



Proposal for Conceptual Design and Feasibility Investigation for a Proposed Whitewater Park in El Dorado County, CA

January 14, 2019

Prepared for:

River Management Advisory Committee
El Dorado County, CA

Prepared by:

Scott Shipley, P.E.
S2O Design and Engineering
318 McConnell Drive
Lyons, CO, 80540



November 13, 2018

David,

Thank you for your interest in S₂O Design and Engineering and the opportunity to propose our services to help get the ball rolling on this project. As you know, there is a growing community of outdoor enthusiasts who would love another place to paddle in your community. We look forward to helping you to get the in-stream portions of this project moving! At S₂O we have a passion for whitewater parks and river recreational opportunities that are fun and that create an impact to the paddling and recreational parts of your community. This in turn drives a positive economic impact to the businesses in your community by way of attracting tourism and events.

These impacts are both direct and indirect. Direct impacts are in the form of usage fees, job creation and retail sales at the site. Indirect impacts are in the form of hotel, restaurant and other spending opportunities in the adjacent towns and cities. A great example is the S₂O designed US National Whitewater Center in Charlotte, NC, which generates over \$37 million dollars per year in economic impacts and has created over 300 jobs. In-stream whitewater parks, such as the S₂O designed Durango Whitewater Park, have had impacts as high as \$7-9 million per year.

Our parks are designed to be unique to your area and to provide recreational amenities for varied users, including paddlers, rafters, SUP paddlers, tubers, anglers, walkers and joggers. When properly designed, whitewater parks serve as fantastic community parks and provide a place for everyone to play, gather and learn. S₂O is the world's premier whitewater park design firm. We have worked closely with many communities around the world, guiding them through the public and design processes required to create internationally acclaimed river corridors and whitewater parks. We have the most capable design team in the businesses that includes specialists in planning, public process, design, river restoration, permitting and implementation. This expertise ensures that you get the design that best meets your objectives in an efficient manner.

Please find our proposal attached. This proposal details our client-based project approach, as well as our qualifications and experience. We are proud of our past work and are confident we are the best and most experienced design firm for this project. Please feel free to call us if you have any additional questions or require any clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sean J. [unclear]', positioned below a horizontal line.

This proposal was prepared to address the feasibility of creating an in-stream multi-use whitewater and community river park in the El Dorado County with the objective of creating an attraction to boaters of all levels including competitive kayaking at higher flows and beginner and intermediate paddling at lower flows.

The first section of this proposal describes our team and our culture. S₂O was founded , and is led, by Olympian and three-time kayaking World Cup Slalom Champion Scott Shipley. Being a paddler-designer is part of the S₂O culture. We are trained professional engineers, architects, landscape architects and planners, and we are also avid paddlers. We bring an understanding of whitewater parks and river recreation to the design of all of our projects. We also bring an experienced and professional design staff that listens to your objectives and priorities, and transforms your needs into a functional design.

The second section describes our understanding of the project, our approach to the design process, and the scope of work to be completed. We are a team that strongly believes in the *process* of design. Our design team will work with you, the Client, as well as with key stakeholders to understand the objectives, desires, and constraints of this project. It is this client-based input, combined with our experience and expertise, that defines the project.

The final sections include our General Terms and Conditions and the costs for the proposed work.



COMPANY INFORMATION

S₂O Design and Engineering, located in Lyons, Colorado, specializes in whitewater parks, river engineering, restoration, recreation, and the design of community focused whitewater and river parks. Our team of expert boater-engineers has planned, conceived, designed and created some of the highest profile in-



stream and pumped whitewater parks in existence today. Our in-stream parks include features and river restorations that range from small waves to massive, river-wide redesigns of dangerous weirs and dams. Our award winning pumped parks are the largest and most dynamic in-stream and recirculating whitewater parks in the world. The quality of our work, and the depth of our experience, has made us the go-to team for discerning whitewater park projects throughout the world.

S₂O's staff is trained, licensed and cutting-edge design and engineering professionals who specialize in planning, public process, design, engineering, river recreation and restoration, landscape architecture, permitting and implementation. S₂O's advantage is its ability to incorporate cutting edge technology in a natural, sustainable and environmentally friendly manner.

In addition, we have a great deal of experience managing multi-stakeholder projects as many of our projects require us to work with, and manage, varied stakeholders such as the local community, commercial entities, and government and permitting agencies. We are experienced in project management and construction oversight and have a proven track record in completing projects on time and on budget.

S₂O has evolved a client-based design methodology that involves working with the Client to define needs, desires and constraints. We believe in a collaborative design process and working hand-in-hand with the Client and key stakeholders. We are strong advocates of open and frequent communications with the Client so they are informed and engaged in the decision making process. Our goal is to ensure that the Client is completely satisfied with the final product. The most effective method of achieving this goal is to establish a transparent and close working relationship from start to finish.

We take great satisfaction in our ability to apply our technical expertise to create the optimal whitewater experience for all types of paddlers. Moreover, we are expert boaters that share a lifelong passion for whitewater recreation, and believe that a river experience for paddlers should be designed by paddlers! Led by engineer, Olympian, three-time World Cup Kayak Champion and Freestyle Kayak Champion Scott Shipley, you can expect nothing short of championship-caliber results that are fun and friendly for the entire community.

EXECUTIVE TEAM



Scott Shipley, PE, MSME, S2O President: Engineer Scott Shipley brings a varied background to the table. Scott Shipley is perhaps the best-known American kayaker in the world today. A veteran of three Olympic games ('92, '96, '00) and holder of four world titles, Shipley has more than 25 years of experience as a whitewater competitor. Scott also holds a bachelor's and master's degree in Mechanical Engineering from top ranked Georgia Institute of Technology. Shipley's combined expertise in both Whitewater and Engineering Design has made him the "go-to" designer for some of the world's most demanding whitewater design projects. Shipley's accolades include two "Best of What's New" design awards from Popular Science, the Everest Award, and the Jack-Kelly Fair Play award, presented by the USOC. Shipley is also a

	<p>hall of fame inductee and has been voted a top-ten athlete of the year by the USOC three times.</p>
	<p>Nathan Werner, PE, S2O Project Manager: Nathan has a bachelor’s degree in Civil Engineering with a concentration in Soil and Water Resources from Colorado State University. He has extensive experience with water resource engineering specializing in hydraulics and hydrology design and modeling. Prior to designing Whitewater Parks, he designed and provided construction oversight for several large water resource projects in Colorado and Wyoming. He has conducted extensive studies for flood modeling with 1D and 2D software including both unvaried and varied flow modeling. He has performed hydraulic design of small and large structures ranging from channel stabilization projects to a 45 foot tall dam. He has dam engineering experience from alternative analysis to final design of earthen and concrete dams. Nathan has also been involved in several flood recovery projects including master planning, stream restoration, whitewater park design, ditch diversion design, and construction oversight.</p>
	<p>Christine Clark, PLA, AICP, S2O, Designer: Christine has a balanced educational design background. She has a master’s degree in Landscape Architecture and in Urban and Regional Planning from the University of Colorado Denver. She also has a bachelor’s degree in Environmental Design in Architecture from the University of Colorado Boulder. Her experience lies in master planning and recreational design. She focuses on creating multifaceted spaces and networks that allow the users to freely move and experience indoor and outdoor spaces.</p>
	<p>Jeffrey Gustin, AIA. Jeffrey Gustin’s vast and varied experience in all aspects of the AEC and development industry has positioned him well as a detail-oriented program and process manager. Key specialties include: owner’s representation, program management, large-scale project management, consultant management, pre-design entitlements and site evaluations, contract negotiations, design and engineering oversight and coordination, quality, time and process controls, construction management, and post construction evaluation and closeout procedures. Prior to joining S2o Design, Jeffrey was Vice President of Construction and COO of Waveyard Development, an Arizona water-based entertainment and recreational development company. Prior to Waveyard, he served as the project manager for the U.S. National Whitewater Center in Charlotte, NC. Jeffrey continues to consult with a variety of large-scale private recreational developers, designers, and operators, ranging from \$2 million to nearly \$1 billion in total project costs.</p>



Kurt Smithgall, M.S. EIT, S2O Associate Engineer: Kurt has a Master's degree in Civil Engineering with a concentration in Water Resource Engineering from Penn State University. He has worked on a variety of projects from forest hydrology in North Carolina to glacial geomorphology in the Austrian Alps. He has experience using 1D and 3D hydraulic models, along with CAD and GIS software packages.



Riley Adams, EIT, S2O Associate Engineer: Riley has a B.S. in Civil Engineering from the University of Maine and over 9 years of experience in the construction industry. He has worked on multiple civil infrastructure projects, including aerial bridge construction for the new Silver Line metro in Washington, D.C. and a major in-service hydroelectric facility upgrade in central British Columbia.



Julia Pershken, S2O, Associate Engineer: Julia received a Bachelor's of Science in Civil Engineering with a focus on environmental and geotechnical engineering from Worcester Polytechnic Institute (WPI). While at WPI, she worked on projects involving storm water management, flood mitigation and wildlife preservation.



Kylie Kwon, Office Manager: Kylie Kwon holds a bachelor's degree in International Business and Finance from Butler University. Her business, marketing and project management background, as well as organizational and communication skills, ensure that S2O meets all contractual needs of a project, including task delivery, insurance and sub-contractor management.

PROJECT EXPERIENCE



S2O has created the world’s leading whitewater parks. These include the design of the London Olympic Whitewater Park for the 2012 Games, the design of the US National Whitewater Center, and the design of the \$40 million Oklahoma City Riversport Rapids Whitewater Center. Our projects also include some fantastic in-stream whitewater parks including Meadow Park in Lyons, CO; The Durango Whitewater Park in Durango, CO; and The Camphill Surf Park in Wanaka, NZ. S2O’s parks are widely used, highly valued, and provide significant economic impacts to the surrounding communities.

PROJECT UNDERSTANDING



S2O recommends that the proposed project in California begin with a short Conceptual Design and Feasibility Investigation. The Conceptual Design and Feasibility Investigation is intentionally brief and short in scope and is designed to accomplish three tasks: (1) determine the feasibility of the project; (2)

create conceptual design layouts that meet your objectives; and (3) define the project costs and steps to completion for the selected design solution.

To complete the Conceptual Design and Feasibility Investigation, S₂O will work with your team to understand your specific objectives and desires for the completed project. We will also work with you to determine the best design solution to achieve the goal of creating an active-flow recreational component to your project. To accomplish this task, we will conduct a site inspection to determine the constraints and opportunities associated with the project site. S₂O will then create two conceptual designs for the desired site and provide conceptual-level costs estimates. These designs and costs estimates will be shared with your team such that you can make an informed design decision and select the most appealing option.

In summary, the Conceptual Design and Feasibility Investigation will include:

Site Visit: Scott Shipley, S₂O Principal, will visit the project area and inspect the proposed project site. The objective of this visit is to work with the client and stakeholders to understand the desired project, as well as to collect site information for analysis.

Concept Development: S₂O will work to create design solutions that meet the client's objectives. Up to two design solutions will be created for client review and the desired solution will be updated per Client's direction. The intent of this task is to work with the Client and provide them with the information needed to make informed decisions about their river park.

Reporting: This task will include the creation of a conceptual design report. This report will document the decisions that were made and information that was gathered and/or created. The report will describe design layout and functionality and it will detail the steps required to move the project forward to completion.

Cost Estimate: A conceptual-level cost estimate will be created that details the required costs to construct the selected design.

PROPOSAL FEE

S₂O agrees to complete the tasks outlined in this proposal for the lump-sum costs (in U.S. Dollars) shown in the table below. Below is an estimate for travel and reimbursable expenses but actual expenses are to be paid by the Client. We believe travel expenses will be less than what is quoted. The costs outlined below will be honored for 90 days from the date of this proposal. If the proposal is not executed within 90 days of the proposal date, all costs are subject to re-negotiation by S₂O Design and Engineering.

Conceptual Design and Feasibility Investigation

Work Item	Task	Cost
		U.S. Dollars
1	Information Gathering: Client supplies all relevant mapping including ownership mapping and electronic basemap in .dwg format or similar if available. Client also to supply all additional reports, soils data, hydraulic data, and flow information relevant to the project. Client also to supply the name and station number of the most relevant gauge and indicate inflows and outflows between the gauge and the proposed project site(s).	To be supplied by the client
2	Site Visit: Meet on site with client and any relevant stakeholders. This work item will include a one day site visit and may include meetings with relevant stakeholders.	\$ 3,500.00
3	Concept Development: Develop reproducible draft conceptual plan for the proposed site. This proposal includes 2 concept plans.	\$ 5,800.00
4	Reporting: Document design decisions, detail design layout and functionality and document design information gathered throughout project.	\$ 1,600.00
5	Conceptual Level Cost Estimate: Create a conceptual level cost estimate for all improvements shown in the plan.	\$ 1,100.00
	Subtotal:	\$ 12,000.00
6	Expenses: Travel, fax, printing, copies, phone. Number is based on adequate prep time to purchase tickets/make travel arrangements. This figure is an estimate only. Actual costs to be paid by the Client.	\$ 1,400.00
	Total (U.S. dollars)	\$ 13,400.00

A \$500.00 deposit is required prior to making any travel arrangements. Progress billings will be made monthly and/or at the submission of progress sets of drawings. Payments are due within 30 days of receipt of invoice. Late payments will be charged a service fee of 1.5% per month. Late payments will also result in a stoppage of work until all invoices are paid in full.

ADDITIONAL SERVICES

Additional services shall include, but are not limited to, renderings, additional meetings or tasks, additional design work, additional tasks or tasks related to making revisions or additions to drawings, specifications, reports, or other documents outlined, when such revisions are inconsistent with instructions previously given, or other services that are not outlined in this Agreement. Additional services can be accomplished through an addendum to this agreement or through a separate agreement.

GENERAL TERMS AND CONDITIONS/ENDORSEMENT

The attached General Terms and Conditions are made a part of this agreement by reference.

We appreciate this opportunity and look forward to working with you on this project. If the above meets with your understanding and approval, please sign a copy of this proposal and return to S₂O for its signature. A fully executed copy will be sent to you for your files. Receipt of the signed copy will serve as our authorization to proceed.

Submitted by:

Scott Shipley S ₂ O Design and Engineering 318 McConnell Drive Lyons, CO, 80540 (303) 819-3985	Date

Approved by:

(insert name, title, address)	Date

GENERAL TERMS AND CONDITIONS

1. The General Terms and Conditions outlined below are part of the attached letter agreement and are hereby incorporated by reference. If **S₂O** does not receive a response to the letter agreement within ninety (90) days, the fees for the design services will be subject to change. Please read these General Terms and Conditions carefully. Your acceptance of this agreement constitutes your acceptance of the foregoing terms and conditions.
2. The standard of care for all professional services performed or furnished by **S₂O** under this agreement will be the skill and care used by consulting engineers and architects practicing under similar circumstances at the same time and in the same locality. Whitewater design projects often include the need to tune and refine a specific design to optimize the shape to best meet client objectives **S₂O** makes no warranties, either express or implied, under this agreement or otherwise, in connection with **S₂O**'s services.
3. The Client shall provide **S₂O** with development program information regarding the requirements and objectives for the Project. Additionally, **S₂O** shall be entitled to rely upon the accuracy and completeness of any information, reports and/or site surveys/base information supplied by the Client or by others authorized by Client.
4. If **S₂O**'s services under this letter agreement do not include services during the construction phase of the project, then Client assumes responsibility for the application and interpretation of **S₂O**'s drawings, specifications and other instruments of service; the observation and evaluation of Contractor's work and the performance of any other necessary construction phase engineering or professional services; and Client waives any claims against **S₂O** that may be connected in any way thereto.
5. If **S₂O**'s services under this letter agreement include limited services during the construction phase of the project, then Client assumes responsibility, to the extent that **S₂O** is not contracted to provide professional services for the project, for the application and interpretation of **S₂O**'s drawings, specifications and other instruments of service; the observation and evaluation of Contractor's work and the performance of any other necessary construction phase engineering or professional services; and Client waives any claims against **S₂O** that may be connected in any way thereto.
6. In addition to professional fees outlined in the attached letter agreement, the Client shall pay all out-of-pocket expenses which are defined as actual expenditures made by **S₂O**, their employees, and/or professional consultants in the interest of the project and include, but are not limited to, the following expenses:
 - a. Air Travel, including departure taxes (Business Class for flights scheduled for four [4] hours or greater) and related airline/agency fees
 - b. Hotel accommodations
 - c. Meals
 - d. Ground transportation, i.e., rental cars and taxis
 - e. Postage, freight, telephone, facsimile, overnight express mail and courier services
 - f. Blueprinting, photocopying, reproductions and printing
 - g. Photographic supplies and processing
 - h. Study model materials
 - i. Special renderings, models, photographs and special consultants, when authorized by Owner

The above listed items will be billed at the actual cost with no markup.

7. **S₂O** will provide electronic transfer media of related materials for the project if available and as requested by the Client or authorized agent for the following costs:

CD-ROM	Fee: \$15.00
FTP Transfer	No Charge

If additional special drawing modifications are requested, i.e., special blocks, drawings, setting up special layering for files, etc., the associated time will be billed **at cost plus 10%**. Prior to the preparation of transfer media, both parties will agree upon the special modifications.

8. **S₂O** will provide reproducible media of project related materials as available and as requested by the Client or authorized agent for the following fees:

MEDIA	MONOCHROME	COLOR
REPRODUCIBLE VELLUM	Fee: \$0.70 per Sq. Ft.	Fee: \$1.50 per Sq. Ft.
OCE BOND	Fee: \$0.25 per Sq. Ft.	N/A
GLOSSY COATED PAPER	Fee: \$1.00 per Sq. Ft.	Fee: \$1.75 per Sq. Ft.
COATED ACETATE	Fee: \$1.00 per Sq. Ft.	Fee: \$1.75 per Sq. Ft.
COATED MYLAR	Fee: \$1.75 per Sq. Ft.	Fee: \$2.50 per Sq. Ft.

9. All documents prepared or furnished by **S₂O** pursuant to this agreement are instruments of **S₂O's** professional service, and **S₂O** shall retain ownership according to all applicable laws. **S₂O** grants Client a license to use instruments of **S₂O's** professional service to construct, occupy, and maintain the project. Reuse or modification of such documents by Client, without **S₂O's** written permission, shall be at Client's sole risk and Client agrees to indemnify and hold **S₂O** harmless from all claims, damages, and expenses, including attorney's fees, arising out of such reuse by Client or others acting through Client. In addition, reuse or modification of such documents without **S₂O's** written permission constitute a copyright infringement and may be subject to enforcement of such rights.
10. Client acknowledges that the information and data delivered to Client in machine-readable copies of the documents may vary from that contained on paper copies of the documents. Variances may be due to the use of different software, hardware, or output devices by Client or others from those used by **S₂O** for original preparation and printing of the documents. Variances may also be the result of undocumented changes or modifications made to the machine-readable documents, whether inadvertently or otherwise and whether made by Client or others. **S₂O**, therefore, reserves the right to retain the machine-readable media upon which the documents were originally prepared, and to retain paper or reproducible documentation delivered to Client in machine-readable form, that shall govern in the event of any inconsistency or discrepancy between the two. **S₂O** also reserves the right to remove from machine-readable copies provided to Client, all identification reflecting the involvement of **S₂O** in their preparation.

Client acknowledges that the automated conversion of documents from the system or format employed by **S₂O** to that of Client or others cannot be accomplished without the introduction of

inexactitude, abnormalities, and errors. In the event documents provided to Client in machine-readable form are so converted, Client agrees to assume all risks associated therewith and, to the fullest extent permitted by law, to hold harmless and indemnify **S₂O** and **S₂O's** professional associates and consultants from and against all arising claims, liabilities, losses, and expenses including attorney fees.

11. All fees and reimbursable expenses will be invoiced monthly and shall be payable in net U.S. Dollars drawn upon a U.S. Bank unless otherwise stated in this letter agreement. The Client understands and acknowledges that these fees are net of any non-U.S. taxes and/or tariffs. If a retainer is received by **S₂O**, it will be applied to the final payment due unless otherwise stated in this letter agreement.
12. In the event the Client should use a foreign bank as its payment bank, the Client shall wire the funds in U.S. Dollars, net of any transaction fees, to **S₂O's** local bank. Bank information will be provided upon request by the client. Payment must be accompanied by the ***Project Name and invoice number(s) to be credited.***
13. All invoices are payable upon receipt. In the event payment is not received within thirty (30) days of invoice date, the past due balance may be assessed an interest penalty of one and one-half percent (1 ½%) per month.

In the event **S₂O** does not receive payment within sixty (60) days, **S₂O** will stop work on the project until payment is received. Stoppage of work by **S₂O** due to non-payment of invoices beyond sixty (60) days will not be deemed as a default under the terms of this letter agreement. An additional fee may be required to stop and restart work due to nonpayment.

14. The Client agrees that this letter agreement shall be interpreted according to the laws of the state where the contracting **S₂O** office is located (Colorado), and agrees to reimburse **S₂O** for reasonable attorney's fees, court costs, and all expenses including without limitation, all such fees, costs, and expenses incidental to arbitration, appeals, and post-judgment proceedings that it may expend in enforcing this letter agreement. In the event of any such dispute, Client agrees that the court venue will be located in Boulder County, CO.
15. Signature of this letter agreement will signify the Client's acceptance of all the Terms and Conditions outlined herein. Accordingly, the Client warrants that the necessary funds are available to pay **S₂O** for the services and expenses outlined in this letter agreement and that these funds are not encumbered nor contingent upon subsequent approvals, permits or financing commitments.
16. This letter agreement will be valid for the duration of the project. However, after ninety (90) days from the date of its issuance and with written notification, fees and conditions will be subject to change.
17. Hazardous Materials. Client acknowledges that consultant's scope of services for this project does not include any services related in any way to asbestos and/or hazardous or toxic materials. Should consultant or any other party encounter such materials on the job site, or should it in any other way become known that such materials are present or may be present on the job site or any adjacent or nearby areas which may affect consultant's services, consultant may, at its option, terminate work on the project until such time as client retains a specialist contractor to abate and/or remove the asbestos and/or hazardous or toxic materials and warrant that the job site is free from any hazard which may result from the existence of such materials.

18. The Agreement may be terminated at any time, by either **S₂O** or CLIENT, by notification in writing. In the event of termination, **S₂O** shall be paid for services performed and reimbursable expenses incurred to date of notification. Any expenses incurred by **S₂O** due to termination of project by CLIENT shall be paid by CLIENT.
19. The **S₂O** assumes no liability arising from the Agreement or the work involved except in so far as it is liable for its professional acts or the acts of its employees. CLIENT expressly waives its right to claim consequential or incidental damages notwithstanding pre-existing professional liabilities on behalf of **S₂O**. CLIENT'S sole remedy for any claim arising out of any sale of services hereunder shall be a refund of monies paid by CLIENT to **S₂O** for said services.
20. It is **S₂O**'S policy to complete its services promptly and within established schedules, however, there is no expressed or implied guarantee as to when plans will be approved by the applicable governing agencies. **S₂O** will progress its work in an expeditious and professional manner at all times.
21. Notwithstanding any provision contained in the Agreement to the contrary, **S₂O** shall not be deemed in default hereunder, or otherwise liable or responsible, if any failure of its performance shall be due to any governmental regulations or controls, the need to obtain any governmental approvals, inability to obtain any material or service, strike, act of war, act of God, act of any third party, or any other cause whatsoever beyond the reasonable control of **S₂O**, and the time for performance by **S₂O** shall be extended by the period of delay resulting from or due to any of such causes.
22. If CLIENT is a corporation or other legal entity, the individual(s) whose signature appears herein hereby personally guarantee CLIENT'S compliance with this Agreement, including payment of all charges and costs.
23. CLIENT agrees that the obligations listed in the Agreement shall not be impaired, modified, changed, released or limited in any manner whatsoever by any impairment, modification, change, release or limitation of liability of the **S₂O** or their respective estates by reason of the commencement of any case, proceeding, or other action seeking reorganization, arrangement, adjustment, liquidation, dissolution, or composition of it or its debts under any law relating to bankruptcy, insolvency, reorganization, relief of debtors or seeking appointment of a receiver, trustee, custodian, or similar official for it or all part of its property.
24. A retainer of 20% of the design fees is requested prior to commencing work on the project. This retainer will be applied to the final invoice. Progress billings will be made monthly and/or at the submission of progress sets of drawings. Payments are due within 30 days of receipt of invoice. Late payments will be charged a service fee of 1.5% per month. Late payments will also result in a stoppage of work until all invoices are paid in full.
25. We reserve the right to rely on the accuracy of this information in our design work. Client shall not hold us liable for any problems arising from inaccuracies in the information provided to us.