



Daniel Woldesenbet, Ph.D., P.E., Director

399 Elmhurst Street • Hayward, CA 94544 • (510) 670-5480 • www.acpwa.org

Request for Qualifications/Proposal (RFQ/P)

RFQ/P No. FLO202402108

for

Hydrologic Data Collection and Management Services

Alameda County SLEB Provisions Apply

Consultants not meeting the definition of a small or emerging local business (SLEB) must commit to subcontracting with at least one County Certified SLEB for at least 20% of the contract amount.

RFQ/P Contact: Anita Franklin

E-mail: anita@acpwa.org

Phone: (510) 670-5569

Mandatory Pre-Proposal Meeting

Tuesday, April 23, 2024 at 2:00 p.m.

Meeting will be held virtually

<https://bit.ly/ac-floodcontrol>

Or call in (audio only)

+1 (415) 915-3950; (888) 715-8170 (Toll-free)

Phone Conference ID: 653 944 644#

RFQ/P Response Due

Friday, May 17, 2024 by 2:00 p.m.

Alameda County Flood Control and Water Conservation District

399 Elmhurst Street, Room 113

Hayward, CA 94544

RFQ/P Issued: April 16, 2024

Calendar of Events

RFQ/P No. FLO202402108

Hydrologic Data Collection and Management Services

Event	Date/Time
RFQ/P Issued	April 16, 2024
Mandatory Virtual Networking/Consultant Conference <i>The Microsoft Teams link for the pre-proposal meeting is https://bit.ly/ac-floodcontrol; Dial in: call locally +1 415-915-3950 or (888) 715-8170 (Toll-free); Phone Conference ID: 653 944 644#</i>	April 23, 2024 at 2:00 p.m.
Written Questions Due on RFQ/P via E-mail: anita@acpwa.org	April 24, 2024 by 5:00 p.m.
List of Attendees	April 29, 2024
Questions and Answers Issued	May 6, 2024
Addendum Issued (only if necessary to amend RFQ/P)	May 6, 2024
SOQ/Proposal Responses Due and Delivered to: Alameda County Flood Control and Water Conservation District, 399 Elmhurst Street, Room 113, Hayward, CA 94544-1307	May 17, 2024 BY 2:00 p.m.
Evaluation Period	May 20 to May 24, 2024
Conduct Oral Interviews (if conducted)	Week of May 27, 2024
Contract Negotiation	June 3 to June 21, 2024
Board Award	July 16, 2024
Contract Start Date	July 16, 2024

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I. Statement of Work

A. Agency Seeking Services

The Alameda County Flood Control & Water Conservation District (District) provides flood protection for western Alameda County residents and businesses. The District analyzes, plans, designs, constructs, and maintains flood control infrastructure and facilities such as natural creeks, channels, levees, pump stations, dams, and reservoirs. The District derives important hydrologic data from a network of stream or flow gauges and rain gauges to support its mission. Some of these stations are a critical component of the District's flood warning system. Their continuous reporting of accurate measurements through storm events is of utmost importance.

This Request for Qualifications/Proposal (RFQ/P) generally describes the project, the anticipated scope of services, the requisite consultant experience and capabilities, District requirements, and the information that must be included in the Consultant's proposal. Failure to submit information in accordance with the RFQ/P requirements and procedures may be cause for disqualification.

The District will be conducting this procurement in a two-step process including an evaluation of the Consultant's qualifications and proposed approach submitted in response to this RFQ/P in combination with an oral interview, if conducted.

The District expects that the Consultant will use its experience and knowledge to make recommendations and refine the scope of work needed to satisfy District objectives for the project.

It is the responsibility of a Proposer to be familiar with all specifications, terms, and conditions of the RFQ/P. By the submission of a Statement of Qualification/Proposal, the Proposer certifies that if awarded a contract it will make no claim against the District based upon ignorance of conditions or misunderstanding of the specifications.

B. Project Description

The District owns a network of rain and flow gauge telemetry stations that it uses to gather hydrologic data throughout western Alameda County. The list of active hydrologic monitoring stations and a location map are shown in Exhibit D.

Rain Gauges

The rain gauge network is comprised of forty three (43) tipping bucket measuring gauges. Sixteen (16) of these stations transmit to the District's receiving station at 951 Turner Court, Hayward, via ALERT2 radios. Twenty-three (23) stations transmit data over a cellular phone network and four (4) utilize a satellite connection. Four (4) stations include a soil moisture sensor.

There are an additional seventeen (17) rain gauges at various flood control pump stations that gather data via a SCADA system that are not currently integrated into the network of all other stations. This scope is to include incorporating these stations into the operations and maintenance of the overall network.

Flow Gauges

There are thirty-five (35) flow gauge stations that transmit via cellular.

All of the data are currently collected, stored, and managed online using the commercial software platform “Contrail” by OneRain. This system is setup to automatically send critical alarms to emergency responders as part of the flood warning system. While the District has no immediate plan to discontinue using this system, it is open to changing systems as may be desired or necessary, but any replacement system must be minimally capable of providing the features and functions described herein. The consultant must be able to demonstrate professional competence in managing such system regardless of host.

The District is seeking a firm or team of firms (Consultants) to operate and maintain its hydrologic monitoring system, with expertise and experience in:

- Operating, monitoring, and maintaining hydrologic data acquisition equipment, including ALERT2 receiving stations.
- Establishing and maintaining real-time connectivity between hydrologic monitoring equipment and computer servers, including a connection to a SCADA system.
- Performing stream measurements during storms and developing rating curves.
- Managing, modifying and/or developing geospatially-enabled database systems for hydrologic data management.
- Performing QA/QC of acquired data and preparing associated reports.

The Consultant will operate, monitor and maintain rain and stream gauges in western Alameda County, and store and manage the hydrologic data derived from the monitoring network.

The hydrologic data recorded at the monitoring sites will be transmitted to a central web-based data repository for storing, then displayed via a GIS-based system for mapping, viewing, and analyses. The data will be used by the District for purposes of flood forecasting/emergency response, watershed management, and computer model calibration.

C. Services Needed

1. Project Management

Consultant will establish a strategy, budget, and schedule to meet the District’s goals, and then manage the work to deliver the Project in a manner acceptable to the District. Activities will include, but are not limited to:

- a) At the outset of the Project, conduct a kick-off meeting with District staff to discuss District goals, objectives, and concerns pertaining to the hydrologic data acquisition and management tasks.
- b) Prepare and regularly update a project schedule (Microsoft Project) at a sufficient level of detail to show a clear understanding of the precise work required to meet the Project goals, objectives and delivery timeline. The schedule shall show the interdependencies among tasks and interim and final milestones for project completion.
- c) Regularly communicate and coordinate with District staff. Consultant shall schedule, attend and conduct meetings with District staff and others to discuss issues relevant to the Project. Consultant shall prepare presentation materials (slides, handouts, maps, charts, etc.) for use in meetings with the District and others, as applicable. Consultant

shall record meeting minutes, including issues discussed, action items, deliverables and timeline.

- d) Coordinate the project team, including staff and subconsultant firms, and manage all work to satisfy District goals.
- e) Monitor all project activities and implement quality assurance and quality control protocols and standards to ensure that the District's quality goals are met.
- f) Assemble and maintain project files that include all documentation and data resulting from or related to Consultant's services for the projects, including but not limited to field notes, engineering computations, documented assumptions, working drawings, meeting minutes, all correspondence, digital image and video libraries, etc.

Deliverables: (1) *Bi-weekly or monthly meetings with minutes, and monthly progress reports with sufficient detail for District staff to determine whether the Consultant is performing to expectations and is on schedule and on budget. The monthly progress reports shall also communicate interim findings and provide information about any difficulties or special issues that need to be remedied.* (2) *Submit project files, in a comprehensive and organized manner, at major interim milestones and/or at the completion of the project.*

2. Planning

Consultant will become familiar with District's goals and objectives for the hydrologic monitoring network, and will work closely with District staff to assess the existing monitoring equipment. Activities will include, but are not limited to:

- a) Gather and review existing and available information about the rain and stream gauge equipment from District staff, including the station locations, types of equipment, operating manuals, General Procedures Manuals, connectivity information, etc.
- b) Prepare a budget for identified upgrades and additions to the existing stations that will be necessary to make them fully operable, capable of recording the rain and flow accurately, and establishing and maintaining connectivity with Consultant's and District's servers.

Deliverables: *Plan of action and budget.*

3. Operations and Maintenance

Consultant shall operate and maintain the hydrologic monitoring equipment such that:

For rain gauges:

- (1) Collectively, across the entire set of gauges, at least 95 percent of the possible data population during storm events is captured by the equipment between October 15 and April 15, gauge vandalism or theft excepted, and
- (2) On an individual gauge basis, at least 90 percent of the possible data population during storm events is captured by the equipment between October 15 and April 15, gauge vandalism or theft excepted, and
- (3) Collectively, across the entire set of gauges, no less than 92 percent of the data population during storm events is transmitted in real-time to the receiving data management systems between October 15 and April 15, gauge vandalism or theft excepted.

For flow gauges:

- (1) Collectively, across the entire set of gauges, at least 97 percent of the possible data population during storm events is captured by the equipment between October 15 and April 15, gauge vandalism or theft excepted, and
- (2) On an individual gauge basis, at least 92 percent of the possible data population during storm events is captured by the equipment between October 15 and April 15, gauge vandalism or theft excepted, and
- (3) Collectively, across the entire set of gauges, no less than 95 percent of the data population during storm events is transmitted in real-time to the receiving data management systems between October 15 and April 15, gauge vandalism or theft excepted.

Activities will include, but are not limited to:

a) Continuously Operate and Monitor Equipment

Continuously monitor equipment conditions and operability with a resource focus on the stormy season from October to April in accordance with the District's General Procedures Manual. Confer with District staff on any desired/recommended manual amendments.

b) Publish Operational Status to Cloud

Provide an up-to-date, Internet-accessible (but password protected), summary table of the current operational status of all gauge stations, including: planned activities, any down time and estimated time to returned working status, battery power, etcetera. Color code the line items to indicate status, for example: green for all good; orange for suspect data (apparent over/under measurements); red for inactive/failure.

c) Service Equipment Routinely

Routinely service the monitoring stations. With each visit inspect for any faults, deficiencies and any possible improvements that could be beneficial, yet economically feasible.

Perform all repairs, upgrades, replacement, and calibrations to existing equipment to bring it all into full operation and connectivity such that the District's data capture, transmission, and data-reliability requirements are met. Each station should be calibrated prior to the start of the stormy season and anytime a gauge drifts from that expected based upon review of local data.

d) Service Equipment Upon Detected Fault

Guarantee 24-hour initial field response (from the time of discovery) for flow gauges showing data anomalies. Consultant shall complete any minor repairs or debris removal at that time. Major/emergency repairs must receive prior approval by District. If an approved emergency, District will generally require repairs to be completed within 3 calendar days thereafter. Exceptions will be made for weather or high streamflow which preclude such timely repair. Schedule extension may be permitted by District if no imminent storm is predicted.

e) Add/Replace/Upgrade Equipment

SOIL MOISTURE SENSORS – New soil moisture sensors may be ordered to be installed at four existing rain gauge sites.

FLOW PRESSURE TRANSDUCERS – Typically, the District has two pressure transducers at each flow site. Several of the pressure transducers may need to be replaced.

LOCAL BACKUP LOGGERS – Not all stations have local backup loggers. New loggers are to be added to all rain and flow stations that do not presently have functioning loggers.

SOLAR POWER UPGRADES – There is the possibility that about 20-stations will need solar power upgrades.

EQUIPMENT ENCLOSURES – About 10-stations may benefit from enclosure upgrades.

RELOCATIONS – Approximately six stations may need to be relocated because of degrading site conditions.

STAFF GAUGES – Not all flow stations have accompanying staff gauges that can be read manually on-site. Confer with District Staff on the planning of new staff gauge placement.

f) Report Station Activities

Consultant shall develop and implement a cloud-based field conditions information documentation system by which Consultant's field inspection reports are available for the District's review. Field reports shall be tracked on a per-station basis and shall be uploaded within 72 hours of each field visit. District prefers the documentation system to be geospatially-based and compatible with District's existing GIS.

g) Update General Procedure Manual

Update the District's "General Procedures Manual for Hydrologic Data Acquisition and Management in Alameda County" based on any new information that results from your work. Incorporate any District comments into the report. A copy of the draft 2014 Manual prepared by Sound Watershed Consulting is attached in Exhibit E for content reference. This draft 2014 Manual is currently being updated to reflect recent equipment changes and anticipated to be updated by end of June 2024.

h) Revise Data for Final Acceptance and Database Archiving

Collect and report final data and check data for accuracy and consistency, and for its ability to meet data quality objectives. District reserves the right to reject the data if the data does not appear to meet QA/QC (quality assurance/quality control) requirements and data quality objectives. The Consultant shall reprocess the data to District's satisfaction at no cost to District.

Deliverables: (1) Operational status report. (2) Field inspection reports, available within 72 hours of each field visit, that document equipment conditions and operability. (3) Updated General Procedures Manual. (4) Final hydrologic data table, in raw and validated/corrected format.

4. Flow Measurement and Development of Rating Curves

At all flow measurement locations, or at select agreed upon locations (as the proposed budget permits), Consultant shall perform flow measurements during storm events to develop accurate rating curves for the stream gauge station. Activities will include, but are not limited to:

- a) Perform ground survey of select locations to determine land surface elevations. The survey must be performed by, or under the responsible charge of, a person licensed by the State of California to perform topographic surveys. All elevations shall be based on NAVD88 datum.
- b) Develop preliminary rating curves based on existing cross-section, as-built information, and a cursory field inspection. This preliminary rating curve is only to provide a temporary “flow versus height” relationship.
- c) Perform velocity measurements during storms to develop “flow versus height” points to develop a more accurate rating curve. District desires at least three to five data points per gauge. Velocity measurements and office computations shall be in accordance with USGS procedures or other standards acceptable to the District. Emphasis on measurements shall be for medium and high flows, generally one foot and above in depth. To that end, Consultant shall consult with District if incoming/imminent storms appear to be suitable candidates.

***Deliverables:** Technical memorandum describing development of rating curves for each flow gauge station.*

5. Data Management

The Consultant will gather, manage, depict, and store the data transmitted from the hydrologic monitoring equipment such that the District can view and analyze the data through a web-based portal and a preparatory database for storage in a format agreed upon by the District. The Consultant will supply, install, and maintain a robust database and associated website portal.

Data management activities will include, but are not limited to:

- a) Administer an Internet-based, password-protected website at which authorized users (including District staff) can access, view, and analyze the data in real-time. The data must be depicted spatially via digital maps using GIS technology. The website must be compatible with all commonly used browser technology (Microsoft Internet Explorer, Google Chrome, and Mozilla Firefox, at a minimum). The platform currently in use is OneRain’s Contrail.
- b) The website must include, at a minimum, basic hydrologic analytical tools such as line graphs of precipitation or flow at any given monitoring location, rain diagrams, scatter plots of data, CVS (comma-separated value) export tools, and the ability to perform basin average rainfall estimates. Other hydrologic analytical tools that are optional – but optimal – include the ability to overlay and batch multiple sites and redundant sensors (the latter at flow sites) for correlation analysis and flow balancing, storm properties analysis, water level modeling, and catchment runoff modeling.

- c) A redundant database that includes all of the original and revised data shall be maintained completely under the control of the consultant independent of a third-party vendor. The information from this database shall be available and provided to the District upon request at any time.
- d) The database and website must be configured such that manual field readings and site verification results can be input manually to supplement or overlay the transmitted monitoring data. It must also be configured such that data errors may be flagged. In near real time, consultant's software shall be capable of detecting malfunctioning gauges or other mechanical/electrical equipment issues, and posting a flag or alert for review and/or field inspection.
- e) Maintain an e-mail and SMS alerting system so that key District and Consultant staff are notified, in real time, when water levels at selected stations reach specified levels, when flow rates at selected locations reach specified values, when catchment runoff levels reach specified levels, or when an algorithmic procedure forecasts levels based on a calculation of data across multiple sensors.
- f) Provide near real-time data feed to NOAA/National Weather Service and CA-DWR's California Data Exchange Center (CDEC), as requested by the District and required by NOAA and DWR respectively.
- g) Perform ongoing data management services during the life of the contract. Activities will include, but are not limited to, storage, quality management, export and import, and security.
- h) At the District's request, customize tools within the database to allow for export of the hydrologic data in a format compatible with standard hydrologic models, including HEC-1, HEC-2, HMS, HEC-RAS, MESH, etc.
- i) Submit monthly status reports to the District accompanying monthly invoice. Additionally, make these status reports continuously available to District Staff online behind a protected password login as previously described in section 3b. This can be part of the data hosting website or another sharing site. At a minimum, the reports will include:
 1. A table for all monitoring sites that: (a) identifies the percentage of storm data as "good," "questionable," and "no/bad" data (b) explanations as to why any data may be questionable or unavailable and how the situation has been or will be corrected (c) rainfall depth summation for the month and water-year-to-date or maximum discharged measured for the month and water-year-to-date.
 2. Maintenance log on a standardized form for any stations where maintenance was performed during the month.
 3. Any recommendations as to how the existing system might be improved to achieve District objectives.

Deliverables: *Web-enabled database(s) for storing, depicting, and manipulating all collected hydrologic data with the ability to program calculations that forecast flooding and will instantly alert those included on notification lists. Monthly status reports with invoice.*

D. Consultant Experience and Capabilities

Consultants responding to this RFQ/P, including all key personnel to be assigned to this project, shall be regularly and continuously engaged in the business of performing hydrologic data collection and management services such as the one described herein, for at least the last five (5) consecutive years.

Consultant shall possess all permits, licenses and professional credentials necessary to perform services as specified under this RFQ/P.

E. Time of Services/Project Schedule

The District intends to enter into a contract with the Consultant for a period of five years. District expects the contract to commence on or about June 19, 2024.

F. Other District Requirements

Local Participation: Note that it is a requirement for award that all contracts such as this one include local (defined as Alameda County-based) businesses to the maximum extent possible consistent with the nature of the services to be provided. The County Small Local and Emerging Business (SLEB) Program requires that to be awarded this contract the lead firm must be a SLEB or, if the lead firm is not a SLEB, the lead firm must partner with SLEBs to the maximum extent reasonable and possible, with a minimum of 20% SLEB participation required. Please note detailed provisions in **Terms and Conditions for Agreement** section of this RFQ/P.

Environmentally Friendly Packing: Alameda County is an environmentally responsible employer and seeks all practical opportunities for waste reduction and recycling. The County, therefore, encourages its contractors to reduce waste volume and toxicity by using environmentally friendly packaging material whenever possible. Options may include backhauling product packaging to the supplier for reuse or recycling, shipping in bulk or reduced packaging, using soy bean-based inks for packaging printing, using recycled product packaging or using recyclable or reusable packaging material. The County encourages all bidders and contractors for goods and services to adhere to these principles where practicable.

II. Instructions to Consultants

A. District Contact

The evaluation phase of the competitive process shall begin upon receipt of sealed Statements of Qualifications, through the potential interview phase, and continue until a Notice of Intent to Award is issued and contract has been awarded. Consultants shall not contact or lobby evaluators during the evaluation process. Any communication regarding this RFP with other District/County personnel, including evaluators, may result in disqualification.

Any questions regarding this RFQ/P shall be submitted in writing via email to the contact person listed below by the date and time specified on the *Calendar of Events* below.

Contact: Anita Franklin
 E-mail: anita@acpwa.org
 Phone: (510) 670-5569
 Address: Alameda County Flood Control and
 Water Conservation District
 399 Elmhurst Street, Hayward, CA 94544

The District reserves the right to amend this RFQ/P or the criteria for Consultant selection in any manner, to cancel this RFQ/P, or to reject any one or all Statements of Qualifications/Proposals at its discretion, thus not awarding a contract to any firm.

The most current supporting information and addenda for this procurement can be found on the ACPWA business webpage <https://www.acpwa.org/business/current-opp.page?#profservices>.

B. Calendar of Events

Event	Date/Time
RFQ/P Issued	April 16, 2024
Mandatory Virtual Networking/Consultant Conference <i>The Microsoft Teams link for the pre-proposal meeting is https://bit.ly/ac-floodcontrol; Dial in: call locally +1 415-915-3950 or (888) 715-8170 (Toll-free); Phone Conference ID: 653 944 644#</i>	April 23, 2024 at 2:00 p.m.
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Contract Negotiation	June 3 to June 21, 2024
Board Award	July 16, 2024
Contract Start Date	July 16, 2024

C. Mandatory Consultant Networking/Pre-proposal Meeting

This mandatory consultant networking/pre-proposal meeting is held to:

- Provide an opportunity for Small Local Emerging Businesses (SLEBs) and large firms to meet qualified sub consultants and/or teaming partners and develop subcontracting relationships in order to participate in the contract that may result from this RFQ/P.
- Provide an opportunity for consultants to ask specific questions about the project and request RFQ/P clarification.
- Provide the District with an opportunity to receive feedback regarding the Project and RFQ/P.

The list of attendees will be included in an RFQ/P Addendum after the consultant networking/pre-proposal meeting. Prime Consultants and subconsultants are encouraged to attend the consultant networking/pre-proposal meeting in order to further facilitate subcontracting relationships. Proposals from prime consultants that fail to attend this mandatory consultant networking/pre-proposal meeting will be rejected.

D. Submittal of Statement of Qualifications/Proposal

1. All responses must be SEALED and must be received by the Alameda County Flood Control and Water Conservation District receptionist **BEFORE** 2:00 p.m. on the due date specified in the Calendar of Events.

NOTE: LATE AND/OR UNSEALED RESPONSES CANNOT BE ACCEPTED. IF HAND DELIVERING RESPONSES PLEASE ALLOW TIME FOR SPARSE METERED PUBLIC PARKING OR SPARSE STREET PARKING.

Responses will be received only at the address shown below, and by the time indicated in the Calendar of Events. Any response received after said time and/or date or at a place other than the stated address cannot be considered and will be returned unopened.

All responses, whether delivered by an employee of Consultant, U.S. Postal Service, courier or package delivery service, must be received and time stamped at the stated

address prior to the time designated. The District's Office Services timestamp shall be considered the official timepiece for the purpose of establishing the actual receipt of responses.

2. Responses are to be addressed and delivered as follows:

RFQ/P No. FLO202402108 - Hydrologic Data Collection and Management Services

Ms. Anita Franklin

Alameda County Flood Control and Water Conservation District

399 Elmhurst Street, Room 113

Hayward, CA 94544-1307

3. Consultant's name and return address must also appear on the mailing package.
4. No telegraphic, e-mail or facsimile responses will be considered.
5. All costs required for the preparation and submission of a response shall be borne by Consultant.
6. Only one response will be accepted from any one person, partnership, corporation, or other entity; however, several alternatives may be included in one response. For purposes of this requirement, "partnership" shall mean, and is limited to, a legal partnership formed under one of more of the provisions of the state of California or other state's Corporations Code or an equivalent statute.
7. All information regarding the responses will be held as confidential until such time as the Consultant Review Board (CRB) has completed its evaluation, and recommended award has been made by the CRB, and the contract has been fully negotiated with the recommended awardee named in the recommendation to award/non-award notification(s).
8. It is the responsibility of the Consultants to clearly identify information in their responses that they consider to be confidential under the California Public Records Act. See: <http://www.acgov.org/gsa/departments/purchasing/policy/proprietary.htm>.
9. Each response received, with the name of the consultant, shall be entered on a record, and each record with the successful responses indicated thereon, shall, after the award of the contract, be open to public inspection.
10. California Government Code §4552: In submitting a response to a public purchasing body, the consultant offers and agrees that if the response is accepted, it will assign to the purchasing body all rights, title and interest in and to all causes of action it may have under §4 of the Clayton Act (15 U.S.C. §15) or under the Cartwright Act (Chapter 2, commencing with Section 16700, of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the consultant for sale to the purchasing body pursuant to the response. Such assignment shall be made and become effective at the time the purchasing body tenders final payment to the consultant.
11. Consultant expressly acknowledges that it is aware that if a false claim is knowingly submitted (as the terms "claim" and "knowingly" are defined in the California False Claims Act, Cal. Gov. Code, §12650 et seq.), District will be entitled to civil remedies set forth in the California False

Claim Act. It may also be considered fraud and the Consultant may be subject to criminal prosecution.

12. The Consultant certifies that it is, at the time of response, and shall be throughout the period of the contract, licensed by the State of California to do the type of work required under the terms of the Contract Documents. Consultant further certifies that it is regularly engaged in the general class and type of work called for in the RFQ/P.
13. The Consultant certifies that it is not, at the time of the response, on the California Department of General Services (DGS) list of persons determined to be engaged in investment activities in Iran or otherwise in violation of the Iran Contracting Act of 2010 (Public Contract Code Section 2200-2208).
14. It is understood that the District reserves the right to reject a response and that the rejected response shall remain open for advancement in this procurement process for a period of 180 days, unless otherwise specified in the RFQ/P documents.

E. Response Format

1. Responses are to be straightforward, clear, concise and specific to the information requested. Submit in 8-1/2 x 11 format one (1) original hardcopy response with original ink signatures, plus four (4) copies of the response, plus an exact duplicate, electronic copy shall be submitted on a USB drive in a single PDF file, and enclosed with the sealed original hardcopy of the response. A PDF file created with searchable text is required. Original response is to be clearly marked "ORIGINAL," printed on plain white paper, and must be either loose leaf or in a 3-ring binder (NOT bound). All copies shall be marked "COPY."

It is preferred that all responses submitted shall be printed double-sided and on minimum 30% post-consumer recycled content paper. Inability to comply with this recommendation will have no impact on the evaluation and scoring of the proposal. Submittals shall contain only material directly related to response to requirements, not general marketing material. Organize your information under tabs in the same order delineated under Section "Response Content/Submittals" Below.

2. In order for responses to be considered complete, Consultant must provide all information and documentation requested, including forms required in Exhibits A and B. Failure to include all requisite information may be grounds for the District's rejection of consultant's response.
3. Responses, in whole or in part, are NOT to be marked confidential or proprietary. The District may refuse to consider any response or part thereof so marked. Responses submitted in response to this RFQ/P may be subject to public disclosure. The District shall not be liable in any way for disclosure of any such records. Please refer to the County's website at: [Alameda County Proprietary and Confidential Information Policies](https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/proprietary-confidential-information/) [\[https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/proprietary-confidential-information/\]](https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/proprietary-confidential-information/).

RESPONSE CONTENT/SUBMITTALS

The District appreciates brevity. Please keep your response submission, excluding transmittal letter, title page, table of contents, plain section dividers, resumes, and required exhibits/attachments, to a total of 20 printed pages. Clarity and conciseness are essential and will be considered in assessing the Consultant's capabilities.

In order to simplify the process and to obtain the maximum degree of comparability, the response should be organized in the following manner:

1. **Transmittal Letter.** Responses shall include a brief description of Consultant's capabilities and approach in providing its services to the District and provide a brief synopsis of the highlights of the response and overall benefits of the response to the District. Consultants should explain its understanding of the work and basic project approach. This synopsis should not exceed two (2) pages in length and should be easily understood. The letter must also identify the authorized signatories for the proposer and include his/her/their signature(s).

Unsigned submittals or submittals signed by an individual not authorized to bind the prospective Consultant will be considered nonresponsive and rejected.

2. The response shall include the following information:
 - a. **Title Page.** Show the RFQ/P subject, the RFQ/P number, the name of the Consultant's firm, address, telephone number, name of the contact person and their email address, and the date. Indicate Small, Local and Emerging Business (SLEB) firm(s) and other firms serving as sub-consultants. Include the **Department of Industrial Relations (DIR) registration number** for registered consultants and sub-contractors covered by DIR prevailing wages, if any.
 - b. **Table of Contents.** Responses shall include a table of contents listing the individual sections of the response and their corresponding page numbers. Tabs should separate each of the individual sections.
 - c. **Description of the Team.** Response must identify prime consultant, sub consultants and the qualifications of each entity to perform the scope described herein. Due to the breadth of disciplines covered by this scope, please be as detailed as possible, and provide an organizational chart to show flow of communication and how the individual entities will be managed by the prime consultant. The description of Consultant's team shall (1) discuss the team's ability to perform hydrologic data collection and management services that will meet or exceed the requirements of the District; (2) explain any special resources, procedures, or approaches that make the services of Consultant particularly advantageous to the District; (3) identify any limitations or restrictions of Consultant in providing the services that the District should be aware of in evaluating Consultant's Statement of Qualifications; and (4) discuss how the team will meet Alameda County's Small Local and Emerging Business (SLEB) required minimum 20% participation. The District will look favorably on SLEB participation at a percentage higher than 20%.
 - d. **Key Personnel.** Responses shall include a complete list of all key personnel who will provide services on the projects. For each person on the list, the following information shall be included:

- (1) The person's relationship with Consultant, including job title and years of employment with Consultant.
- (2) Brief one-paragraph description of expertise and experience.
- (3) The role that the person will play on the project.
- (4) Address, telephone number, and e-mail address.
- (5) Person's educational background.
- (6) Person's relevant experience, certifications, and/or merits.

Detailed resumes for key staff may be included as an attachment and will not count towards the page total.

- e. **Description of Consultant's Experience and Expertise.** Responses shall include a detailed explanation of relevant experience including descriptions of similar project work, years of experience in the field of hydrologic data acquisition and management, and general skills sets that can be provided by personnel. Consultant should demonstrate a clear understanding of the project.

Specifically, this description should address consultant's qualifications in the following areas: (1) Project Management; (2) Reconnaissance, Inventory, and Planning; (3) Maintenance and Operation for Rain Gauges and Flow Gauges; (4) Flow Measurement and Development of Rating Curves; and (5) Data Management.

The description of consultant's team should (1) discuss how the team will meet or exceed the requirements of the District; (2) explain any special resources, procedures, or approaches that make the services of Consultant particularly advantageous to the District; and (3) identify any limitations or restrictions of Consultant in providing the services that the District should be aware of in evaluating Consultant's response to the RFQ/P.

- f. **Project Approach and Work Plan.** This section should include a full description of the work elements and the proposed methodology the Consultant proposes to satisfy District objectives. The scope of work provided in Section B, "Scope of Services," offers a framework to performing this project and outlines the minimum number of tasks.

The work description should be detailed to a sufficient level (work elements, sub elements, etc.) to show a clear understanding of the precise work required to meet project goals. Provide a detailed description covering all the discussed requirements in Tasks 1 through 5.

Identify other activities that you propose to implement in support of the required tasks. Describe any changes that you would make to the work scope. Discuss the reasons for any changes made to the scope of work as outlined in Section I.B "Project Description." Identify all tasks or activities that would be fully supported by your organization and those that would require assistance from the District.

- g. **Project Delivery Schedule.** Include a Microsoft Project Gant Chart showing the work elements and sub-elements with major milestones, based on the assumption that the consultant will perform hydrologic data collection and management, and that work will be on or about July 16, 2024.

- h. **Management Plan.** This section should describe the Consultant's approach to managing the work. If the proposal is a team effort, the allocation of the work to the team members should be indicated.
- i. **Contract Negotiation Authorization and Financial Responsibility.** Include the name(s), e-mail addresses, and phone numbers of individuals authorized to negotiate this contract and contractually bind the Proposer and who may be contacted during the period of evaluation. A copy of the District's Professional Services Agreement and insurance requirement are enclosed for advanced review. The District shall have the right to request changes to the project team before execution of the contract. District shall have the right to reject any and all Statements of Qualification for any reason.

In this section the Proposer should also effectively demonstrate financial responsibility. At a minimum, the Proposer must certify, by including the following statement: "Our financial management system meets the standards for financial reporting, accounting records, internal and budget control as set forth in the Uniform Guidance, 2 CFR Part 200, to the extent applicable to the Consultant." Provide brief explanation on how your markup(s) are financially responsible and competitive. Proposer should demonstrate how to manage expenses and keep costs at a minimum.

- j. **Cost Proposal and Fees.** Under separate sealed envelope, on company letterhead, the consultant must provide a current fee schedule showing labor categories and hourly labor rates for all named personnel and/or type of personnel anticipated on this contract, plus expense costs, as well as a cost proposal for the scope of work described herein.
 - (a) The District's maximum allowable mark up on sub consultant fees and any expenses is ten (10) percent.
 - (b) Quoted fees shall be firm for the first twelve (12) months of any contract that may be awarded pursuant to this RFQ/P.
 - (c) Maximum annual escalation of fees shall be no more than 3%.
 - (d) Federal and State minimum wage laws apply. The District has no requirements for living wages. The District is not imposing any additional requirements regarding wages.
3. **Exhibits/Attachments.** Consultants shall include in their submittal completed and signed documentation for all listed Exhibits, including any attachments required by the Exhibit. The content and sequence for each required document shall be as follows:

Exhibit A RFQ/P Response Packet- Required Documentation

Attachment (a): Consultant Information and Acceptance (required with submittal of response). Every Consultant must select one choice under Item 11 of this exhibit and must completed and sign on page 4 of this Attachment.

Attachment (b): References (required with submittal of response). Consultants and subconsultants must use the templates on Exhibit A, Attachment (b) to provide references. Consultants and subconsultants are to provide a list of three clients and must verify the contact information for all references. References must be satisfactory as

deemed solely by the District. Consultants and subconsultants are strongly encouraged to notify all references that the District may be contacting them to obtain a reference. The District may contact some or all of the references provided in order to determine Consultant's and subconsultant's performance record on work similar to that described in this request. The District reserves the right to contact references other than those provided in the Response and to use the information gained from them in the evaluation process.

Attachment (c): Small Local Emerging Business (SLEB) Partnering Information Sheet (required with submittal of response). This form is required with the submittal of Consultant's response. If Consultant is not certified, the name, identification information, and goods/services to be provided by the named CERTIFIED SLEB partner(s) with whom the Consultant will subcontract to meet the County SLEB participation requirement must be stated. For any CERTIFIED SLEB subcontractor(s) named, the Exhibit must be signed by the CERTIFIED SLEB(s) according to the instructions. All named SLEB subcontractor(s) must be certified by the time of response submittal.

Attachment (d): Exceptions, Clarifications, Amendments (required with submittal of response). If Consultants are making ANY clarifications and/or amendments, or taking exception to policies or specifications of this RFQ/P, these MUST be submitted in the Exceptions, Clarifications, Amendments form in Exhibit A, Attachment (d). **The District is under no obligation to accept any exceptions, and such exceptions may be a basis for response disqualification.**

Attachment (e): Debarment & Suspension Certification Form (required with submittal of response). Consultant must complete, sign, and date the Debarment and Suspension Certification form.

Attachment (f): Iran Contracting Act Compliance Certificate (required with submittal of response). Consultant must complete, sign, and date the Iran Contracting Act Compliance Certificate form.

Exhibit B **Insurance Requirements** (for information). This exhibit contains the minimum insurance limits, required by the County of Alameda to be held by the Consultant and all of its sub consultants performing on the projects. Insurance certificates are not required at the time of submission of the response; however, by signing Attachment (a) - Consultant Information and Acceptance, Consultant and its sub consultants agree to meet the minimum insurance requirements stated in the RFQ/P prior to contract award. This documentation must be provided to the District prior to award and shall include an insurance certificate and additional insured certificate naming the Alameda County Flood Control and Water Conservation District and County of Alameda, which meets the minimum insurance requirements, as stated in the Exhibit B – Insurance Requirements.

Exhibit C **Sample Professional Services Agreement** (for information).

Exhibit D **List of Active Hydrologic Monitoring Stations** (for information)

Exhibit E **Draft 2014 General Procedures Manual for Hydrologic Data Acquisition and Management in Alameda County** (for information)

III. Process of Selection

All responses that pass the initial evaluation criteria identified as a pass/fail item in the Evaluation Criteria table below will be evaluated by a Consultant Review Board (CRB). The CRB may be composed of District staff and other parties that may have associated expertise or experience. The CRB will review and rank the submittals to create a shortlist of up to three (3) Consultants that may be invited to participate in an oral presentation and interview.

All contacts during the evaluation phase shall be through the District contact only. Consultants shall not contact or lobby evaluators during the evaluation process. Any communication regarding this RFQ/P with other District/County personnel and/or influence members of the CRB may result in disqualification of Consultant.

Consultants should bear in mind that any response that is unrealistic in terms of the technical or schedule commitments may be deemed reflective of an inherent lack of technical competence or indicative of a failure to comprehend the complexity and risk of the District's requirements as set forth in this RFQ/P.

Each of the evaluation criteria below will be used in ranking and determining the quality of the responses. Responses will be evaluated according to each Evaluation Criteria, and scored on the zero to ten-point scale. The scores for all evaluation criteria will then be added, according to their assigned weight to arrive at a weighted score for each response. A response with a high weighted total will be deemed of higher quality than a response with a lesser-weighted total.

As indicated in Section I, this evaluation process is a one-step approach including an initial evaluation of the response and preliminary scoring of the same in combination with an oral presentation/interview score (if interviews are conducted).

As a result of this RFQ/P, the District intends to contract with one (1) best qualified Consultant.

The zero to ten-point scale range is defined as follows:

0	Not Acceptable	Non-responsive, fails to meet RFP specification. The approach has no probability of success. If the unmet specification is a mandatory requirement, this score may result in the disqualification of the proposal.
1-2	Poor	Below average, falls short of expectations, is substandard to that which is the average or expected norm, has a low probability of success in achieving objectives per RFQ/P.
3-4	Fair	Has a reasonable probability of success, however, some objectives may not be met.
5-6	Average	Acceptable and likely to achieves all objectives in a reasonable fashion per RFQ/P specification. This will be the baseline score for each item with adjustments based on the interpretation of the proposal by Evaluation Committee members.
7-8	Above Average/Good	Better than that which is average or expected as the norm. Excellent probability of success in achieving all objectives of the RFQ/P requirements and expectations.
9-10	Excellent/Exceptional	Exceeds expectations, is very innovative, clearly superior to that which is average or expected as the norm. Excellent probability of success and in achieving all objectives and meeting RFQ/P specification.

The Evaluation Criteria and their respective weights are as follows:

	INITIAL CRITERIA	Score
1.	Completeness of Response: Responses must be complete. Responses that do not include the RFQ/P content requirements and subsequent Attachments and do not address each of the items listed in Exhibit A will be considered incomplete, be rated a Fail in the evaluation criteria and will receive no further consideration. Responses that are rated a Fail and are not considered may be picked up by the Consultant at the delivery location within 14 calendar days of contract award and/or the completion of the competitive process.	Pass/Fail
2.	Debarment and Suspension: Consultant, its principals, and named subcontractors are not identified on the list of Federally debarred, suspended or other excluded parties located at www.sam.gov . Certification form attached hereto as Exhibit A, Attachment (e) must be completed and signed.	Pass/Fail

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	EVALUATION CRITERIA – STATEMENT OF QUALIFICATIONS & PROPOSAL RESPONSE	Weight Factor	Max. Rating	Max. Score
1.	<p>Understanding of the Project: Responses will be evaluated against the RFQ/P specifications and the questions below:</p> <ul style="list-style-type: none"> a. Has Consultant demonstrated a thorough understanding of the purpose and scope of the project? b. How well has the consultant demonstrated that it will manage the project team to satisfy District goals for the project? c. Has the Consultant included the appropriate type and level of expertise to execute the project? 	1.0	10	10
2.	<p>Experience and Expertise: In each skill area described below, an evaluation will be made of the probability of success of and risks associated with the response:</p> <ul style="list-style-type: none"> a. Project management. b. Reconnaissance, Inventory, and Planning. c. Maintenance and Operation for Rain Gauges and Flow Gauges. d. Flow Measurement and Development of Rating Curves. e. Data Management. 	2.0	10	20
3.	<p>Relevant Experience of Key Personnel: Responses will be evaluated against the RFQ/P specifications and the questions below:</p> <ul style="list-style-type: none"> a. Has the staff been engaged in relevant projects and services as outlined in Section I.B.? b. Do the individuals assigned to the project have appropriate licenses and certifications and demonstrated expertise and relevant experience on similar projects? c. How extensive is the applicable education and experience of the personnel designated to work on the project? 	2.0	10	20
4.	<p>Project Approach and Work Plan: In each skill area described below, an evaluation will be made of the probability of success and risks associated with the proposal:</p> <ul style="list-style-type: none"> 1. Methodology proposed to satisfy District objectives. 2. Clear understanding of work required. 3. Detailed description of all requirements in Tasks 1-5. 4. All tasks and activities clearly identified and supported. 	2.0	10	20
5.	<p>Project Delivery Schedule: Has the consultant provided a clear and itemized description of deliverables and when each will be provided to the District.</p>	1.0	10	10

6.	<p>Management Plan: Proposals will be evaluated against the questions below:</p> <p>a. Is the management approach, including roles of prime and subcontractors, and any other team members, clearly explained.</p> <p>b. Is the work assignment structure, including work elements and sub elements performed by subcontractors clearly explained?</p> <p>c. Is it clear that consultant has the capacity to perform multiple drainage master plan site studies?</p> <p>d. Does the proposal include a description of subcontractor supervision strategy?</p> <p>e. Does consultant provide an overview of quality assurance and quality control procedures with sufficient detail that the District can evaluate how the consultant will meet or exceed the District's expectations on this project?</p>	1.0	10	10
7.	<p>Cost Proposal: Has the Consultant provided a clear, detailed, and reasonable cost proposal and current fee schedule in a separate, sealed envelope.</p>	1.0	10	10
Maximum SOQ and Proposal Evaluation Score				100

LOCAL OR SLEB PREFERENCES		
1.	<p>Local Preference Points: equaling five percent (5%) of Consultant's total score, for the above Evaluation Criteria, will be added. This will be the Consultant's <u>final score</u> for purposes of award evaluation.</p>	5% added to Response Total
2.	<p>Small and Local or Emerging and Local Preference Points: equaling ten percent (10%) of Consultant's total score, for the above Evaluation Criteria, will be added. This will be the Consultant's <u>final score</u> for purposes of award evaluation.</p>	10% added to Response Total
Max Response Evaluation Score w/ either Local OR SLEB Preference Points		110

The final maximum score for any project is 110 points, including the possible 10 points for local and small, local and emerging, or local preference points (maximum 10% of final score). Preference points awarded to each Consultant for being local and/or certified SLEB will be calculated from the actual scores achieved in the evaluation of their responses.

All Consultants will be notified of the shortlist participants; however, the preliminary scores at that time will not be communicated to Consultants. Response scores of the shortlisted Consultants will be combined with the Consultant's Interview score if interviews are conducted, for a total maximum final evaluation score of two-hundred ten (210), as detailed in the following table:

	FINAL EVALUATION SCORE	MAX TOTALS
1.	CONSULTANT'S TOTAL SOQ/PROPOSAL SCORE	110
2.	CONSULTANT'S INTERVIEW/ORAL PRESENTATION/REFERENCE SCORE	100
FINAL MAXIMUM SCORE		210

The District reserves the right to conduct an oral interview with up to three (3) highest scoring proposers. If the District elects to conduct oral interviews, additional details will be provided to those who are invited to participate. At the interview, the selection team will expect the Consultant

team to present its team members and their qualifications. The project manager and key staff persons who will be working on the project on a daily basis must be present for the interview/presentation. The presentation will be followed by a question-and-answer period by the Consultant Review Board. Oral interviews, if held, will be held virtually.

The Consultant with the highest final score will be invited to negotiate a contract with the District for the professional services described herein.

AWARD

The CRB will recommend award to the Consultant who achieves the highest overall score. Overall scores are determined by adding the response evaluation score, proposal evaluation score, and the oral presentation/interview score.

The District reserves the right to reject any or all responses that materially differ from any terms contained in this RFQ or from any Exhibits attached hereto, to waive informalities and minor irregularities in responses received, and to provide an opportunity for proposers to correct minor and immaterial errors contained in their submissions. The decision as to what constitutes a minor irregularity shall be made solely at the discretion of the District.

The District has the right to decline to award this contract or any part thereof for any reason.

Any proposal that contain false or misleading information may be disqualified by the County.

Board approval to award a contract is required.

A contract must be negotiated, finalized, and signed by the recommended awardee prior to Board approval.

Final Professional Services Agreement terms and conditions will be negotiated with the selected consultant.

The RFQ/P specifications, terms, conditions, and Exhibits, RFQ/P Addenda and Proposer's SOQ/Proposal, may be incorporated into and made a part of any contract that may be awarded as a result of this RFQ/P.

CONTRACT EVALUATION AND ASSESSMENT

During the initial sixty (60) day period of any contract that may be awarded to Consultant, the CRB and/or other persons designated by the District will meet with the Consultant to evaluate the services provided thus far, to identify any issues or potential problems.

The District reserves the right to determine, at its sole discretion, whether:

1. Consultant has complied with all terms of this RFQ/P; and
2. Any problems or potential problems with the proposed services that make it unlikely (even with possible modifications) that such services have met the District requirements,

If, as a result of such determination, the District concludes that it is not satisfied with Consultant, Consultant's performance under any awarded contract and/or Consultant's services as contracted for therein, the Consultant will be notified of contract termination effective forty-five (45) days

following notice. Consultant shall be responsible for returning District property at no charge to the District. The District will have the right to invite the next highest ranked consultant to enter into a contract. The District also reserves the right to re-procure this project if it is determined to be in its best interest to do so.

NOTICE OF INTENT TO AWARD

At the conclusion of the evaluation process, all consultants will be notified in writing by e-mail, fax, or US Postal Service mail, of the contract award recommendation, if any, by the District. The document providing this notification is the Notice of Intent to Award.

The Notice of Intent to Award will provide the following information:

1. The name of the consultant being recommended for contract award; and
2. The names of all other parties that submitted proposals.

At the conclusion of the evaluation process and negotiations, debriefings for unsuccessful consultants may be scheduled and provided upon written request and will be restricted to discussion of the unsuccessful consultant's response. Under no circumstances will any discussion be conducted with regard to contract negotiations with the successful consultant.

TERM/TERMINATION/RENEWAL

1. The term of the contract, which may be awarded pursuant to this RFQ/P, will be five (5) years.
2. The District has and reserves the right to suspend, terminate or abandon the execution of any work by the Consultant without cause at any time upon giving to the Consultant prior written notice. In the event that the District should abandon, terminate or suspend the Consultant's work, the Consultant shall be entitled to negotiate its payment for services provided hereunder prior to the effective date of said suspension, termination or abandonment. The District may terminate the contract at any time without written notice upon a material breach of contract and substandard or unsatisfactory performance by the Consultant. In the event of termination with cause, the District reserves the right to seek any and all damages from the Consultant. In the event of such termination with or without cause, the District reserves the right to invite the next highest ranked consultant to enter into a contract or re-procure the project if it is determined to be in its best interest to do so.
3. The District may, at its sole option, terminate any contract that may be awarded as a result of this RFQ/P at any time, for reason of non-appropriation of funds. In such event, the District will give Consultant at least thirty (30) days written notice that such function will not be funded for the next fiscal period. In such event, the District will return any associated equipment to the Consultant in good working order, reasonable wear and tear excepted, and vice-versa.

PROCUREMENT PROTEST/APPEALS PROCESS

District prides itself on the establishment of fair and competitive contracting procedures and the commitment made to follow those procedures. The following is provided in the event that Consultants wish to protest the procurement process or appeal the recommendation to award a contract for this project once the Notices of Intent to Award/Non-Award have been issued. Protests

submitted prior to issuance of the Notices of Intent to Award/Non-Award will not be accepted by the District.

1. Any protest by any Consultant to any part of the procurement process, must be submitted in writing to the Flood Control Program Manager, located at 399 Elmhurst Street, Hayward, CA 94544, by 5:00 p.m. on the SEVENTH (7th) calendar day following the date of issuance of the Notice of Intent to Award, not the date received by the Bidder. A protest received after 5:00 p.m. is considered received as of the next calendar day. A protest received after 5:00 p.m. on the SEVENTH (7th) calendar day following the date of issuance of the Notice of Intent to Award will not be considered under any circumstances by the Protest Evaluator or their designee.

Generally, the County will promptly send an email acknowledging receipt of the protest; it is the responsibility of the protestor to confirm that the protest was timely received.

- a. The protest must contain a complete statement of the reasons and facts for the protest.
 - b. The protest must refer to the specific portions of all documents that form the basis for the protest.
 - c. The protest must include the name, address, email address and telephone number of the person submitting the protest on behalf of the protesting party.
 - d. The District will transmit a copy of the protest to all Consultants as soon as possible after receipt of the protest.
2. Upon receipt of the written protest, the Flood Control Program Manager or designee will review and evaluate the protest and issue a written decision. The Flood Control Program Manager, may, at his or her discretion, investigate the protest, obtain additional information, provide an opportunity to settle the protest by mutual agreement, and/or schedule a meeting(s) with the protesting Consultant and others (as appropriate) to discuss the protest. The decision on the protest will be issued at least ten (10) business days prior to the Board hearing date. The decision will be communicated by e-mail or fax, and certified mail, and will inform the proposer whether or not the recommendation to the Board of Supervisors in the Notice of Intent to Award is going to change. A copy of the decision will be furnished to all Consultants affected by the decision. As used in this paragraph, a Consultant is affected by the decision on a protest if a decision on the protest could have resulted in the Consultant not being the apparent successful Consultant on the procurement.
 3. The decision of the Flood Control Program Manager on the protest may be appealed to the Auditor-Controller's Office of Contract Compliance & Reporting (OCCR) located at 1221 Oak Street, Room 249, Oakland, CA 94612, Email: OCCR@acgov.org, unless the OCCR determines that it has a conflict of interest in which case an alternate will be identified to hear the appeal and all steps to be taken by OCCR will be performed by the alternate. The Bidder whose bid is the subject of the protest, all Bidders affected by the Protest Evaluator's decision on the protest, and the protestor have the right to appeal if they feel the Protest Evaluator's decision is incorrect. All appeals to the Auditor-Controller's OCCR must be in writing and submitted within SEVEN (7) calendar days following the issuance of the decision, not the date the decision is received by the Bidder. An appeal received after 5:00 p.m. is considered received as of the next calendar day. An appeal received after 5:00 p.m. on the SEVENTH (7th) calendar day following the date of issuance of the decision by the Protest Evaluator will not be considered under any circumstances by the Auditor-Controller OCCR or their designee.

- a. The appeal shall specify the decision being appealed and all the facts and circumstances relied upon in support of the appeal.
- b. In reviewing protest appeals, the OCCR will not re-judge the proposal(s). The appeal to the OCCR must be limited to review of the procurement process to determine if the contracting department materially erred in following the RFQ/P or, if applicable, County contracting policies or other laws and regulations.
- c. The appeal to the OCCR also shall be limited to the grounds raised in the original protest and the written decision by the Flood Control Program Manager. As such, a Consultant is prohibited from stating new grounds for the protest in its appeal. The Auditor-Controller (OCCR) shall only review the materials and conclusions reached by the Flood Control Program Manager or department designee and will determine whether to uphold or overturn the protest decision.
- d. The Auditor's Office may overturn the results of a RFQ/P process for ethical violations by District staff, District Selection Committee members, subject matter experts, or any other staff managing or participating in the competitive process, regardless of timing or the contents of a proposal protest. Any participating County staff, including County Counsel or Auditor-Controller, are doing so as staff of the District.
- e. The finding of the Auditor-Controller's OCCR is the final step of the appeal process. A copy of the finding of the Auditor-Controller's OCCR will be furnished to the protestor.
- f. The finding on the appeal must be issued before a recommendation to award the contract is considered and contract awarded by the Board of Supervisors.

The procedures and time limits set forth in this paragraph are mandatory and are each Consultant's sole and exclusive remedy in the event of protest. A Consultant's failure to timely complete both the protest and the appeal procedures shall be deemed a failure to exhaust administrative remedies. Failure to exhaust administrative remedies, or failure to comply otherwise with these procedures, shall constitute a waiver of any right to further pursue the protest, including filing a Government Code Claim or legal proceedings.

IV. Other Terms and Conditions for Agreement

Prior to acting upon this opportunity, qualifying proposers should review all applicable County, State, and Federal policies, terms, and conditions normally included as contractual requirements for projects of this type. The actual contract terms and conditions may differ from those presented here based on contract negotiations or changes in policy or law that might occur prior to executing a final agreement.

Proposers who wish to request exceptions or amendments to this RFQ/P or associated documents must complete the Exceptions and Amendments Form (Exhibit A, Attachment d) and submit it with the Statement of Qualifications/Proposal. The District is under no obligation to accept any exceptions and such exceptions may be a basis for Statement of Qualifications/Proposal disqualification.

Specific terms and conditions presented in this section will supplement or supersede those of the professional services agreement.

1. Contract Term and Renewal

The contract that may be awarded as a result of this RFQ/P is expected to span a period of five (5) years.

2. Pricing

Final scope of work and contract price will be determined during negotiations between the Consultant and the District.

All labor rates pricing will be as negotiated during the term of the contract that may be awarded as a result of this RFQ/P. Maximum labor rate escalation will be limited to three percent (3%) per year.

Federal and State minimum wage laws apply. The District has no requirements for living wages. The District is not imposing any additional requirements regarding wages.

Prevailing Wages: Pursuant to Labor Code Sections 1770 et seq., Contractor shall pay to persons performing labor in and about Work provided for in Contract not less than the general prevailing rate of per diem wages for work of a similar character in the locality in which the Work is performed, and not less than the general prevailing rate of per diem wages for legal holiday and overtime work in said locality, which per diem wages shall not be less than the stipulated rates contained in a schedule thereof which has been ascertained and determined by the Director of the State Department of Industrial Relations to be the general prevailing rate of per diem wages for each craft or type of workman or mechanic needed to execute this contract.

3. SLEB Requirements

Local Participation: The District implements the County of Alameda's Small Local and Emerging Business (SLEB) Program. It is a requirement for award that all contracts such as this one include local (defined as Alameda County based) businesses to the maximum extent possible consistent with the nature of the services to be provided. The SLEB Program requires that to be awarded this contract the lead firm must be a SLEB or, if the lead firm is not a SLEB, the lead firm must partner with SLEBs to the maximum extent reasonable and possible, with a **minimum of 20% SLEB participation required.**

- a. Small, Local & Emerging Business Program: The County is vitally interested in promoting the growth of small and emerging local businesses by means of increasing the participation of these businesses in the County's purchase of goods and services. As a result of the County's commitment to advance the economic opportunities of these businesses, **Firms must meet the County's Small, Local & Emerging Business Program requirements in order to be considered for the contract award.** These requirements can be found online at: <http://acgov.org/auditor/sleb/overview.htm>, and <https://gsa.acgov.org/do-business-with-us/vendor-support/small-local-and-emerging-businesses/>.

For purposes of this Statement of Qualifications, applicable industries include, but are not limited to, the following NAICS Codes: 541690 - Other Scientific and Technical Consulting Services; 541990 - All Other Professional, Scientific, and Technical Services.

A small business is defined by the United States Small Business Administration (SBA) as having no more than the number of employees or average annual gross receipts over the last three (3) years required per SBA standards based on the small business's appropriate NAICS code.

An emerging business, as defined by the County, is one that has less than one-half (1/2) of the preceding amount and has been in business less than five (5) years.

- b. Compliance with the SLEB program is required for goods, services, and professional services contracts, including but not limited to architectural, landscape architectural, engineering, environmental, land surveying, and construction project management services projects.
- c. Alameda County utilizes the Elation Systems contract compliance application as part of its commitment to assist contractors to conveniently comply with legal and contractual requirements. Elation Systems, a secure web-based system, was implemented to monitor compliance and to track and report SLEB participation in County contracts.
- d. The prime contractor and all participating local and SLEB subcontractors awarded contracts as a result of this bid process for this project are required to use Elation to submit SLEB Program information including, but not limited to, monthly progress payment reports and other information related to SLEB participation. Use of Elation Systems, support and training is available at no charge to prime and subcontractors participating in County contracts.

Upon contract award

- 1) The County will provide contractors and subcontractors participating in any contract awarded as a result of this bid process, a code that will allow them to register and use Elation Systems free of charge.
- 2) Contractors should schedule a representative from their office/company, along with each of their subcontractors, to attend Elation training.
 - Free multi-agency Elation Systems one-hour training sessions require reservations and are held monthly in the Pleasanton, California area.

It is the Contractor's responsibility to ensure that they and their subcontractors are registered and trained as required to utilize Elation Systems. For further information, please contact Elation Systems at (925) 924-0340.

If you have any other questions regarding the utilization of Elation Systems please contact the Auditor-Controller's Office of Contract Compliance (OCC) located at 1221 Oak Street, Room 249, Oakland, CA 94612 at Tel: (510) 891-5500, Fax: (510) 272-6502 or via E-mail at ACSLEBcompliance@acgov.org.

- e. **Compliance Information and Records:** As needed and upon request, for the purposes of determining compliance with the SLEB Program, the Contractor shall provide the County with access to all records and documents that relate to SLEB participation and/or certification. Proprietary information will be safeguarded. All subcontractor Submittals must be through the prime contractor.

4. State Requirements:

Department of Industrial Relations Registration:

A contractor or subcontractor shall not be qualified to bid on, be listed in a bid Statement of Qualifications, or engage in the performance of any contract for public work, as defined in this chapter, unless registered and qualified to perform public work pursuant to Labor Code Section 1725.5. As noted above, the proposer must include the DIR registration number for registered Consultants and subconsultants covered by DIR prevailing wages.

Governor Gavin Newsom issued Executive Order (EO) N-6-22:

On March 4, 2022, Governor Gavin Newsom issued EO N-6-22 regarding sanctions in response to Russian aggression in Ukraine. The EO is located at <https://www.gov.ca.gov/wp-content/uploads/2022/03/3.4.22-Russia-Ukraine-Executive-Order.pdf>.

The EO directs all agencies and departments that are subject to the Governor's authority to take certain immediate steps, including notifying all contractors and grantees of their obligations to comply with existing economic sanctions imposed by the U.S. government in response to Russia's actions in Ukraine, as well as any sanctions imposed under state law.

This correspondence serves as a notice under the EO that as a contractor or grantee, compliance with the economic sanctions imposed in response to Russia's actions in Ukraine is required, including with respect to, but not limited to, the federal executive orders identified in the EO and the sanctions identified on the U.S. Department of the Treasury website (<https://home.treasury.gov/policy-issues/financial-sanctions/sanctions-programs-and-country-information/ukraine-russia-related-sanctions>). Failure to comply may result in the termination of contracts or grants, as applicable.

If you have any questions concerning this Request for Qualifications, please contact Anita Franklin at (510) 670-5569 or email at anita@acpwa.org.

We look forward to receiving your Statement of Qualifications/Proposal.

* * * END OF REQUEST FOR QUALIFICATIONS/PROPOSAL * * *



EXHIBIT A

RFQ/P RESPONSE PACKET

REQUIRED DOCUMENTATION

RFQ/P– HYDROLOGIC DATA COLLECTION AND MANAGEMENT SERVICES IN WESTERN ALAMEDA COUNTY

All of the specific information and documentation listed below is required to be submitted with the Response Packet in order for a response to be deemed complete. Any pages of Exhibit A (Or Attachments therein) not applicable to the Consultant, must still be submitted as part of a complete Response, with such pages or items clearly marked “N/A.” Consultants that do not comply with the requirements, and/or submit incomplete response packages, shall be subject to disqualification and their responses rejected in total.

Consultants shall submit all information and documentation, in the order listed below and clearly label each section with the appropriate title (i.e. Table of Contents, Letter of Transmittal, Description of Proposer’s Experience and Expertise, Key Personnel, etc.). Please consider the following a checklist of items required:

- 1. **Transmittal Letter**
- 2. **Title Page & Table of Contents**
- 3. **Description of the Team**
- 4. **Key Personnel**
- 5. **Description of Consultant’s Experience and Expertise**
- 6. **Project Approach and Work Plan**
- 7. **Project Delivery Schedule**
- 8. **Management Plan**
- 9. **Contract Negotiation Authorization and Financial Responsibility**
- 10. **Cost Proposal and Fees**
- 11. **Attachments to be Completed:** Responses shall include a complete set of the following forms:
 - **Attachment (a): Consultant Information and Acceptance:** Every Consultant must select one choice under Item 11 of this Attachment and must complete and sign Page 3 of this form (or page 6 of Exhibit A).
 - **Attachment (b): References:** Consultants and subconsultants must use the templates on Attachment (b) of Exhibit A to provide references. Consultants and subconsultants are to

provide a list of three clients and must verify the contact information for all references. References must be satisfactory as deemed solely by District. Consultants and subconsultants are strongly encouraged to notify all references that the District may be contacting them to obtain a reference. The District may contact some or all of the references provided in order to determine Consultant's or subconsultant's performance record on work similar to that described in this request. The District reserves the right to contact references other than those provided in the Response and to use the information gained from them in the evaluation process.

- **Attachment (c): County Small, Local, and Emerging Business (SLEB) Forms:** Every Consultant must fill out and submit a signed SLEB Partnering Information Sheet, (Attachment (c) of Exhibit A) indicating their SLEB certification status. If Consultant is not certified, the name, identification information, and goods/services to be provided by the named CERTIFIED SLEB partner(s) with whom the Consultant will subcontract to meet the County SLEB participation requirement must be stated. For any CERTIFIED SLEB subcontractor(s) named, the Exhibit must be signed by the CERTIFIED SLEB(s) according to the instructions. All named SLEB subcontractor(s) must be certified by the time of response submittal.
 1. SLEB Certification Instructions
 2. East Bay Inter-agency Alliance (EBIA) Common Application for Local Certification
 3. SLEB Partnering Information Sheet
 4. Request for Preference

- **Attachment (d): Exceptions, Clarifications, Amendments:** If Consultants are making ANY clarifications and/or amendments, or taking exception to policies or specifications of this RFQ, these MUST be submitted in the Exceptions, Clarifications, Amendments form of Exhibit A. THE DISTRICT IS UNDER NO OBLIGATION TO ACCEPT ANY EXCEPTIONS, AND SUCH EXCEPTIONS MAY BE A BASIS FOR RESPONSE DISQUALIFICATION.

- **Attachment (e): Debarment & Suspension Form:** Consultant must complete, sign, and date the *Debarment and Suspension Certification* form.

- **Attachment (f): Iran Contracting Act Compliance Certificate:** Consultant must complete, sign, and date the *Debarment and Suspension Certification* form.



EXHIBIT A
Attachment (a)

CONSULTANT INFORMATION AND ACCEPTANCE

RFQ/P No. FLO202402108

For

**HYDROLOGIC DATA COLLECTION AND MANAGEMENT SERVICES
IN WESTERN ALAMEDA COUNTY**

1. The undersigned declares that the Response Documents, including, without limitation, the RFQ/P, Q&A, Addenda, and Exhibits have been read and accepted.
2. Consultant hereby certifies to District that all representations, certifications, and statements made by Consultant, as set forth in this form and attachments are true and correct and are made under penalty of perjury pursuant to the laws of California.
3. The undersigned is authorized, offers, and agrees to furnish the articles and/or services specified in accordance with the Specifications, Terms & Conditions of the Response Documents of RFQ/P, Hydrologic Data Acquisition and Management for Alameda County.
4. The undersigned has reviewed the Response Documents and fully understands the requirements in this RFQ/P including, but not limited to, the requirements under the District provisions, and that each Consultant who is awarded a contract shall be, in fact, a prime Contractor, not a subcontractor, to District.
5. The undersigned acknowledges receipt and acceptance of all addenda.
6. The undersigned agrees to the following terms, conditions, certifications, and requirements found on the County's website:
 - a. **Debarment/Suspension Policy** *See also Exhibit A, Attachment (e)*
[\[https://gsa.acgov.org/do-business-with-us/contracting-opportunities/debarment-suspension-policy/\]](https://gsa.acgov.org/do-business-with-us/contracting-opportunities/debarment-suspension-policy/)
 - b. **Iran Contracting Act (ICA) of 2010**
[\[https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/iran-contracting-act-of-2010-ica/\]](https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/iran-contracting-act-of-2010-ica/)
 - c. **General Environmental Requirements**
[\[https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/general-environmental-requirements/\]](https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/general-environmental-requirements/)
 - d. **Alameda County SLEB Program Overview** *See also Exhibit A, Attachment (c)*
[\[http://acgov.org/auditor/sleb/overview.htm\]](http://acgov.org/auditor/sleb/overview.htm)
 - e. **Alameda County SLEB Program Additional Information**
[\[https://gsa.acgov.org/do-business-with-us/vendor-support/small-local-and-emerging-businesses/\]](https://gsa.acgov.org/do-business-with-us/vendor-support/small-local-and-emerging-businesses/)
 - f. **First Source**
[\[http://acgov.org/auditor/sleb/sourceprogram.htm\]](http://acgov.org/auditor/sleb/sourceprogram.htm)
 - g. **Online Contract Compliance System**
[\[http://acgov.org/auditor/sleb/elation.htm\]](http://acgov.org/auditor/sleb/elation.htm)

h. **General Requirements**

[\[https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/general-requirements/\]](https://gsa.acgov.org/do-business-with-us/contracting-opportunities/policies-procedures/general-requirements/)

7. The undersigned acknowledges that Consultant will be in good standing in the State of California, with all the necessary licenses, permits, certifications, approvals, and authorizations necessary to perform all obligations in connection with this RFQ/P and associated RFQ/P Documents, and any contract that is awarded.
8. It is the responsibility of each consultant to be familiar with all of the specifications, terms and conditions and, if applicable, the site conditions. By the submission of a response, the Consultant certifies that if awarded a contract they will make no claim against the District based upon ignorance of conditions or misunderstanding of the specifications.
9. Patent indemnity: Consultants who do business with the District shall hold the Alameda County Flood Control and Water Conservation District, the County of Alameda, their officers, agents and employees, harmless from liability of any nature or kind, including cost and expenses, for infringement or use of any patent, copyright or other proprietary right, secret process, patented or unpatented invention, article or appliance furnished or used in connection with the contract or purchase order.
10. Insurance certificates are not required at the time of submission. However, by signing Exhibit A, Consultant Information and Acceptance, the Consultant agrees to meet the minimum insurance requirements stated in the RFQ. This documentation must be provided to the District, prior to award, and shall include an insurance certificate and additional insured certificate naming the Alameda County Flood Control and Water Conservation District and the County of Alameda, which meets the minimum insurance requirements, as stated in the RFQ/P.
11. The undersigned acknowledges **ONE** of the following (please check only one box):
 - Consultant is not local to Alameda County and is ineligible for any evaluation preference points; OR
 - Consultant is a certified SLEB and is requesting 5% evaluation preference; (Consultant must check the first box and provide its SLEB Certification Number in the Attachment (d) SLEB PARTNERING INFORMATION SHEET); OR
 - Consultant is LOCAL to Alameda County and is requesting 5% evaluation preference points **and has attached the following documentation to this Exhibit:**
 - Copy of verifiable business license, issued by the County of Alameda or a City within the County; AND
 - Proof of six (6) months business residency, identifying the name of the vendor and the local address. Utility bills, deed of trusts or lease agreements, etc., are acceptable verification documents to prove residency.

Official Name of Consultant _____

Street Address Line 1 _____

Street Address Line 2 _____

City _____ State _____ Zip Code _____

Webpage _____

Type of Entity/Organizational Structure (check one):

- | | |
|--|--|
| <input type="checkbox"/> Corporation | <input type="checkbox"/> Joint Venture |
| <input type="checkbox"/> Limited Liability Partnership | <input type="checkbox"/> Partnership |
| <input type="checkbox"/> Limited Liability Corporation | <input type="checkbox"/> Non-Profit/Church |
| <input type="checkbox"/> Other: _____ | |

Jurisdiction of Organization Structure _____

Date of Organization Structure _____

Federal Tax Identification Number _____

DIR Contractor Registration Number (if applicable): _____

Primary Contact Information

Name/Title _____

Telephone No. _____ Fax No. _____

E-mail Address _____

12. Addendum Acknowledgement: The Proposer has verified that the following is a complete list of addenda issued prior to the submittal deadline. Receipt of the following addenda is hereby acknowledged and all changes have been incorporated in the Statement of Qualifications. Failure to acknowledge will cause the Statement of Qualifications to be considered non-responsive.

Addendum No. ____, dated _____ Addendum No. ____, dated _____

Addendum No. ____, dated _____ Addendum No. ____, dated _____

The undersigned acknowledges receipt of above referenced RFQ and/or Addenda and offers and agrees to furnish the articles and/or services specified on behalf of the firm indicated below, in accordance with the specifications, terms and conditions of this RFQ Acknowledgement.

Signature _____

Print Name _____

Title _____

Dated this _____ Day of _____ 20 _____



EXHIBIT A
Attachment (b)

REFERENCES
(Include Three)

RFQ/P No. FLO202402108
For
HYDROLOGIC DATA COLLECTION AND MANAGEMENT SERVICES
IN WESTERN ALAMEDA COUNTY

Consultant Name: _____

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided/Date(s) of Service	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided/Date(s) of Service	

Company Name:	Contact Person:
Address:	Telephone Number:
City, State, Zip:	E-mail Address:
Services Provided/Date(s) of Service	

EXHIBIT A
Attachment (c)
RFQ/P No. FLO202402108



COUNTY OF ALAMEDA
SMALL, LOCAL AND EMERGING BUSINESS PROGRAM
SLEB CERTIFICATION INSTRUCTIONS

1. Complete the application form

3 Easy Steps

Program Definitions

Local Business: A business having a fixed office with a street address in Alameda County for a minimum period of 6 months and a valid business license issued by the County or a City within Alameda County

Small Business: A business which has been certified by the County as local and meets the U.S. Business Administration (SBA) size standards for its classification. Size standards and classification codes information available at <https://www.naics.com/search/>

Emerging Business: A business which has been certified by the County as local and meet less than one half of the U.S. SBA size standards for its classification and has been in business less than 5 years.

If you own less than 51% interest in your business, please indicate other owner(s) name(s), title(s) and percentage of ownership. List all current business and professional licenses. If you have been in business for less than three years, please provide your actual gross receipts received for the period that you have been in business. If you have not been in business for a complete tax year, please provide actual gross receipts to date. If any item on the application form is not applicable, please put "N/A" in the designated area. If additional space is needed, please attach additional sheet(s).

2. Please sign* and mail Application to:

Alameda County Auditor-Controller Agency
Office of Contract Compliance
1221 Oak Street, Room 249
Oakland, CA 94612

*The application form must be signed by the owner, principal partner or authorized officer of the corporation. We will contact you within 10 days to schedule a site visit upon receipt of your application.

3. On-site Visit

The following items must be available for our review during the visit to your business address:

- Signed Federal Tax Returns showing Gross Business Receipts for the last 3 years**
- Business Licenses
- Current Identification (i.e. Driver's License, Identification Card)
- Deed, Rental or Lease Agreement showing Business Address

**Personal Net Worth Statement (if the business has never filed taxes)

If you have questions regarding your certification, please contact:

Office of Contract Compliance Tel: (510) 891-5500 Fax: 510-272-6502 or Email:
ACSLEBcompliance@acgov.org

Thank you for your interest in doing business with Alameda County.

East Bay Interagency Alliance (EBIA)

COMMON APPLICATION for LOCAL CERTIFICATION

Alameda County – Alameda County Transportation Commission – City of Oakland – Port of Oakland

Submittal Date: _____

Check Certifying Agency and click link to download Supplemental:

- Alameda County – No supplemental required
- Alameda County Transportation Commission – Complete **Supplement B**
(https://www.portofoakland.com/files/pdf/responsibility/cert_port_supplemental_B.pdf)
- City of Oakland – Complete **Supplement C**
(https://www.portofoakland.com/files/pdf/responsibility/cert_port_supplemental_C.pdf)
- Port of Oakland – Complete **Supplement D**
(https://www.portofoakland.com/files/pdf/responsibility/cert_port_supplemental_D_interactive.pdf)
- All the above

The Common Application is a sharing of information between agencies and NOT a reciprocal certification.

1) Contact Information

Legal Name of Entity		Contact Person (Name & Title)		
Street Address of Entity (No P.O. Box)				
City		State	Zip Code	County
Telephone ()	Fax # ()		Cell# ()	
Email Address			Web Site	

2) Company Profile

Primary Service undertaken/offered:		Specialty Service undertaken/offered:		
Date Entity was established (mm/dd/yr)	Does the entity have one or more additional offices outside the city of Oakland, CA? <input type="checkbox"/> Y <input type="checkbox"/> N If yes, list other location(s)		Date Oakland office was established (mm/dd/yr)	
Method of Acquisition	<input type="checkbox"/> New <input type="checkbox"/> Merger or consolidation	<input type="checkbox"/> Purchased existing <input type="checkbox"/> Inherited	<input type="checkbox"/> Secured concession <input type="checkbox"/> Other (explain)	Federal ID Number:
Has this entity operated under a different name during the past five years? <input type="checkbox"/>				
Type of Firm <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Joint Venture <input type="checkbox"/> Partnership <input type="checkbox"/> Corporation <input type="checkbox"/> Limited Liability Partnership <input type="checkbox"/> Limited Liability Corporation <input type="checkbox"/> Publicly traded entity <input type="checkbox"/> Non-Profit or Church <input type="checkbox"/> Other _____		Ethnicity Group of owners(s) that own greater than 50% of the business. (for tracking purposes only) <input type="checkbox"/> African American <input type="checkbox"/> Asian <input type="checkbox"/> Asian Pacific /Hawaiian <input type="checkbox"/> Asian Indian <input type="checkbox"/> Caucasian <input type="checkbox"/> Filipino <input type="checkbox"/> Hispanic <input type="checkbox"/> Native American <input type="checkbox"/> Multi ethnic ownership <input type="checkbox"/> Multi ethnic minority ownership <input type="checkbox"/> Other _____		
		Gender (for tracking purposes only) <input type="checkbox"/> Male <input type="checkbox"/> Female		
Gross Receipts for the last three recent fiscal years: Please attach copies of appropriate tax returns: (e.g. Form 990, Form 1040, Form 1120, etc)				
Year Ended _____		Total Receipts \$ _____		
Year Ended _____		Total Receipts \$ _____		
Year Ended _____		Total Receipts \$ _____		

2) Company Profile: (Continue)

Number of Employees at the local office Permanent Full time ____ Permanent Part time ____	Temporary Full Time ____ Temporary Part Time ____	Seasonal Full Time ____ Seasonal Part Time ____
TOTAL Number of Employees at all locations. Permanent Full time ____ Permanent Part time ____	Temporary Full Time ____ Temporary Part Time ____	Seasonal Full Time ____ Seasonal Part Time ____

3) Certifications:

Name of Issuing Authority	Type	Number	Expiration Date
City / County Business Tax Certificate			
Internal Revenue Service (required) – If your firm is a Non-Profit, submit the Letter of Determination of Not For Profit Status.			
State of CA /CUCP Certification for DBE/ACDBE firm			
State of CA /SBA Certification for Small firm			
Other Certification			
Other Certification			
Other Certification			

4) Professional Licenses, Permits and/or Certificates (e.g. contractor, architect, engineer, etc. – list all that apply - attach copies. List on a separate page if additional space is needed)

Name of Issuing Authority	Type	Number	Expiration Date
State of CA Contractor’s License Board – Contractor’s License:			
State of CA Professional Service License or Permit:			
State of CA Service Provider License or Permit:			
Other:			
Other:			

5) NAICS Codes: Please review the NAICS¹ listing of work codes and indicate below your areas of expertise ranked in order of importance (begin with primary and specialty areas as indicated in the Company Profile section) NAICS Codes can be found at: <https://www.naics.com/search/> & <https://www.census.gov/naics/>. Add separate sheet for additional NAICS codes if needed.

NAICS Code	Description of Work

6) Additional Information:

Are you a Trucking Firm? Yes No Are you a Truck Broker? Yes No Both? Yes No
A supplier? Yes No

7) When submitting this application to any of the checked Certification Taskforce members, I consent to the sharing of information contained herein and declare under penalty of perjury that statements in this application are true and correct. Yes No _____

Signature

Print Name

Title

Date

¹ North American Industry Classification System – www.naics.com
Rev. 05/2011

SMALL LOCAL EMERGING BUSINESS (SLEB) PARTNERING INFORMATION SHEET

In order to meet the Small Local Emerging Business (SLEB) requirements of this RFP, all Bidders must complete this form. If a bidder is unable to meet the SLEB requirements, they must take exception to this requirement in the [Exceptions and Clarifications](#) section of this solicitation. Please note that the County is under no obligation to accept any exceptions or clarifications, and any exceptions or clarifications may be the basis for bid disqualification.

Bidders that are not certified SLEBS (for the definition of a SLEB, see [Alameda County SLEB Program Overview; \[http://acgov.org/auditor/sleb/overview.htm\]](#)) are required to subcontract with a SLEB for at least 20% of the total estimated bid amount in order to be eligible for contract award. SLEB subcontractors must be independently owned and operated from the prime Contractor with no employees of either entity working for the other. A copy of this form must be submitted for each SLEB that the Bidder will subcontract with as evidence of a firm contractual commitment to meeting the SLEB participation requirement.

Bidders are encouraged to form a partnership with a SLEB that can participate directly with this contract. One of the benefits of the partnership will be economical, but this partnership will also assist the SLEB to grow and build the capacity to eventually bid as a prime on their own.

Once a contract has been awarded, substitutions of the named subcontractor(s) are not allowed without prior written approval from the Auditor-Controller, Office of Contract Compliance & Reporting (OCCR).

County departments, prime, and subcontractors are required to use the web-based Elation Systems to monitor SLEB subcontractor compliance with [Elation Systems; \[http://www.elationsys.com/elationsys/\]](#).

<input type="checkbox"/> BIDDER IS A CERTIFIED SLEB (sign at bottom of page) SLEB BIDDER Business Name: _____ SLEB Certification #: _____ SLEB Certification Expiration Date: _____ NAICS Codes Included in Certification: _____
--

OR

<input type="checkbox"/> BIDDER IS <u>NOT</u> A CERTIFIED SLEB AND WILL SUBCONTRACT ____% WITH THE SLEB NAMED BELOW FOR THE FOLLOWING GOODS/SERVICES: _____ SLEB Subcontractor Business Name: _____ SLEB Certification #: _____ SLEB Certification Expiration Date: _____ SLEB Certification Status: <input type="checkbox"/> Small / <input type="checkbox"/> Emerging NAICS Codes Included in Certification: _____ SLEB Subcontractor Principal Name: _____ SLEB Subcontractor Principal Signature: _____

Upon award, Bidder (the Prime Contractor) and all SLEB subcontractors agree to register and use the secure web-based ELATION SYSTEMS. ELATION SYSTEMS will be used to submit SLEB subcontractor participation, including, but not limited to, subcontractor contract amounts, payments made, and confirmation of payments received.

Prime Bidder Authorized Signatory Name/Title: _____ / _____

Street Address: _____ **City** _____ **State** _____ **Zip Code** _____

Bidder Signature: _____ **Date:** _____

COUNTY OF ALAMEDA

REQUEST FOR PREFERENCE

PLEASE READ AND COMPLETE THIS FORM CAREFULLY:

IF YOU ARE A PRIME FIRM WHO IS A **LOCAL BUSINESS**, AND/OR A **CERTIFIED SMALL AND LOCAL BUSINESS** OR A **CERTIFIED EMERGING AND LOCAL BUSINESS**, COMPLETE THIS FORM AND RETURN IT WITH YOUR RFP/SOQ SUBMITTAL.

Subject to the requirements of the SLEB program and the criteria of each procurement process, the maximum proposal evaluation preference points for being certified is 10% (5% local & 5% certified). Compliance with the SLEB program is required for architectural, landscape architectural, engineering, environmental land surveying, and construction project management services projects.

Check the appropriate boxes below (2 maximum) and provide the requested information.

<input type="checkbox"/> Request for 5% LOCAL Proposal Preference (Complete 1-4, print name, title, sign and date below) Submit the following:			
<ul style="list-style-type: none"> • Copy of a verifiable business license, issued by the County of Alameda or a City within the County; and • Proof of six (6) months business residency, identifying the name of the vendor and the local address. Utility bills, deed of trusts or lease agreements, etc., are acceptable verification documents to prove residency. 			
1. Company Name			
2. Street Address			
3. Telephone Number			
4. Business License #			
(Check One) <input type="checkbox"/> Request for 5% SMALL Local Business Proposal Preference <i>OR</i> <input type="checkbox"/> Request for 5% EMERGING Local Business Proposal Preference (Complete certification information below)			
SLEB Certification #:		SLEB Certification Expiration Date	/ /
NAICS Codes Included in SLEB Certification			

The Undersigned declares that the foregoing information is true and correct:

Print/Type Name: _____

Print/Type Title: _____

Signature: _____

Date: _____



EXHIBIT A

Attachment (d)

EXCEPTIONS, CLARIFICATIONS, AMENDMENTS

RFQ/P No. FLO202402108

For

**HYDROLOGIC DATA COLLECTION AND MANAGEMENT SERVICES
IN WESTERN ALAMEDA COUNTY**

Consultant: _____

List below requests for clarifications, exceptions and amendments, if any, to the RFQ/P and associated documents, and submit with your response.

The County is under no obligation to accept any exceptions and such exceptions may be a basis for bid disqualification.

Reference to:			Description
Page No.	Section	Item No.	
p. 23	D	1.c.	<i>Vendor takes exception to...</i>
EXAMPLE			

*Print additional pages as necessary



EXHIBIT A

Attachment (e)

DEBARMENT AND SUSPENSION CERTIFICATION

For Procurements Over \$25,000

RFQ/P No. FLO202402108

For

**HYDROLOGIC DATA COLLECTION AND MANAGEMENT SERVICES
IN WESTERN ALAMEDA COUNTY**

The bidder, under penalty of perjury, certifies that, except as noted below, bidder, its Principal, and any named and unnamed subcontractor:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three years;
- Does not have a proposed debarment pending; and
- Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

If there are any exceptions to this certification, insert the exceptions in the following space. For any exception noted, indicate to whom it applies, initiating agency, and dates of action. Exceptions will not necessarily result in denial of the award but will be considered in determining Contractor responsibility.

Notes: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof will also constitute the signature of this Certification.

CONSULTANT: _____

NAME OF AUTHORIZED SIGNER: _____ TITLE: _____

SIGNATURE: _____ DATE: _____



EXHIBIT A

Attachment (f)

IRAN CONTRACTING ACT COMPLIANCE CERTIFICATE

(for contracts of \$1,000,000 or more)

COUNTY OF ALAMEDA

The Iran Contracting Act (ICA) of 2010

The California Legislature adopted the Iran Contracting Act (ICA) to respond to policies of Iran in a uniform fashion (PCC § 2201(q)). The ICA prohibits persons engaged in investment activities in Iran from bidding on, submitting proposals for, or entering into or renewing contracts with public entities for goods and services of one million dollars (\$1,000,000) or more (PCC § 2203(a)). A person who “engages in investment activities in Iran” is defined in either of two ways:

1. The person provides goods or services of twenty million dollars (\$20,000,000) or more in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipelines used to transport oil or liquefied natural gas, for the energy sector of Iran; or
2. The person is a financial institution (as that term is defined in 50 U.S.C. § 1701) that extends twenty million dollars (\$20,000,000) or more in credit to another person, for 45 days or more, if that person will use the credit to provide goods or services in the energy sector in Iran and is identified on a list created by the California Department of General Services (DGS) pursuant to PCC § 2201(b) as a person engaging in the investment activities described in paragraph 1 above.

By signing below, I hereby certify that as of the time of bidding or proposing for a new contract or renewal of an existing contract, neither I nor the company I own or work for are identified on the DGS list of ineligible persons and neither I nor the company I own or work for are engaged in investment activities in Iran in violation of the Iran Contracting Act of 2010.

If either I or the company I own or work for are ineligible to bid or submit a Statement of Qualifications or to renew a contract, but I believe I or it qualifies for an exception listed in PCC § 2202(c), I have described in detail the nature of the exception:

FIRM NAME: _____

PRINCIPAL: _____ TITLE: _____

SIGNATURE: _____ DATE: _____

EXHIBIT B
COUNTY OF ALAMEDA MINIMUM INSURANCE REQUIREMENTS

Without limiting any other obligation or liability under this Agreement, the Contractor, at its sole cost and expense, shall secure and keep in force during the entire term of the Agreement or longer, as may be specified below, the following minimum insurance coverage, limits and endorsements:

TYPE OF INSURANCE COVERAGES		MINIMUM LIMITS
A	Commercial General Liability Premises Liability; Products and Completed Operations; Contractual Liability; Personal Injury and Advertising Liability	\$1,000,000 per occurrence (CSL) Bodily Injury and Property Damage
B	Commercial or Business Automobile Liability All owned vehicles, hired or leased vehicles, non-owned, borrowed and permissive uses. Personal Automobile Liability is acceptable for individual contractors with no transportation or hauling related activities	\$1,000,000 per occurrence (CSL) Any Auto Bodily Injury and Property Damage
C	Workers' Compensation (WC) and Employers Liability (EL) Required for all contractors with employees	WC: Statutory Limits EL: \$1,000,000 per accident for bodily injury or disease
D	Professional Liability/Errors & Omissions Includes endorsements of contractual liability and defense and indemnification of the County	\$1,000,000 per occurrence \$2,000,000 project aggregate
E	<p>Endorsements and Conditions:</p> <ol style="list-style-type: none"> 1. ADDITIONAL INSURED: All insurance required above with the exception of Professional Liability, Commercial or Business Automobile Liability, Workers' Compensation and Employers Liability, shall be endorsed to name as additional insured: Alameda County Flood Control and Water Conservation District (District), its Board of Supervisors, the individual members thereof, and all District and County of Alameda officers, agents, employees, volunteers, and representatives. The Additional Insured endorsement shall be at least as broad as ISO Form Number CG 20 38 04 13. 2. DURATION OF COVERAGE: All required insurance shall be maintained during the entire term of the Agreement. In addition, Insurance policies and coverage(s) written on a claims-made basis shall be maintained during the entire term of the Agreement and until 3 years following the later of termination of the Agreement and acceptance of all work provided under the Agreement, with the retroactive date of said insurance (as may be applicable) concurrent with the commencement of activities pursuant to this Agreement. 3. REDUCTION OR LIMIT OF OBLIGATION: All insurance policies, including excess and umbrella insurance policies, shall include an endorsement and be primary and non-contributory and will not seek contribution from any other insurance (or self-insurance) available to the County. The primary and non-contributory endorsement shall be at least as broad as ISO Form 20 01 04 13. Pursuant to the provisions of this Agreement insurance effected or procured by the Contractor shall not reduce or limit Contractor's contractual obligation to indemnify and defend the Indemnified Parties. 4. INSURER FINANCIAL RATING: Insurance shall be maintained through an insurer with a A.M. Best Rating of no less than A:VII or equivalent, shall be admitted to the State of California unless otherwise waived by Risk Management, and with deductible amounts acceptable to the County. Acceptance of Contractor's insurance by County shall not relieve or decrease the liability of Contractor hereunder. Any deductible or self-insured retention amount or other similar obligation under the policies shall be the sole responsibility of the Contractor. 5. SUBCONTRACTORS: Contractor shall include all subcontractors as an insured (covered party) under its policies or shall verify that the subcontractor, under its own policies and endorsements, has complied with the insurance requirements in this Agreement, including this Exhibit. The additional Insured endorsement shall be at least as broad as ISO Form Number CG 20 38 04 13. 6. JOINT VENTURES: If Contractor is an association, partnership or other joint business venture, required insurance shall be provided by one of the following methods: <ul style="list-style-type: none"> - Separate insurance policies issued for each individual entity, with each entity included as a "Named Insured" (covered party), or at minimum named as an "Additional Insured" on the other's policies. Coverage shall be at least as broad as in the ISO Forms named above. - Joint insurance program with the association, partnership or other joint business venture included as a "Named Insured." 7. CANCELLATION OF INSURANCE: All insurance shall be required to provide thirty (30) days advance written notice to the County of cancellation. 8. CERTIFICATE OF INSURANCE: Before commencing operations under this Agreement, Contractor shall provide Certificate(s) of Insurance and applicable insurance endorsements, in form and satisfactory to County, evidencing that all required insurance coverage is in effect. The County reserves the rights to require the Contractor to provide complete, certified copies of all required insurance policies. The required certificate(s) and endorsements must be sent as set forth in the Notices provision. 	

EXHIBIT C
SAMPLE PROFESSIONAL SERVICES AGREEMENT

SAMPLE DOCUMENT STARTS ON NEXT PAGE

Exhibit C

Professional Services Agreement

With

Consultant Name

for

Hydrologic Data Collection and Management Services

Contract No. #####

Alameda County Flood Control and Water Conservation District

**AGREEMENT BETWEEN
THE ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
AND**

Consultant Name

This AGREEMENT is made this the ___ day of June, 2024, in the City of Oakland, State of California, by and between **Consultant Name, Address**, hereinafter referred to as “CONSULTANT” and the **Alameda County Flood Control and Water Conservation District**, a political subdivision of the State of California, hereinafter referred to as “DISTRICT.”

AGREEMENT

1. Definitions

Where any word or phrase defined below, or a pronoun used in place thereof, is used in any part of this Agreement, it shall have the meaning herein set forth.

AGREEMENT This Agreement together with all attachments and appendices and other documents incorporated herein by reference, including, but not limited to, Appendices “A”, “B”, “C”, “D”, “E”, “F”, “G”, and “H” attached hereto.

CONSULTANT **NAME**

DISTRICT Alameda County Flood Control and Water Conservation District

Project The DISTRICT’s project – Hydrologic Data Collection and Management Services - as further described in Appendix “A”, Scope of Services

Services All work, labor, materials, and services required under the terms and conditions of this Agreement, provided pursuant to the terms and conditions of this Agreement, including without limitation architectural, engineering, coordination and administrative services.

Subconsultant or Subcontractor CONSULTANT’s consultants, subconsultants, contractors and subcontractors, of any tier.

2. Term of Agreement

All work comprising the Services shall be deemed performed under this Agreement. The contract period will be from June 19, 2024 through June 30, 2029.

3. Services Consultant Agrees to Perform

3.1 CONSULTANT shall perform all Services described in Appendix “A”, “Scope of Services ” to be Provided by CONSULTANT, attached hereto and incorporated by reference as though fully set forth herein.

3.2 CONSULTANT and DISTRICT shall mutually agree upon a specific work requirement, time frames for completion and cost in writing prior to commencement of each task. It is anticipated that most tasks will be performed on a “time and material” basis and in such cases, proposed cost should be expressed as an “estimated cost”, and rates of payment shall be shown in the Fee Schedule Appendix B-1. CONSULTANT shall complete all Services required by this Agreement within the times specified by mutual agreement. CONSULTANT shall achieve its agreed-upon time frames unless an excusable event causes delay (excusable delay), and unless CONSULTANT gives written notice of the excusable event and requests a time extension within ten days of the occurrence of the excusable event. (Excusable events shall be limited to acts of neglect by District or District’s agents or CONSULTANTS when acting at District’s direction, breaches of this Agreement by County, Acts of God such as fire, flood, earthquake, unforeseeable pandemic, or delay by a construction contractor during

the construction phase of the Project, or any other circumstances beyond CONSULTANT'S reasonable control).

If the period of excusable delay caused by an excusable event concurs with a Consultant-caused or other non-excusable delay, District may (but shall not be required to) grant a time extension without compensation. The COVID-19 pandemic shall not constitute an excusable event or be deemed a cause of excusable delay.

- 3.3 CONSULTANT may recover extra costs resulting from excusable delay upon showing that the costs claimed (i) resulted from time and/or expenses actually incurred in performing Services, (ii) were incurred by CONSULTANT as a direct result of the delay and not otherwise within CONSULTANT'S scope of Services, and (iii) are documented to the DISTRICT'S satisfaction. (For example, and not by way of limitation, contract punch list and final inspection Services, whenever performed, and Services related to correcting deficiencies in CONSULTANT'S work, shall not entitle CONSULTANT to extra costs.)
- 3.4 Should the progress of the Services under this AGREEMENT at any time fall behind schedule for any reason other than excusable delays, CONSULTANT shall apply such additional manpower and resources as necessary to bring progress of the Services under this AGREEMENT back on schedule and consistent with the standard of professional skill and care required by this AGREEMENT. Time is of critical importance in the performance of this AGREEMENT.

4. Compensation

- 4.1 DISTRICT shall pay CONSULTANT compensation according to the Payment Terms established in Appendix "B", Payments to CONSULTANT. DISTRICT shall pay CONSULTANT in monthly payments on or before the last day of each month for Services properly invoiced by the CONSULTANT which have been properly performed as of the last day of the immediately preceding month and is due under Appendix "B".
- 4.2 DISTRICT shall not incur any charges under this AGREEMENT, nor shall any payments become due to CONSULTANT for any payment period on the Project, until DISTRICT receives all deliverables required under Appendix "A" for the payment period (if any) and reasonably accepts such deliverables as meeting the requirements of this AGREEMENT. In cases where CONSULTANT has partially completed one or more deliverables due during a payment period, and if CONSULTANT demonstrates diligent progress thereon, then DISTRICT may make a partial progress payment based upon CONSULTANT'S percentage completion of the partially completed deliverables and diligent progress but taking into account any adverse impacts upon DISTRICT.
- 4.3 DISTRICT will not withhold entire payment if a questioned amount is involved, but will issue payment in the amount of the total invoice less any questioned amount(s). DISTRICT will make payment for questioned amount(s) upon DISTRICT'S receipt of any requested documentation verifying the claimed amount(s) and DISTRICT'S determination that the amount is due under the terms of this AGREEMENT. DISTRICT shall advise CONSULTANT, in writing, within 15 days of receipt of the requested documentation. Final payment will be made when all Services required under this AGREEMENT have been completed to the reasonable satisfaction of DISTRICT including, without limitation, CONSULTANT'S transmittal of all deliverables to DISTRICT required by Appendix "A".
- 4.4 Invoices furnished by CONSULTANT under this AGREEMENT must be in a form acceptable to DISTRICT. All amounts paid by DISTRICT to CONSULTANT shall be subject to audit by DISTRICT. Payment shall be made by DISTRICT to CONSULTANT at the address stated hereinabove.
- 4.5 DISTRICT may set off against payments due CONSULTANT under this AGREEMENT any sums that DISTRICT determines that CONSULTANT owes to DISTRICT because of CONSULTANT'S errors, omissions, breaches of this AGREEMENT, delays or other acts which caused DISTRICT monetary damages. Prior to exercising such right, DISTRICT must demand and attend mediation pursuant to Section 27.3 of this AGREEMENT, to be attended by DISTRICT, CONSULTANT, and any applicable insurance carriers; such mediation to occur within 30 days of demand. If the parties cannot agree upon the time, place, and mediator, within one week of the DISTRICT'S demand, then the Alameda County Superior Court may upon application by any party make such selection for the parties. If a party other than DISTRICT refuses to mediate under this Section, then DISTRICT shall have satisfied its obligations under this Section.

5. Maximum Costs

- 5.1 DISTRICT's obligation hereunder shall not at any time exceed the amount approved by the Board of Supervisors for payment to the CONSULTANT pursuant to the terms of this AGREEMENT.
- 5.2 Except as may be provided by applicable law governing emergency conditions, DISTRICT has not authorized its employees, officers and agents to request CONSULTANT to perform Services or to provide materials, equipment and supplies that would result in CONSULTANT performing Services or providing materials, equipment and supplies that exceed the scope of the Services, materials, equipment and supplies agreed upon in the AGREEMENT unless the DISTRICT amends the AGREEMENT in writing and approves the amendment as required by law to authorize the additional Services, materials, equipment or supplies.
- 5.3 DISTRICT shall not reimburse CONSULTANT for Services, materials, equipment or supplies provided by CONSULTANT beyond the scope of the Services, materials, equipment and supplies agreed upon in the AGREEMENT and unless approved by a written amendment to the AGREEMENT having been executed and approved in the same manner as this AGREEMENT.

6. Qualified Personnel

- 6.1 For purposes of this AGREEMENT, except for notices specified under Section 17 below, DISTRICT shall direct all communications to CONSULTANT through **PROJECT MANAGER NAME, PRINCIPAL, Consultant Address** and CONSULTANT shall direct all communications to "DISTRICT" through DISTRICT Project Manager.
- 6.2 Services under this AGREEMENT shall be performed only by competent personnel under the supervision of and/or in the employment of CONSULTANT. CONSULTANT shall conform with DISTRICT's reasonable requests regarding assignment of personnel, but all personnel, including those assigned at DISTRICT's request, shall be supervised by CONSULTANT.
- 6.3 CONSULTANT agrees that all professional personnel assigned to the Project will be listed in its proposal, Appendix "A", attached hereto and by this reference incorporated herein, and that the listed personnel will continue their assignments on the Project during the entire term of this AGREEMENT. It is recognized that the listed personnel are not bound by personal employment contracts to CONSULTANT. CONSULTANT agrees that reassignment of any of the listed personnel during the AGREEMENT period shall only be with other professional personnel who have equivalent experience and shall require the prior written approval of DISTRICT. Any costs associated with reassignment of personnel shall be borne exclusively by CONSULTANT.
- 6.4 CONSULTANT agrees that should the above personnel not continue their assignments on the Project during the entire term of this AGREEMENT, then CONSULTANT shall not charge DISTRICT for the cost of training or "bringing up to speed" replacement personnel. DISTRICT may condition its reasonable approval of substitution personnel upon a reasonable transition period wherein new personnel will learn the Project and get up to speed at CONSULTANT's cost.

7. Representations

- 7.1 CONSULTANT represents that it has reviewed Appendix "A", "Scope of Services" to be provided by CONSULTANT, and that in its professional judgment the Services to be performed under this AGREEMENT can be performed for a fee within the maximum amount set forth in the "Payment Terms" to CONSULTANT established in Appendix "B", Billing rates to CONSULTANT shall be from the "Fee Schedule Rates" established in Appendix B-1.
- 7.2 CONSULTANT represents that it is qualified to perform the Services and that it possesses the necessary licenses and/or permits required to perform the Services or will obtain such licenses and/or permits prior to time such licenses and/or permits are required. CONSULTANT also represents that it has reasonable knowledge of all applicable building codes, laws, regulations and ordinances.

- 7.3 CONSULTANT represents that it and its sub-consultants have specialized expertise in engineering services similar to those intended for the Project. CONSULTANT agrees that the Services shall be performed in a manner that conforms to the standards of engineering practice observed by a specialist in performing services similar to the Services. CONSULTANT agrees that for a period of one year after the completion of the Services or at the final acceptance of the construction resulting from the Services, whichever is later, it will re-perform or replace any part or all of the Services deemed by DISTRICT to be defective and/or not meeting the above standard.
- 7.4 The granting of any progress payment by DISTRICT, or the receipt thereof by CONSULTANT, or any inspection, review, approval or oral statement by any representative of DISTRICT or any other governmental entity, shall in no way waive or limit the obligations in this Section 7 or lessen the liability of CONSULTANT to re-perform or replace unsatisfactory Services to the extent required by Section 7.3 above, including but not limited to cases where the defective or below standard Services may not have been apparent or detected at the time of such payment, inspection, review or approval.

8. Indemnification and General Liability

- 8.1 To the fullest extent permitted by law (including, without limitation, California Civil Code Section 2782.8), Consultant shall indemnify, defend, and hold harmless the DISTRICT, and its officers, agents, departments, officials, representatives and employees (collectively "Indemnitees") from and against any and all claims, losses, damages, injuries (including, without limitation, injury to or death of an employee of Consultant or its Subconsultants), expenses, liabilities of every kind, nature and description (including, without limitation, incidental special and consequential damages, court costs, attorneys' fees, litigation expenses and fees of expert consultants or expert witnesses incurred in connection therewith and costs of investigation) to the extent they arise from, or are brought for, or on account of any loss or cost arising out of, pertaining to, relating to or resulting from Consultant's negligence, recklessness, or willful misconduct in connection with the performance of any work performed under this Contract by the Consultants as a design professional; provided that this duty shall not apply to injuries or damages for which the DISTRICT has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence, recklessness or willful misconduct.
- 8.2 Consultant shall defend (with legal counsel reasonably acceptable to the DISTRICT), indemnify and hold harmless the Indemnitees from all loss, cost, damage, expense, liability or claims, in law or in equity, including attorneys' fees, court costs, litigation expenses and fees of expert consultants or expert witnesses, that may at any time arise for any infringement of the patent rights, copyright, trade secret, trade name, trademark, service mark or any other proprietary right of any person or persons in consequence of the use by DISTRICT, or any of the other Indemnitees, of Articles or Services to be supplied in the performance of this Agreement.
- 8.3 [Intentionally Omitted]
- 8.4 CONSULTANT shall place in its subconsulting agreements and cause its Subconsultants to agree to indemnities and insurance obligations in favor of DISTRICT and other Indemnitees in the exact form and substance of those contained in this AGREEMENT. Consultant shall require all subconsultants to comply with all indemnification and insurance requirements of this Agreement, including, without limitation, Appendix C. Consultant shall verify subconsultant's compliance.
- 8.5 DISTRICT acknowledges that the discovery, presence, handling or removal of asbestos products, polychlorinated biphenyl (PCB) or other hazardous substances which may presently exist at the Project site is outside of CONSULTANT's expertise and is not included in the Scope of Services. CONSULTANT is to perform nor included in CONSULTANT's insurance. DISTRICT shall hire an expert CONSULTANT in this field if the Project involves such materials. CONSULTANT shall not be responsible or be involved in any way with the discovery, presence, handling or removal of such materials. CONSULTANT shall be responsible to coordinate with DISTRICT's expert CONSULTANT as required by Appendix "A", Scope of Services to be provided by CONSULTANT.

9. Liability of District

- 9.1 Except as provided in Appendix "A", Scope of Services to be Provided by CONSULTANT, and Appendix "C", Insurance, DISTRICT's obligations under this AGREEMENT shall be limited to the

payment of the compensation provided for in Sections 3, 4 and 5 of this AGREEMENT.

- 9.2 Notwithstanding any other provision of this AGREEMENT, in no event shall DISTRICT be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits or revenue, arising out of or in connection with this AGREEMENT or the Services performed in connection with this AGREEMENT.
- 9.3 DISTRICT shall not be responsible for any damage to persons or property as a result of the use, misuse, or failure of any equipment used by CONSULTANT, or by any of its employees, even though such equipment be furnished, rented, or loaned to CONSULTANT by DISTRICT. The acceptance or use of such equipment by CONSULTANT or any of its employees shall be construed to mean that CONSULTANT accepts full responsibility for and agrees to exonerate, indemnify, defend and save harmless DISTRICT from and against any and all claims for any damage or injury of any type, including attorneys' fees, arising from the use, misuse or failure of such equipment, whether such damage be to the CONSULTANT, its employees, DISTRICT employees or third parties, or to property belonging to any of the above except to the extent caused by the sole negligence or willful misconduct of DISTRICT.
- 9.4 Nothing in this AGREEMENT shall constitute a waiver or limitation of any right or remedy, whether in equity or at law, which DISTRICT may have under this AGREEMENT or any applicable law. All rights and remedies of DISTRICT, whether under this AGREEMENT or other applicable law, shall be cumulative.

10. Independent Contractor; Payment of Taxes, and Other Expenses

- 10.1 CONSULTANT shall be deemed at all times to be an independent contractor and shall be wholly responsible for the manner in which CONSULTANT performs the Services required of CONSULTANT by the terms of this AGREEMENT. CONSULTANT shall be liable for the acts and omissions of its Subconsultants, its employees and its agents.
- 10.2 Nothing contained herein shall be construed as creating an employment, agency or joint venture relationship between DISTRICT and CONSULTANT. CONSULTANT acknowledges that neither it nor any of its employees or agents shall, for any purpose whatsoever, be deemed to be DISTRICT employees, and shall not be entitled to receive any benefits conferred on DISTRICT employees, including without limitation workers' compensation, pension, health, insurance or other benefits.
- 10.3 CONSULTANT shall be solely responsible for payment of any required taxes, including California sales and use taxes, and United States income tax withholding and social security taxes, levied upon this AGREEMENT, the transaction, or the Services delivered pursuant hereto.
- 10.4 CONSULTANT shall be available as much as reasonably possible to DISTRICT staff during the DISTRICT's normal working hours or as otherwise requested by DISTRICT. Terms in this AGREEMENT referring to direction from DISTRICT shall be construed as providing for direction as to policy and the result of CONSULTANT's Services only and not as to the means by which such a result is obtained.
- 10.5 Nothing in this AGREEMENT shall operate to confer rights or benefits on persons or entities who are not parties to this AGREEMENT.

11. Insurance

- 11.1 Prior to execution of this Contract, CONSULTANT shall furnish to DISTRICT satisfactory proof that it maintains the insurance required by this Contract as set forth in Appendix C "Insurance," which is attached and made a part of this Contract. In the event CONSULTANT fails to maintain any required insurance, DISTRICT may (but is not obligated to) purchase such insurance and deduct or retain premium amounts from any sums due CONSULTANT under this Contract (or CONSULTANT shall promptly reimburse DISTRICT for such expense).

12. Suspension of Services

- 12.1 DISTRICT may, without cause, order CONSULTANT to suspend, delay or interrupt ("suspend") Services pursuant to this AGREEMENT, in whole or in part, for such periods of time as DISTRICT may determine in its sole discretion. DISTRICT shall deliver to CONSULTANT written notice of the extent of the suspension at least seven (7) calendar days before the commencement thereof. Suspension

shall be treated as an excusable delay and CONSULTANT shall be compensated for such delay to the extent provided under this AGREEMENT.

- 12.2 Notwithstanding anything to the contrary contained in this Section, no compensation shall be made to the extent that performance is, was or would have been so suspended, delayed or interrupted by a cause for which CONSULTANT is responsible.

13. Termination of Agreement for Cause

- 13.1 If at any time DISTRICT believes CONSULTANT may not be adequately performing its obligations under this AGREEMENT, that CONSULTANT may be failing to complete the Services as required by this AGREEMENT, or DISTRICT has provided written notice of observed deficiencies in CONSULTANT's performance, DISTRICT may request from CONSULTANT prompt written assurances of performance and a written plan to correct the observed deficiencies in CONSULTANT's performance. CONSULTANT shall provide such written assurances and written plan within ten calendar days of receipt of written request. CONSULTANT acknowledges and agrees that any failure to provide written assurances and a written plan to correct observed deficiencies, in the required time, is a material breach under this AGREEMENT.

- 13.2 CONSULTANT shall be in default of this AGREEMENT and DISTRICT may, in addition to any other legal or equitable remedies available to DISTRICT, terminate CONSULTANT's right to proceed under the AGREEMENT, for cause:

13.2.1 Should CONSULTANT make an assignment for the benefit of creditors, admit in writing its inability to pay its debts as they become due, file a voluntary petition in bankruptcy, be adjudged a bankrupt or insolvent, file a petition or answer seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution, or similar relief under any present or future statute, law, or regulation, file any answer admitting or not contesting the material allegations of a petition filed against CONSULTANT in any such proceeding, or seek, consent to, or acquiesce in, the appointment of any trustee, receiver, custodian or liquidator of CONSULTANT or of all or any substantial part of the properties of CONSULTANT, or if CONSULTANT, its directors or shareholders, take action to dissolve or liquidate CONSULTANT; or

13.2.2 Should CONSULTANT commit a material breach of this AGREEMENT and not cure such breach within ten (10) calendar days of the date of written notice from DISTRICT to CONSULTANT demanding such cure; or, if such failure is curable but not curable within such ten (10) day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for CONSULTANT to avail itself of this time period in excess of 10 calendar days, CONSULTANT must provide DISTRICT within the 10 day period a written plan acceptable to DISTRICT to cure said breach, and then diligently commence and continue such cure according to the written plan); or

13.2.3 Should CONSULTANT violate or allow a violation of any valid law, statute, regulation, rule, ordinance, permit, license or order of any governmental agency in effect at the time of performance of the Services and applicable to the Project or Services and does not cure such violation within ten (10) days of the date of the notice from DISTRICT to CONSULTANT demanding such cure; or, if such failure is curable but not curable within such ten (10) day period, within such period of time as is reasonably necessary to accomplish such cure. (In order for CONSULTANT to avail itself of this time period in excess of 10 calendar days, CONSULTANT must provide DISTRICT within the 10 day period a written plan to cure said violation acceptable to DISTRICT, and then diligently commence and continue performance of such cure according to the written plan.)

- 13.3 In the event of termination by County as provided herein for cause:

13.3.1 DISTRICT shall compensate CONSULTANT for the value of the Services delivered to DISTRICT upon termination as determined in accordance with the AGREEMENT, subject to all rights of offset and back charges, but DISTRICT shall not compensate CONSULTANT for its costs in terminating the Services or any cancellation charges owed to third parties;

13.3.2 CONSULTANT shall deliver to DISTRICT possession of all tangible aspects of the Services in their then condition, including but not limited to, all copies (electronic and hard copy) of designs, engineering, Project records, cost data of all types, drawings and specifications and

contracts with vendors and Subconsultants, and all other documentation associated with the Project, and all supplies and aids dedicated solely to performing Services which, in the normal course of the Services, would be consumed or only have salvage value at the end of the Services period.

- 13.3.3 CONSULTANT shall remain fully liable for the failure of any Services completed and drawings and specifications provided through the date of such termination to comply with the provisions of the AGREEMENT. The provisions of this Section shall not be interpreted to diminish any right which DISTRICT may have to claim and recover damages for any breach of this AGREEMENT, but rather, CONSULTANT shall compensate DISTRICT for all loss, cost, damage, expense, and/or liability suffered by DISTRICT as a result of such termination and failure to comply with the AGREEMENT.
- 13.4 In the event a termination for cause is determined to have been made wrongfully or without cause, then the termination shall be treated as a termination for convenience, and CONSULTANT shall have no greater rights than it would have had if a termination for convenience had been effected in the first instance. No other loss, cost, damage, expense, or liability may be claimed, requested, or recovered by CONSULTANT.

14. Termination of Agreement for Convenience

- 14.1 DISTRICT may terminate performance of the Services under the AGREEMENT in accordance with this Section in whole, or from time to time in part, whenever DISTRICT shall determine that termination is in the DISTRICT's best interests. Termination shall be effected by DISTRICT delivering to CONSULTANT, at least seven (7) calendar days prior to the effective date of the termination, a Notice of Termination specifying the extent to which performance of the Services under the AGREEMENT is terminated.
- 14.2 After receipt of a Notice of Termination, and except as otherwise directed by DISTRICT, CONSULTANT shall:
- 14.2.1 Stop Services under the AGREEMENT on the date and to the extent specified in the Notice of Termination;
- 14.2.2 Place no further orders or subcontracts (including agreements with Subconsultants) for materials, Services, or facilities except as necessary to complete the portion of the Services under the AGREEMENT which is not terminated;
- 14.2.3 Terminate all orders and subcontracts to the extent that they relate to performance of Services terminated by the Notice of Termination;
- 14.2.4 Assign to DISTRICT in the manner, at times, and to the extent directed by DISTRICT, all right, title, and interest of CONSULTANT under orders and subcontracts so terminated. DISTRICT shall have the right, in its discretion, to settle or pay any or all claims arising out of termination of orders and subcontracts;
- 14.2.5 Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with approval or ratification of DISTRICT to the extent DISTRICT may require. DISTRICT's approval or ratification shall be final for purposes of this clause;
- 14.2.6 Transfer title and possession to DISTRICT, and execute all required documents and take all required actions to deliver in the manner, at times, and to the extent, if any, directed by DISTRICT, completed and uncompleted designs and specifications, Services in process, completed Services, supplies, and other material produced or fabricated as part of, or acquired in connection with performance of, Services terminated by the Notice of Termination (including mockups and model(s)), completed or partially completed plans, drawings, information, in whatever form (i.e., hard-copy and electronic), all intellectual property rights (including without limitation, to the extent applicable, all licenses and copyright, trademark and patent rights) and all other property and property rights which, if the AGREEMENT had been completed, would have been required to be furnished to DISTRICT.
- 14.2.7 Use its best efforts to assist DISTRICT in selling, in the manner, at times, to the extent, and at a price or prices that DISTRICT directs or authorizes, any property of the types referred to in Section 14.2.6, but CONSULTANT shall not be required to extend credit to any purchaser, and may acquire any such property under conditions prescribed and at a price or prices approved by

- DISTRICT. All proceeds from the foregoing shall be applied to reduce payments to be made by DISTRICT to CONSULTANT under this AGREEMENT, shall otherwise be credited to the price or cost of Services covered by this AGREEMENT or be paid in such other manner as DISTRICT may direct;
- 14.2.8 Complete performance of any part of the Services which were not terminated by the Notice of Termination; and
- 14.2.9 Take such action as may be necessary, or as DISTRICT may direct, for the protection and preservation of property related to this AGREEMENT which is in CONSULTANT's possession and in which DISTRICT has or may acquire an interest.
- 14.3 After receiving a Notice of Termination, CONSULTANT shall submit to DISTRICT a termination claim, in the form and with the certification DISTRICT prescribes. The claim shall be submitted promptly but in no event later than 3 months from the effective date of the termination, unless one or more extensions in writing are granted by DISTRICT upon CONSULTANT's written request made within such 3-month period or authorized extension. However, if DISTRICT determines that facts justify such action, it may receive and act upon any such termination claim at any time after such 3-month period or extension. If CONSULTANT fails to submit the termination claim within the time allowed, DISTRICT may determine, on basis of information available to it, the amount, if any, due to CONSULTANT because of the termination. DISTRICT shall then pay to CONSULTANT the amount so determined.
- 14.4 Subject to provisions of Section 14.3, CONSULTANT and DISTRICT may agree upon the whole or part of the amount or amounts to be paid to CONSULTANT because of any termination of Services under this Section. The amount or amounts may include a reasonable allowance for profit on Services done. However, such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total AGREEMENT price as reduced by the amount of payments otherwise made and as further reduced by the AGREEMENT price of Services terminated. The AGREEMENT may be amended accordingly, and CONSULTANT shall be paid the agreed amount.
- 14.5 If CONSULTANT and DISTRICT fail, under Section 14.4, to agree on the whole amount to be paid to CONSULTANT because of termination of Services under this Section, then CONSULTANT's entitlement to compensation for Services specified in the AGREEMENT which are performed before the effective date of Notice of Termination, shall be the total (without duplication of any items) of –
- 14.5.1 Reasonable value of CONSULTANT's Services performed prior to Notice of Termination, based on CONSULTANT's entitlement to compensation under Appendix "B", "Payments Terms" to CONSULTANT". Such amount or amounts shall not exceed the total AGREEMENT price as reduced by the amount of payments otherwise made and as further reduced by the AGREEMENT value of Services terminated. Deductions against such amount or amounts shall be made for deficiently performed Services, rework caused by deficiently performed Services, cost of materials to be retained by CONSULTANT, amounts realized by sale of materials, and for other appropriate credits against cost of Services. Such amount or amounts may include profit, but not in excess of 10 percent of CONSULTANT's total costs of performing the Services.
- 14.5.2 When, in opinion of DISTRICT, the cost of any item of Services is excessively high due to costs incurred to remedy or replace defective or rejected Services (including having to re-perform Services), reasonable cost to be allowed will be the estimated reasonable cost of performing Services in compliance with the requirements of AGREEMENT and excessive actual cost shall be disallowed.
- 14.5.3 Reasonable cost to CONSULTANT of handling material returned to vendors, delivered to DISTRICT or otherwise disposed of as directed by DISTRICT.
- 14.6 Except as provided in this AGREEMENT, in no event shall DISTRICT be liable for costs incurred by CONSULTANT (or Subconsultants) after receipt of a Notice of Termination. Such non-recoverable costs include, but are not limited to, anticipated profits on the AGREEMENT or subcontracts, post-termination employee salaries, post-termination administrative expenses, post-termination overhead or unabsorbed overhead, costs of preparing and submitting claims or proposals, attorney's fees or other costs relating to prosecution of the claim or a lawsuit, pre-judgment interest, or any other expense which is not reasonable or authorized under Section 14.5.
- 14.7 This section shall not prohibit CONSULTANT from recovering costs necessary to discontinue further Services under the AGREEMENT as provided for in Section 14.2 or costs authorized by DISTRICT to

- settle claims from Subconsultants.
- 14.8 In arriving at amount due CONSULTANT under this Section there shall be deducted:
- 14.8.1 All unliquidated advance or other payments on account theretofore made to CONSULTANT, applicable to the terminated portion of AGREEMENT,
 - 14.8.2 Any substantiated claim which DISTRICT may have against CONSULTANT in connection with this AGREEMENT, and
 - 14.8.3 The agreed price for, or proceeds of sale of, any materials, supplies, or other things kept by CONSULTANT or sold under the provisions of this Section, and not otherwise recovered by or credited to DISTRICT.
- 14.9 If the termination for convenience hereunder is partial, before settlement of the terminated portion of this AGREEMENT, CONSULTANT may file with DISTRICT a request in writing for equitable adjustment of price or prices specified in the AGREEMENT relating to the portion of this AGREEMENT which is not terminated. DISTRICT may, but shall not be required to, agree on any such equitable adjustment. Nothing contained herein shall limit the right of DISTRICT and CONSULTANT to agree upon amount or amounts to be paid to CONSULTANT for completing the continued portion of the AGREEMENT when the AGREEMENT does not contain an established price for the continued portion. Nothing contained herein shall limit DISTRICT's rights and remedies at law.

15. Conflicts of Interest/Other Agreements

- 15.1 CONSULTANT represents that it is familiar with Section 1090 and Section 87100 et seq. of the Government Code of the State of California, and that it does not know of any facts that constitute a violation of said sections.
- 15.2 CONSULTANT represents that it has completely disclosed to DISTRICT all facts bearing upon any possible interests, direct or indirect, which CONSULTANT believes any member of DISTRICT, or other officer, agent or employee of DISTRICT or any department presently has, or will have, in this AGREEMENT, or in the performance thereof, or in any portion of the profits thereunder. Willful failure to make such disclosure, if any, shall constitute ground for termination of this AGREEMENT by DISTRICT for cause. CONSULTANT agrees to comply with all conflict of interest codes adopted by the County of Alameda and their reporting requirements.
- 15.3 CONSULTANT covenants that it presently has no interest, and shall not have any interest, direct or indirect, which would conflict in any manner with the performance of Services required under this AGREEMENT. Without limitation, CONSULTANT represents to and agrees with the DISTRICT that CONSULTANT has no present, and will have no future, conflict of interest between providing the DISTRICT the Services hereunder and any interest CONSULTANT may presently have, or will have in the future, with respect to any other person or entity (including but not limited to any federal or state wildlife, environmental or regulatory agency) which has any interest adverse or potentially adverse to the DISTRICT, as determined in the reasonable judgment of the DISTRICT. The provisions of this Section 15 shall remain fully effective indefinitely after termination of Services to the DISTRICT hereunder.

16. Proprietary or Confidential Information of County; Publicity

- 16.1 CONSULTANT acknowledges and agrees that, in the performance of the Services under this AGREEMENT or in the contemplation thereof, CONSULTANT may have access to private or confidential information which may be owned or controlled by DISTRICT and that such information may contain proprietary or confidential details, the disclosure of which to third parties may be damaging to DISTRICT. CONSULTANT agrees that all information disclosed by DISTRICT to or discovered by CONSULTANT shall be held in strict confidence and used only in performance of the AGREEMENT. CONSULTANT shall exercise the same standard of care to protect such information as a reasonably prudent CONSULTANT would use to protect its own proprietary data, and shall not accept employment adverse to the DISTRICT's interests where such confidential information could be used adversely to the DISTRICT's interests. CONSULTANT agrees to notify the DISTRICT immediately in writing if it is requested to disclose any information made known to or discovered by CONSULTANT during the performance of or in connection with this AGREEMENT.
- 16.2 Any publicity or press releases with respect to the Project or Services shall be under the DISTRICT's sole discretion and control. CONSULTANT shall not discuss the Services or Project, or

matters pertaining thereto, with the public press, representatives of the public media, public bodies, or representatives of public bodies, without DISTRICT's prior written consent. CONSULTANT shall have the right, however, without DISTRICT's further consent, to include representations of Services among CONSULTANT's promotional and professional material, and to communicate with persons or public bodies where necessary to perform under this AGREEMENT.

16.3 The provisions of this Section 16 shall remain fully effective indefinitely after termination of Services to the DISTRICT hereunder.

17. Notice to the Parties

17.1 Notices. All notices (including requests, demands, approvals, or other communications) under this AGREEMENT shall be in writing.

17.1.1 Method of Delivery. Notice shall be sufficiently given for all purposes as follows:

- (a) When personally delivered to the recipient, notice is effective on delivery.
- (b) When mailed first class to the last address of the recipient known to the party giving notice, notice is effective on delivery.
- (c) When mailed by certified mail with return receipt requested, notice is effective on receipt if delivery is confirmed by a return receipt.
- (d) When delivered by overnight delivery service, including Federal Express, Airborne, and United Parcel Service, with charges prepaid or charged to the sender's account, notice is effective on delivery if delivery is confirmed by the delivery service.
- (e) When sent by fax to the last fax number of the recipient known to the party giving notice, notice is effective on receipt as long as (1) a duplicate copy of the notice is promptly given by first-class or certified mail or by overnight delivery or (2) the receiving party delivers a written confirmation of receipt. Any notice given by fax shall be considered to have been received on the next business day if it is received after 5 p.m. (recipient's time) or on a nonbusiness day.

17.1.2 Refused, Unclaimed or Undeliverable Notices. Any correctly addressed notice that is refused, unclaimed, or undeliverable because of an act or omission of the party to be notified shall be considered to be effective as of the first date that the notice was refused, unclaimed, or considered undeliverable by the postal authorities, messenger, or overnight delivery service.

17.1.3 Addresses. Addresses for the purpose of giving notice are set forth below. Either party may change its address or fax number by giving the other party notice of the change in any manner permitted by this paragraph 17.

To DISTRICT:
Alameda County Flood Control and
Water Conservation District
Moses Tsang, Principal Civil Engineer
399 Elmhurst Street
Hayward, CA 94544

To CONSULTANT:
Consultant Name
Project Manager Name, Principal
Address 1
Address 2

17.1.4 Change of Recipient or Address. Either party may, by written notice given at any time or from time to time, require subsequent notices to be given to another individual person, whether a party or an officer or a representative, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

18. Ownership of Results/Work for Hire

18.1 Any interest (including, but not limited to, property interests and copyright interests) of CONSULTANT or its Subconsultants, in drawings, plans, specifications, studies, reports, memoranda, computational sheets or other documents (including but not limited to, electronic media) prepared by CONSULTANT or its Subconsultants in connection with Services to be performed under this AGREEMENT shall become the property of and will be transmitted to DISTRICT at the conclusion of this AGREEMENT. CONSULTANT may, however, retain

one copy for its files. Notwithstanding the foregoing, in the normal course of the CONSULTANT's activities, CONSULTANT shall have an unrestricted right to reuse its standard construction drawings, details, specifications and other related documents, including the right to retain electronic data or other reproducible copies thereof, and the right to reuse portions or the information contained in them which is incidental to the overall design of the Project. DISTRICT shall indemnify, hold harmless and defend CONSULTANT against any and all claims, liabilities, losses and costs arising from DISTRICT's use of CONSULTANT's documents on work for which CONSULTANT is not retained.

- 18.2 Any and all artworks, copy, posters, billboards, photographs, videotapes, audiotapes, systems designs, software, reports, diagrams, surveys, source codes or any original works of authorship created by CONSULTANT or its Subconsultants in connection with Services performed under this AGREEMENT shall be Works for Hire as defined under Title 17 of the United States Code, and all copyrights in such works are the property of DISTRICT. In the event that it is ever determined that any works created by CONSULTANT or its Subconsultants under this AGREEMENT are not Works for Hire under U.S. law, CONSULTANT hereby assigns all copyrights to such works to DISTRICT. With the prior written approval of the DISTRICT, CONSULTANT may retain and use copies of such works for reference and as documentation of its experience and capabilities.

19. Audit and Inspection Records

- 19.1 CONSULTANT shall maintain all drawings, specifications, calculations, cost estimates, quantity takeoffs, statements of construction costs and completion dates, schedules and all correspondence, internal memoranda, papers, writings, electronic media and documents of any sort prepared by or furnished to CONSULTANT during the course of performing the Services and providing services with respect to the Project, for a period of at least five years following final completion and acceptance of the Project. All such records (except for materials subject to the attorney client privilege, if any) shall be available to DISTRICT, and DISTRICT's authorized agents, officers, and employees, upon request at reasonable times and places. Monthly records of CONSULTANT's personnel costs, CONSULTANT costs, and reimbursable expenses shall be kept on a generally recognized accounting basis, and shall be available to DISTRICT, and DISTRICT's authorized agents, officers, and employees, upon request at reasonable times and places. CONSULTANT shall not destroy any Project records until after advising DISTRICT and allowing DISTRICT to accept and store the records.
- 19.2 CONSULTANT agrees to maintain full and adequate records in accordance with DISTRICT requirements to show actual costs incurred by CONSULTANT in its performance of this AGREEMENT, and to make available to DISTRICT during business hours accurate ledgers, books of accounts, invoices, vouchers, cancelled checks, and accounting and other books, records and documents evidencing or relating to all expenditures and disbursements charged to DISTRICT or relative to CONSULTANT's activities under this AGREEMENT. CONSULTANT will furnish to DISTRICT, its authorized agents, officers and employees such other evidence or information as DISTRICT may request with regard to any such expenditure or disbursement charged by CONSULTANT. CONSULTANT will permit DISTRICT, and DISTRICT's authorized agents, officers, and employees, to audit, examine and make copies, excerpts and transcripts from such items, and to make audits of all invoices, materials, payrolls, records or personnel and other data related to all other matters covered by this AGREEMENT, whether funded in whole or in part under this AGREEMENT.
- 19.3 CONSULTANT shall maintain all items described in Sections 19.1 and 19.2 above in an accessible location and condition for a period of not less than five years after final completion and acceptance of the Project or until after final audit has been resolved, whichever is later. If such items are not kept and maintained by CONSULTANT within a radius of fifty (50) miles from DISTRICT's offices at 399 Elmhurst Street, Hayward, California, CONSULTANT shall, upon DISTRICT's request and at CONSULTANT's sole cost and expense, make such items available to DISTRICT, and DISTRICT's authorized agents, officers, and employees, for inspection at a location within said fifty (50) mile radius, or CONSULTANT shall pay DISTRICT its reasonable and necessary costs incurred in inspecting CONSULTANT's books and records, including, but not limited to, travel, lodging and subsistence costs. The State of California or any federal agency having an interest in the subject of this AGREEMENT shall have the same rights conferred upon DISTRICT by this Section.
- 19.4 The rights and obligations established pursuant to this Section shall be specifically enforceable and survive termination of this AGREEMENT.

20. Subcontracting/Assignment/ District Employees

- 20.1 CONSULTANT and DISTRICT agree that CONSULTANT's unique talents, knowledge and experience form a basis for this AGREEMENT and that the services to be performed by CONSULTANT under this AGREEMENT are personal in character. Therefore, CONSULTANT shall not subcontract, assign or delegate any portion of this AGREEMENT or any duties or obligations hereunder unless approved by DISTRICT in a written instrument executed and approved by the DISTRICT in writing. Neither party shall, on the basis of this AGREEMENT, contract on behalf of or in the name of the other party. Any agreement that violates this Section shall confer no rights on any party and shall be null and void.
- 20.2 CONSULTANT shall use the Subconsultants for the scopes of work listed in Appendix A attached hereto, and shall not substitute Subconsultants unless approved by written instrument executed and approved by the DISTRICT in writing.
- 20.3 To the extent CONSULTANT is permitted by DISTRICT in writing to subcontract, assign or delegate any portion of this AGREEMENT or any duties or obligations hereunder, CONSULTANT shall comply with all applicable prompt payment laws and regulations (including, without limitation, California Civil Code Section §3321. CONSULTANT shall remain fully liable and responsible for all acts and omissions of its Subconsultants in connection with the Services or the Project, as if it engaged in the acts and omissions directly.
- 20.4 CONSULTANT shall not employ or engage, or attempt to employ or engage, any person who is or was employed by DISTRICT or any department thereof at any time that this AGREEMENT is in effect, during the term of this AGREEMENT and for a period of two years after the termination of this AGREEMENT or the completion of the Services, without the written consent of DISTRICT.

21. SMALL, LOCAL AND EMERGING BUSINESS (SLEB) PARTICIPATION:

If Prime Consultant is a County certified SLEB, use the following paragraphs:

Consultant has been certified by the County as a small or emerging local business. As a result, there is no requirement to subcontract with another business in order to satisfy the County's Small and Emerging Locally owned Business provision. If during the term of this contract, Consultant's certification status changes, Consultant shall notify the District within three business days.

Should Consultant's status as a certified small or emerging local business change at any time during the term of this Agreement, Consultant shall negotiate with County to be in compliance with the County's Small and Emerging Local Business provision, including but not limited to:

- a. Consultant must subcontract a minimum 20% of the remaining contract value with a certified small or emerging local business(es).
- b. SLEB subconsultant (s) is independently owned and operated (i.e., is not owned or operated in any way by Prime), nor do any employees of either entity work for the other.
- c. As is applicable, Consultant shall ensure that their certification status is maintained in compliance with the SLEB Program for the term of this contract.
- d. For any subconsultants retained to comply with this provision, Consultant shall not substitute any such small and/or emerging local business(s) subconsultant without prior written approval from the County. Said requests to substitute shall be submitted in writing to the District's contract representative identified under Item #17 above. Consultant will not be able to substitute the subconsultant without prior written approval from the Alameda County Auditor Controller Agency, Office of Contract Compliance (OCC). Further approval from the Board of Supervisors may also be required.
- e. If subconsultants are added to the contract, all SLEB participation, except for prime Consultant, must be tracked and monitored utilizing the Elation compliance System (see Appendix E). SLEB prime Consultant with SLEB subconsultants must enter payments made to subconsultants in the Elation System and ensure that SLEB subconsultants confirm payments received.

Consultant shall meet the requirements above within 15 business days of the County notifying Contractor that it is no longer in compliance with the program. District will be under no obligation to pay Consultant for the percent

committed to a SLEB subconsultant if the work is not performed by the listed small and/or emerging local business.

If Prime Consultant is not a County certified SLEB, use the following paragraphs:

SMALL LOCAL AND EMERGING BUSINESS (SLEB) PARTICIPATION: Contractor shall subcontract with **SLEB Sub-consultant Name (Address; Principal, Project Manager Name), SLEB Sub-consultant Name (Address; Principal, Project Manager Name), SLEB Sub-consultant Name (Address; Principal, Project Manager Name), etc.,** for services to be provided under this Agreement in a minimum amount equal to twenty percent (20%) of the contract value of this Agreement in accordance with County's Small and Emerging Local Business provision, which includes but is not limited to:

- a. SLEB subcontractor(s) is independently owned and operated (i.e., is not owned or operated in any way by Prime), nor do any employees of either entity work for the other.
- b. As is applicable, Contractor shall ensure that the certification status of participating SLEB subcontractors is maintained in compliance with the SLEB Program for the term of this contract.
- c. Contractor shall not substitute or add any small and/or emerging local business(s) listed in this agreement without prior written approval from the County. Said requests to substitute or add a small and/or emerging local business shall be submitted in writing to the County contract representative identified under Item #17 above. Contractor will not be able to substitute the subcontractor without prior written approval from the Alameda County Auditor–Controller Agency, Office of Contract Compliance (OCC).
- d. All SLEB participation, except for SLEB prime contractor, must be tracked and monitored utilizing the Elation compliance System. Contractor and Contractor's small and/or emerging local businesses participating as subcontractors on the awarded contract are required to use the Elation web-based compliance system as described in Appendix D (Small Local Emerging Business (SLEB) Partnering Information Sheet) to report and validate payments made by Prime Contractors to the certified small and/or emerging local businesses. It is the Contractor's responsibility to ensure that they and their subcontractors are registered and trained as required to utilize the Elation compliance system. SLEB prime contractor with SLEB subcontractors must enter payments made to subcontractors in the Elation System and ensure that SLEB subcontractors confirm payments received.

District will be under no obligation to pay contractor for the percent committed to a SLEB subcontractor if the work is not performed by the listed small and/or emerging local business.

For further information regarding the Small Local Emerging Business participation requirements and utilization of the Alameda County Contract Compliance System contact County Auditor-Controller's Office of Contract Compliance (OCC) via e-mail at ACSLEBcompliance@acgov.org.

22. First Source Program

- 22.1 For contracts over \$100,000, Consultant shall provide District ten (10) working days to refer to Consultant, potential candidates to be considered by Consultant to fill any new or vacant positions that are necessary to fulfill their contractual obligations to the District that Consultant has available during the contract term before advertising to the general public.

23. Non-Discrimination, Equal Employment Opportunity and Business Practices

- 23.1 Consultant shall not discriminate against any employee or applicant for employment, nor against any Subconsultant or applicant for a subcontract, because of race, color, religious creed, age, sex, actual or perceived sexual orientation, national origin, disability as defined by the ADA (as defined below) or veteran's status. To the extent applicable, Consultant shall comply with all federal, state and local laws (including, without limitation, County ordinances, rules and regulations) regarding non-discrimination, equal employment opportunity, affirmative action, and occupational-safety-health concerns, shall comply with all applicable rules and regulations thereunder, and shall comply with same as each may be amended from time to time.

24. Drug-Free Workplace Policy

- 24.1 CONSULTANT acknowledges that pursuant to the Federal Drug-Free Workplace Act of 1989, the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited on a

County facility or work site. CONSULTANT agrees that any violation of this prohibition by CONSULTANT, its employees, agents, or assigns shall be deemed a material breach of this AGREEMENT.

24.2 If CONSULTANT or any employee of CONSULTANT is convicted of a criminal drug statute violation occurring at a County facility or work site, the CONSULTANT within five days thereafter shall notify the head of the DISTRICT department/agency for which the contract services are performed.

25. Compliance with Americans with Disabilities Act

25.1 CONSULTANT acknowledges that, pursuant to the Americans with Disabilities Act (“ADA”), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. CONSULTANT shall provide the Services specified in this AGREEMENT in a manner that complies with the standard of care established under this AGREEMENT regarding the ADA and any and all other applicable federal, state, and local disability rights legislation. CONSULTANT agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this AGREEMENT, and further agrees that any violation of this prohibition on the part of CONSULTANT, its employees, agents or assigns shall constitute a material breach of this AGREEMENT.

26. Debarment and Suspension Certification (Applicable to all agreements funded in part or whole with federal funds and contracts over \$25,000).

- 26.1 (a) By signing this AGREEMENT and Appendix D, Debarment and Suspension Certification, CONSULTANT/Grantee agrees to comply with applicable federal suspension and debarment regulations, including but not limited to 7 Code of Federal Regulations (CFR) 3016.35, 28 CFR 66.35, 29 CFR 97.35, 34 CFR 80.35, 45 CFR 92.35, and Executive Order 12549.
- (b) By signing this AGREEMENT, CONSULTANT certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any federal department or agency;
 - (2) Shall not knowingly enter into any covered transaction with a person who is proposed for debarment under federal regulations, debarred, suspended, declared ineligible, or voluntarily excluded from participation in such transaction.

27. Disputes

27.1 CONSULTANT acknowledges that, pursuant to the Americans with Disabilities Act (“ADA”), programs, services and other activities provided by a public entity to the public, whether directly or through a contractor, must be accessible to the disabled public. CONSULTANT shall provide the Services specified in this AGREEMENT in a manner that complies with the standard of care established under this AGREEMENT regarding the ADA and any and all other applicable federal, state, and local disability rights legislation. CONSULTANT agrees not to discriminate against disabled persons in the provision of services, benefits or activities provided under this AGREEMENT, and agrees that any violation of this prohibition on the part of CONSULTANT, its employees, agents or assigns shall constitute a material breach of this AGREEMENT.

27.2 Provided that DISTRICT continues to compensate CONSULTANT in accordance with this AGREEMENT, CONSULTANT shall continue its Services throughout the course of any and all disputes. Nothing in this AGREEMENT shall allow CONSULTANT to discontinue Services during the course of any dispute and CONSULTANT’s failure to continue Services during any and all disputes shall be considered a material breach of this AGREEMENT. CONSULTANT agrees that the existence or continued existence of a dispute does not excuse performance under any provision of this AGREEMENT, including but not limited to, the time to complete the Services. CONSULTANT also agrees that should CONSULTANT discontinue Services due to a dispute or disputes, DISTRICT may terminate this AGREEMENT for cause as provided herein.

27.3 In the event of claims exceeding \$50,000, as a precondition to litigation, the parties shall first participate in non-binding mediation pursuant to the construction mediation procedures of the American Arbitration

Association (“AAA”), in Oakland, before a mediator mutually agreeable to the parties, and in the event the parties are unable to agree, selected by a judge of the Alameda County Superior Court from an approved list of AAA qualified construction mediators. The parties may agree to engage in discovery prior to mediation, but if they do, they shall follow the procedures prescribed in the California Code of Civil Procedure, Section 2019, et. seq. and discovery so conducted shall apply in any subsequent litigation as if conducted in that litigation.

28. Agreement Made in California; Venue

28.1 This AGREEMENT shall be deemed to have been executed in the City of Oakland, County of Alameda. The formation, interpretation, and performance of this AGREEMENT shall be governed by the laws of the State of California, excluding its conflict of laws rules. Venue for all litigation relative to the formation, interpretation and performance of this AGREEMENT shall be in the County of Alameda. CONSULTANT waives CCP §394.

28.2 The parties shall execute one original and three copies of this AGREEMENT.

29. Compliance with Laws

29.1 CONSULTANT represents that it will comply with all applicable laws in the performance of the Services, regardless of whether such laws are specifically stated in this AGREEMENT and regardless of whether such laws are in effect on the date hereof. CONSULTANT shall comply with all security requirements imposed by authorities with jurisdiction over the Project, and will provide all information, work histories, and/or verifications as requested by such authorities for security clearances or compliance.

29.2 CONSULTANT further represents that all plans, drawings, specifications, designs and any other product of the Services will comply with all applicable laws, codes and regulations, consistent with the standard of care in this AGREEMENT.

30. Construction

30.1 All section and paragraph captions are for reference only and shall not be considered in construing this AGREEMENT. Each signatory to this AGREEMENT for CONSULTANT shall have joint and several responsibility and liability to perform the terms of this AGREEMENT.

31. Miscellaneous

31.1 As between the parties to this AGREEMENT, as to all acts or failures to act by either party to this AGREEMENT, any applicable statute of limitations shall commence to run on the date of issuance by DISTRICT of the final Certificate for Payment, or termination of this AGREEMENT, whichever is earlier. This section shall not apply to latent defects as defined by California law or negligence claims, as to which the statute of limitations shall be as defined by law. However, the applicable statutes of repose, California Code of Civil Procedure Sections §§337.1 and 337.15 shall continue to apply.

31.2 Any provisions or portion thereof of this AGREEMENT, which is prohibited by, unlawful or unenforceable under any applicable law of any jurisdiction, shall as to such jurisdiction be ineffective without affecting other provisions of this AGREEMENT. If the provisions of such applicable law may be waived, they are hereby waived to the end that this AGREEMENT may be deemed to be a valid and binding agreement enforceable in accordance with its terms. If any provisions or portion thereof of this AGREEMENT are prohibited by, unlawful, or unenforceable under any applicable law and are therefore stricken or deemed waived, the remainder of such provisions and this AGREEMENT shall be interpreted to achieve the goals or intent of the stricken or waived provisions or portions thereof to the extent such interpretation is consistent with applicable law.

31.3 Either party’s waiver of any breach, or the omission or failure of either party, at any time, to enforce any right reserved to it, or to require performance of any of the terms, covenants, conditions or other provisions of this AGREEMENT, including the timing of any such performance, shall not be a waiver of any other right to which any party is entitled, and shall not in any way affect, limit, modify or waive that party’s right thereafter to enforce or compel strict compliance with every term, covenant, condition or other provision hereof, any course of dealing or custom of the trade or oral representations notwithstanding.

31.4 If a death, serious personal injury or substantial property damage occurs in connection with CONSULTANT’s performance of this AGREEMENT, CONSULTANT shall immediately notify the Alameda County Risk Manager’s Office by telephone. CONSULTANT shall promptly submit to

DISTRICT a written report, in such form as may be required by DISTRICT of all accidents which occur in connection with this AGREEMENT. This report must include the following information: (1) name and address of the injured or deceased person(s); (2) name and address of CONSULTANT's sub-consultant; if any; (3) name and address of CONSULTANT's liability insurance carrier; and (4) a detailed description of the accident and whether any of DISTRICT's equipment, tools, material, or staff were involved.

- 31.5 CONSULTANT further agrees to take all reasonable steps to preserve all physical evidence and information which may be relevant to the circumstances surrounding a potential claim, while maintaining public safety, and to grant to the DISTRICT the opportunity to review and inspect such evidence, including the scene of the accident.

32. Entire Agreement; Modifications of Agreement

- 32.1 The AGREEMENT, and any written modification to the AGREEMENT, shall represent the entire and integrated AGREEMENT between the parties hereto regarding the subject matter of this AGREEMENT and shall constitute the exclusive statement of the terms of the parties' AGREEMENT. The AGREEMENT, and any written modification to the AGREEMENT, shall supersede any and all prior negotiations, representations or agreements, either written or oral, express or implied, that relate in any way to the subject matter of this AGREEMENT or written modification, and the parties represent and agree that they are entering into this AGREEMENT and any subsequent written modification in sole reliance upon the information set forth in the AGREEMENT or written modification and the parties are not and will not rely on any other information. All prior negotiations, representations, or agreements, either written or oral, express or implied, that relate in any way to the subject matter of this AGREEMENT, shall not be admissible or referred to hereafter in the interpretation or enforcement of this AGREEMENT.
- 32.2 CONSULTANT, in any price proposals for changes in the Services that increase the AGREEMENT amount, or for any additional Services, shall break out and list its costs and use percentage markups. CONSULTANT shall require its subconsultants (if any) to do the same, and the subconsultants' price proposals shall accompany CONSULTANT's price proposals.
- 32.3 CONSULTANT and its subconsultants shall, upon request by DISTRICT, permit inspection of all original unaltered AGREEMENT bid estimates, subcontract AGREEMENTs, purchase orders relating to any change, and documents substantiating all costs associated with all cost proposals.
- 32.4 Changes in the Services made pursuant to this Section and extensions of the AGREEMENT time necessary by reason thereof shall not in any way release CONSULTANT's representations and agreements pursuant to this AGREEMENT.
- 32.5 This AGREEMENT may not be modified, nor may compliance with any of its terms be waived, except by written instrument executed and approved by a fully authorized representative of both DISTRICT and CONSULTANT expressing such an intention in the case of a modification or by the party waiving in the case of a waiver.
- 32.6 Whenever the words "as directed", "as required", "as permitted", or words of like effect are used, it shall be understood as the direction, requirement, or permission of DISTRICT. The words "approval", "acceptable", "satisfactory", or words of like import, shall mean approved by, or acceptable to, or satisfactory to DISTRICT, unless otherwise indicated by the context.

33. Labor Code Requirements

- 33.1 The CONSULTANT shall adhere to all appropriate provisions of the California Labor Code in particular with Division 2, Part 7, Chapter 1, Articles 1-3. Any approvals, by the County, will not relieve the CONSULTANT from the observation and/or adherence to the provisions of the California Labor Code.
- 33.2 The CONSULTANT and any subcontractor shall be currently registered to perform public work. CONSULTANT and any subcontractor shall pay not less than the specified general prevailing rates of wages to all workers employed in the execution of the contract. General Prevailing rates of per diem wages shall be those general wage determinations made by the Director of the Department of Industrial Relations, State of California, for each craft, classification or type of worker required in the execution of the contract.
- 33.3 Copies of the prevailing rate of per diem wages are on file with the Contract Compliance Officer, County of Alameda, 951 Turner Court, Room 100, Hayward, CA 94545.

- 33.4 The CONSULTANT shall post, on the job site, a copy of the prevailing rates of per diem wages as determined by the Director of the Department of Industrial Relations, State of California, for each craft, classification or type of worker needed to execute the contract.
- 33.5 Premium pay for Saturdays, Sundays, holidays and overtime shall be as determined by the Director of the Department of Industrial Relations, State of California for each craft, classification or type of worker required in the execution of the contract. Holidays for which the general prevailing hourly wage rate for holiday work shall be paid, shall be all holidays recognized in the collective bargaining agreement on file with the Director of the Department of Industrial Relations, State of California, applicable to the particular craft, classification, or type of worker employed on the project.
- 33.6 Health and welfare, pension, vacation/holiday, apprenticeship or other training programs and any other employer payments required in the execution of the contract shall be as determined by the Director of the Department of Industrial Relations, State of California, for each craft, classification or type of worker required in the execution of the contract.
- 33.7 Hours of work per day or week shall be as determined by the director of the Department of Industrial Relations, State of California, for each craft, classification or type of worker required in the execution of the contract. Eight hours labor constitutes a legal day's work.
- 33.8 Pursuant to Section 1773.8 of the Labor Code, travel and subsistence payments shall be made to each worker needed to execute the work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed with the Director of the Department of Industrial Relations, State of California.
- 33.9 The CONSULTANT, or any subcontractor, shall comply with all provisions of Section 1777.5 of the Labor Code pertaining to the employment of apprentices on public works projects. The responsibility for compliance with all the provisions of said Section 1777.5 for apprenticeable occupations is vested with the CONSULTANT. In the event the CONSULTANT willfully fails to comply with Section 1777.5, said CONSULTANT shall be denied the right to bid on any public works contract for a period of up to one year for the first violation and up to three years for the second or subsequent violation with the period running from the date the determination of non-compliance is made. The interpretation and enforcement of Section 1777.5 shall be in accordance with rules and procedures prescribed by the California Apprenticeship Council.
- 33.10 The CONSULTANT shall comply with the Labor Code Sections 1774 and 1775. In accordance with said Section 1775, the CONSULTANT shall forfeit, as a penalty, not more than two hundred dollars (\$200.00) for each calendar day or portion thereof, for each worker paid less than the prevailing wage rates as determined by the Director of Industrial Relations, State of California, for such work or craft in which such worker is employed for any work done under the contract by the CONSULTANT, or by any subcontractor, in violation of the provisions of the Labor Code, and, in particular, Labor Code Sections 1770 to 1780 inclusive. In addition to said penalty, and pursuant to said Section 1775, the difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof, for which each worker was paid less than the stipulated prevailing wage rate, shall be paid to each worker by the CONSULTANT.
- 33.11 Eight hours labor constitutes a legal day's work. The CONSULTANT shall forfeit, as a penalty, Twenty-Five Dollars (\$25.00) for each worker employed in the execution of the contract by the CONSULTANT or by any subcontractor for each calendar day during which such worker is required or permitted to work more than 8 hours in any one calendar day and 40 hours in any one calendar week in violation of the provisions of the Labor Code and, in particular, Sections 1810 to 1814 thereof, inclusive, except that work performed by employees of the CONSULTANT in excess of 8 hours per day, and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of 8 hours per day at not less than one-and-one-half (1-1/2) times the basic rate of pay, as provided in Section 1815 of the Labor Code.
- 33.12 In accordance with Section 1776 of the Labor Code:
- 33.12.1 The CONSULTANT and each subcontractor shall keep an accurate payroll record, showing the name, address, social security number, work classification, ethnic code, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by said CONSULTANT or

- subcontractor in connection with the work.
- 33.12.2 The payroll records enumerated in Section 33.12.1 shall be certified, and shall be available for inspection at all reasonable hours at the principal office of the CONSULTANT on the following basis:
- 33.12.2.1 A certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his or her authorized representative on request.
- 33.12.2.2 A certified copy of all payroll records enumerated in Section 33.12.1 shall be forwarded weekly to the Contract Compliance Officer via the Inspector at 951 Turner Court, Hayward, CA 94545, and shall be made available for inspection or furnished upon request to a representative of the DISTRICT, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations, State of California.
- 33.12.2.3 A certified copy of all payroll records enumerated in Section 33.12.1 shall be made available upon request to the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the DISTRICT, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. The public shall not be given access to such records at the principal office of the CONSULTANT.
- 33.12.3 The CONSULTANT shall file a certified copy of the records enumerated in Section 33.12.1 with the entity that requested such records within ten (10) days after receipt of a written request.
- 33.12.4 Any copy of records made available for inspection as copies and furnished upon request to the public or to any public agency by the DISTRICT, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, shall be marked or obliterated in such a manner so as to prevent disclosure of an individual's name, address and social security number. The name and address of the CONSULTANT awarded the contract or performing the contract shall not be marked or obliterated.
- 33.12.5 The CONSULTANT shall inform the DISTRICT of the location of the records enumerated under Section 33.12.1 including the street address, city and county, and shall, within five (5) working days, provide a notice of any change of location and/or address.
- 33.12.6 In the event of noncompliance with the requirements of said Section 1776 of the Labor Code, the CONSULTANT shall have ten (10) calendar days in which to comply subsequent to receipt of written notice specifying in what respects such CONSULTANT must comply with said Section. Should noncompliance still be evident after such ten-day period, the CONSULTANT shall, as a penalty, forfeit one hundred dollars (\$100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due.
- 33.12.7 The responsibility for compliance with Section 1776 of the Labor Code shall be a responsibility of the CONSULTANT.
- 33.13 A certified copy of all payroll records enumerated in the above Section 33.12 shall be sent weekly to the Contract Compliance Officer via the Inspector at 951 Turner Court, Hayward, CA 94545
- 33.13.1 Certified weekly payrolls shall show the wages and benefits paid to each employee, the employee's job classification, sex and ethnic code. Payrolls will be submitted by the Consultant and each subcontractor via the Consultant.
- 33.13.2 This provision applies to all classifications, including truckers.
- 33.14 Requests for information relating to labor compliance records, including certified payroll records enumerated in Section 33.12, shall be made through the Contract Compliance Officer at 951 Turner Court, Room 100, Hayward, CA 94545.
- 33.15 Failure to file certified copies of the records enumerated in Section 33.12.1 with DISTRICT

representatives may result in conditioning amounts of any progress payment due.

- 33.16 The CONSULTANT assures that he/she/it will comply with the Americans with Disabilities Act (ADA) and Title VII of the Civil Rights Act of 1964 and that no person shall, on the grounds of race, creed, color, disability, sex, sexual orientation, national origin, age, religion, Vietnam era Veteran's status, political affiliation, or any other non-merit factor, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this contract.
- 33.16.1 The CONSULTANT shall, in all solicitations or advertisements for applicants for employment placed as a result of this contract, state that it is an "Equal Opportunity Employer" or that all qualified applicants will receive consideration for employment without regard to their race, creed, color, disability, sex, sexual orientation, national origin, age, religion, Vietnam era Veteran's status, political affiliation, or any other non-merit factor.
- 33.16.2 CONSULTANT shall, if requested to so do by the DISTRICT, certify that it has not, in the performance of this contract, discriminated against applicants or employees because of their race, creed, color, disability, sex, sexual orientation, national origin, age, religion, Vietnam era Veteran's status, political affiliation, or any other non-merit factor.
- 33.16.3 If requested to do so by the DISTRICT, CONSULTANT shall provide the DISTRICT with access to copies of all of its records pertaining or relating to its employment practices, except to the extent such records or portions of such records are confidential or privileged under state or federal law.
- 33.16.4 CONSULTANT shall recruit vigorously and encourage minority- and women-owned businesses to bid its subcontracts.
- 33.16.5 Nothing contained in this contract shall be construed in any manner so as to require or permit any act which is prohibited by law.
- 33.16.6 The CONSULTANT shall include the provisions set forth in Sections 33.16.1 through 33.16.5 in each of its subcontracts.
- 33.16.7 EQUAL EMPLOYMENT OPPORTUNITY PRACTICES PROVISIONS POLICY FORM: The CONSULTANT must post the Equal Employment Opportunity Practices Provisions Policy in a conspicuous place at each construction site. A sample form shall be provided.
- 33.17 Non-compliance with the provisions of the Equal Employment Opportunity Practices policy is subject to the provisions outlined below.
- 33.17.1 If DISTRICT finds that the CONSULTANT has violated the Equal Employment Opportunity Practices Provisions policy, the Director of Public Works (or designee) shall hold a meeting with the CONSULTANT for the purpose of determining whether the CONSULTANT is out of compliance. If after the meeting the CONSULTANT is found to be still out of compliance, the CONSULTANT will be notified of a public hearing. The public hearing will be held before the Board of Supervisors with a minimum five calendar-day notice to the CONSULTANT. If the Board of Supervisors finds that there has been a violation, the DISTRICT will notify the CONSULTANT in writing of the sanctions to be imposed.
- 33.17.2 In addition, the DISTRICT shall deem a finding by the Fair Employment Practice Commission that there was willful violation of the California Fair Employment Act also to be a violation by the CONSULTANT of the Equal Employment Opportunity Practices Provisions requirements of the contract, and such violation shall be subject to the sanctions provided herein
- 33.18 A finding at the public hearing that there has been violation of the Equal Employment Opportunity Practices Provisions requirements of the contract shall be cause for the Board of Supervisors to impose any or all of the following sanctions:
- 33.18.1 Withhold an additional ten percent (10%) of all further contract progress payments until the CONSULTANT provides evidence satisfactory to the Board of Supervisors that the condition of non-compliance has been corrected.
- 33.18.2 Suspend the contract until such time as the CONSULTANT provides evidence satisfactory to the Board of Supervisors that the condition of non-compliance has been corrected.
- 33.18.3 Terminate the contract and collect appropriate damages from the CONSULTANT.

33.18.4 Declare that the CONSULTANT is a non-responsible bidder, and is ineligible to make bids on future DISTRICT contracts for a stated period of time or until the CONSULTANT can demonstrate to the satisfaction of the Board of Supervisors that the violation has been corrected.

Sample

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the dates shown below their respective authorized signatures.

“DISTRICT”

**Alameda County Flood Control and
Water Conservation District**

By: _____
NATE MILEY, PRESIDENT
BOARD OF SUPERVISORS

Date: _____

“CONSULTANT”

Consultant Name

By: _____
PROJECT MANAGER NAME, PRINCIPAL

Date: _____

Approved as to form:
Donna R. Ziegler, County Counsel

Kathy Lee, Deputy County Counsel

By signing above, signatory warrants and represents that he/she executed this Agreement in his/her authorized capacity and that by his/her signature on this Agreement, he/she or the entity upon behalf of which he/she acted, executed this Agreement.

*** END OF STANDARD AGREEMENT ***

Exhibit D

**List of active hydrologic monitoring stations operated by ACFCWCD
As of April 16, 2024**

Station Name	Zone	Station Code	Latitude	Longitude	Type	Transmission Type	Datalogger/transmitter	Depth Sensor(s)	Tipping Bucket	Soil Moisture Probe	Housing	Comments
Castro Valley Creek at Watson	2	M02I0001	37.689	-122.072	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Chabot Creek us Norbridge	2	M02G0002	37.691	-122.083	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Crow Creek at Crow Cyn Blvd.	2	M02B2301	37.705	-122.044	Flow	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	co-located with USGS station
Crow Creek at Cull Creek	2	M02B2302	37.702	-122.054	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	one sensor upstream of confluence, one downstream
Estudillo Canal at Manor	2	M02A0001	37.692	-122.143	Flow	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	
Norris Creek at Crow Creek	2	M02B2303	37.732	-122.033	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Palomares Creek at Palomares School	2	M02B2201	37.695	-122.025	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
San Lorenzo Ck at A Street	2	M02B0004	37.679	-122.076	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
San Lorenzo Ck at Center Street	2	M02B0005	37.686	-122.063	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
San Lorenzo Ck at Via Hermana	2	M02B2001	37.677	-122.151	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
San Lorenzo Ck at Washington Ave.	2	M02B0001	37.685	-122.140	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	co-located with USGS station
San Lorenzo Creek at Foothill Blvd	2	M02B0003	37.677	-122.084	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
San Lorenzo Crk at Don Castro	2	M02B0002	37.691	-122.055	Flow	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	
Line D at Auto Auction	3	M03D0001	37.614	-122.066	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Main Outlet Chan. At Hesperian	3	M03A0001	37.610	-122.084	Flow	none	Solinst Levellogger 5	2 pressure transducers	--	--	Sealed cabinet enclosure	station temporarily converted to self-contained, non-reporting due to repeated vandalism
Ward Creek at Folsom and Thackery	3	M03B0001	37.627	-122.072	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Crandal Creek at Deep Ck Rd	5	M05K0001	37.567	-122.052	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Line M at Royal Ann	5	M05M0001	37.586	-122.028	Flow	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	
Laguna Creek at Grimmer	6	M06E0001	37.502	-121.954	Flow	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	
Mission Ck at Driscoll	6	M06L0003	37.546	-121.944	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Mission Ck ds Mission Bl.	6	M06L0004	37.536	-121.922	Flow	none	Solinst Levellogger 5	1 pressure transducer	--	--	Sealed cabinet enclosure	station converted to self-contained, non-reporting due to lack of flow
Morrison Ck at Stevenson	6	M06M0001	37.559	-121.959	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Chimes Ck at Altamont St.	12	M012J0001	37.776	-122.168	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	no solar; includes high-capacity rechargeable battery
Glen Echo Creek at Valdez St.	12	M012B0001	37.815	-122.262	Flow	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	
Lake Temescal Outlet	12	M012A0002	37.848	-122.231	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	

Station Name	Zone	Station Code	Latitude	Longitude	Type	Transmission Type	Datalogger/transmitter	Depth Sensor(s)	Tipping Bucket	Soil Moisture Probe	Housing	Comments
Line K at Hegenberger	12	M012K0001	37.758	-122.188	Flow	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	
Lion Creek near 66th Ave. and Lion Way	12	M012J0002	37.759	-122.197	Flow	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	
San Leandro Ck u/s 98th Ave.	12	M012P0001	37.728	-122.187	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Sausal Creek d/s of Logan St.	12	M012E0001	37.788	-122.224	Flow	cellular	OTT Sutron X-link 500	2 pressure transducers	--	--	Sealed cabinet enclosure	
Temescal Ck at Temescal Ck Pk	12	M012A0003	37.837	-122.278	Flow	cellular	Campbell Scientific CR800	2 pressure transducers	--	--	Sealed cabinet enclosure	
Estudillo Canal at Tidegates	2	M02A0002	37.691	-122.182	Stage only	cellular	YSI Storm3 w/Sierra Wireless external modem	2 pressure transducers	--	--	Sealed cabinet enclosure	one pressure transducer upstream of tidegates; one downstream
Mission Ck at Lk Elizabeth	6	M06L0002	37.546	-121.959	Stage only	none	Solinst Levellogger 5	4 pressure transducers	--	--	Sealed cabinet enclosure	station converted to self-contained, non-reporting due to repeated vandalism; 2 loggers are in Lake Elizabeth; 2 are in the wetland/channel downstream of the outlet
Claremont Country Club	12	M012B1001	37.834	-122.248	Stage only	n/a	n/a	n/a	--	--	Sealed cabinet enclosure	station was destroyed by landslide in WY24; waiting on re-construction of pier before re-installing
Line C at Grand and Weldon	12	M012C0001	37.816	-122.245	Stage only	none	Solinst Levellogger 5	3 pressure transducers	--	--	Sealed cabinet enclosure	station operated as non-reporting, self-contained recorded due to lack of cellular signal inside stormdrain
Ward Creek at Sylvan Glen Court	3	M03B0002	37.668	-122.068	Stage/Rain	cellular	OTT Sutron X-link 500	2 pressure transducers	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Arcadian Reservoir	2	35932	37.718	-122.093	Rain	Radio	Hydrolynx 50388	--	Hydrolynx 5054TS	--	Standpipe	
Cull Canyon	2	35930	37.734	-122.057	Rain	Radio	High Sierra 3334 Repeater	--	High Sierra 2400	Campbell Scientific CS650	Standpipe	
Cull Maintenance Yard	2	O2G0020	37.713	-122.055	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Dublin Canyon Road	2	O2G0025	37.698	-121.979	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Eden Reservoir	2	35934	37.721	-122.021	Rain	Radio	Hydrolynx 50388	--	Hydrolynx 5054TS	Campbell Scientific CS650	Standpipe	
Estudillo at Huff (ACF #9)	2	O2G0007	37.727	-122.151	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Lower Palomares Rd	2	O2G0002	37.678	-122.014	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Lower San Lorenzo Watershed	2	35110	37.685	-122.139	Rain	Radio	High Sierra 3306	--	High Sierra 2400	--	Standpipe	
San Miguel (ACF #25)	2	O2G0019	37.697	-122.080	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Upper Crow Canyon	2	O2G0010	37.767	-122.012	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Upper Cull Canyon	2	AC1019C2	37.753	-122.058	Rain	Satellite	OTT Sutron SatLink	--	Sutron 5600-series	--	Sealed cabinet enclosure	
Upper Palomares Watershed	2	35119	37.656	-121.988	Rain	Radio	High Sierra 3306	--	High Sierra 2400	Campbell Scientific CS650	Standpipe	
Upper San Leandro Reservoir	2	AC100AB4	37.765	-122.098	Rain	Satellite	OTT Sutron SatLink	--	Sutron 5600-series	--	Sealed cabinet enclosure	
Industrial Parkway	3	35117	37.619	-122.059	Rain	Radio	High Sierra 3306	--	High Sierra 2400	--	Standpipe	

Station Name	Zone	Station Code	Latitude	Longitude	Type	Transmission Type	Datalogger/transmitter	Depth Sensor(s)	Tipping Bucket	Soil Moisture Probe	Housing	Comments
Turner Court	3	35104	37.648	-122.098	Rain	Radio	High Sierra 3306	--	High Sierra 2400	--	Standpipe	
Appian Way	5	05G0009	37.598	-122.001	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Cherry Street	5	35111	37.530	-122.010	Rain	Radio	High Sierra 3306	--	High Sierra 2400	--	Standpipe	
Decoto and I880	5	35112	37.566	-122.037	Rain	Radio	High Sierra 3306	--	High Sierra 2401	--	Standpipe	
J-3 Pump Station	5	05G0005	37.584	-122.081	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
SF Bay Refuge	5	35210	37.531	-122.073	Rain	Radio	Hydrolynx 5052RP Repeater	--	Hydrolynx 5054TS	--	Standpipe	
Union City Municipal Bld.	5	05G0008	37.587	-122.027	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Automall at I880	6	35113	37.508	-121.964	Rain	Radio	High Sierra 3306	--	High Sierra 2400	--	Standpipe	
Fremont Fire Station #1	6	06G0006	37.545	-121.990	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Kaiser Pond	6	35940	37.569	-121.987	Rain	Radio	High Sierra 3306	--	High Sierra 2400	--	Standpipe	
Mission Peak	6	35942	37.505	-121.904	Rain	Radio	Hydrolynx 50388	--	Hydrolynx 5054TS	Campbell Scientific CS650	Standpipe	
Palm and Mission	6	35114	37.542	-121.934	Rain	Radio	High Sierra 3306	--	High Sierra 2400	--	Standpipe	
Del Valle WTP	7	07G0001	37.632	-121.785	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
HERB Maintenance Facility	7	07G0005	37.714	-121.883	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Mines Road	7	AC10228A	37.513	-121.541	Rain	Satellite	OTT Sutron SatLink	--	Sutron 5600-series	--	Sealed cabinet enclosure	
Patterson Pass	7	07G0002	37.695	-121.683	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Valle Arroyo	7	AC101710	37.561	-121.685	Rain	Satellite	OTT Sutron SatLink	--	Sutron 5600-series	--	Sealed cabinet enclosure	
66th (OFS #29)	12	12G0007	37.760	-122.196	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Arrowhead Marsh	12	35118	37.741	-122.207	Rain	Radio	High Sierra 3306	--	High Sierra 2400	--	Standpipe	
Chabot Reservoir Dam	12	12G0033	37.730	-122.123	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Ettie St. Pump Station	12	12G0032	37.826	-122.289	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Grass Valley (OFS #28)	12	12G0026	37.751	-122.123	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
High (OFS #17)	12	12G0015	37.786	-122.197	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
International (OFS#4)	12	12G0016	37.790	-122.248	Rain	cellular	YSI Storm3 w/Sierra Wireless external modem	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Miles (OFS #19)	12	12G0019	37.846	-122.250	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
Oakland Fire Station #25	12	35944	37.809	-122.191	Rain	Radio	Hydrolynx 50388	--	Hydrolynx 5054TS	--	Standpipe	standpipe will need to be moved

Station Name	Zone	Station Code	Latitude	Longitude	Type	Transmission Type	Datalogger/transmitter	Depth Sensor(s)	Tipping Bucket	Soil Moisture Probe	Housing	Comments
OFS#21 at Skyline	12	12G0024	37.789	-122.150	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
OFS#6 at Colton	12	12G0012	37.839	-122.198	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	
UC Botanical	23	23G0002	37.874	-122.237	Rain	cellular	OTT Sutron X-link 500	--	Texas Electronics TE525 8"	--	Sealed cabinet enclosure	

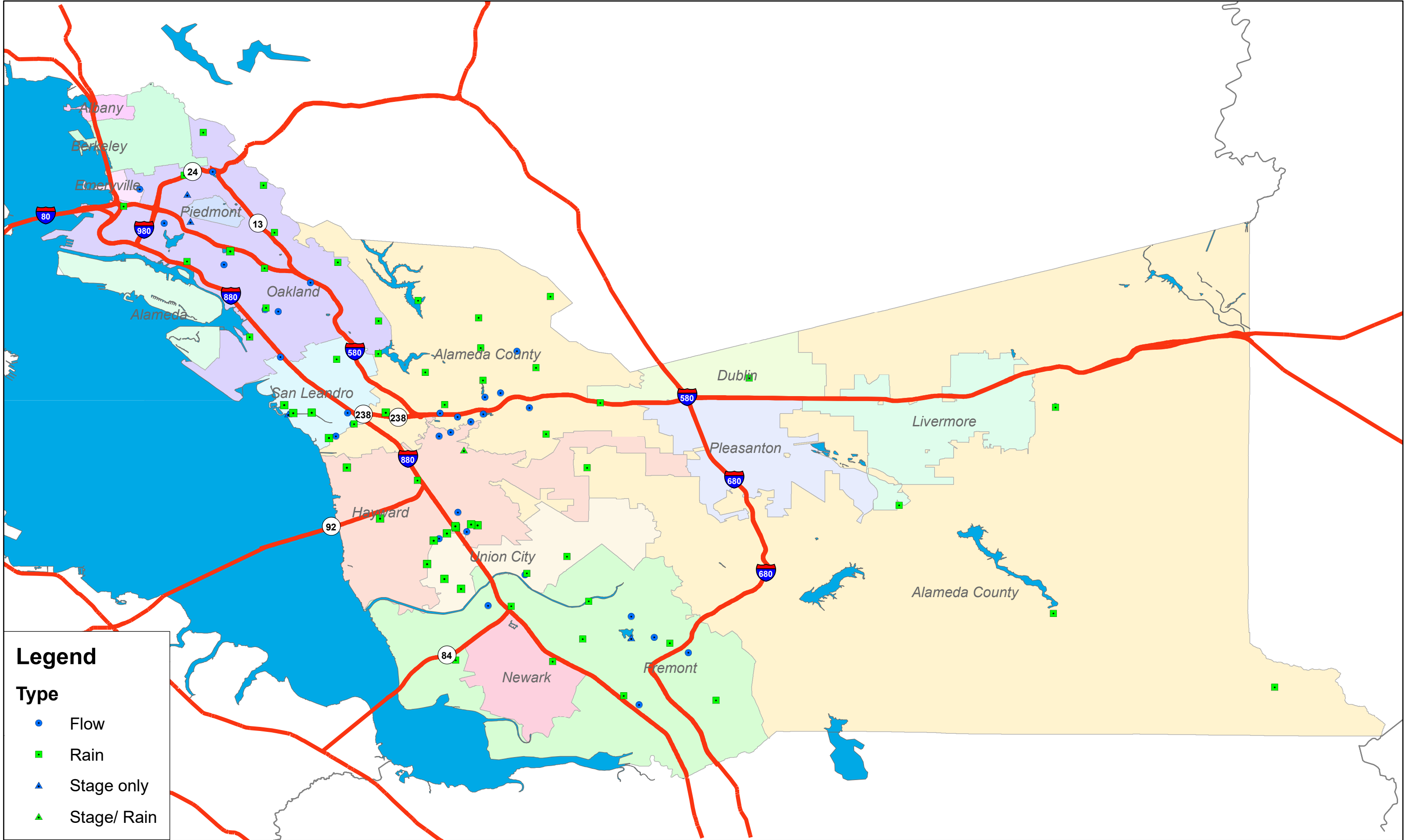
Notes:

¹ All transmitting sites, unless otherwise noted, are equipped with solar panels and rechargeable batteries. (Solinst Leveloggers are operated by internal battery.)

² Pressure transducers are a mix of Keller America Acculevel transducers and Campbell Scientific CS450 transducers; connection type varies, but includes 4-20mA, 05VDC, and SDI, depending on the site.

³ Radio transmissions are received at new ALERT2 receiver/decoder located at Turner Court; then forwarded to the Contrail database.

Alameda County Rain / Flow Gages



Legend

Type

- Flow
- Rain
- ▲ Stage only
- ▲ Stage/ Rain



Working DRAFT
General Procedures Manual
for
Hydrologic Data Acquisition &
Management in Alameda County

for
Alameda County Flood Control and
Water Conservation District

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V 2.2 Working June 2014



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General Procedures Manual

Key Contact Information

Hydrolynx help: contact Joe - (916) 374-1800

High Sierra help: contact Jerry Bloom – (800) 275-2080

SFE help: contact Adrian Marshall - (604) 992-6792

Conrail help: contact Rick Jensen, Mike Zucosky – (303) 774-2033

WaterLOG technical support: (435) 753-2212

ALERT System

The ALERT telemetry system is made up of 10 High Sierra Electronics rain stations and 10 Hydrolynx rain and weather stations. Even though the components are supposed to be interchangeable, the transmitters are different.

Installation & Configuration Notes

CAUTION: Note that solar panels provide up to 19V of power supply whenever light is available. When disconnecting power supplies or changing batteries, cover the solar panel and test current to reduce the risk of shocks or current surges to the instrument (or yourself).

Equipment Checklist for ALERT Maintenance:

- Laptop, USB-Serial Connector, and Hydrolynx/High Sierra Connection Cables
- Keys: County key, ALERT door and Top Section Keys, any other enclosure key
- Desiccant packs and canisters
- Cleaning supplies: spray water bottle, cleaning solution, scrubby pad, towels
- Extra battery –12AH or 18AH
- Precision Flathead Screwdriver
- Zip ties (to keep cables organized)
- Hand held radio to test Transmissions
- Volt Meter
- Allen Wrench



- Extra bolts

Maintenance

Standpipe & General Maintenance

Clean bucket with mild solvent – remove all sediments

Clean funnel of all debris and insects

Check connections between all cables, transmitters, sensors

Check for overhead obstructions

Check for vertical integrity of unit

Test transmitter with radio receiver

Check test tips and test transmission in Contrail

Reset datalogger?? (check manual)

Tipping Bucket Calibration

ALERT Tipping Bucket

See Manual for Calibration instructions [5050P_manual.pdf](#)

Resolution: 1mm/tip (72.97mL per tip)

Accuracy:

- $\pm 3\%$ for precipitation rate from 0 to 50 mm/hr. (0-2 in./hr.)
- $\pm 2\%$ for precipitation rate from 50 to 150 mm/hr. (2-6 in./hr.)
- $\pm 5\%$ for precipitation rate from 150 to 300 mm/hr. (6-12 in./hr.)
- Note: % error shown for calibration point of 128 mm/hr.

Leveling the 5050P Tipping Bucket

The 5050P must be level to insure proper operation. Both types of mounting provide three leveling screws. Adjust leveling screws until bubble level is centered. The level is checked and adjusted after the 5054TS is installed.

Static Calibration of 5050P Tipping Bucket

Using the 60mL and 10mL syringes, fill each bucket with 72.97 mL of water so that it tips. Adjust the calibration screws until the bucket tips at the volume of 72.97mL.



Adjusting the bucket calibration screws

When adjusting the bucket calibration screws - rotating the screw out (counter-clock wise) will decrease the amount of water needed to tip the bucket (increased number of counts); rotating the screw in (clock wise) rotation increases the amount of water (decreased counts).



Transmitter Maintenance

When performing annual maintenance on the transmitter you should:

- Download previous year's data
- Clear the memory
- Reset date and time to current Daylight Savings Time
- Check proper ID on the transmitter board
- Check 12V battery voltage
- Check and replace desiccant canister
- Check transmission frequency with the test button and receiver radio

And additional instructions for the repeater:

- Check that the correct pass through IDs are programmed
- Update firmware (if required)



Programming ALERT Transmitters & Repeaters

Note there are different protocols for the Repeater sites and the transmitter sites.

Hydrolynx 50386 Repeater Transmitter

- Use Toolbox software provided by Hydrolynx. Attach repeater serial port cable to RS232 plug on top of transmitter.
- Follow 50386 manual for programming instructions.
[50386_repeater_transmitter.pdf](#)

Hydrolynx 5096 Transmitter Programming

- Use Hyperterminal program on your computer. Attach serial port to serial port cable provided by Hydrolynx to the transmitter board.
- Follow programming instructions in the 5096 transmitter manual written by Hydrolynx. Use Adobe Reader to open the file [Hydrolynx 5096 Transmitter.pdf](#)

Hydrolynx 5096 Transmitter Programming

Starting up transmitter connection:

- Open Hyperterminal on netbook; open file “Hydrolynx 5096”; use assigned COM port for Serial cable connection to transmitter (using USB adapter and Hydrolynx’s grey Serial-Serial cable)
- Hit enter, if no “>” appears, disconnect (go to Call menu, then Disconnect or just click on icon of the phone hanging up)
- Go to File menu, Properties, click on Configure button, change Bits per Second to 300, click Apply, click OK
- Go to Call menu, then Connect (or click on icon of telephone)
- Hit enter and “>” should appear
- Type “SET-BAUD 9600[enter]”¹ with the space in between BAUD and 9600; now a strange symbol should appear
- Again, disconnect the call, then go to properties, then configure, then change Bits per Second back to 9600, Click Apply, then OK, Connect the Call again, then hit Enter when back at Hyperterminal screen and “>” should appear
- Now you are ready to go!

To Reveal Transmitter Programming

- To display current transmitter programming type:
"SHOWALL[enter]"

¹ Do not type the quotation marks “” these just indicate what should be typed the " _ " indicates a space



- You can use the same Capture Text function to record the transmitter programming revealed when you type "SHOWALL" then Enter (start capture text, then stop when finished)

To Set Date/Time

- Type "TIME=_hh,mm,ss,YYYY,MM,DD[enter]" with the space after =
- For example, "TIME=_16,40,00,2012,01,16" would give you 01/16/2012 16:40:00

To Clear Memory

- Type "CLEAR-MEM"

For programming all sensors

- to set one parameter, type the number of commas before it in the command with nothing entered. For example, to change the year type: "TIME=_,,2012,,"

Set tipping bucket

- Type: "SET-ev_2,1,6,43200,1,2,1,1,0,#####" where the "_" is a space and "#####" is the site ID
- to see what the **current** rain gauge **settings** are type: "SET-EV_2"
this will display:

Event 2 ID	: #####	(this is the 4 digit sensor ID)
Event Detection	: Enabled	(1: enabled; 0: disabled)
Event Mode	: 6	(for 5050P and 5050P-MS tipping buckets)
Transmit Intervl	: 43200	(max # seconds btwn transmissions: 12 hrs)
Change to Txmit	: 1	(change in reading to trigger transmission)
Change for Alarm	: 2	(change in reading to trigger alarm)
Calibration CAL	: (RAW*1)/1 +0	(leaves RAW as a count)

- To see the command format type: "SET-ev_?"
- set-ev sn, {en_ev}, {mode}, {t_int}, {cgt}, {cga}, {a}, {b}, {c}, {id}
- which translates to: SET-EV_ sensor #, {enabled}, {mode}. {transmit interval}, {change to transmit}, {change for alarm}, {coefficient: a}, {coefficient: b}, {coefficient: c}, {sensor ID}

To set Battery



- Type "SET-BATT_21600,,,,1939" for ID 1939, and remember the space after BATT

To set Soil Moisture Sensor

- Set the Soil Moisture Sensor
"SET-AN_3,0,900,300,5,50,100,1023,0,#####" where the " " is a space and "#####" is the site ID
- Check the current output:
"READ-AN_3"
- To see what the current analog port settings are:
"SET-AN_3"
this will display:

ANALOG 3 ID	: #####	(this is the 4 digit sensor ID)
Event Threshold	: 0	(transmits all data if change criteria are met)
Transmit Interval	: 900	(max # seconds between transmissions)
Sample Interval	: 300	(# seconds between samples)
Change to Txmit	: 5	(change in reading to trigger transmission)
Change for Alarm	: 50	(change in reading to trigger alarm)
Calibration CAL	: (RAW*100)/1023 +0	(converts RAW to %)

- To see the command format:
"SET-AN_?"
SET-AN_sn,{ev_th},{t_int},{s_int},{cgt},{cga},{a},{b},{c},{id}
SET-AN_sensor #,{event threshold}, {transmit interval}, {sample interval},
{change to transmit}, {change for alarm}, {coefficient: a}, {coefficient: b},
{coefficient: c}, {sensor ID}

The calibration formula format is:

$(RAW * a) / b + c$

For the soil probes:

a = 100, b = 1023, and c = 0

Background and more information:

the soil probe output is 0 - 5V

the logger converts this to 0 - 1023

we want the output to be 0 - 100%

To set Wind Direction Sensor

- Set the Wind Direction Sensor
"SET-WI_1,1,30162,0,1,10,1,1,0,1,#####" where the " " is a space and "#####" is the site ID



- Check the current output:
"READ-WI_1"
- To see what the current analog port settings are:
"SET-WI_1"
this will display:

Wind 1 ID : ##### (this is the 4 digit sensor ID)
Event Detection : Enabled (enabled or not)
Pre-divide Ctr : 30612 (increments RAW once/3km of wind run*)
Transmit Intervl : 0 (reports each 3km increment)
Change to Txmit : 1 (change in reading to trigger transmission)
Change for Alarm : 10 (change in reading to trigger alarm)
Calibration CAL : (RAW*1)/1 +0 (maintains RAW as a counter)

*pre-divide control = 30612 in km for the R.M. Young Wind Sensor, HydroLynx Systems Model 200-05103; for the 5050WS/WD wind sensors = 3924 for km and = 2094 for mi

- To see the command format:
"SET-WI_?"
SET-WI_sn,{en_ev},{pdc},{t_int},{cgt},{cga},{a},{b},{c},{we},{id}
SET-WI_sensor #,{enabled}, {pre-divide control}, {sample interval}, {change to transmit}, {change for alarm}, {coefficient: a}, {coefficient: b}, {coefficient: c}, {wind enable flag}, {sensor ID}
- WE: wind enable flag, set to 1 for the standard ALERT Wind or standard data reporting, sends a combined speed and direction data report.

To set Warm up Time for Air Temperature/Relative Humidity Sensor

- Read the Analog sensor data value. First, turn the Analog Sensor On, Type "AD-ON[enter]"
- Wait 10 seconds
- Type "READ-AN 1[enter]" with space before 1
 - This will read the Analog 1 (Temp/Humidity) sensor data values
 - This will tell you that the Analog sensor is working
- Type "AD-OFF[enter]" to turn off Analog sensor power (this is important to remember!)
- Set the Warm up Time: Type "SET-WARM 300[enter]" to set the warm up time to 3000 msec or 3 seconds.
- Type "READ-AN 1[enter]" to make sure you are getting a correct value (the same value as before)

Wiring Wind Speed/Wind Temperature Sensor

- Wind Speed: Red wire = A, Black wire + shield wire (clear) = B
- Wind Direction: White wire = C, Black wire + shield wire (clear) = D, Red wire = E, empty = F



High Sierra 3206 Transmitter Programming

- Use Data Logger software. Attach telephone cable to logger on transmitter board. Follow High Sierra 3206 Logger Module manual for logger download and programming instructions [High Sierra 3206 Data Logger Module.pdf](#)
- Follow 3206 transmitter manual for transmitter programming instructions [High Sierra Transmitter Manual 3206.pdf](#)

Follow the easy instructions in the manual: [High Sierra 3206 Data Logger Module.pdf](#) to program the logger on the transmitter. Use the telephone-serial cable and DataLogger software to do the following:

- Download data
- Reset memory
- Set date/time to computer time
- Check test transmission on logger readout

Logger Issues:

After the 3206 transmitter is stored for a period of time without power, the Logger module may go into a “frozen LED” mode where the LED light stays on and the logger will not respond when trying to put the transmitter back into use.

To fix this problem, first disconnect the main 12V battery from the transmitter (and disconnect the solar panel if it is connected); then pull the 3V Lithium Battery out of the Logger module (with the transmitter power off); then push the Test and Reset buttons at the Same Time and hold for a few seconds; then put the 3V Lithium battery back into the Logger Module and re-connect the main 12V power to the transmitter. Now the LED light on the Logger module should flash a few times, then go off.

Battery Voltage Sensor Reporting:

For the Battery Sensor to report on the 3206 transmitters, first remove the JB5 black jumper plug from the underside of the top metal disk of the transmitter frame (not the jumper on the main board). Keep the plug inside the transmitter tube in case it is needed in the future. Set the Event/Time dial to 9 for the Battery voltage to be reported every 6 hours (to match the Hydrolynx transmitter’s battery voltage reporting default).

The transmitter’s default programming will now transmit the battery voltage readings on ID+5, so if the station ID is set to 1900, the Battery will be reporting on 1905. If a different ID is desired for the battery reporting, a new EPROM must be ordered from High Sierra to program the Battery for a desired ID, such as ID+999



for a 1900 ID to report Battery Voltage on 2900. The EPROM is installed in place of the existing EPROM that reads 3206 and the label is upside down. Use a small flat head screwdriver to pry the EPROM off the board, from the bottom of the chip, where the notch is. Make sure the new EPROM is also installed with the label upside down so the Notch is on the bottom. This completes the battery programming.

Instrument Maintenance

General Field Maintenance Procedures

Rain Gauge Maintenance

Annual maintenance on the Geotivity Rain Gauges should involve the following:

- Clean rain gauge thoroughly including the tipping buckets, funnel, and around the battery. Clean the solar panel and make sure it is properly positioned for sunlight exposure.
- Level the rain gauge on the instrument using the 3 nuts on the bottom of the rain collector
- Replace the desiccant canister or packets inside the instrument
- Check battery voltage to see if the external deep cycle battery needs to be replaced. Also check the 3V lithium battery inside the instrument and replace if necessary.
- Download logger data and clear memory, including checking time and date and sampling intervals. Force upload to verify network connection

More frequent maintenance should include

- Cleaning debris out of the funnel and making sure it is not clogged
- Cleaning off the solar panel
- Checking that the rain gauge is leveled.

Tools & Materials Checklist for Rain Gauge Maintenance:

- Laptop with serial-USB adapter and Yellow Geotivity COM Cable
- Flathead screwdriver
- Electrical tape to cover exposed com ports
- Zip ties
- Cleaning supplies: spray water bottle, cleaning solution, scrubby pad, towels
- Desiccant Canisters and Packs
- 10mL syringe
- Water
- County key
- Volt meter
- Wire cutters and pliers



- 5/64" Allen wrench to adjust bucket level for calibration



Flow Instrument Maintenance

Annual maintenance on the Flow instruments should involve the following:

- Clean the outside of the instrument, including removing debris and algae from the sensors.
- Replace desiccant in the tube and packets inside the instrument
- Check battery voltage to see if the external deep cycle battery needs to be replaced. Also check the 3V lithium battery inside the instrument and replace if necessary.
- Calibrate Pressure Transducers. Replace pressure transducers that are not holding the calibrated settings.
- Check for loose wires inside the instrument
- Download logger data and clear memory, including checking time and date and sampling intervals. Force upload to verify network connection.

More frequent maintenance should include:

- Replace the desiccant in the tube outside of the instrument when it turns pink
- Check battery voltage for the external battery and replace battery if necessary
- Clean debris from around sensors in the stream.

Equipment for Flow Instrument Maintenance:

- Laptop or mobile device for WiFi loggers
 - Use USB-A to USB mini-B cable for direct connection to laptop
- Laptop for Geotivity with serial-USB adapter and Yellow Geotivity COM Cable
- 7/16" socket wrench
- 9/16" socket wrench
- Wire cutters, stripper, pliers, wrenches, screwdrivers and other tools
- Cleaning supplies: spray water bottle, cleaning solution, scrubby pad, towels
- Loose Desiccant and extra Desiccant tube
- Zip ties
- 10mL syringe
- Water
- County key
- Volt meter
- Extra 12V battery of appropriate capacity for site, with wire connectors
- Precision flathead screwdriver
- Metric tape for calibration, with clamps (large and small) and graduated cylinder
- Water for the graduated cylinder



WaterLog Storm 3 Wiring & Configuration

This section covers analog depth sensor, tipping bucket rain gauges and SDI-12 sensor wiring and logger configuration.

Keller America Acculevel Depth Sensors

This section refers to Keller America Acculevel depth sensors that output in the 4-20 mA range. Voltage-controlled sensors will require different wiring and configuration.

Keller Acculevel 4-20 mA analog depth sensor wiring

The Keller America Acculevel sensors widely deployed as of 2014 output in 4-20 milliamps rather than 0 – 5 volts. As these milliamp sensors fail over time they should be replaced with sensors that output in volts, but in the meantime there is a procedure for handling the conversion of milliamps to volts.

4-20 mAmps can be converted to 0 – 1 volts ($\text{Amps} * \text{Resistance} = \text{Volts}$) via installation of a 50 Ohm resistor across the analog input channel and the analog ground. Analog input channels are labeled Vin 1 through Vin 4.

Connect the black supply wire from the sensor to any +12V terminal on the logger. If connecting the supply line to the +12Vswd (+12V switched), go to the home screen -> Advanced Options and set "+12Vswd Mode" to ON.

Connect the white output/ground wire to one of the Vin terminals (ex. Vin 1). Jumper the Vin terminal to one of the AGnd (analog ground) terminals with a 50 Ohm resistor. We used 1/8 W 50 Ohms metal film resistors with a 0.1% tolerance. Refer to the sample wiring diagram shown in Figure 1.



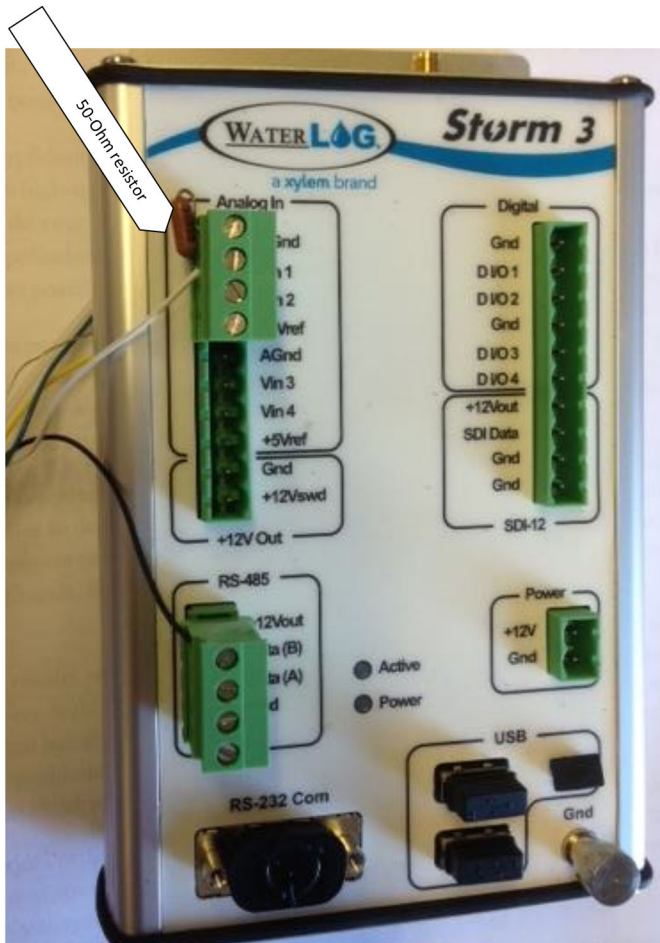


Figure 1) Example placement of 50 Ohm resistor and wiring of black and white wires.

Keller Acculevel analog depth sensor configuration

This dialog applies to Keller and other sensors that output in either voltage or amperage. Connect to the Storm 3 via the WiFi connection or USB cable as described in the Storm 3 “Getting Started” guide. On the home screen click on the “Sensors” icon on the lower left. You should see the “Add New Sensor” dialog box on the right.

The Storm 3 does not have pre-configured values for Keller sensors and must be set up manually. Click on the “Sensor Type” radio button on the Sort By dialog. On the drop-down, choose “Generic” followed by “Analog Sensor”, then click on the “Add Sensor” button. This should take you to the “Sensor Setup” page.



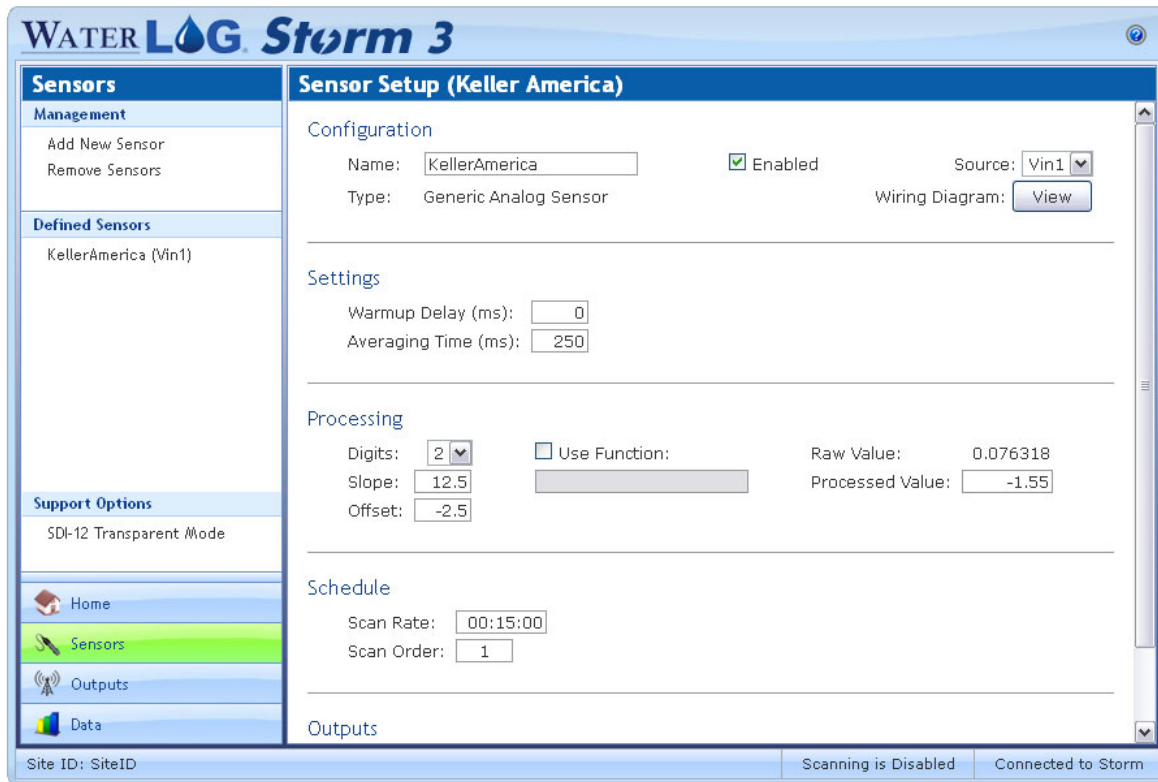


Figure 2) Analog sensor configuration for a Keller America 0 – 10’ range pressure transducer

The “Name” field is arbitrary, but choose something useful such as the serial number or description (ex. “KellerAmerica”). On the “source” dropdown choose the appropriate Vin 1 – 4 terminal. Make sure to check the “Enabled” checkbox.

In the “Settings” dialog, leave the default values (0 & 250) alone. The warmup delay applies only to the +5V reference voltage and isn’t used here.

Depth sensor calibration

In the “Processing” dialog, select “2” in the “Digits” dropdown for data output with 2 decimal places. Next you will need to enter the slope and offset which is how the logger converts a change in sensor output voltage to a value such as water depth in feet. The sensor manufacturer should include sensor calibration information with new sensors.

Regardless of whether the sensors output in volts or milliamps, the sensors must be calibrated with the correct slope and offset for proper results.

To calibrate pressure transducers, do the following:

1. Set up the 8-ft. deep test station (PVC tube capped on one end) and fill with water to within about 2-3” of the top.



2. Mark the PT cable at 1' and 7' intervals as measured from the bottom of the PT. Colored tape works well for this. Accuracy counts here, so re-measure after marking the cables and correct if necessary.
3. Wire the PT to the logger as described above. At this point you should observe a non-zero value in the logger "Raw Value" window.
4. Open up the "PT slope and offset calculator" spreadsheet. You should see something like this:

Calibration calculator	
Values in gray boxes are constants or calculated - do not adjust!	
Sensor Depth (ft)	Voltage from logger
1.0	
7.0	
Slope =	#DIV/0!
Offset =	#DIV/0!

5. Lower the PT to a depth of 1' and clamp it to the side of the tube such that it stays fixed at 1' depth.
6. Take the "Raw Value" voltage reading and enter it into the spreadsheet cell to the right of the gray "1.0" sensor depth cell.
7. Lower the PT to a depth of 7' and secure it with the clamp.
8. Record the raw voltage from the 7' reading in the cell to the right of the "7.0" depth. The spreadsheet should change to look something like this:



Calibration calculator	
Values in gray boxes are constants or calculated - do not adjust!	
Sensor Depth (ft)	Voltage from logger
1.0	0.2812
7.0	0.7609
Slope = 12.5	
Offset = -2.5	

9. Write down the slope and offset values from the spreadsheet on the sensor calibration log sheet and enter the values in the “Slope:” and “Offset:” dialog boxes of the logger.
10. Verify the sensor calibration by checking the “Processed Value:” output of the logger at 1’ and 7’ depth intervals. Record the verification values on the log sheet. Depths should be within 0.05’ of actual values; if not, check the marking measurements and try running the calibration again.
11. When the sheet is complete for the set of two sensors, file the calibration log sheet in the binder.

For new Keller Acculevel 4-20mA sensor with a 0-10 foot depth range wired with a 50-Ohm resistor, calibration co-efficients should come close to these values:

$$\text{Slope} = 12.5$$

$$\text{Offset} = -2.5$$

If co-efficients deviate from these values by more than 5%, check wiring, try a different resistor, and clean the sensors (if previously deployed in the field). It’s also a good idea to check the logger port with a known good sensor to make sure the logger is working correctly. If everything else checks out OK, the useful life of the sensor may have expired.

For non-Keller Acculevel sensors, slope and offset will vary with sensor type and range. If the manufacturer does not supply slope and offset values, they can be calculated with the “PT slope and offset calculator” spreadsheet and the sensor test calibration chart supplied with the instrument. If you need to convert milliamps to voltage, multiply milliamps * the resistor value and dividing that result by 1000. Your table should look something like this:



Table 1) Converting mAmps to Volts

Resistance (ohms) =	50	
Pressure Input (ft)	Voltage	mA Output
0.000	0.199	3.983
2.000	0.359	7.189
4.000	0.520	10.390
6.000	0.680	13.592
8.000	0.840	16.798
10.000	1.000	20.001

Enter the factory-supplied voltages from the test sheet that came with the sensor (voltage sensors) or the calculated voltage values from the spreadsheet (mA sensors), and you should get a result that resembles Figure 3.

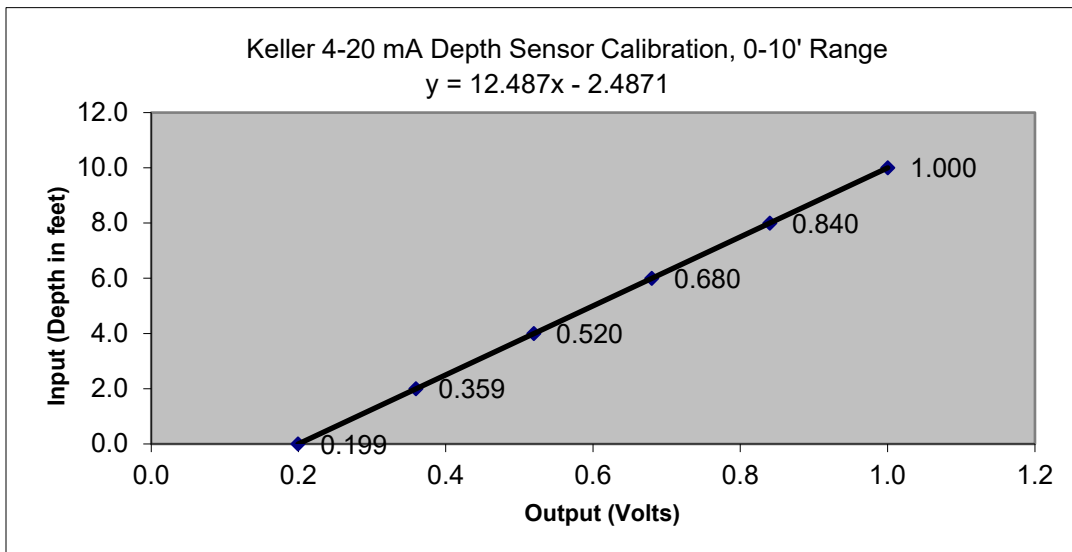


Figure 3) Slope and offset calculations using a trendline in Excel. These values correspond to factory calibration results, converted from mA to V as in Table 1, for a new Keller Acculevel pressure transducer.

Output Scheduling

In the “Schedule” dialog, enter the desired hh:mm:ss sampling interval. For depth, we generally sample every 5 minutes, or 00:05:00. The order box determines the sequence of instruments scanned.

In the “Outputs” dialog, enter a log rate that’s an integer multiple of the sampling frequency. This determines how frequently events get written to the log file. Set this value to 00:15:00 (15 minutes).



Other Analog Depth Sensors

Analog ports on the Storm 3 measure sensor outputs in the 0 – 5 V range. For sensors that output in milliamps such as the Keller Acculevel 4-20mA, refer to the “Keller Acculevel 4-20 mA analog depth sensor wiring” discussion below.



Figure 4) Generic analog sensor wiring for a sensor using a +5V reference.

Analog depth sensors are typically pressure transducer (PT) devices. Connect them to the logger through one of the four “Vin” (voltage in) ports. The figure below shows wiring for a generic analog sensor that uses a +5V reference.

Note: Many sensors, including the Keller PTs in widespread use, require a +12V supply! Consult the sensor vendor’s documentation for a description of the voltages and wire color for each wire. They may not match the diagram below!

SDI-12 Sensor Wiring

Multiple SDI-12 (Serial Digital Interface @ 1200 baud) sensors can be wired into the single SDI-12 input port on the Storm unit. Each SDI-12 sensor however must have a unique channel number, which is what allows multiple sensors to share one physical interface. Unlike analog sensors, which continually output a voltage or amperage based on environmental conditions, SDI-12 instruments respond to a command set and only sample on request from the controller (Storm logger in this case).



To see a wiring diagram, click on the Wiring Diagram “View” button as shown in the figure below.

SDI-12 Sensor Configuration

As of May 2013, we have two types of SDI-12 instruments deployed in the field: the H-312x pressure transducer and the H-3553 bubbler unit, both from WaterLog. This makes configuration quite simple, as one need only choose the appropriate WaterLog model number in the configuration dialog. Settings for each WaterLog instrument are pre-configured, so the only remaining options are the sampling and logging schedules and any offset adjustment (eg. Stage offset).



Figure 5) SDI-12 pressure transducer setup

Click on “Add New Sensor”, choose WaterLog as the manufacturer, then choose the appropriate sensor from the drop-down box.

The default channel number of an instrument shipped from the factory is usually 0; additional instruments attached to the SDI-12 port will need to have their channel ID’s reassigned. Reassigning a channel number requires that no other channel “0” instruments are connected during the channel reassignment process to avoid an ID



conflict with another channel “0” device. Once reassigned, the new channel ID should be stored permanently in the instrument’s flash memory.

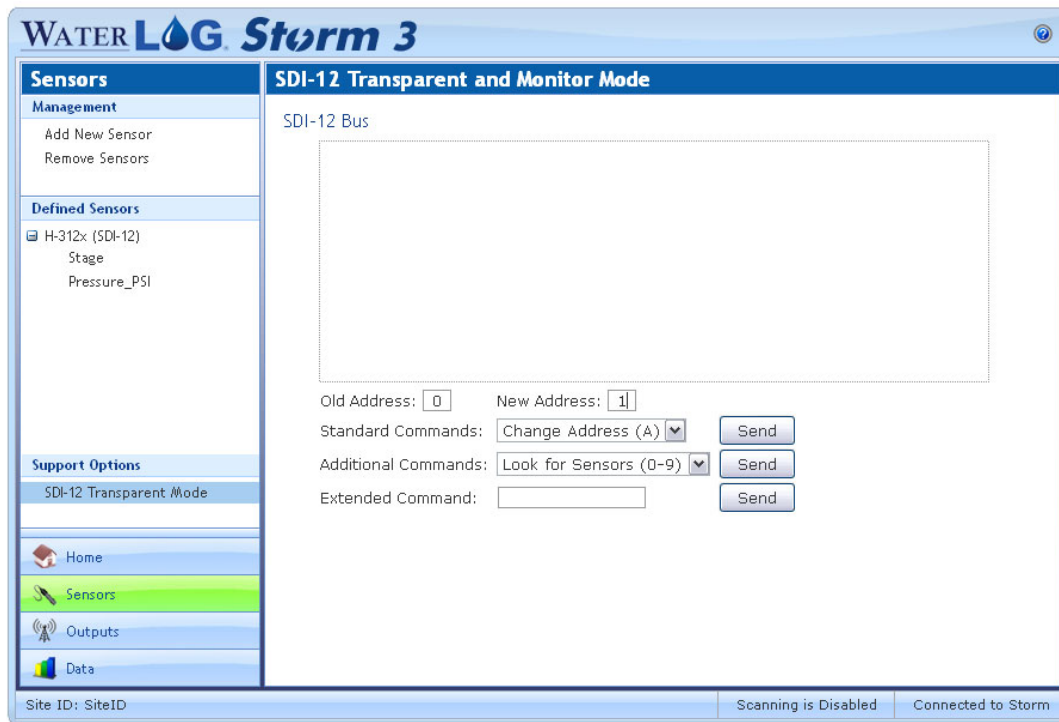


Figure 6) Reassigning channel IDs for SDI-12 instruments

Click on “SDI-12 Transparent Mode” then select “Change Address” from the Standard Commands dialog. Specify the old address (usually 0 if new from the factory) and a new address, then click the “Send” button. Commands sent to that sensor will now require the new address.



Tipping Bucket Rain Gauge Sensors

Tipping buckets use one of the four “Digital” inputs on the Storm logger.

Wiring the Logger for a Tipping Bucket

Connect one lead of the tipping bucket to the “Gnd” port on the Digital input and the other lead to one of the “D I/O” ports (usually #1), corresponding to the “Source” setting in the figure above. Which port you use doesn’t matter, as long as the wiring and the “Source” setting match.

Tipping Bucket Configuration

To add a tipping bucket, choose a generic Digital Counter from the Add New Sensor dialog as shown in the figure below.



Figure 7) Adding a digital counter for a tipping bucket rain gauge

After clicking on “Add Sensor”, you should see the Sensor Setup dialog. Set parameters as follows:

- Count Reset Interval = October 1
- Slope = 1 (counts tips only, no conversion)
- Offset = 0
- Scan Rate = 00:01:00 (scans once per minute)
- Log Rate (not shown) = 00:15:00 (15 minute interval)



The default slope is 0.01, representing 1/100th of an inch per tip. Since conversion from number of tips to rainfall rate and rainfall amount is handled by Contrail, we reset the slope to 1 so that the logger reports tips rather than 1/100th of an inch of rain.

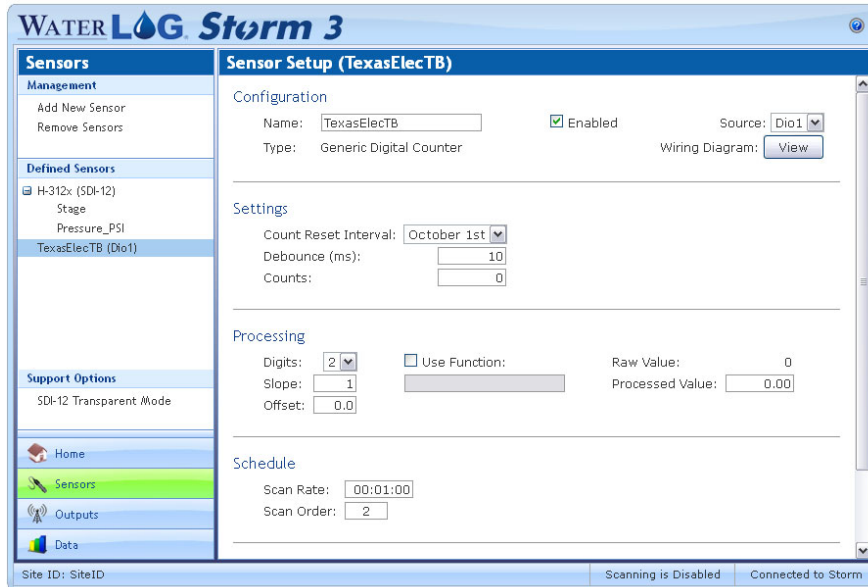


Figure 8) Slope, offset and scan rate for a tipping bucket

Storm Communications (Modem) Settings

As of June 2014 we used AT&T's GSM service for networking and SFE's Go Data service as the data repository. The Modem Setup screen applies AT&T. Set the modem parameters as follows:

- COM Port: Internal Cell
- Modem Type: GSM-GPRS
- Power Control: Automatic
- Power Mode: Automatic
- Service Provider: Custom
- Access Point Name: wap.cingular
- APN Username: wap@cingulargprs.com
- APN Password: Cingular1
- GMS Freq. Band: 850/1900 (default)
- Timeout Length: 10-30 (seconds)



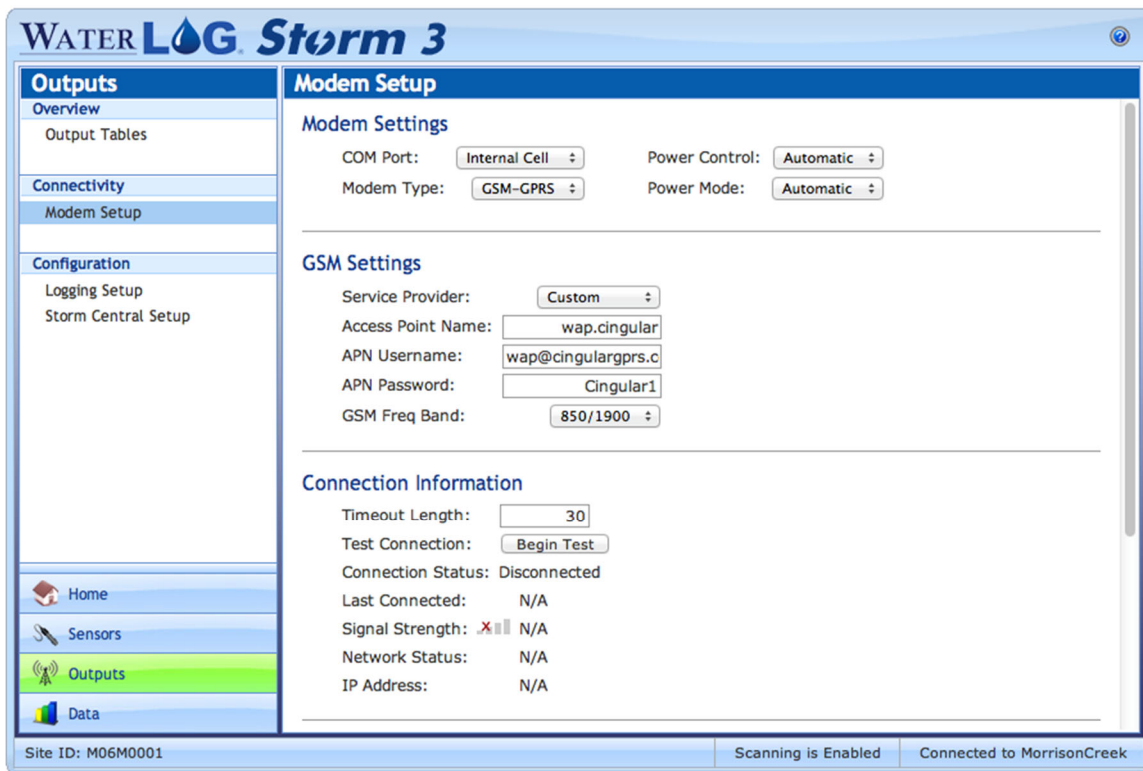


Figure 9) GSM-GPRS modem settings

The Storm Central Setup screen applies to Go Data or other service. Set parameters as follows:

- Transmit Rate: 00:15:00 (transmit every 15 min.)
- Transmitting: Enabled
- Server Type: Custom
- Server Address: 216.105.94.137 (IP address of Go Data's server)
- Server Port Number: 10050 (also supplied by Go Data)
- Optional Data Prefix: <blank>
- Date/Time Format: Epoch



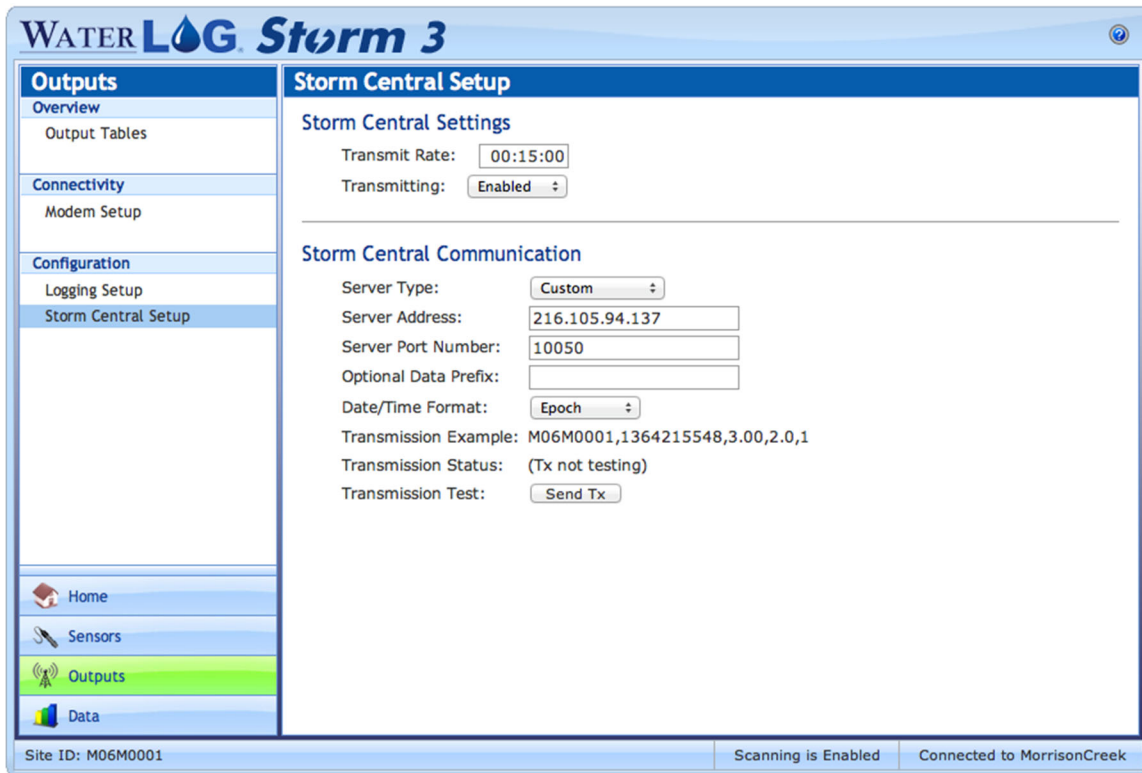


Figure 10) Storm Central setup for GoData

NOTE: These values (eg. IP address and port) will likely change if a provider other than GoData is used to capture data from the logger.

Click the “Send Tx” button to confirm a test transmission. The test may take up to 2 minutes.



Geotivity Flow Instrument Sensor Installation Procedure

Install the pressure transducers through the cable glands (replace cable glands if the seals look old). Use the above wiring diagram: White-Blue-Black-Blank (for Keller sensors) OR Black-White-Red-Blank (for Geotivity sensors). Plug the wired connections into J10 and J11 on the mainboard. J10 and J11 are connected with a ribbon wires from the mainboard to the I/O Board, which converts the readings to Analog 1 (Depth 1) and Analog 2 (Depth 2). If you are using J10 and J11 on the mainboard for your sensor inputs, the ribbon wire on the back of the mainboard is connected to J30 and J31, respectively.

Qtrek V3 Mainboard Wiring

- Float:
 - Connected to J21
 - Wiring: Left=White, Right=Black, with J21 as the top of the board
- Pressure Transducers:
 - Depth 1 is Analog 1, usually connected to J10 (unless it has been moved to another port due to problems with J10)
 - Depth 2 is Analog 2, usually connected to J11 (unless it has been moved to another port due to problems with J11)
 - Wiring: Left to right with J10 as the top of the board: White-Blue-Black-Blank (for Keller sensors) OR Black-White-Red-Blank (for Geotivity sensors)
- Communications Cable:
 - Connected to COM port on left side of mainboard
 - Wiring: White-Red-Black (with J21 as the top of the board)
- Velocity Sensors:
 - Usually in J12 and J13
 - Wiring: Clear-White-White-Clear



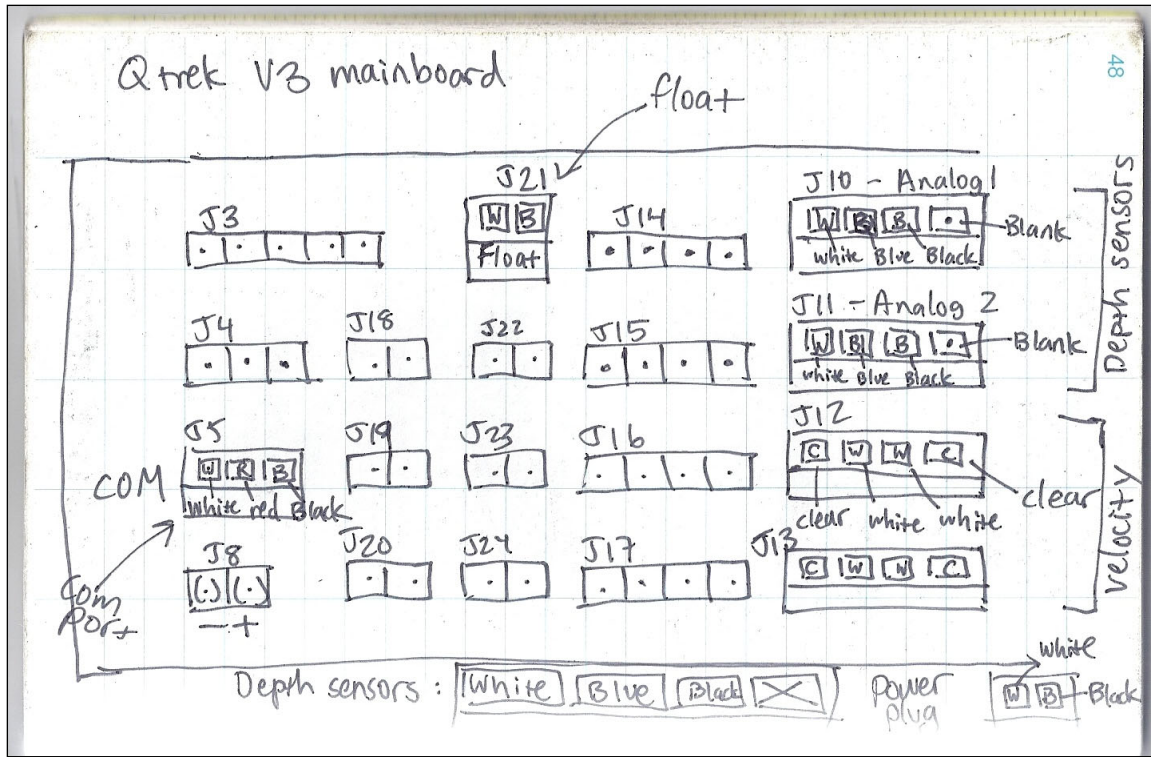


Figure 11) Geotivity wiring

Troubleshooting:

If there is a problem reading Depth 1 or 2 during the calibration process, try moving the Analog connector to another plug on the mainboard. For example, on one instrument, J10 for Depth 1 was reporting strangely (with a brand new sensor), so I moved the ribbon wire on the back of the mainboard from J30 to J32, and moved the Depth 1 Sensor that was previously in J10 to J12.



Geotivity Instrument Sensor Calibration

To calibrate pressure transducers, use the 8 foot test station.

At a minimum use a graduated cylinder about 50cm tall that fits both sensors together. Attach a tape (in decimal feet increments) to the tip of the sensor with a small clamp. The tip of the sensor is really inside the protective cap, where you can see the membrane. Clamp the two sensor cables together, then add water so that the distance from the sensor membrane to the top of water is 40 cm (400 mm). Begin the calibration programming, using Hyperterminal.

Generally, the longer the calibration depth, the better calibration will occur. Short calibration depths can result in extrapolation when field values exceed the high-end of values.

3) Program

4) Analog Sensors

3) Calibrate

1) Depth 1

units = ft [ENTER]

enter depth measurement 1 (*usually 1 ft*) - [ENTER]

enter depth measurement 2 (*usually 6 ft*) - [ENTER] [ESC]

Write down the Coefficient and Offset values in the field notebook.

2) Depth 2

repeat calibration procedures [ESC]

4) Calibrate Offset

units = ft [ENTER]

enter field measurement (*water depth measured from tip of pressure transducer*)
[ENTER]

7) Decimals

set to 2 (for ft) or 0 (for mm)



Note: Decimal settings are prone to getting dropped after calibration. If resetting units from mm to ft, be sure to change the decimals to 2.

Note: Entering 5) Coefficients will require re-entering the proper coefficients. Can be used where coefficient values are known (but this has not been thoroughly tested).

Check Calibration and Sensor Readings

1) Reading and Status

2) Analog Display

move sensors to different depths to see if the readings are correct

ALWAYS perform tests at multiple values following calibration.

If just calibrating offset in the field (after sensors are installed), check the reading to the field measurement; if the readings are not correct, try to calibrate offset again.



After replacing Battery at Geotivity Flow Stations

- Check modem settings
 - Listening Interval = 60
 - Listening Time = 60
 - GSM/GPRS options
 - PPP options
 - Servers
- Check sensor settings
 - Sample Rate = 5
- Check Serial Number
 - Configuration, password Qtrak
- Check sensor readings
 - 1) Reading & Status, 2) Analog Display
 - if readings not correct, Calibrate Offset (see calibration instructions – Program – Analog Sensor – Calibrate Offset)

Troubleshooting

When force uploading, if you get a “TCP Broken” error, it means that the cellular tower is possibly overloaded and has dropped your “call”; just download the data to the laptop, clear the memory, then force upload the most recent sampling data



To Reprogram Geotivity Rain Gauge

If the rain gauge is not reporting tips on GoData, and the raw data shows mm and m/s as units along with the raw data, it is likely programmed as a rain gauge. To fix this, go to:

3) Program

6) Rain Gauge Control

(this is where you can enable, disable and setup onboard rain gauges)

4) Enable RG

There may be another function in the rain gauge control menu that will let you set the default rain gauge settings, but try Enable RG first.

To see if you have fixed the programming, go to 1) Reading and Status 2) Analog Display and see if it displaying as a rain gauge, not in depth and velocity.



CALIBRATION

Dynamic Calibration with Rickly Hydrologic Test Cylinder

We use the Rickly Field Calibration Unit for Tipping Bucket Gage - Model 3514, with a 100mm/hr discharge nozzle. The description from Rickly follows:

In response to hydrologists requests for a device to calibrate 8" (203 mm) Tipping Bucket Gages in the field, Rickly Hydrological has developed a Field Calibration Unit. It is a light, portable device that allows the hydrologist to perform calibration tests effectively. The advantage of using a Field Calibration Unit is that Tipping Bucket Gages can remain fixed in their location and are therefore only out of service for a very short period of time.

To calibrate a rain gage, the Field Calibration Unit nozzle is unscrewed from the cylinder, which is in turn filled with water to the very top. The nozzle is then screwed back on the cylinder and placed through the holding plate which sits on the catch of any Tipping Bucket Gage.

When the tap on the Field Calibration Unit is closed, the air is entrapped in the cylinder. When the tap is turned, a vacuum is created and the water is released down through the nozzle and into the Tipping Bucket Gage. A preset volume per RICKLY (653 ml) water will discharge through the Tipping Bucket Gage. This process is to be repeated a second time for accurate calibration. Calibration conforms to ISO 7309 specifications.

The Rickly Hydrologic Test Cylinder (per Jessica): volume approx. = 553mL

Measured Test Cylinder Volume (to top of drain) = 590mL

For the 0.01" Rain Gauges (Geotivity), the Rickly tester should produce 67.19 tips (553mL/8.23mL per tip) or 71.69 tips at 590mL

For the 0.04" Tipping Buckets (most ALERTs), the Rickly tester should produce 7.58 tips (553mL/72.97mL per tip) or 8.09 tips at 590mL

Best approach is to use a specific measurement volume for each test and do the calculations.

Small syringes can be used to more precisely test the volume of each tip (see below).

Calibration of Geotivity Rain Gauges

The Geotivity Rain Gauges uses a tipping bucket rain gauge, manufactured by Texas Electronics (model TR-525USW). It has an 8" diameter collector with a resolution of 0.01". See a photo on the brochure: [TR-525USW rain.pdf](#). Wiring specs can be found at [Wiring Diagram Rain Sensor.pdf](#)



Field Calibration of Geotivity Rain Gauge

The User's Manual for the TR-525USW wrote the following about field calibration of the unit (from [User Manual TR-525.pdf](#)).

Absolutely accurate calibration can be obtained only with laboratory equipment, but an approximate field check can be easily made. The tipping bucket mechanism is a simple and highly reliable device. The transmitter must be located in a clear area, away from trees, buildings, etc. It must also be mounted level. Accurate readings will not be obtained unless the transmitter is mounted in a level position. The mechanism must be clean. Any accumulation of foreign material, dust, etc. will alter the calibration of this unit. The transmitter must be calibrated with the rate of flow of water through the tipping bucket mechanism under control. At least 36 seconds should be allowed to fill one side of the tipping bucket. This represents a maximum flow rate of one inch of rain per hour. If the flow rate is increased, then the instrument will read low (if properly calibrated).

Decreasing the rate of flow will not materially affect the calibration. The reason for this is obvious if the tipping bucket assembly is observed when the weight of this water starts to tip the bucket. Some time is required for the bucket to tip (a few milliseconds). During the first 50% of this time, water flows into the empty bucket. The amount of water flowing during the first 50% of the time is error, the faster the flow rate, the greater the error. Now at flow rates of one inch per hour (100 bucket fillings) or less, the water actually drips into the bucket rather than flowing. Under this condition, the bucket tips between drips, and no error water is added to a full moving bucket.

Static Calibration of the Geotivity Rain Gauges:

The bucket size is .01" of water per tip, which equals a volume of 8.23mL. Using a 10mL syringe, fill each bucket with 8.23mL of water (very slowly). Find out which sides need to be adjusted in height. Use a 5/64" Allen wrench in the holes underneath the screws holding up the buckets (on the bottom of the white rain gauge tipping bucket)



Dataloggers

Programming Qtrek Instruments

To program the Geotivity Flow and Rain Gauge Instruments, use the following protocols. These protocols can also be found in [SFE GoData Meter Operations Manual.pdf](#)

Plug the Serial-to-USB connector in to the proper USB port on the computer and connect the serial cable adapter to the instrument. Make sure the connection is tight between the serial cable and the serial-to-USB adapter. This often comes loose and causes connection issues. If the battery is connected properly and the 3V battery inside the unit is not drained, you should get a connection to the laptop using Hyperterminal. If you see a bunch of symbols scrolling across the screen (and you have already checked the batteries), check the serial-to-usb connection and then try cycling the power through the instrument by unplugging and then plugging the battery back in.

Using Hyperterminal:

Open Hyperterminal program

New Connection – name it anything you want like “GoData Connection”

Bits – 57600

Data Bits – 8

Parity – None

Stop Bits – 1

Flow Control – None

Hit enter repeatedly (even if it asks for username) to connect with instrument

To register modem to network:

3) Program

4) GSM/GPRS options

2) GPRS APN = wap.cingular

1) GSM PLMN = 40576

5) PPP options



- 1) username = wap@cingulargprs.com
- 2) password = Cingular1
- 6) Servers
 - 1) Primary
 - 1) Server IP = 216.105.94.137
 - 2) Server Port = 10,001
 - 2) Secondary
 - 1) Server IP = 216.105.94.137
 - 2) Server Port – 10,001
- 7) Upload configuration = Y
- 9) Factory Modem Test (it will read “I don’t know you” error, which is OK)

To Change Date/Time and Site Name Information

- 3) Program
 - 1) Site Information
 - 2) Date/Time

To Program Serial Number

- 4) Configuration

Password = “qtrak” (if that fails try “QTrak” or “Qtrak”)

 - 1) Serial Number

Set instrument sample rate and modem timing:

- 3) Program
 - 3) Sensors

Sampling Rate = 5



4) Wireless Modem

Listening Interval = 60 min

Listening Time = 60 sec

To Force Upload (download, then clear memory, then force upload)

2) Download

3) Raw File (Xmodem 1k)

Right click on “Starting xmodem”; Select “receive file”; Browse to select file on computer to save data file to; click “receive file” then name the file as the Station Name

An alternative method to capture the data is found in the Hyperterminal command **Transfer/Capture Text** and follow the pathway for storing the captured text file.

When finished downloading, will return to main menu. If the instrument restarts while downloading, the error limit will be exceeded and you will have to start download over again. If instrument keeps restarting, just continue to clear the memory.

3) Program

6) Reset Memory

wait at least 5 minutes

1) Readings and Status

4) Force Upload

force upload is successful when you see a date and time stamp after “Sending Data” in the report list. If no date and time stamp, run force upload again.

Programming Float

- Set float alarm: Closed = High Alarm; Open = Low Alarm
- Enable Closed Alarm to set float to be triggered when water rises to a certain level
- Enable Open Alarm to set float to be triggered when water drops below a certain level



Flow Monitoring Stations

Installation & Configuration Notes

CAUTION: Note that solar panels provide up to 19V of power supply whenever light is available. When disconnecting power supplies or changing batteries, cover the solar panel and test current to reduce the risk of shocks or current surges to the instrument (or yourself).

Stormchasing Procedures

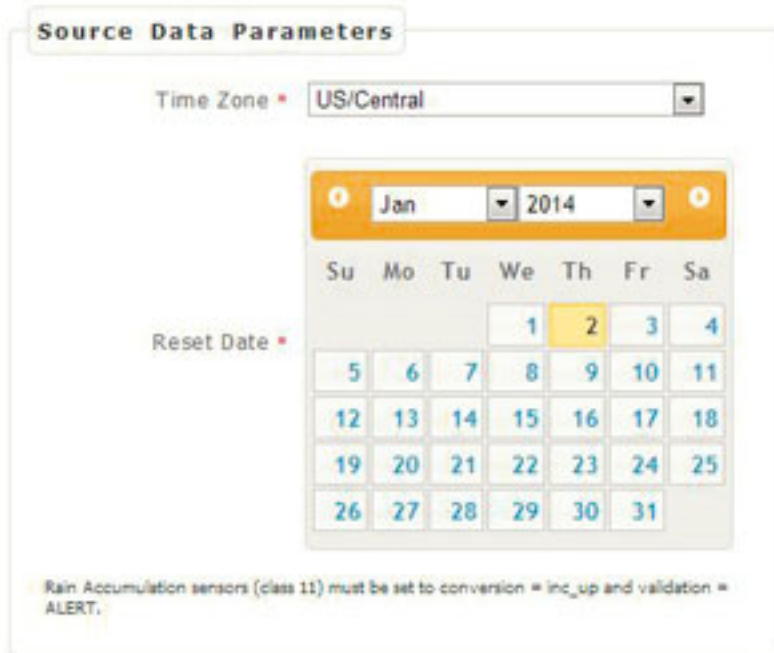
Validation Observations

Discharge Measurements



Contrail Administration

RESETTING RAIN ACCUMULATION



Source Data Parameters

Time Zone • US/Central

Reset Date •

Jan		2014				
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Rain Accumulation sensors (class 11) must be set to conversion = inc_up and validation = ALERT.

1. **Login** to Contrail. In the main menu, select **Administration** to open the administration interface. This option is visible only if you have Administration privileges.
2. In the Administration menu, select **Systems**. In the Input System list, select a system to reset.
3. Under Sensor Type, select **Rain Accumulation** (Sensor Class 11).
4. Click the **Rain Reset** button. The Reset Rain Accumulation window opens.
5. Under Source Data Parameters, ensure that the time zone matches your system's input time. Then, in the calendar, choose the desired reset date. Point and click the day of the month, e.g. "1". The number of the selected day and surrounding box change color (gold).

Click Save.



Field Forms and Templates

Discharge Measurement Template

Rating Curve Template

Culvert Chalking Measurement Form

Field Calibration Checklist

Field Inspection Checklist

Validation Observation Form



Maintenance & Calibration Schedules

Bubbler Installation

Bubbler units get installed in a 30" x 30" x 8" lockable housing. The bubbler unit, desiccant tube and logger housing should be bolted to the housing insert before bolting the insert into the lockbox itself. Other items in the lockbox will include the power supply (12V battery) and any other pressure transducer cables and pressure equalizer boxes (eg. WaterLog H-312x).

Bubbler Parts List

The housing to protect the bubbler line can be constructed from off-the-shelf items available at most hardware stores.



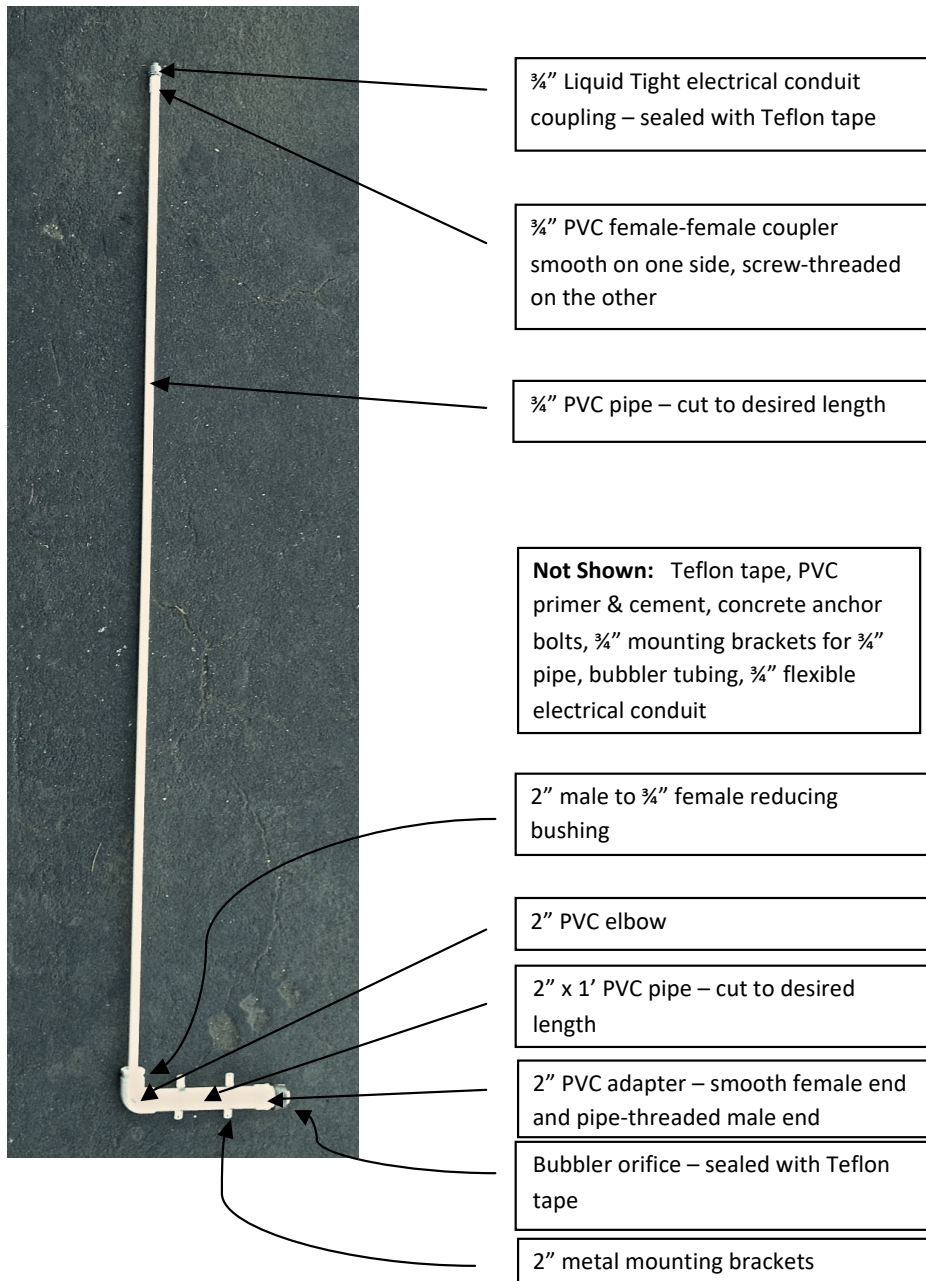
Table 2) Bubbler parts list and supplier

Qty	Description	Supplier
2 ea.	¾" Liquid Tight electrical coupling	Hardware store
1 ea.	¾" PVC female-female coupler smooth on one side, screw-threaded on the other	Hardware store
100'	¾" flexible electrical conduit – cut to desired length	
10'	¾" PVC pipe – cut to desired length	Hardware store
1 ea.	2" male to ¾" female PVC reducing bushing	Hardware store
1 ea.	2" PVC elbow	Hardware store
1'	2" PVC pipe – adjust length as needed	Hardware store
1 ea.	2" PVC adapter – smooth female end and pipe-threaded male end	Hardware store
2 ea.	2" mounting brackets – adjust quantity as needed	Hardware store
4 ea.	¾" mounting brackets –adjust quantity as needed	Hardware store
1 ea.	Teflon tape	Hardware store
1 ea.	PVC primer	Hardware store
1 ea.	PVC cement	Hardware store
8 ea.	¼" x 2-1/4" wej-it concrete anchor bolts	Hardware store
4 ea.	5/16" x 2-½" Serve-a-lite sleeve anchor bolts	Hardware store
1 ea.	Bubbler orifice	WaterLog
100'	Bubbler tubing	WaterLog

Bubbler Orifice and Housing Components

Here is a photo of a bubbler housing constructed from various pieces of PVC pipe. We recommend connecting all the parts without any PVC cement until all parts are tested for a good fit.





Misc. Notes

Information Sources

Mike,



If they want to go to some sort of recording gage, the price point quickly jumps to \$200-500 per gage. (<http://www.onsetcomp.com/products/data-loggers/rg2-m>) For their purposes, the county might consider the personal gages on www.wunderground.com

Here's a link that will show Wunderground gages throughout the County.

<http://www.wunderground.com/wundermap/?lat=38.672901&lon=-121.148804&zoom=10&wxsn=1>

All the daily data are available on the internet for these gages.

Another avenue is the CoCoRaHS program which has several daily reporting gages in Alameda County

<http://www.cocorahs.org/Stations/ListStations.aspx>

Data from these gages are also available on the Internet.

If all they want is general verification, these should work for them. If

they want more control over operation and quality, they'll have to jump to more expensive gages.

Weather Station Vendors

High Sierra

Hydrolynx

Sutron



Hach/Ott

Campbell Scientific

Water Log

[AcuRite](#)

[Ambient Weather](#)

[Columbia Weather Systems](#)

[Davis Instruments](#)

[New Mountain Innovations](#)

[Onset Weather Stations](#)

[Oregon Scientific](#)

[ProWeatherStation™](#)

[RainmanWeather Store](#)

[Rainwise](#)

[Scientific Sales, Inc.](#)

[Star City Enterprises, LLC](#)

[Texas Weather Instruments](#)

[Texas Electronics](#)

[WeatherHawk](#)

[Weather Information Systems](#)

[Weather Shack](#)

[WeatherShop](#)

[Weatherwise Instruments](#)



