty) to monitor the handling of any such claim or claims if they are likely to involve CITY.

11. RELATIONSHIP OF CONSULTANT TO CITY

The relationship of the CONSULTANT to CITY shall be that of an independent contractor and that in no event shall CONSULTANT be considered an officer, agent, servant or employee of CITY. CONSULTANT shall be solely responsible for any workers compensation insurance, withholding taxes, unemployment insurance, and any other employer obligations associated with the described work.

12. CORRECTIONS

In addition to the above indemnification obligations, CONSULTANT shall correct, at its expense, all errors in the work that may be disclosed during CITY's review of CONSULTANT's report or plans. Should CONSULTANT fail to make such correction in a reasonably timely manner, such correction shall be made by CITY, and the cost thereof shall be charged to CONSULTANT or withheld from any funds due to CONSULTANT hereunder.

13. TERMINATION BY CITY

CITY, by notifying CONSULTANT in writing, may upon 10 calendar days notice, terminate without cause any portion or all of the services agreed to be performed under this AGREEMENT. If termination is for cause, no notice period need be given. In the event of termination, CONSULTANT shall have the right and obligation to immediately assemble work in progress for the purpose of closing out the job. All compensation for actual work performed and charges outstanding at the time of termination shall be payable by CITY to CONSULTANT within 30 days following submission of a final statement by CONSULTANT unless termination is for cause. In such event, CONSULTANT shall be compensated only to the extent required by law.

14. ACCEPTANCE OF FINAL PAYMENT CONSTITUTES RELEASE

The acceptance by CONSULTANT of the final payment made under this AGREEMENT shall operate as and be a release of CITY from all claims and liabilities for compensation to CONSULTANT for anything done, furnished, or relating to CONSULTANT'S work or services. Acceptance of payment shall be any negotiation of CITY's check or the failure to make a written extra compensation claim within 10 calendar days of the receipt of that check. However, approval or payment by CITY shall not constitute, nor be deemed, a release of the responsibility and liability of CONSULTANT, its employees, subcontractors, agents and CONSULTANTs for the accuracy and competency of the information provided and/or work performed; nor shall such approval or payment be deemed to be an assumption of such responsibility or liability by CITY for any defect or error in the work prepared by CONSULTANT, its employees, subcontractors, agents and consultants.

15. AUDIT OF RECORDS

At any time during normal business hours and as often as it may deem necessary, CONSULTANT shall make available to a representative of CITY for examination of all its records with respect to all matters covered by this AGREEMENT and will permit CITY to audit, examine and/or reproduce such records. CONSULTANT will retain such financial records, time sheets, work progress reports, invoices, bills and project records for at least two years after termination or final payment under this AGREEMENT.

16. WAIVER; REMEDIES CUMULATIVE

Failure by a party to insist upon the strict performance of any of the provisions of this AGREEMENT by the other party, irrespective of the length of time for which such failure continues, shall not constitute a waiver of such party's right to demand strict compliance by such other party in the future. No waiver by a party of a default or breach of the other party shall be effective or binding upon such party unless made in writing by such party, and no such waiver shall be implied from any omissions by a party to take any action with respect to such default or breach. No express written waiver of a specified default or breach shall affect any other default or breach, or cover any other period of time, other than any default or breach and/or period of time specified. All of the remedies permitted or available to a party under this AGREEMENT, or at law or in equity, shall be cumulative and alternative, and invocation of any such right or remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right of remedy.

17. CONFLICT OF INTEREST

CONSULTANT is unaware of any CITY employee or official that has a financial interest in CONSULTANT'S business. During the term of this AGREEMENT and/or as a result of being awarded this AGREEMENT, CONSULTANT shall not offer, encourage or accept any financial interest in CONSULTANT'S business by any CITY employee or official.

18. CONSTRUCTION OF LANGUAGE OF AGREEMENT

The provisions of this AGREEMENT shall be construed as a whole according to its common meaning of purpose of providing a public benefit and not strictly for or against any party. It shall be construed consistent with the provisions hereof, in order to achieve the objectives and purposes of the parties. Wherever required by the context, the singular shall include the plural and vice versa, and the masculine gender shall include the feminine or neutral genders or vice versa.

19. MITIGATION OF DAMAGES

In all situations arising out of this AGREEMENT, the parties shall attempt to avoid and minimize the damages resulting from the conduct of the other party.

20. GOVERNING LAW

This AGREEMENT, and the rights and obligations of the parties, shall be governed and interpreted in accordance with the laws of the State of California. Should litigation occur, venue shall be in Superior Court of Santa Barbara County.

21. NONDISCRIMINATION

CONSULTANT shall not discriminate on the basis of race, color, gender, gender identity/expression, pregnancy, sexual orientation, disability, marital status, or any other characteristic protected under applicable federal or state law.

22. TAXPAYER IDENTIFICATION NUMBER

CONSULTANT shall provide CITY with a complete Request for Taxpayer Identification Number and Certification, Form W-9 (Rev. October 2018), as issued by the Internal Revenue Service.

23. NON-APPROPRIATION OF FUNDS

Payments due and payable to CONSULTANT for current services are within the current budget and within an available, unexhausted and unencumbered appropriation of CITY funds. In the event CITY has not appropriated sufficient funds for payment of CONSULTANT services beyond the current fiscal year, this AGREEMENT shall cover only those costs incurred up to the conclusion of the current fiscal year.

24. MODIFICATION OF AGREEMENT

The tasks described in this AGREEMENT and all other terms of this AGREEMENT may be modified only upon mutual written consent of CITY and CONSULTANT.

25. USE OF THE TERM "CITY"

Reference to "CITY" in this AGREEMENT includes City Manager or any authorized representative acting on behalf of CITY.

26. PERMITS AND LICENSES

CONSULTANT, at its sole expense, shall obtain and maintain during the term of this AGREEMENT, all appropriate permits, licenses, and certificates that

Public Works Department and Northwest Hydraulic Consultants, Inc. Page 9 of 20 may be required in connection with the performance of services under this AGREEMENT.

27. CAPTIONS

The captions or headings in this AGREEMENT are for convenience only and in no other way define, limit or describe the scope or intent of any provision or section of the AGREEMENT.

28. AUTHORIZATION

Each party has expressly authorized the execution of this AGREEMENT on its behalf and bind said party and its respective administrators, officers, directors, shareholders, divisions, subsidiaries, agents, employees, successors, assigns, principals, partners, joint venturers, insurance carriers and any others who may claim through it to this AGREEMENT.

29. ENTIRE AGREEMENT BETWEEN PARTIES

Except for CONSULTANT'S proposals and submitted representations for obtaining this AGREEMENT, this AGREEMENT supersedes any other agreements, either oral or in writing, between the parties hereto with respect to the rendering of services, and contains all of the covenants and agreements between the parties with respect to said services.

30. PARTIAL INVALIDITY

If any provision in this AGREEMENT is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

31. NOTICES

Any notice required to be given hereunder shall be deemed to have been given by depositing said notice in the United States mail, postage prepaid, and addressed as follows:

TO CITY:

Attention: Michelle Greene, City Manager City of Goleta 130 Cremona Drive, Suite B Goleta, CA 93117

Public Works Department and Northwest Hydraulic Consultants, Inc. Page 10 of 20 TO CONSULTANT: Attention: Ed Wallace Northwest Hydraulic Consultants, Inc. 200 S. Los Robles Avenue, Suite 405 Pasadena, CA 91101

32. COUNTERPARTS AND ELECTRONIC/FACSIMILE SIGNATURES

This Agreement may be executed in several counterparts, which may be facsimile or electronic copies. Each counterpart is fully effective as an original, and together constitutes one and the same instrument.

In concurrence and witness whereof, this AGREEMENT has been executed by the parties effective on the date and year first above written.

CITY OF GOLETA

CONSULTANT

Michelle Greene, City Manager

Erik Rowland, President

ATTEST

Deborah Lopez, City Clerk

Ed Wallace, Principal

APPROVED AS TO FORM: MEGAN GARIBALDI, CITY ATTORNEY

— DocuSigned by:

Winnie (ai winnie faiguestant City Attorney

> Public Works Department and Northwest Hydraulic Consultants, Inc. Page 11 of 20

EXHIBIT A

City of Goleta San Jose Creek Channel Fish Passage Modification Project

SCOPE OF WORK BY NHC INC.

PHASE 1 TASKS

TASK 1: Design Coordination with NMFS, CDFW, and City of Goleta

CONSULTANT shall attend up to 9 one-hour each bi-weekly coordination meetings in Goleta or by TEAMS, plus up to 9 two-hour each monthly summary meetings in Goleta or by TEAMS, for the expected nine (9) months of the primary design effort (total of 18 meetings). This assumes that up to 3 of the monthly summary meetings will be in-person held in Goleta.

Assumptions: CONSULTANT's budget includes all travel expenses required for up to 3 in-person meetings in Goleta. These meetings will be attended in-person by the CONSULTANT design lead, joined by up to one CONSULTANT member of the design support team via telephone. The remaining fifteen (15) total meetings will be attended via TEAMS by the CONSULTANT design lead. City will prepare draft meeting notes. City of Goleta will provide venue for any meetings and coordination activities associated with regulating agency collaboration and comment.

Deliverables:

a. Electronic tracked-changes comments on meeting notes prepared by the City.

TASK 2: Updated Hydrologic and Hydraulic Assessment

CONSULTANT shall conduct an updated hydrologic assessment of San Jose Creek using USGS gage data or other data sources, as available. The hydrologic assessment will include development of a flow duration curve and a flood frequency curve for annual peak flows. The purpose of this work is to help identify appropriate low flow and high flow design discharges to be considered during design of the fish passage features. The calculated flood frequency curve will be compared to the data utilized previously to design the flood flow capacity of the channel.

Hydrologic data developed above will be utilized to calculate hydraulic conditions throughout the project reach and within a portion of the natural channel upstream of the project reach throughout the range of fish passage flows of interest in

> Public Works Department and Northwest Hydraulic Consultants, Inc. Page 12 of 20

Tasks through 7 below. Determination of appropriate fish passage flow range may be influenced by the hydraulic characterization of the fish passage conditions apparent in the "best" available reference reach selected from within the natural channel upstream of the project reach extending to the Highway 101 crossing. The "best" available reference reach determination will be made during a site visit in collaboration with the City, CDFW, and NMFS staff.

Assumptions: The City will provide additional field survey data for the natural reach upstream of Hollister Avenue extending from Hollister Avenue upstream to the Highway 101 bridge. Survey needs will be developed by CONSULTANT and provided to the City.

Deliverables:

a. An initial Draft Design Report, to include flow duration curve and updated flood frequency curve.

TASK 3: Development of Weir Configurations for Study

CONSULTANT shall coordinate with City, CDFW, and NMFS to establish and agree on three (3) weir configurations that would be initially tested using the Computational Fluid Dynamic (CFD) modeling design tasks. These may additionally be tested in the physical scale modeling. A fourth weir configuration may be developed that considers the performance of the three initial configurations, and it will be evaluated in the CFD modeling discussed in Task 5 below, and in the physical modeling discussed in Task 7 below.

Assumptions: The existing flow line of the built downstream reach of San Jose Creek Channel and the designed flow line included in the upstream channel will not be altered.

Deliverables:

a. An updated Draft Design Report, to include summary design sketches of three proposed upstream weir configurations.

TASK 4: Development of Downstream Weir Design

CONSULTANT shall develop a new breakaway or collapsible weir design for downstream weirs within the downstream 2650 feet of the existing flood control channel. Development of an appropriate design will require collaboration with Santa Barbara County Flood Control District and the City to accomplish the objective of passing large flood events within the existing channel and yet be readily replaced and maintained during lower flows within the range of fish passage design flows. Assumptions: The design is expected to accommodate fish passage within the range of fish passage design flows but not compromise regulatory flood flow capacity of the channel during large flow events.

Deliverables:

a. An updated Draft Design Report to include fish passage weir design drawings for selected downstream weir concept.

TASK 5: Numerical CFD Hydraulic Modeling for Fish Passage

CONSULTANT shall develop a Computational Fluid Dynamic (CFD) model of the flood control channel extending into the natural reach about 200 feet upstream of the Hollister Avenue Bridge to the downstream end of the flood control channel. Upstream boundary conditions will be based on previously developed HECRAS modeling results of the upstream natural reach, and downstream boundary conditions downstream will be based on USGS and NOAA tidal data for the lagoon. The CFD model will incorporate up to three different alternative fish passage weir and velocity cover element design configurations, within the uniform flood control channel and fish passage channel flow line geometry. These three alternatives are expected to be developed in collaboration with the NMFS and CDFW staff participating in the regular project design coordination effort described in Task 1 and Task 3 above. The CFD model will be used to simulate up to 10 steady state flows, including up to 5 flows within the range from low criteria fish passage flow to high criteria fish passage flow, and up to 5 higher flows tentatively equivalent to the 2-yr, 10-yr, 25-yr, 50-yr, and 100-yr recurrence interval flow events. These flows will be based on the summary review of existing historical USGS flow data for San Jose Creek and development of updated flow duration and exceedance curves in Task 2 above.

CONSULTANT shall evaluate the three initial weir configurations developed in Task 3 above and may also evaluate a fourth weir configuration that considers the performance of the three initial configurations and incorporates features of one or more of them. Evaluation of this potential fourth alternative will follow the collaborative development of the three initial weir designs with the team (CDFW, NMFS, City, NHC), after the Computational Fluid Dynamic (CFD) modeling results of the initial three weir configurations have been produced and reviewed.

Assumptions: The USGS historical gage record data, however incomplete, will be sufficient for development of hydrologic statistical data necessary to define the 10 flows to be modeled. As noted in Task 3 above, the existing flow line of the San Jose Creek Channel and the designed flow line included in the upstream channel will not be altered.

Deliverables:

- a. An updated Draft Design Report, to include the electronic summary of CFD modeling results, including hydraulic profiles, tabular summary results, and plan and isometric view 3-D velocity, water surface, and other graphical representations of important hydraulic characteristics illustrating the calculated results.
- b. Animation of CFD model results will be submitted as well, which are intended to provide a medium for collaborative consideration of the detailed hydraulic conditions affecting fish passage and sediment deposition.
- c. All CFD model results, and boundary condition data will be summarized within the Final Design Report developed for this project.

TASK 6: Sediment Transport Study

CONSULTANT shall develop a simplified one-dimensional sediment transport model of the upstream natural reach of the San Jose Creek channel, to provide a range of appropriate boundary conditions for sediment entering the flood control channel. This task will include collection of sediment samples for bed sediments by the CONSULTANT, and, if possible, suspended sediment if conditions permit. These data will be input into the sediment transport model to calibrate the model equations such that the model reasonably reproduces the observed condition and behavior of the natural channel reach upstream of the flood control channel. The boundary conditions determined using the sediment transport modeling will be used as input to the physical modeling evaluations of sediment transport characteristics of the proposed weir configurations described in Task 7 below. The sediment transport model may also be used to compare the deposition behavior observed in the existing flood control channel by extending the 1-D sediment transport boundary downstream to include a portion of the existing flood control channel.

Assumptions: The bed sediment samples will be analyzed by CONSULTANT or a local analytical laboratory at the direction of the CONSULTANT, accustomed to the determination of key sediment transport parameters needed for the sediment transport modeling. Model calibration will be accomplished using analogous sediment transport studies of other southern California stream within the region near San Jose Creek, with similar watershed geology and hydrology. No separate verification will be conducted for the model, as there is no available previous sediment transport modeling available, and no field data collection for the proposed fish passage channel features and their effects on sediment transport are available. Sediment transport model simulation results will be considered qualitative, indicating general trends toward aggradation (deposition) or scour only, rather than quantitative in nature.

Deliverables:

Public Works Department and Northwest Hydraulic Consultants, Inc. Page 15 of 20 a. An updated Draft Design Report, to include an electronic summary of Sediment Transport modeling results, including bed sediment sample gradations, suspended sediment sample data (if practical and conditions permit), incoming sediment loads, sediment rating curves, sediment transport hydrographs, net deposition within the flood control channel (both annual representations and dynamic per-event simulation results), and the section-by-section net deposition and scour in the upstream natural reach between the flood control channel and the Hwy 101 crossing.

TASK 7: Development of Physical Model for Selected Weir

CONSULTANT shall develop a physical modeling plan to validate and refine the best weir configuration developed via Computational Fluid Dynamic (CFD) modeling in Task 5 above to evaluate how a new weir configuration will handle the sediment and debris loading, items that cannot be evaluated using CFD.

The physical model will be constructed at an appropriate scale to properly simulate the hydraulic and sediment transport characteristics of the fish passage channel and weir configuration. While the model scale has not been determined yet, for purposes of scoping this effort, we assume that the scale will likely be in the range of 1:6 to 1:16 depending on sediment gradations of samples collected in Task 6 above. The model will be used to evaluate the upstream reach of the flood control channel from the transition reach through the Hollister Avenue bridge and downstream well into the previously constructed channel section. The model test bed facility will be constructed atop the sump basin for space efficiency and will simulate roughly 750 feet to 900 feet of channel, which will include a portion of the upstream natural reach above Hollister Avenue Bridge and extend downstream around the bend in the previously constructed flood control channel. This length will permit the evaluation of the most critical section of the fish passage channel, with the results readily translated downstream through the rest of the flood control channel to all the other fish passage weirs. Modeling the entire length of the flood control channel is not necessary to understand and evaluate the fish passage characteristics of the preferred weir configuration, as all other weirs will be modified to produce similar results. Additionally, the physical space required to do so is prohibitively expensive for little additional benefit.

Modeling will likely include witness testing and evaluation attended in-person by key technical staff from CDFW, NMFS, and the City, with optional attendance via Microsoft Teams as needed. During the witness testing, we would expect that a consensus will be reached with City, CDFW and NMFS on the performance of all weir options and a decision made on which option to construct in the prototype.

Assumptions: The physical model will be used to test the weir options developed under Task 5 above. The model will incorporate up to 10 flows over a range from low fish passage flows to high flood flows, commensurate with the flows to be evaluated in Task 5 above. The direct comparison between CFD model results and physical scale modeling results will permit validation of the modeling simulations. Sediment transport evaluations in the physical scale modeling should be acknowledged to be qualitative in nature, with deposition volumes to be relative only, not absolute. The results of the physical scale modeling as summarized in the Draft report will be reviewed by key technical staff from CDFW, NMFS, and the City within three weeks of submittal.

Deliverables:

- a. An updated Draft Design Report, to include the results of the physical modeling will be developed to summarize the physical scale model results for clear-water hydraulic characteristics in the channel and sediment transport characteristics in the channel for the three initial weir configurations and the fourth weir configuration identified in Task 5 above.
- b. Deliverables will also include an in-person witness test attended by key technical staff from CDFW, NMFS, and the City.
- c. The consensus opinion of weir design configuration will be presented in drawings as part of the modeling final report. The draft report will include modeling assumptions, methods, design and drawings, simulation results, and records of meeting notes and decisions made.
- d. The Draft Design Report will be issued as a Final Design Report including all results for Tasks 2 through 7 once comments are addressed on the Draft report

TASK 8: Development of Design Plans and Technical Specifications

CONSULTANT shall develop design plans and technical specifications for the selected fish passage features to be constructed within the existing flood control channel, based on the selected preferred alternative that arises from the agency collaboration conducted in Tasks 2 through 7 above. These plans will be developed to 65% complete, 95% complete, and 100% complete design, with each level of design documents reviewed by the City, the NMFS, and CDFW. Comments shall be resolved by CONSULTANT, in collaboration with the City, the NMFS, and CDFW, with summary comments and resolutions recorded in spreadsheet format, with the reviewer's identification and affiliation clearly stated. At each of these three phases of design, up to a two-hour Teams review conference will be attended by all reviewers and the CONSULTANT to discuss the comments and determine appropriate resolution. Comments and resolutions will be distributed to reviewers following each design phase review conference meeting.

Assumptions: The City will develop its own Division 0 specifications as necessary to conform to City standards for construction bid projects of similar scope. The CONSULTANT shall develop the General Specifications and any Special Provisions needed to adequately define and communicate the project fish passage feature design to the contractor. Reviewers will furnish comments at least one week before the review conference meeting.

Deliverables:

- a. 65% Plans.
- b. 95% Plans, Technical Specifications and Construction Cost Estimate.
- c. 100% Plans, Technical Specifications and Construction Cost Estimate.
- d. Electronic Design Review Comment and Resolution spreadsheet shall be distributed by CONSULTANT following the review conferences for each phase of design as noted above.
- e. CONSULTANT shall distribute Design Plans and Specifications to reviewers at least one week prior to the scheduled review conference meeting as noted above, with markups and revisions arising from the previous phase comment review and resolution incorporated into the updated set for distribution.

TASK 9: Monitoring and Maintenance Plan

CONSULTANT shall develop (with input from the City, CDFW and NMFS) a monitoring, maintenance and adaptive management plan for the project based upon the results of the design and modeling (physical and numerical) efforts.

Deliverables:

- a. Draft Monitoring and Maintenance Plan.
- b. Final Monitoring and Maintenance Plan.

TASK 10: Permitting Support for Technical Data

CONSULTANT shall provide technical support to permitting staff at the City or contracted to the City as needed to prepare permit application documents and materials.

Assumptions: CONSULTANT will not prepare permit applications but will provide technical information as needed to support the permit process.

Deliverables:

a. Electronic technical supporting documents and information submitted in electronic format to City as needed to support permitting process.

Public Works Department and Northwest Hydraulic Consultants, Inc. Page 18 of 20

TASK 11: Construction Bidding Support

CONSULTANT shall assist the City of Goleta in preparation for a pre-bid conference, responding to bidder inquiries, and preparing contract addenda as required during bid advertisement of the project. The City shall receive bids and furnish to CONSULTANT who shall tabulate and evaluate bids for construction of the project. CONSULTANT shall evaluate bids including reviewing math, reviewing bid substitutions, and contacting project references. CONSULTANT shall prepare up to three addenda if needed and submit to City for distribution to the prospective bidders. CONSULTANT shall review the lowest apparent responsive bid and report recommendations on contractor qualifications.

Assumptions: The project will be bid one time only. The City is the primary contact during bidding for questions and issuing addenda. The advertisement period lasts four weeks. CONSULTANT team spends a maximum of 20 hours responding to bidder inquiries and preparing addenda.

Deliverables:

- a. Bid inquiry and construction contractor responses (RFI's) to support City's various requests for assistance.
- b. Addenda items, as enumerated above.
- c. A recommendation letter regarding contract award.

TASK 12: Engineering During Construction (EDC) Services

CONSULTANT shall provide engineering and consultation during construction of the fish passage features and any alteration of the transition reach upstream of the flood control channel limits. General tasks may include responding to RFI's, contractor submittals, inspections, vendor inquiries, exchanges, and observation of critical portions of the construction work as needed to determine conformance with design intent.

Assumptions: CONSULTANT shall respond to up to 5 RFI's, shall make up to three site observation visits during construction, and shall respond to up to 3 vendor inquiries. CONSULTANT shall notify City of apparent discrepancies with project design intent within two working days of identification of said discrepancies.

Deliverables:

a. RFI review responses, submittal responses, exchange responses, vendor inquiry responses, site observation visit notes for each visit.

EXHIBIT B

Schedule of Fees for NHC, Inc. 20221

Schedule of Fees for NH Effective Dec 2021 – Dec 2023)	HC, Inc.
Labor Category	Fee Rate \$/Hr
Principal	261
Principal T3	241
Sr. Project Engineer/Scientist	220
Sr. Engineer/Scientist 1	195
Sr. Engineer/Scientist 2	169
Engineer/Scientist 1	149
Engineer/Scientist 2	128
Jr. Engineer/Scientist	118
GIS Analyst 1	149
GIS Analyst 2	113
Sr. Engineering Technician	149
Engineering Technician	118
Jr. Engineering Technician	92
Sr. Engineering Lab Technician	138
Sr. Contract Administrator	174
Sr. Technical Editor	154
Technical Editor	118
Office Administrator	92
Handling Charges / Fees	
Markup on Subconsultants	10%
Markup on Reimbursables	10%
Markup on Travel/Subsistence	0%
Plotting	\$/sheet
Plots, bond, 11 x 17	\$2.00
Plots, bond, D size	\$4.00
Plots, oversize (running foot)	\$2.00
Photocopies	\$/sheet
B&W 8½ x 11	\$0.10
B&W 11 x 17	\$0.15
Color 81/2 x 11	\$1.00
Color 11 x 17	\$2.00

Refer to separate schedules for field and laboratory equipment charges

Travel reimbursement only for out of California Travel, subject to pre-approval from City Staff.

Public Works Department and Northwest Hydraulic Consultants, Inc. Page 20 of 20

ATTACHMENT 2

San Jose Creek Channel Fish-Passage Modification Project PowerPoint Presentation.



San Jose Creek Channel Fish Passage Modification Project January 18, 2022

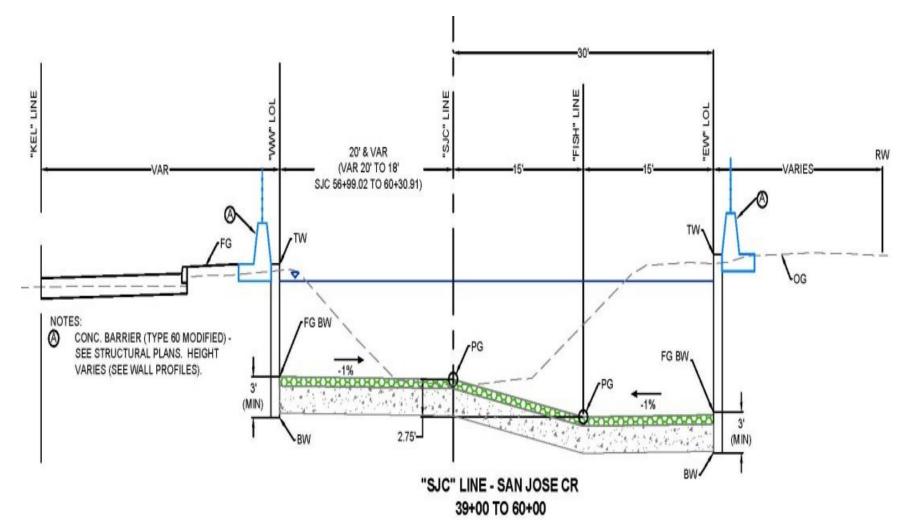
San Jose Creek Channel Fish Passage Modification Project

INTRODUCTION

- Jose Creek Channel Capacity Improvements and Fish Passage Project Objectives.
- First Phase completed construction in 2014.
- Second phase will complete the channel and fish passage improvements and as well as replace the Hollister Avenue Bridge.

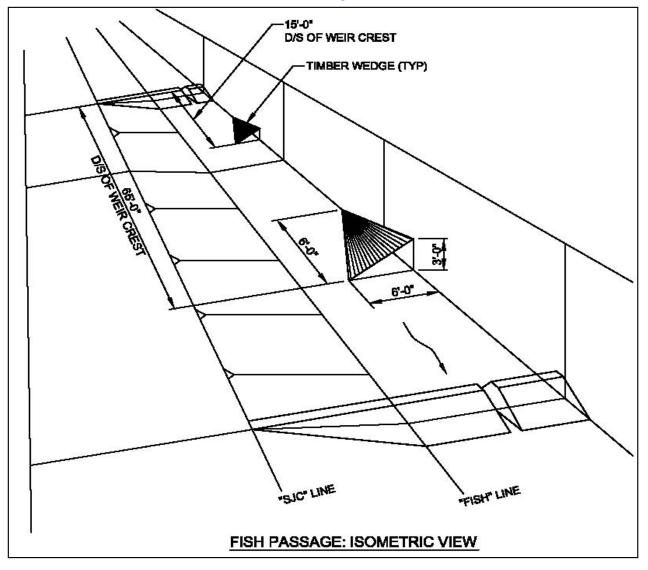
San Jose Creek Channel Fish Passage Modification Project

Channel Cross-Section with Low Flow Fish-Passage on right-side



San Jose Creek Channel Fish Passage Modification Project

Cross-Section of Fish-Passage Channel with Weirs (2008)



San Jose Creek Channel Fish Passage Modification Project

Completed Channel Showing Concrete Weirs – 2014



San Jose Creek Channel Fish Passage Modification Project

Completed Channel With Tiber Weirs After Heavy Rain



San Jose Creek Channel Fish Passage Modification Project

Lake and Streambed Alteration Agreements (LSA)

- The first phase of the Jose Creek Channel Capacity Improvements and Fish Passage Project received a Lake and Streambed Alteration Agreement (LSA) from the California Dept of Fish and Wildlife (CDFW).
- The LSA Agreement stipulated that the City was to maintain a functioning and viable fish-passage system and that if this were not achieved, the City would be responsible to make appropriate modifications.
- Based on the performance and extensive maintenance required for the constructed portion of the fish passage facility, CDFW along with the Federal Agency National Marine Fisheries Service (NMFS), has indicated that the fish passage facility should be modified.

San Jose Creek Channel Fish Passage Modification Project

Wooden Weir with Trapped Debris



San Jose Creek Channel Fish Passage Modification Project

Trapped Sediment with Vegetation Growth - 2019



San Jose Creek Channel Fish Passage Modification Project

Sediment and Vegetation Removal - 2019



San Jose Creek Channel Fish Passage Modification Project

Hollister Avenue Bridge Project - Streambed Alteration Agreements (LSA)

- The new LSA Agreement required for the Hollister Avenue Bridge Project, includes language requiring the fish passage modification work.
- Without the City's approval of the LSA agreement (permit) the Hollister Avenue Bridge project can not proceed into construction.
- Included in this LSA Agreement is a requirement that the City acquire a surety in the name of CDFW, for the delivery of the fish passage modification project. Should the City not deliver on the project, CDFW will be able to access the surety and deliver it themselves.

San Jose Creek Channel Fish Passage Modification Project

Recommendations

Public Works recommends:

- The approval of a new CIP project for a San Jose Creek Channel Fish Passage Project.
- Appropriation of funds for the <u>Preliminary Design and</u> <u>Environmental Phase</u> of the new project in the amount of \$650,000.
- Authorization for City Manager to approve an agreement with Northwest Hydraulic Consultants (NHC) for Professional Design services in the amount of \$340,921.

San Jose Creek Channel Fish Passage Modification Project

Next Steps

- Development of fish passage design modification options.
- Hydraulic modeling (computerized and physical) of options.
- Development of final design of selected option.
- Secure environmental approval and permits.
- Appropriate construction and monitoring phase funding.
- Construction.
- Design + construction schedule 2 years.
- Post construction monitoring 3 years.

San Jose Creek Channel Fish Passage Modification Project

QUESTIONS?