



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

**Board of Directors Meeting**

**February 2018**



# Minutes



Minutes for Meeting of Board of Directors

January 11, 2018

**A. ROLL CALL**

President Woo called the meeting to order at 9:00 a.m. Director Rupp conducted the roll call. Directors Fuller, Hecathorn, Rupp and Woo were present. Director Latt was absent. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris and Board Secretary Sherrie Sobol were also present. Operations Supervisor Mario Palmero and Maintenance Mechanic Russell Roberts were present for a portion of the meeting. Pat Kaspari and John Winzler of GHD were present for a portion of the meeting. Mitch Barker of PARS was also present for a portion of the meeting.

**B. FLAG SALUTE**

President Woo led the flag salute.

**C. ACCEPT AGENDA**

President Woo stated the Operations Supervisor Presentation is time set for 10:30 a.m. On motion by Director Rupp, seconded by Director Fuller, the Board voted 4-0 to accept the agenda.

**D. MINUTES**

On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to approve the minutes of December 14, 2017.

**E. PUBLIC COMMENT**

No public comment was received.

**F. CONSENT AGENDA**

Director Rupp pulled the article "Unfiltered Fervor: The Rush to Get Off the Water Grid". He found it interesting that people are taking water direct from the air and streams and that it is being marketed. Director Hecathorn noted that in the past people were encouraged not to drink direct from streams and now it's being promoted. Director Fuller was amused by the comment that it's a benefit when the water turns green. On motion by Director Hecathorn, seconded by Director Fuller, the Board voted 4-0 to approve the Consent Agenda.

**G. CORRESPONDENCE**

CPUC ReMAT

Mr. Friedenbach shared the ACWA Notice and the email from JTN Energy regarding the California Public Utilities Commission (CPUC) ruling on implementing the Renewable Market Adjusting Tariff (ReMAT). In response to a December 6, 2017 Federal District Court decision, the CPUC declared that investor owned utilities must not execute any new ReMAT contracts, hold any new ReMAT program periods, or accept any new ReMAT applications. Per the CPUC letter dated December 15, 2017 "The court's order does not affect the validity of already-executed Re-MAT contracts, and existing Re-MAT contracts must continue with their full force and effect." Mr. Friedenbach commented the District signed up just in time. Both ACWA and JTN Energy will keep us apprised of the situation.

Planning Commission – Mercer Fraser Project

Mr. Friedenbach discussed the Mercer Fraser project item on the Humboldt County Planning Commission agenda. The Commission is scheduled to decide upon a zone reclassification to change the Mercer Fraser APN 504-161-001, from Agriculture General to Heavy Industrial with a Qualified combining zone. Additionally, they will consider a Special Permit to develop and operate a cannabis



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products manufacturing facility of approximately 5,000 square feet in size. According to the Planning Commission agenda, the proposed facility will produce medical cannabis products using both nonvolatile and volatile solvents. The facility may operate 24 hours a day during peak season. Mr. Friedenbach stated the District does not have an issue with the current non-conforming use by Mercer-Fraser. The District is adamantly opposed to heavy industrial development adjacent to our source water intake infrastructure on the Mad River. He clarified that the District is opposed to the zoning change. He shared the letter he sent to the Planning Commission opposing the change. The District's interest involves the health and safety needs to protect and preserve the high-quality water source that serves 88,000 customers. The Board discussed the importance of this and stated they too would attend the Planning Commission Hearing. Mr. Friedenbach shared some of the support letters from the Municipal Customers and thanked the Board for their support on this important issue. Director Fuller suggested Mr. Friedenbach contact the Blue Lake Rancheria on this issue as well. Mr. John Winzler commented as a member of the public. He advocated for the District to take an aggressive opposition stance on the issue. He stated the District tried to acquire the property many decades ago in an effort to protect their resources, however, Mercer Fraser did not want to sell the property. He added that there is an excess of unused industrial zoned property in Humboldt County. The Board thanked him for his input.

**H. CONTINUING BUSINESS**

Water Resource Planning

Mr. Friedenbach stated there are no updates. The District is still waiting to hear back from the Wildlife Conservation Board regarding the instream flow grant application.

Cannabis Grows

Mr. Friedenbach shared the article "Legal or not, cannabis takes a toll on Northern California watersheds". He stated the District has worked with Bryan McFadin, referenced in the article. The article also notes that the water board's enforcement unit is understaffed. Director Rupp stated perhaps it's time the Board consider the option of funding enhanced enforcement on the Mad River. Director Fuller inquired what the benefit of this would be for the District. Director Rupp replied it would reduce illegal grows that impact the quality of water and the illegal withdrawal of water from Mad River watershed. He thought it would be worthwhile to discuss the option with the Municipal Customers. President Woo agreed and requested staff look into enforcement options available.

Bartle Wells Associates – MSRB Rule G-10 Notification

Mr. Friedenbach stated the letter from Bartle Wells is a required annual notification regarding the Municipal Securities Rulemaking Board (MSRB) that went into effect in October 2017.

**I. NEW BUSINESS**

Officer and Committee Assignments

The Board reviewed the current Officer and Committee Assignments list. No changes were made to officer roles. They discussed the current vacancy on the ACWA Region 1 Board. Director Fuller inquired if the Board felt it were valuable to have a representative on the Region 1 Board. Director Rupp stated the advantage is that we would have a voice in regards to regional issues and ACWA knows that we are actively involved. Director Hecathorn concurred and feels it is important to have a presence on the Board. After a brief discussion and with support from the Board, Director Rupp stated he would apply for the Region 1 Board vacancy. He added that if and when Director Fuller would like to serve on the Board, he would be willing to step down. The Board appointed Director Hecathorn and President Woo to the Education and Outreach





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Committee. The Board also appointed Director Fuller to replace former Director Laird on the currently inactive Joint Agency Aquatic Invasive Species Committee.

Presentation of District Jacket to Russell Roberts

Mr. Davidsen introduced Russell Roberts, the District's newest maintenance mechanic. Mr. Davidsen stated that Mr. Roberts is an excellent fit to the team and with a D2 T2 and crane certification as well a Class A license. The Board welcomed Mr. Roberts and presented him with a District jacket. Mr. Roberts thanked the Board and stated he was happy to part of the District.

CLOSED SESSION

The Board went into closed session at 3:35 p.m. to discuss the Public Employee Performance Evaluation for the General Manager (pursuant to Section 54957(b)(1)).

Open Session

The Board returned to Open Session at 4:10 p.m. There was no reportable action.

J. REPORTS (from Staff)

1. Engineering

IMG Reservoir Roof Replacement /Painting

Mr. Kaspari stated the Notice of Completion has been filed. The final payment to Paso Robles Tank will be made later this month.

Blue Lake-FG CSD Water Line Replacement over Mad River (funded by Prop 84 NCIRWMP grant and FEMA Hazard Mitigation Grant)

Mr. Kaspari stated the Geotech report is done. Staff will review it then bring the bid packet to the Board for approval at the February meeting. The goal is to approve a contract at the March meeting. Once a contractor is approved, the District will host another public outreach meeting.

Surge Tower Replacement/12kV Replacement/Collector Mainline Redundancy Hazard Mitigation Grants

Mr. Kaspari stated that NEPA for the Surge Tower was scheduled to be completed in January. He is awaiting confirmation of the project timeline.

Staff was asked to do an underground service alert for the 12kV Project. The Cultural Resources report is just beginning and will be several months before NEPA is done.

Cal OES received the grant application for the Collector Mainline Redundancy Hazard Mitigation Grant. Mr. Kaspari shared the email from CalOES stating project determinations will be made in mid-to-late January with notification in February.

Matthews Dam Spillway Workplan

Mr. Kaspari stated the Comprehensive Spillway Condition Assessment Status Update for the R.W. Matthews Dam was submitted to FERC. The document is considered a status update since additional information is still needed. Staff requested an extension to April 30, 2018 but have not heard back. The Comprehensive Spillway Condition Assessment is now required since the Oroville Dam incident. GHD hosted a webinar presentation of the forensic analysis



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of the Oroville Dam failure and several District staff attended as well. Mr. Kaspari stated he doesn't believe that what happened at Oroville can happen to the District spillway. The District spillway is thicker and has water stops. It also has competent bedrock and good rebar as well. Director Hecathorn added the District uses the spillway every year and Oroville did not. Director Rupp added he is impressed with the diligence on maintenance and repairs of the spillway.

Status report re: other engineering work in progress

Mr. Kaspari stated a new round of Hazard Mitigation Grants is coming up. The District plans to submit a Notice of Interest for the seismic retrofit of the 1 MG and 2 MG tanks for \$3.5 million total. If awarded, the District's portion would be \$875,000. Director Rupp inquired if this was discussed with the Municipal Customers. Mr. Friedenbach confirmed it was.

2. Financial

Presentation by Mitch Barker re: CalPERS Retirement & related unfunded liability

Ms. Harris provided a staff report regarding the CalPERS unfunded liability. She shared a comparison of potential earnings between two different investment mechanisms, the County and a possible new trust fund. She then introduced Mr. Mitch Barker from Public Agency Retirement Services (PARS) who provided an educational presentation regarding the District's CalPERS unfunded liability. Mr. Barker discussed the proposal for PARS Pension Rate Stabilization. The PARS Trust Team consists of PARS, US Bank and High Mark Capital Management. Mr. Barker shared several reasons why the District should prefund the pension obligations via the PARS IRS-approved 115 trust fund. The top five reasons include: 1) addresses the rising pension contribution rates and unfunded liabilities; 2) potential for greater return than leaving in the general fund; 3) "rainy day" access if needed for emergency purpose; 4) rating agencies look favorably at prefunding-improved balance sheet; and 5) District has complete local control over assets. Mr. Barker discussed the program fees and noted there is no set up fee. He provided their client list of other Special District's and noted that Humboldt County is a client as well as Sonoma County. If the District is interested, he will arrange for Andrew Brown, Senior Portfolio Manager to meet with the Board so they are comfortable selecting a rate of return level. Mr. Barker reiterated several times that there is no guarantee on investments. Director Rupp thanked him for a great presentation and inquired if PARS was an ACWA Preferred Vendor. Mr. Barker stated he believed they were. The Board discussed the investment options and on motion by Director Rupp, seconded by Director Hecathorn, voted 4-0 to participate in the PARS 115 Trust Fund to "pre-fund" the CalPERS pension liability, using a portion of the funds currently residing in the County Investment Funds. Contributions to this fund will be considered a component of the annual District budget beginning with the FY 18/19 budget. Staff will bring a revised Investment Policy to the Board next month along with the appropriate trust fund agreements. Director Fuller thanked Ms. Harris for her staff reports. She stated the reports are well laid out and easy to understand.

Capital Improvement Plan (CIP) 2018

In 2011 the Board approved the first comprehensive long-term CIP. The CIP is a multi-year planning document intended to identify projects that will ensure the regional water system reliably meets the communities' water supply needs in a cost-effective manner. The CIP is intended to guide and support future District budgets, and assist the District's Municipal Customers with their financial planning and rate studies. Mr. Friedenbach requested the Board's input on how to best review the updates. The Board suggested providing an overview with



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details as needed. Mr. Friedenbach provided the project costs and sequences for fiscal years 2016/17 to 2035/36. He and staff answered questions from the Board on various projects. The Board expressed appreciation for the time and effort put into updating the CIP and commended staff for a job well done. On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to accept and approve the updated 2018 CIP.

Financial Report

Director Rupp and Ms. Harris provided the December 2017 financial report. Director Rupp discussed the project financials and Ms. Harris discussed the operational financials. Director Fuller reviewed the bills and stated all was in order. On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to approve the December financial statement & vendor detail report in the amount of \$414,029.33.

Casselle Software Contract

Last month the Board voted to upgrade the current utility billing and finance software to Casselle Software. Ms. Harris worked with a representative from Casselle Software to develop a contract that includes terms acceptable to the District staff. She highlighted key sections of the contract and recommended approval of the contract. She stated a portion of the one-time implementation fee and ongoing maintenance fees will be allocated to the Fieldbrook-Glendale CSD for the billing services the District provides for them. The general manager of Fieldbrook-Glendale CSD has been informed of this and is agreeable to the cost share. On motion by Director Hecathorn, seconded by Director Fuller, the Board voted 4-0 to approve the contract with Casselle Software (including training and first year maintenance fees) for the District portion \$52,959.

Humboldt County Interest Apportionment

Ms. Harris shared the Quarterly report for July through September 2017. The funds earned an annualized interest rate of 1.28%.

3. Operations

Mr. Davidsen provided the December Operational Report. Work is continuing on the SCADA upgrade with additional training later this month. The Safety Meeting topic was SCBA: Donning and Doffing. Three people from the maintenance staff attended Confined Space and Trenching and Shoring classes put on by United Rentals. Mr. Davidsen stated United Rentals does good job and he appreciates them providing training opportunities. Mr. Davidsen attended the Arcata Flood Planning exercise. The exercise was based on the failure of R.W. Matthews Dam, as the worst possible flood event that could affect Arcata. He stated Arcata is doing a good job with their emergency preparedness planning efforts.

Discuss and possibly authorize purchase of new pump for Collector 1

Mr. Davidsen stated the Collector 1 pump is slated to be replaced as part of the Collector 1 rehabilitation project this year. Once ordered, it will be approximately 18 weeks before it arrives. Mr. Davidsen requested authorization to order the pump within the next few months so it can be installed by early fall, before October 15<sup>th</sup>. The pump will be budgeted for next fiscal year 18/19 and received after July 1, 2018. Payment will be due upon receipt and therefor be in the FY 18/19 budget. The estimated cost of the pump is \$162,000 plus freight. On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to authorize ordering the pump for Collector 1.



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Discuss and possibly authorize purchase of new transformer for Collector 2

Mr. Davidsen stated last October, the Collector 2 transformer failed. Collector 2 is currently being operated with a rented transformer. The rental cost is \$1,500 per month plus shipping costs from and to Bakersfield. Again, a new transformer is likely to be 12-16 weeks out from order date to being shipped to the District. Staff is requesting authorization to purchase the transformer out of reserves to either be paid back from a warranty claim, insurance, or out of next year's budget. Staff is still deciding on which transformer would best suit the District needs and therefore do not have a cost. It will be somewhere between \$50,000 and \$100,000. On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to order a new transformer not to exceed \$100,000 paid in FY 18/19.

Operations Supervisor Presentation – Turbidity Reduction Facility (TRF) start up process

Last June, Operations Supervisor Mario Palmero provided a presentation on the TRF shut-down process. Today's presentation was about the TRF start-up process. He discussed the regulations, steps prior to start up, steps of start-up and what occurs once the TRF is online. He stated there are over 170 steps to make the process happen. He shared that he and staff are working on a programming code for SCADA for chemical loading. They have the data and need to integrate in the SCADA system. This will provide greater detail on overall filter performance. The Board asked several questions and thanked him for a great presentation.

**K. MANAGEMENT**

CSDA – January 2018 Brief

Mr. Friedenbach shared the CSDA January 2018 Action Brief. One of the items listed under the legislation section is SB 606 (Skinner) that requires an urban retail water supplier, including special districts, to: 1) calculate an urban water use objective and 2) actual urban water use, no later than July 1, 2022 and by July 1 each year thereafter. The CSDA is opposed to this unless amended. Staff will follow this as well.

**L. DIRECTOR REPORTS & DISCUSSION**

**1. General**

General comments or reports from Directors

Director Fuller stated she will be attending the Watershed Educational Day on February 3rd, part of the Steelhead Days. She inquired if the District would be interested in having a table at the event. The other Directors and staff requested she email them additional information.

**2. ACWA – JPIA**

Director Rupp stated there are no JPIA meetings to report out on.

**3. ACWA**

Mr. Friedenbach shared the article in ACWA news about "Filmmaker Thebaut Chronicles 'A World Without Water'" Mr. Thebaut was the speaker at the opening breakfast at the 2017 ACWA Fall Conference and previewed a segment of his film at the breakfast. Mr. Friedenbach stated he would contact Humboldt State University to see if they might be interested in sponsoring a screening of 'A World Without Water'.

Mr. Friedenbach shared the ACWA list of committee members. He noted that Director Rupp is the Vice-Chair of the Finance Committee.



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On January 9<sup>th</sup>, ACWA hosted a webinar on the new state law regarding school lead testing. Operations Supervisor Mario Palmero and Assistant Operations Supervisor Larry Raschein attended.

Mr. Friedenbach shared the article regarding a below-average December snowpack. The article stated it is still too early to draw conclusions regarding the type of season ahead. It also noted that end of year water storage is at the highest since December 2012.

Director Rupp stated he would be willing to serve on the ACWA Region 1 Board as noted in the Officer and Committee Assignments section.

**4. Organizations on which HBMWD Serves: RCEA, RREDC**

RREDC did not have a December meeting. President Woo reported out on RCEA. She stated offshore wind production is going to be a big topic. She stated she is willing to and has committed to remaining on the RCEA Board as president for an additional year. She questioned the Districts nexus to RCEA. The Board discussed this and Director Hecathorn stated she sees the District participation in RCEA similar to that of RREDC. Director Rupp added the District is part of the Humboldt County economic infrastructure. Given this, it makes sense that we are asked to participate with RCEA and RREDC. Director Rupp commended President Woo for her efforts.

**ADJOURNMENT**

The meeting adjourned at 4:11 p.m.

Attest:

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Sheri Woo, President

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J. Bruce Rupp, Secretary/Treasurer



Minutes for Special Meeting of Board of Directors

January 17, 2018

**A. ROLL CALL**

President Woo called the meeting to order at 5:30 p.m. Director Rupp conducted the roll call. Directors Fuller, Hecathorn, Rupp and Woo were present. Director Latt arrived at 5:33 p.m. General Manager John Friedenbach, Superintendent Dale Davidsen, Business Manager Chris Harris and Board Secretary Sherrie Sobol were also present.

**B. FLAG SALUTE**

President Woo lead the flag salute.

**C. ACCEPT AGENDA**

On motion by Director Rupp, seconded by Director Hecathorn, the Board voted 4-0 to accept the agenda. Director Latt was not present for the vote.

**D. PUBLIC COMMENT**-This is an opportunity for the public to speak on items not on the agenda.

Mr. Kent Sawatzky stated he believes policies and procedures need to be clarified. He spoke with Natalie Duke, county counsel and he hopes she will provide the County with information on how a Board or Council member how to recuse yourself from a topic, what is a quorum and what an abstention from voting really means. He also stated he doubts this happens at the water district, but county staff often have their own agenda and only provide their side to boards and councils. This needs to stop so boards and councils can make informed decisions.

**E. NEW BUSINESS**

Prior to discussing the items under New Business, Director Latt declared a possible conflict of interest. Mercer Fraser is a client of the law firm he works for and therefore he recused himself from the meeting and left the premises.

Planning Commission Re-Zoning decision on APN 504-161-010, Mercer-Fraser property

President Woo acknowledged the many members of the public who were in attendance at the meeting. She shared the process for discussion. She stated the Board would hear from staff first, then open up the discussion for public comments, then discuss amongst the Board prior to making a decision. Director Rupp stated the protection of our asset, clear, clean water is our most important mission and highest priority.

Mr. Friedenbach provided the staff report. Initially staff believed the fee to file an appeal was \$750 however have since learned the cost is actually \$2,263 per staff at the Humboldt County Planning Department. He shared the letter from Mark Harrison, attorney for MCMP, LLC, (Mercer Fraser) to John Ford and Michelle Nielsen in the Humboldt County Planning Department, responding to our later dated January 3, 2018. He also provided the Board the latest news articles on the subject. He reviewed the process to appeal and shared a map of the Mercer Fraser property in relation to Collectors 1 and 2 and the surface intake to orient the Board and public as to the where property is. He stated the main purpose of this meeting is consider if the Board wants to appeal the Planning Commission's recommendation to change the zoning on the Mercer Fraser property. Staff presented four options to the Board: 1) accept the mitigation measures added at the Planning Commission meeting (the District has not received these documents yet); 2) file an appeal by January 26, 2018 (10 business days) and pay the \$2,263 filing fee. This option will require additional staff time and legal counsel; 3) negotiate further mitigation with Mercer Fraser; or 4) a combination of option 2 and 3. Mr. Friedenbach reminded the Board that Mr. John Ford, Humboldt County Planning Director is at the meeting and may be able to answer some questions. Director Rupp requested clarification on the appeal. He stated the Planning Commission recommended rezoning under the new General Plan and



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permitting for the project. Although the Planning Commission recommended rezoning, it is the Board of Supervisors that have the final decision. This means we are appealing the project at this point, since the Board of Supervisors will decide on the rezoning. Staff confirmed this.

A dozen members of the public addressed the Board. The common concern was that if rezoned from agricultural to heavy industrial, any number of business could go there. It may be a cannabis facility now, but could be a laundry mat or diesel repair shop in a few years. These heavy industrial uses are just too close to the drinking water and the risk level of contamination is too great. There was also great concern regarding the substances used in the cannabis extraction process getting into the water. All agreed the water must be protected and were supportive of the Board filing an appeal.

Mr. John Ford addressed the Board. He thanked them for the opportunity to address questions and apologized for the planning departments failure to properly communicate to our District early on in the process. His purpose at the meeting is to help the Board and public understand what has been done so far. He stated the Q Zone overlay limits the types of industrial uses allowed. Auto wrecking yards, diesel repairs and laundry mats are not permitted activities.

Mr. Ford confirmed that the Planning Commission did recommend the rezoning be changed. This will go to the Board of Supervisors no matter what. The permit for the cannabis processing facility can't go through without the zoning change. He shared options available. The District could advocate the Q Zone in its current form not be approved and request modifications or the District could appeal the special permit if the Board feels the conditions attached do not protect the water. The permit will not be effective until the zoning goes through. Mr. Ford stated the gravel extraction on the site will continue and is a legal non-conforming use on the site. They have a vested right for gravel extraction and processing. Director Hecathorn inquired if a different zoning other than heavy industrial could be used for the gravel extraction. Mr. Ford stated he would have to look into it and get back the District. Director Fuller asked if the current non-conforming use can continue without a zoning change and Mr. Ford stated yes.

Director Rupp inquired if the Board files an appeal, then decides it is no longer necessary, can the District get some of the money back. Mr. Ford replied yes, providing a great deal of work has not been done. Rezoning work is being done already so it is likely that it can be refunded. The money is more of a deposit than a fee. Director Fuller questioned why an EIR wasn't necessary. She noted that cannabis production was not addressed in the general plan and is a very different use than the previous EIR addressed. Mr. Ford stated the EIR will not address everything. It does allow for a look at impacts and mitigations. President Woo noted that she believes people like the idea of an EIR because of the transparency. She feels the process so far has not been transparent. Director Fuller also inquired if risk was addressed as she did not see it in the staff report. Mr. Ford stated no risk assessment was done. Director Rupp inquired if other parcels in the watershed were considered for a zoning change to heavy industrial. Mr. Ford stated he would provide that information to the District.

Mr. Ford stated there is still time to make adjustments to the Q overlay. He is willing to work with staff to modify the Q overlay if the Board would like to use this option. This does not require an appeal. The Board asked several questions regarding what can be added to the Q overlay. Mr. Friedenbach asked about the timeline for the zoning issue going to the Board of Supervisors. Mr. Ford thought it would likely go before the Board of Supervisors on February 27, 2018.

Mr. Friedenbach recapped the Board's options. Director Rupp stated the Board was verbally told that when the District formed, they attempted to purchase the Mercer Fraser property but they would not





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sell. This shows District has been concerned about this property for some time. He went on to say that Mercer Fraser has done work for the District and they do a great job. The District doesn't have any hard feeling against Mercer Fraser. The District's priority is protecting our water. President Woo made it clear that if they District appeals, it will cost some money for fees, attorney and staff time. This extra project will take ratepayer dollars to fund. There were no objections heard from the public. On motion by Director Rupp, seconded by Director Fuller, the Board voted 4-0 by roll call vote to file an appeal with the Board of Supervisors for the Use Permit and oppose the zoning change and work with Mercer Fraser to try and arrive at mutually agreeable Q Zone modifications. Director Latt was not present for the vote since he recused himself prior to discussions and left the premises as noted earlier.

Conflict Counsel

Mr. Friedenbach stated staff recommends obtaining conflict counsel. Staff has researched several land use firms and recommends the Pioneer Law Group, LLP, specifically attorney Andrea Matarazzo. She is available and the firm does not have any conflicts. The Municipal Rate is \$395 per hour. On motion by Director Fuller, seconded by Director Hecathorn, the Board voted 4-0 to hire Andrea Matarazzo of the Pioneer Law Firm, LLC.

Director Rupp requested staff send a letter signed by President Woo to the Board of Supervisors advising them of our concerns.

Director Hecathorn thanked the members of the public for showing up and stated they had good points and input.

**ADJOURNMENT**

The meeting adjourned at 7:12 p.m.

Attest:

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Sheri Woo, President

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J. Bruce Rupp, Secretary/Treasurer

# Consent

## Legal Brief



### CONFLICT OF INTEREST UNDER GOVERNMENT CODE § 1090: NEW RULES, NEW RISKS

*By Kenneth White, Partner, Brown White & Osborn LLP*

Prudent officers and employees of California's special districts already know about Government Code § 1090, which imposes criminal penalties on public officials for prohibited conflicts of interest. But even seasoned and well-trained districts may not be familiar with recent developments that broaden the already-expansive statute and its risks.

Let's start with a brief review of the statute and why it's already so dangerous and a minefield to the careless and uninformed public official. Section 1090 provides, in part, that "[m]embers of the Legislature, state, county, district, judicial district, and city officers or employees shall not be financially interested in any contract made by them in their official capacity, or by any body or board of which they are members." Put simply, if you work for the government, you can not be involved in creating government contracts that will bring profit to you personally. Though the statute sounds straightforward and intuitive, California courts have

interpreted every element of it so broadly that it has become a hazard for the unwary.

First, California courts have interpreted "making a contract" expansively. It means not only creating or voting upon a government contract in which the government official has an official interest – that would be easy enough to avoid. Instead, courts have construed "making a contract" to refer to nearly any activity related to the contract, including preliminary discussions, negotiation, advising, planning, or creating specifications. Moreover, members of a public board – including the board of a special district – are automatically treated as having "made" a contract voted upon by the board, even if the member with the financial interest abstained.

Second, California courts have defined "financial interest" equally aggressively and broadly. Courts have identified direct and indirect interests, and both chance of profits and risk of loss, as triggering the prohibition. The financial interest can be indirect through a spouse or even through an employer. If a member of a special district board has a job with a company that contracts

With the special district, that relationship creates a financial interest even if the contract in question doesn't have any influence on the member's salary. Though there are statutory exceptions to the definition of "financial interest," they are convoluted, confusingly drafted, and not clearly construed by the courts.

Third, even though Section 1090 carries criminal penalties, it does not require knowledge of wrongdoing or bad intent. Under Section 1097 – the criminal provision of the statute – the prosecution need only prove that a defendant acted "knowingly" and "willfully," which in this context only requires that the defendant knew that they "made" the contract and knew that they had the financial interest. Sincere good-faith belief that a particular contract is not prohibited under Section 1090 is no defense, nor is the fact that the public entity approved of the contract. In fact, it's not even a defense that the government entity's legal counsel reviewed the transaction and informed the defendant that it was legal and not a conflict of interest! California prosecutors pursue Section 1090 charges vigorously, and I have personally defended multiple defendants who were charged even though counsel for their public entities and their boards specifically approved the transactions at issue as not violating Section 1090.

Two recent developments increase the scope of Section 1090 and the risk it imposes on special district officials.

The first development expands the zone of danger from the public official with the conflict of interest to anyone who assists them in making the contract. In 2014, in response to an unpublished Court of Appeal case, the Legislature amended Section 1090 to add a prohibition on "aiding and abetting" a violation of the statute. "Aiding and abetting," in criminal law parlance, is helping, promoting, encouraging, or facilitating a crime. Under this development, the public official with the conflict of interest is no longer the only one at risk – anyone who knew of the


conflict and assisted the official in "making" the contract is a potential defendant. That could include other members of a special district's board, administrative employees, or even legal counsel. Traditionally aiding and abetting requires proof that the aider and abettor knows that they are assisting a crime and intends to do so. However, given the California courts' expansive interpretation of every other part of Section 1090 and its refusal to require any bad intent on the part of primary violators, it is not yet clear what intent requirement will be imposed upon this provision.

The second development expands the zone of danger to independent contractors and consultants of public entities. Section 1090, by its terms, only applies to members, officers, and employees of public entities. But in June 2017, in *People v. Superior Court (Sahlolbei)*, the Supreme Court of California construed Section 1090 broadly yet again, this time to rule that some independent contractors and consultants were covered by the term "employee." Specifically, the Court ruled that independent contractors of public entities fall under the statute to the extent they have duties to "engage in or

advise on public contracting" by the entity. Many California special districts now use independent contractors to staff positions traditionally filled by public employees. Under the Supreme Court's new rule, they fall squarely under Section 1090 if they have any role in the public entity's public contracting. Section 1090 has been a hazard for public officials and employees for decades. These recent developments broaden the risk. Special districts should take pains to train their members and employees about the scope of the statute and seek reliable and informed advice when in doubt. ■

*Ken White is a partner at Brown White & Osborn LLP in Los Angeles, where his practice includes criminal defense, civil litigation, and First Amendment matters. He has litigated multiple Section 1090 cases across California in trial and appellate courts.*

Check out more on this topic through CSDA's Government Code 1090: California's Dangerously Broad Conflict of Interest Law, and How to Avoid It webinar on January 30, 2018. Register online at [csda.net](http://csda.net).



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County Administrative Office

Posted on: January 25, 2018

**Sea Level Rise report now available**

Humboldt County has completed a Sea Level Rise Vulnerability Assessment and you are invited to view it now.



The assessment, prepared by Aldaron Laird and Trinity Associates, with grant money the county received from the California Ocean Protection Council, identifies potential vulnerabilities and risks associated with future anticipated sea level rise and tidal inundation on Humboldt Bay. The report describes the vulnerability of shoreline, land use, transportation, utility, and coastal resource assets and will be used to develop sea level rise adaptation strategies in a region-wide collaborative effort in the coming years as part of the Humboldt Bay Area Plan update currently underway.

The Humboldt Bay Area Plan Sea Level Rise Vulnerability Assessment is available on the [county's web site](#). Or you can [download it directly](#) (12.8 MB file).

In addition, a Sea Level Rise 1.0 meter viewer is available for Humboldt Bay on the [county's webGIS](#).

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*full report is*  
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# HUMBOLDT COUNTY

## Humboldt Bay Area Plan

### Sea Level Rise Vulnerability Assessment

Prepared By

**Aldaron Laird**  
**Trinity Associates**

**January 2018**

HANK SIMS / TODAY @ 12:10 P.M. / LOCAL GOVERNMENT, OCEAN

## Sea Level Rise Will Mess Up Many Things: County Releases New Threat Assessment to Local Infrastructure



1/25/18 Lost Coast  
Outpost

Photo: From the Trinity Associates report.

**UPDATE:** We're only just starting to read this thing, but it's an eye-opener so far. Check this tidbit from the executive summary

... [A]pproximately 10,000 acres of agricultural land; Highways 101 and 255; municipal water and wastewater lines; electrical distribution infrastructure, gas lines, and optical fiber communications lines; and the communities of King Salmon, Fields Landing and Fairhaven, could all become tidally inundated if tidal waters on Humboldt Bay rise three feet.

Press release from the County of Humboldt:

Humboldt County has completed a Sea Level Rise Vulnerability Assessment and you are invited to view it now.

The assessment, prepared by Aldaron Laird and Trinity Associates, with grant money the county received from the California Ocean Protection Council, identifies potential vulnerabilities and risks associated with future anticipated sea level rise and tidal inundation on Humboldt Bay. The report describes the vulnerability of shoreline, land use, transportation, utility, and coastal resource assets and will be used to develop sea level rise adaptation strategies in a region-wide collaborative effort in the coming years as part of the Humboldt Bay Area Plan update currently underway.

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# HUMBOLDT STEELHEAD EXPO



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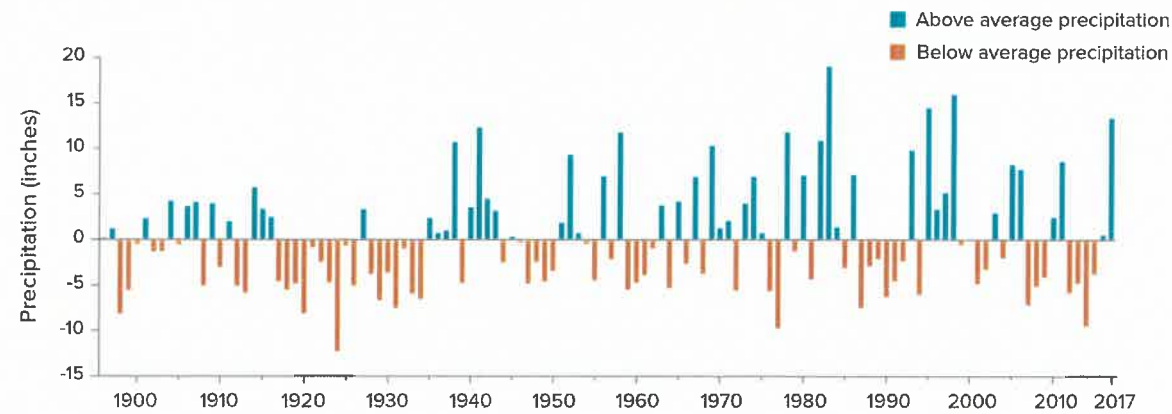
### California faces growing water management challenges

Water management in California has always been challenging. The state's variable climate is marked by long droughts and severe floods, with stark regional differences in water availability and demand. California has adapted by building a vast network of storage and conveyance facilities to deliver water from the wetter parts of the state to population and farming centers in the Bay Area, the San Joaquin Valley, and Southern California.

The Sacramento–San Joaquin Delta is a fragile link in the state's water supply network, and a plan to address supply reliability, known as California WaterFix, faces many hurdles. California's extensive network of dams is aging. Agricultural demand is becoming less flexible, as farmers are increasing tree crops (especially nuts), which must be watered every year. Conflicts are growing between human water use and water needed to support fish and other wildlife. And the latest cycle of droughts and floods provides a glimpse of an uncertain future under climate change.

California's water management challenges are complex, but they can be addressed. Solutions will involve difficult and sometimes costly trade-offs, as well as contentious legal and political changes.

#### CALIFORNIA'S VARIABLE CLIMATE LEADS TO DROUGHTS AND FLOODS



SOURCE: Western Regional Climate Center.

NOTES: Bars show number of inches above or below the long-term California statewide average precipitation (21.43 inches) based on water year (October–September) since 1896. The 2017 bar is based on data through July and author estimates for the remaining two months based on 2016 values.

### Climate extremes reveal strengths and weaknesses in California's water systems

The 2012–16 drought set records for lowest river flows, smallest snowpack, and highest average temperatures. In 2017, the state experienced near-record levels of precipitation that filled reservoirs, stressed dams and other flood infrastructure, caused landslides, and added fuel—in the form of new growth of brush and small trees—to fire-prone landscapes. These extremes provide a “stress test” for California, with key lessons for the future.

- Managing demand and investing in diversified water supplies pays dividends during drought.**  
 At the height of the drought, California's cities and suburbs reduced water use by nearly 25 percent. Yet the drought did not significantly affect the state's economy. This is because in most urban and suburban areas—responsible for 98 percent of the state's gross domestic product—savings came from reducing less-essential uses, such as landscape watering. These areas also benefited from significant past investments to improve and diversify supplies.
- Wet years create opportunities for recharging groundwater, California's main drought reserve.**  
 During droughts, farmers rely heavily on groundwater to make up for reduced surface water. However, unsustainable groundwater withdrawals are making this resource less reliable and causing other problems, including sinking lands (which damage infrastructure) and reduced river flows (which harm aquatic habitat). The 2014 Sustainable



Groundwater Management Act requires local water users to manage their basins sustainably over time. Increased basin recharge efforts will be a key part of this work; the 2017 rains highlighted both the opportunities and the constraints that must be overcome to do this more effectively. Obstacles include permitting challenges, infrastructure constraints, and a lack of incentive programs to encourage farmers to recharge shared aquifers.

- **Drought increases hardships for poor rural communities as well as for ecosystems.**  
Some small, poor, rural communities lost drinking water supplies as their wells went dry during the recent drought. Many of these communities also have contaminated well water. Low river flows and high water temperatures pushed 18 fish species close to extinction, including most salmon runs. Shrinking wetlands threaten waterbirds. Severe wildfires threaten public safety and the long-term health of the state's conifer forests.
- **California's aging dams are under stress.**  
Half of California's dams are more than 50 years old, and all were designed to function in past climate conditions. A crisis in early 2017 at the Oroville Dam—which led to the evacuation of nearly 200,000 downstream residents—has spurred new efforts to evaluate dam safety and develop emergency action plans for other reservoirs across the state. Some improvements can be funded under Proposition 1, which authorized \$395 million for flood management in 2014; the legislature allocated an additional \$111 million in the 2017 budget.

### California has only just begun to address extreme flood risks

One in five Californians live in areas with significant flood risk, and most are not insured. Flood risks are expected to grow due to sea level rise and increasing storm intensity. Although the state has recently increased investments in flood control infrastructure, more efforts are needed to keep development out of harm's way.

- **Local governments and residents need incentives to limit flood risk exposure.**  
Federal flood insurance regulations only restrict new development in areas of extreme flood risk (susceptible to a "100-year flood"). State legislation from 2007 requires that local governments within the Central Valley provide double that level of protection for new homes, but the weaker federal standards still apply elsewhere. Neither federal nor state policies adequately account for increasing risks from climate change and sea level rise.
- **Local governments also need to consider future conditions when approving new development.**  
State law requires cities and counties to consider sea level rise and climate change in hazard mitigation planning. But they are not required to reduce development in areas likely to be at higher risk in the future.

### Instability in the Sacramento–San Joaquin Delta is a major challenge

The Delta supplies water to more than 25 million people and 3 million acres of farmland in the Bay Area, the San Joaquin Valley, and Southern California. Sea level rise and earthquakes threaten levees that protect water quality and Delta farms. Water management to help declining native fishes—many are endangered species—disrupts water exports. The current system relies on moving water through channels to pumps in the southern Delta. California WaterFix calls for constructing two tunnels to tap the Sacramento River and move the water under the Delta to the pumps.

- **A strategic decision is needed on Delta exports.**  
The next year will be critical for the Delta's future. The state will decide whether to go forward with WaterFix—a decision that will, in turn, help determine the way forward for ecosystems and levees. WaterFix would improve the reliability and quality of export water and provide flexibility in managing water for the environment. The plan is costly and entails many uncertainties, but failing to resolve the Delta's problems will also be costly. If the state decides to not go forward—whether as a matter of policy or as a result of litigation—it will need to develop another management plan for the Delta that mitigates the continued decline in water supply reliability and quality, levee integrity, and ecosystem health.

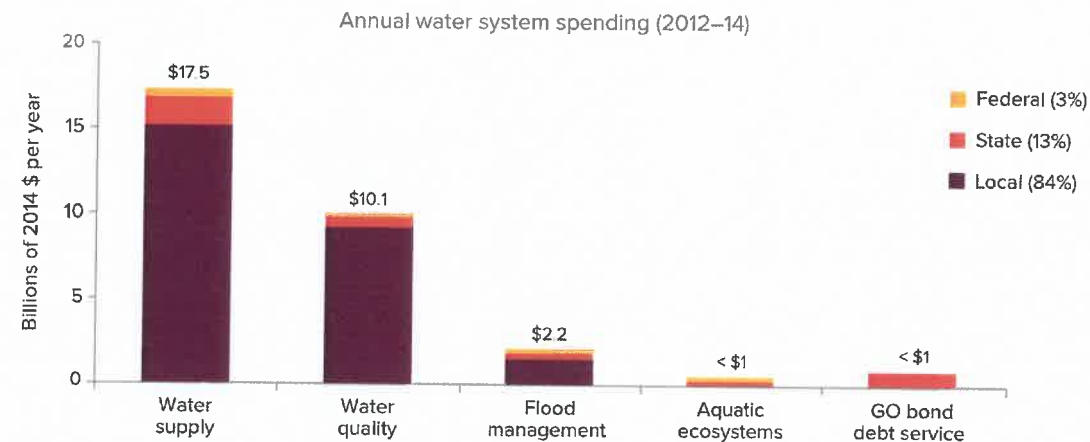
### Californians must decide how to fill funding gaps

Local agencies raise most of the \$30-plus billion spent annually in the state's water sector, and urban water and wastewater agencies are doing reasonably well at covering service costs. But the state faces critical funding gaps in five "orphan" areas: the provision of safe, affordable drinking water to small, disadvantaged communities; flood protection; management of stormwater and other polluted runoff; aquatic ecosystem management; and integrated water management.

- **California needs to move beyond bonds.**

Californians pay for the vast majority of water system expenditures through their monthly water and wastewater bills, but since 2000 the sector has been relying more heavily on state general obligation bonds. These bonds—reimbursed with general tax dollars—have helped local water agencies fund some innovative projects. California voters passed a \$7.5 billion water bond in November 2014 and will vote on another \$4 billion bond in June 2018. But even if this new bond passes, other funds are needed to address critical gaps.

#### LOCAL AGENCIES RAISE MOST OF THE MONEY SPENT ON THE WATER SECTOR



SOURCE: Updated from Ellen Hanak et al., *Paying for Water in California* (PPIC, 2014).

NOTES: The figure reports average spending for 2012–14. GO bond = general obligation bond. Local expenditures are net of grants from higher levels of government. The water quality category includes management of wastewater and approximately \$500 million for polluted stormwater and other runoff.

- **Legal constraints are an obstacle to sustainable local funding.**

Three constitutional reforms approved by voters since the late 1970s—Propositions 13, 218, and 26—have severely limited the ability of local agencies to raise funds for some essential programs and services. Legal uncertainty also threatens funding reliability for water and wastewater agencies. Minor changes could better align the state’s water pricing and funding laws with the goals of modern water management.

### California must improve management of aquatic ecosystems

The demand for environmental water, healthy watersheds, and clean beaches has been increasing and is likely to grow. And the latest drought highlighted major challenges in meeting some environmental goals.

- **The state needs to arrest the decline in native fishes.**

Populations of native fish species—important indicators of freshwater ecosystem health—are declining across California, despite several decades of well-intentioned efforts. These declines lead to tighter and costlier restrictions on water supply, wastewater, and flood management projects, heightening conflicts among water management goals.

- **Ecosystem-based approaches can help.**

Environmental management is often siloed: agencies and projects address particular issues in specific locations—water quality, wetlands, flows, habitat—and there is no overarching plan for improving ecological conditions. Coordinated, flexible approaches that improve environmental performance for entire watersheds would protect native species much more effectively—and help California allocate its dollars (and environmental water) more efficiently.

### Looking ahead

California has the tools to secure a safe and reliable water supply, improve the health of wetlands and rivers, and reduce flood risks. Water managers have made significant progress toward these goals. But the challenges are increasing with population growth and climate change. Increased momentum toward policy reform—coupled with new investments—is essential to the state’s future. Some changes will be politically difficult. Several issues require sustained attention.

**Dam safety and flood risk exposure.** California will need to modernize some dams and rethink how to operate dams and other flood infrastructure in response to a changing climate. To reduce risks to new development, floodplain mapping should account for climate change and increasing flood risks.

**Drought preparation.** California should learn from the latest drought so that it will be better prepared for the next one. The state must improve its management of water rights, water transfers, ecosystems, and interagency coordination.

**The Delta.** If the state moves ahead with WaterFix, it must address uncertainties about governance, financing, benefits for the environment, and mitigation for Delta residents and landowners. The alternatives include scaling down the current project's size or developing a new plan to address declining water supply reliability from the Delta.

**Ecosystem protection.** California needs a more comprehensive and coordinated approach to support aquatic ecosystems and the native species that depend on them.

**Groundwater management.** The new groundwater law is likely to improve management of most basins in California. But implementation will be challenging, especially for agricultural regions that rely heavily on unsustainable groundwater withdrawals. As water users develop their sustainability plans, state support for building solid and transparent water accounting systems and the removal of constraints on groundwater recharge are top priorities.

**Funding.** Legal reforms are needed to enable local and state agencies to fill funding gaps for drinking water quality, flood protection, stormwater management, aquatic habitat, conservation, and integrated water management.

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# Big projects for Mack Town

## Services district has a full plate for next five years

### Jack Durham

MAD RIVER UNION

**McKINLEYVILLE** — A five-million-gallon water tank, upgraded sewer lines, salmon-rearing ponds, a community forest, solar arrays and a BMX track are among the projects included in McKinleyville's updated Strategic Plan.

The document, approved by the McKinleyville Community Services District Board

of Directors on Jan. 3, charts a course of action for the district over the next five years. The meaty plan maps out everything from infrastructure upgrades, to park improvements to creating a strategy to run district facilities off solar power.

### Community Forest

Then the district will continue its efforts to obtain grant funding to create a community forest on the east side of town. The dis-

trict wants to acquire 556 acres now owned by Green Diamond. The property would be accessible from trails off Murray, Babler, Gwin and Sutter roads.

The McKinleyville Community Forest is part of a bigger project to protect the forest east of town.

In 2015, Green Diamond unveiled a proposal for a wide swath of land stretching

**MCSD ❖ A4**

❖ FROM A1

from north of Murray Road all the way down to near North Bank Road, encompassing a total of 3,644 acres.

Green Diamond presented three different options. The community forest would range from 426 to 626 acres. Just east of the community forest, Green Diamond would continue to own from 2,744 to 2,944 acres which would have a conservation easement that would protect the property from being developed. Green Diamond would continue to grow and harvest timber on the property. All three options included 274 acres of land intended for residential development.

The exact size of the community forest would depend on how much grant funding can be obtained.

**BMX track**

Redwood Empire BMX has approached the district about building a BMX track on park land in McKinleyville. One of the possible locations is 3.1 acres of undeveloped district property located off Washington Avenue north of School Road.

District staff may work with the BMX organization to determine whether it is suitable for a track. If it is, then the proposal would be sent to the McKinleyville Recreation Advisory Committee for a recommendation, which would then be sent to the MCSO Board of Directors for consideration.

**Hewitt Ranch**

McKinleyville has a 14-acre park located west of Azalea Avenue called Hewitt Ranch. The park includes a forest and pastures and some small streams. It's used by people who live in the neighborhood.

The district has considered improving the park with an interpretative trail system, an informal disc golf course and a small gravel parking lot. However, there's not sufficient access to the site. This problem may be solved if the district accomplishes another one of its goals in the Strategic Plan — the acquisition of property adjacent to the Hewitt Ranch on Cochran Road for a water tank.

**Water tank**

The district has determined that it should have a five-day supply of water in case there's an emergency and its main water supply line fails.

The district receives all of its water, which it purchases from the Humboldt Bay Municipal Water District, through a single water line that crosses under the Mad River. There's a concern that the line could be severed in an earthquake or other disaster.

In preparation for such a disaster, the district wants to build a five-million-gallon

water tank on the Cochran Road property. The district is negotiating with the owner of the Cochran Road property for purchase of the land.

If the district acquires the property, it could be used to access the Hewitt Ranch park.

**Sewer line upgrades**

The Strategic Plan calls for the creation of detailed plans for upgrading undersized sewer lines and repairing or replacing aging pipes. The district will be looking at upgrading a sewer main that goes under U.S. Highway 101 near Thiel Avenue. It has also contracted GHD to complete a Sewer Main Rehabilitation Plan.

**Coho ponds**

The district will continue to work on a proposal to decommission its percolation ponds located west of the Fischer Ranch. The ponds, which are across from the Mad River boat ramp, were once used for the disposal of treated wastewater.

The ponds will be converted into a fish-friendly backwater, where coho salmon can escape the currents of the Mad River and fatten up before heading back out to sea.

**Solar array**

The plan calls for the creation of a comprehensive plan to power all district facilities with solar energy. Last year, the board made solar energy a priority, and directed district staff to develop a solar plan. The board gave staff five years to get the job done.

Being that this decision was made a year ago, the updated Strategic Plan should have stated that staff now had four years to get the solar plan completed, but due to a typo, it said five years.

Director John Corbett noticed this and asked staff why the solar project was being delayed. Although Manager Greg Orsini pointed out that it was just an error and should have stated four years, Corbett and Director George Wheeler said they wanted to see progress on solar projects take place sooner than later.

Orsini pointed out that while it may take some time to develop a comprehensive plan, there may be progress made this year depending on grant funding when it comes to building a solar energy project at the town's sewer plant.

A motion was made to approve the Strategic Plan update, with the completion of the solar plan moved up to 2020. The board voted 4-1, with Director Dennis Mayo dissenting, in favor of the plan update. Mayo told his fellow board members that he voted no because he did not have clarity on how moving up the solar project would affect district staff.



# Suit alleges DWR 'corrupt' culture

City of Oroville's legal action seeks damages

By Risa Johnson

rjohnson@chicoer.com  
@risamjohnson on Twitter

**OROVILLE** » The city of Oroville filed a lawsuit against the state Department of Water Resources Wednesday which alleges fabricated maintenance reports, racial discrimination and decades of mismanagement led to the Oroville Dam spillway failure last February.

Attorney Joseph Cotchett of Cotchett, Pitre and McCarthy, LLP said the complaint was compiled through many off-the-record interviews, including with industry experts and former and current DWR employees. Attorneys representing the city held a press conference Wednesday afternoon and a copy of the lawsuit was made public.

One of the most explosive things in the report, he said, was an African-American employee's allegation that a noose was hung in the workplace to harass him. Cotchett said discrimination allegedly went back 20 years.

"If you were African-American, you were not going to work up there," he said. "Wait 'til you see it. Horrible."

The city is seeking, at least, reimbursement for damage to city roads and infrastructure and costs incurred as a result of evacuating its citizens in February.

Over 180,000 people were ordered to evacuate in Oroville and downstream communities when flows down the emergency spillway re-

sulted in massive erosion and the fear that water heading upward could cause a concrete wall to collapse.

## More allegations

The complaint also alleges that the State Water Contractors had inappropriate influence over DWR operations.

"When the people of Oroville and this county talk about the Mafia water companies, that's exactly what they were," Cotchett said. "They thought they were the Mafia. They thought they could get away with anything ..."

"They thought they could just say, 'no, we don't have to do that maintenance.' When FERC (the Federal Energy Regulatory Commission) came out and said, 'we've had reports the dam has serious problems,' they went out and hired some experts who stood up and said, 'oh no, we looked at it. It's all fine ...'"

"Why? The water companies have to pay to maintain it. They were making millions, if not billions of dollars of profit off that water. That water belongs to all of us. It belongs to the public. Although they call themselves a nonprofit activity, nonprofit my (expletive)."

Cotchett said some former engineers who came forward to attorneys were afraid to share their names out of fear they could lose their pensions.

"Maintenance was allegedly done. In fact, they never did it," Cotchett said. "Goods

were being bought for delivery to the dam. They were never delivered to the dam. They were delivered to a garage in Oroville and sold."

Another maintenance worker reached out to attorneys but declined an invitation to lunch because being seen with them could create problems for her, Cotchett said.

## Just the beginning

Additional lawsuits against DWR, including by local farmers, are expected to be filed next week. Several others have been filed against the department since the incident.

"This is the beginning," he said. "This is the city, today, that's opening up this can of worms. This was not an act of God. This was not just a wild rainstorm. This went back 20 years of neglect."

He estimated the damages to the city could range from \$500 million to \$1 billion. The latest cost estimate from DWR to reconstruct the spillway was \$500 million or more, with hopes that the Federal Emergency Management Agency would cover 75 percent.

That is the percentage the agency chipped in to pay for emergency relief.

"You're looking at major damages that are going to come out of your pocket as a taxpayer," Cotchett said.

Carolyn Frank, a partner with Huber of Cota Cole and Huber, LLP, said the firm had been looking into litigation since the incident occurred. Scott Huber, of the same company, is the attor-

ney for the city of Oroville.

"The city decided this was the moment when they had enough evidence and had taken their time to really look at the evidence and decide to move forward," Frank said. "You don't want to move forward quickly on something like this."

She said this all could have been avoided.

"The city is outraged at the evidence — the intimidation, the discrimination of women, of people of color and of the mismanagement of the entire department," she said.

Don Rust, acting city administrator, said the council voted unanimously in closed session to go forward with the lawsuit. Lawyers were hired on contingency, meaning the city won't pay a dime unless they win the case.

The city has been negotiating compensation for road damages for months, but nearly a year after the incident, talks have gone nowhere, Rust said.

"We are no further than where we were on Feb. 8," he said. "Unfortunately, this is part of what we have to do."

That was the day after a gap in the spillway emerged, developing into a gaping hole by day two.

Councilors did not speak at the press conference and the mayor and vice mayor did not offer comments before deadline.

Erin Mellon, a DWR spokeswoman, said she could not comment on any pending litigation.

Contact reporter Risa Johnson at 530-896-7763.

*from Sacramento Bee*

# Now \$870 million, price of Oroville Dam crisis jumps by a third

BY DALE KASLER AND RYAN SABALOW

[dkasler@sacbee.com](mailto:dkasler@sacbee.com)



January 26, 2018 02:03 PM

Updated January 27, 2018 01:55 PM

Oroville Dam's battered flood-control spillways have been largely rebuilt, but the cost of last February's near-disaster keeps rising. On Friday, state officials put the total price tag at \$870 million.

The latest figure from the California Department of Water Resources represents a 32 percent increase from DWR's estimate in October, when the cost was pegged at approximately \$660 million.

State officials insist the climbing price tag is not from unexpected cost overruns. Instead, DWR spokeswoman Erin Mellon said the agency has finally been able to estimate the cost of recovery work that includes removal of debris from the Feather River channel below the dam; relocation of power transmission lines; staff time and other work that's been undertaken since last winter's crisis. Those costs came to \$210 million.

"So it's not a jump in costs at all," she said.

Of the total \$870 million cost, the largest expense is the reconstruction of the dam's two badly damaged flood-control spillways. Mellon said the reconstruction work, which is proceeding in two phases and is expected to be completed this fall, is [expected to cost \\$500 million](#). That estimate hasn't changed since last October.

In the initial days of the crisis, before 188,000 residents had to be evacuated, DWR officials said it might cost \$200 million to fix Oroville. The price has more than quadrupled since then.

Mellon said costs could change again, but major new expenses aren't expected beyond the \$870 million. "Right now this is the number that we're looking at for the total," she said on a conference call with reporters.

One of the DWR's fiercest critics, state Sen. Jim Nielsen, R-Tehama, isn't buying DWR's explanation that the costs haven't risen since October.

"They're certainly inventing a new math," said Nielsen, who represents the region that evacuated during the crisis.

State officials expect the Federal Emergency Management Agency to reimburse California for up to 75 percent of the crisis's costs, with the rest to be covered by the Metropolitan Water District of Southern California and other water agencies that store water behind the nation's tallest dam. That would put federal taxpayers on the hook for \$652 million.

So far FEMA has agreed to pay 75 percent of the first \$115.9 million in costs submitted by the state, totaling \$86.9 million, according to Mellon.

However, state officials have said FEMA reimbursements could decline if the federal agency determines that the emergency was [caused by improper maintenance](#). "Is there a maintenance issue here? Because they're not going to cover that," then-DWR director Bill Croyle, who has since retired, told a legislative committee last spring.

An independent forensic team concluded earlier this month that the dam's main flood-control spillway failed in part because of poor maintenance.

Asked about the possibility of getting turned down by FEMA for additional dollars, Mellon said, "We're going to continue submitting our costs to FEMA until they tell us otherwise."

Nielsen said he doesn't think federal taxpayers should have to pay the bulk of the costs for a failure he places squarely on the shoulders of the DWR and the powerful water agencies that store water behind the dam. Known as the State Water Contractors, the largest of which serve Silicon Valley and Southern California, these agencies are responsible for upkeep and maintenance costs.

The federal government is not ... (responsible) for it all being screwed up like it has been for decades," Nielsen said. "The federal government is not the reason they didn't fix anything."

Jerry Quinn, a Sacramento consultant who helps local governments get FEMA dollars, said the state shouldn't have a problem collecting the full 75 percent reimbursement. If FEMA cites the deficiencies [reported by the forensic team](#) as a

reason for withholding money, DWR can argue that federal regulators had also inspected the dam over the years and failed to uncover problems with the spillways, said Quinn, of Gerard J. Quinn & Associates.

Victor Inge, a FEMA spokesman, said it's too early to say how the federal agency will respond to the latest requests for reimbursement.

DWR officials said a few problems have emerged with the reconstruction work performed so far. Of the more than 200 concrete slabs that have been placed on the main spillway, three have "minor surface imperfections" and might have to be replaced, said Ted Craddock, the agency's assistant deputy director.

Oroville's crisis began when the main spillway fractured in two last Feb. 7 in a heavy rainstorm. DWR officials limited water releases to control the damage. That allowed reservoir levels to rise and water to flow over the adjacent emergency spillway, a concrete lip atop an unpaved hillside, for the first time ever. When the hillside began eroding badly, threatening to dump uncontrolled amounts of water from the lake, officials ordered the emergency evacuation of 188,000 downstream residents.

Assemblyman James Gallagher, R-Yuba City, said he's less concerned about who ends up ultimately paying for the costs, so long as the work is completed correctly and his constituents below the dam are safe.

"The big thing for us whatever that needs to be done to put that dam in a safe working condition is what needs to be done," he said.

Separately, federal regulators Friday told owners of more than 500 dams nationwide to read the forensic report explaining the causes of the Oroville crisis. "The report concludes that flaws in the Oroville Dam Spillway existed since construction that were missed by the owner, regulators, and consultants," officials with the Federal Energy Regulatory Commission wrote in a letter to dam owners. "It is very clear that just because a project has operated successfully for a long period of time does not guarantee that it will continue to do so."

*Dale Kasler: [916-321-1066](tel:916-321-1066), [@dakasler](https://twitter.com/dakasler)*







## Maven's Notebook

### THIS JUST IN ... Snowpack Below Average Despite Gains

February 1, 2018 Maven Breaking News



**Snow Water Equivalent just 14 percent of the early-February average at Phillips as measured there since 1964**

*From the Department of Water Resources:*





Despite moderate January precipitation in the Sierra Nevada after an historically dry December, today's Department of Water Resources (DWR) manual snow survey east of Sacramento found little snowpack there, two months into what is typically California's wettest three months.

Measurements at Phillips Station revealed a snow water equivalent (SWE) of 2.6 inches, 14 percent of the early-February average at Phillips as measured there since 1964. SWE is the depth of water that theoretically would result if the entire snowpack melted instantaneously.

"California experiences the most variable weather in the nation," said DWR Director Karla Nemeth. "It's vital that water conservation efforts remain consistent regardless of the year's precipitation."

More telling than a survey at a single location like Phillips are DWR's electronic readings today from 103 stations scattered throughout the Sierra. Measurements indicate the SWE of the northern Sierra snowpack is 4.6 inches, 27 percent of the multi-decade average for today's date. The central and southern Sierra readings are 5.8 inches (30 percent of average) and 3.8 inches (25 percent of average) respectively. Statewide, the snowpack's SWE is 4.9 inches, or 27 percent of the Feb. 1 average.

"The snow survey today shows water content far below average for this time of year," said Frank Gehrke, chief of the California Cooperative Snow Surveys Program who conducted today's survey at Phillips. "Today's measurements indicate an anemic snowpack to date, but there is still the possibility of a wet February and March."

On average, the snowpack supplies about 30 percent of California's water needs as it melts in the spring and early summer. The greater the snowpack water content, the greater the likelihood California's reservoirs will receive ample runoff as the snowpack melts to meet the state's water demand in the summer and fall.

The Phillips snow course, near the intersection of Highway 50 and Sierra-at-Tahoe Road, is one of 260 that are surveyed manually throughout the winter. Manual measurements augment the electronic readings from the snow pillows in the Sierra Nevada that provide a current snapshot of the water content in the snowpack.

Results of today's manual readings by DWR near Echo Summit are as follows:

Location	Elevation	Snow Depth	Water Content	% of Long-Term Average
Alpha	7,600 feet	NA	NA	NA
Phillips Station	6,800 feet	13.6 inches	2.6 inches	14
Lyons Creek	6,700 feet	NA	NA	NA
Tamarack Flat	6,500 feet	14 inches	3.0 inches	17

California's exceptionally high precipitation last winter and spring has resulted in above-average storage in 154 reservoirs tracked by the Department. DWR estimates total storage in those reservoirs at the end of January was 24.7 million acre feet (MAF), or 106 percent of the 23.4 MAF average for this time of year.

**Video of today's Phillips survey can be found here:** <http://bit.ly/2EQMtUY>

**Photographs can be found here:** <http://bit.ly/2DICraT>

**Electronic snowpack readings are available on the Internet**

**at:** <http://cdec.water.ca.gov/snowapp/sweq.action> **For earlier readings, click the calendar icon below the map, select a date, then Refresh Data.**

**Water Year 2018's precipitation can be found at the link below; look in the right-hand column for the Northern Sierra 8-station index for updated rainfall readings in the critical northern portion of the state, as well as the San Joaquin 5-station and Tulare Basin 6-station links:** [http://cdec.water.ca.gov/snow\\_rain.html](http://cdec.water.ca.gov/snow_rain.html)

**For a broader snapshot of current and historical weather conditions, see DWR's "Water Conditions" page:** <http://www.water.ca.gov/waterconditions/waterconditions.cfm>

**Everyday water conservation tips at Save Our Water:** <http://saveourwater.com/>

# Correspondence



H.B.M.W.D. JAN 25 2018

Date: January 24, 2018  
To: Board of Directors of Independent Special Districts  
From: George Williamson, Executive Officer

**Subject: Request for Nominations for District Members to serve on LAFCo**

The term of office for two of the special district members on LAFCo expires on June 30, 2018 - one Regular Member seat and one Alternate Member seat. All terms are four years and end on June 30. There are no term limits.

**Current Special District Terms**

Designation	Current Member	Term of Office (ends on June 30)
Regular Member	Debra Lake, Fruitland Ridge Fire Protection District	2016 - 2020
Regular Member	Troy Nicolini, Samoa Peninsula Fire District	2014 - 2018
Alternate Member	Frank Scolari, Humboldt Community Services District	2014 - 2018

The basic process for selecting special district members to LAFCo is set forth in Government Code Section 56332, which provides for a meeting to be convened among representatives from each of the 48 independent special districts in Humboldt County, unless the Executive Officer determines that a meeting is not feasible. Based on Government Code Section 56332, it has been determined that a meeting of this "Independent Special District Selection Committee" for the purpose of selecting a special district member is not feasible due to the likelihood that a quorum would not be achieved. As such, both the nominating process and the election itself will be conducted by mail.

Your district is encouraged to participate in this election process. A schedule is enclosed together with a list of the 48 independent special districts in Humboldt County that are eligible to participate. If your district wishes to nominate a Board member to be a candidate for the LAFCo district member, the nomination procedures are as follows:

1. Each district may nominate two persons- one for the Regular Member seat and one for the Alternate Member seat. Nominees must be board members, not staff.
2. All nominations must be accompanied with a completed nomination form approved by a majority of your Board (enclosed).
3. A candidate information form (enclosed) or a letter of interest and qualifications may be submitted with the nomination. This is voluntary and will be kept on file at the LAFCo offices to be made available upon request. It will not be distributed with the ballots.
4. All nomination materials must be returned to Humboldt LAFCo, 1125 16<sup>th</sup> Street, Suite 202, Arcata, CA 95521, or faxed 707-825-9181.
5. Upon receipt of nominations, LAFCo will prepare and send a ballot to each district. The ballot will state the return date and how successful candidates will be notified.

**The deadline for submitting nominations is Friday, March 30, 2018.** Any nomination that is submitted after the deadline will not be considered.

General information about LAFCo is available at the Humboldt LAFCo website at [www.humboldtlaftco.org](http://www.humboldtlaftco.org). The Commission is comprised of seven regular and four alternate members representing the county, cities, independent special districts, and general public. All terms are four years and end on June 30. Regular meetings are held at 9:00 a.m. on the third Wednesday of every other month in the Humboldt County Board of Supervisors Chamber, with special meetings held as needed.

If you have any questions, please contact LAFCo staff at 707-445-7508.

### Election Schedule

LAFCo call for nominations letter mailed via certified mail	Wednesday, January 24, 2018
Nominations due to LAFCo	By 5:00 p.m., Friday, March 30, 2018
Ballots mailed from LAFCo via certified mail	No later than Wednesday, April 11, 2018
Election Day – Ballots due to LAFCo	By 5:00 p.m., Friday, June 15, 2018
Election results mailed from LAFCo via certified mail	No later than Friday, June 29, 2018

### Independent Special Districts

Big Lagoon Community Services District	Arcata Fire Protection District
Briceland Community Services District	Blue Lake Fire Protection District
Carlotta Community Services District	Briceland Fire Protection District
Fieldbrook-Glendale Community Services District	Bridgeville Fire Protection District
Humboldt Community Services District	Ferndale Fire Protection District
Loleta Community Services District	Fruitland Ridge Fire Protection District
Manila Community Services District	Garberville Fire Protection District
McKinleyville Community Services District	Humboldt No. 1 Fire Protection District
Miranda Community Services District	Kneeland Fire Protection District
Orick Community Services District	Myers Flat Fire Protection District
Orleans Community Services District	Petrolia Fire Protection District
Palmer Creek Community Services District	Redway Fire Protection District
Patrick Creek Community Services District	Rio Dell Fire Protection District
Phillipsville Community Services District	Samoa Peninsula Fire District
Redway Community Services District	Telegraph Ridge Fire Protection District
Riverside Community Services District	Willow Creek Fire Protection District
Scotia Community Services District	Humboldt Bay Harbor, Recreation and Conservation District
Weott Community Services District	Humboldt County Resource Conservation District
Westhaven Community Services District	North Humboldt Recreation and Park District
Willow Creek Community Services District	Southern Humboldt Community Healthcare District
Alderpoint County Water District	Fortuna Cemetery District
Hydesville County Water District	Petrolia Cemetery District
Jacoby Creek County Water District	
Humboldt Bay Municipal Water District	
Garberville Sanitary District	
Resort Improvement District No. 1	



**REGULAR Special District Member Nomination Form**

Name of District: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

The Board hereby nominates \_\_\_\_\_ to fill the term beginning on June 30, 2018 and expiring June 30, 2022 as a **REGULAR MEMBER** of the Humboldt Local Agency Formation Commission representing independent special districts of Humboldt County.

Board action taken on the \_\_\_\_\_ day of \_\_\_\_\_, 2018, by the following vote:

AYES: \_\_\_\_\_

NOSE: \_\_\_\_\_

ABSTAIN: \_\_\_\_\_

ABSENT: \_\_\_\_\_

District Representative:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name





**REGULAR Special District Member Candidate Information Sheet**

Providing this form or a letter of interest and qualifications is voluntary. It will be kept on file at the LAFCo offices and made available on request. It will not be distributed with the ballots.

Candidate Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

District: \_\_\_\_\_

Title: \_\_\_\_\_

Length of service with District:

Present Occupation:

Personal and Professional Background:

Summarize your interest in serving on LAFCo:

Summarize your qualifications for serving on LAFCo:

List local government and/or civic organization involvement:

List special interests:



**ALTERNATE Special District Member Nomination Form**

Name of District: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_

The Board hereby nominates \_\_\_\_\_ to fill the term beginning on June 30, 2018 and expiring June 30, 2022 as an **ALTERNATE MEMBER** of the Humboldt Local Agency Formation Commission representing independent special districts of Humboldt County.

Board action taken on the \_\_\_\_\_ day of \_\_\_\_\_, 2018, by the following vote:

AYES: \_\_\_\_\_

NOSE: \_\_\_\_\_

ABSTAIN: \_\_\_\_\_

ABSENT: \_\_\_\_\_

District Representative:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name



**ALTERNATE Special District Member Candidate Information Sheet**

Providing this form or a letter of interest and qualifications is voluntary. It will be kept on file at the LAFCo offices and made available on request. It will not be distributed with the ballots.

Candidate Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

District: \_\_\_\_\_

Title: \_\_\_\_\_

Length of service with District:

Present Occupation:

Personal and Professional Background:

Summarize your interest in serving on LAFCo:

Summarize your qualifications for serving on LAFCo:

List local government and/or civic organization involvement:

List special interests:

**John Friedenbach**

---

**From:** Timothy Quinn <Tim.Quinn@acwa.com>  
**Sent:** Tuesday, January 16, 2018 1:59 PM  
**To:** Tim Quinn  
**Cc:** Dave Bolland; Cindy Tuck; Heather Engel  
**Subject:** Lifting emergency request re Montecito WD

**Importance:** High

Dear ACWA Member General Managers,

The emergency request from Montecito Water District for materials needed to repair damaged infrastructure has been fulfilled and lifted. I sent a request out to you all last week seeking assistance for a local water district facing catastrophic circumstances. The response was gratifying with many of you offering to help or search for those who could.

On behalf of ACWA, the District and the State Water Resources Control Board, I want to thank you for the extraordinary response to help the district find the pipe it needs to restore service to its community in a timely manner. This is yet another example of the generosity of ACWA members coming together to support and assist each other in a time of need.

**Tim Quinn**

Executive Director  
Association of California Water Agencies  
916.441.4545 | [TimQ@acwa.com](mailto:TimQ@acwa.com) | [www.acwa.com](http://www.acwa.com)



---

**From:** Timothy Quinn  
**Sent:** Friday, January 12, 2018 10:19 AM  
**To:** Tim Quinn  
**Cc:** Cindy Tuck; Dave Bolland  
**Subject:** URGENT: Montecito WD needs 14-inch pipe  
**Importance:** High

Dear ACWA Member General Managers,

As you know, our friends at Montecito Water District are dealing with an emergency situation that has resulted in extensive damage to their water supply infrastructure. The district has issued a boil notice and is providing its customers with bottled water.

For the health and safety of its customers, the district needs to repair its infrastructure and is looking for 1,000 to 1,500 feet of 14-inch steel pipeline (1/4 or 1/2 inch thickness), cement lined and coated. The district is currently looking at a two-week wait for pipeline. The State Water Board, which is working closely with the District, asked ACWA to issue an alert to our members.

ACWA members who have pipe available are urged to contact Mark Bartson at the SWRCB Division of Drinking Water at (916) 449-5622 or [Mark.Bartson@waterboards.ca.gov](mailto:Mark.Bartson@waterboards.ca.gov).

If you have any questions, please contact Dave Bolland at [daveb@acwa.com](mailto:daveb@acwa.com).

### Tim Quinn

Executive Director  
Association of California Water Agencies  
916.441.4545 | [TimQ@acwa.com](mailto:TimQ@acwa.com) | [www.acwa.com](http://www.acwa.com)



State of California  
The Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE

SONAR ESTIMATION OF CALIFORNIA COASTAL (CC) CHINOOK SALMON  
(*Oncorhynchus tshawytscha*) ABUNDANCE AND MIGRATION PATTERNS IN THE  
MAD RIVER, HUMBOLDT COUNTY, CALIFORNIA, 2013/14 AND 2014/15



Michael D. Sparkman  
Michael P. Griffin  
Charles M. Boone  
Dominic A. Vitali  
Steve Sanches  
Philip K. Barrington  
Mark Wheatley



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**SONAR ESTIMATION OF CALIFORNIA COASTAL (CC) CHINOOK SALMON  
(*Oncorhynchus tshawytscha*) ABUNDANCE AND MIGRATION PATTERNS IN THE  
MAD RIVER, HUMBOLDT COUNTY, CALIFORNIA, 2013/14 AND 2014/15**

Michael D. Sparkman, Michael P. Griffin, Charles M. Boone, Dominic A. Vitali, Steve Sanches,  
Philip K. Bairrington, and Mark Wheatley

**ABSTRACT**

We used DIDSON and ARIS sonars and species apportionment methods to estimate the returns of wild adult CC Chinook Salmon to the Mad River during the 2013/14 (pilot year) and 2014/15 seasons. During the pilot year, the DIDSON was installed on November 18, 2013 and missed migration from late August – November 17, 2013. In 2014/15, we operated the sonar throughout the Chinook Salmon run. We estimate 2,169 (95% CI = 1,936 – 2,402; CV = 5.4%) adult CC Chinook Salmon (TL > 54 cm) passed the sonar site in 2013/14, and 6,384 (95% CI = 5,749 – 7,018; CV = 5.0%) in 2014/15. The total run size in 2014/15, which included jack and adult Chinook Salmon, equaled 7,489 (CV = 4.7%). In both study years, November was the peak month for migration. Daily passage rates of adults ranged from -12 to 348 in 2013/14 and averaged 32 adults/day, and in 2014/15 ranged from -3 to 985 and averaged 52 adults/day. Adults migrated throughout all hours of the day in 2014/15, however migration during low flow periods (September) was higher during suppressed light and darkness, and migration during higher flow periods (December) was greater during morning to mid-day. We found that the DIDSON/ARIS sonar cameras, in conjunction with species apportionment methods, worked well to enumerate CC Chinook Salmon returns to the Mad River, and with CV values that were acceptable for long-term monitoring.

To cite this technical paper: Sparkman, M.D., M.P. Griffin, C.M. Boone, D.A. Vitali, S. Sanches, P.K. Bairrington, and M. Wheatley. 2017. Sonar estimation of California Coastal (CC) Chinook Salmon (*Oncorhynchus tshawytscha*) abundance and migration patterns in the Mad River, Humboldt County, California, 2013/14 and 2014/15. California Department of Fish and Wildlife, Anadromous Fisheries Resource Assessment and Monitoring Program, 19 p.

## INTRODUCTION

Population monitoring of Pacific Salmon (*Oncorhynchus* spp.) is vital in California, where many Evolutionarily Significant Units (ESUs) are listed under the Federal Endangered Species Act. The California Coastal (CC) Chinook Salmon ESU was first listed as threatened under the Federal Endangered Species Act in 1999 (64 FR 50394), and two subsequent status reviews have reaffirmed the threatened status (Good et al., 2005; Williams et al., 2011). The CC Chinook Salmon ESU ranges from Redwood Creek (Humboldt County) to Russian River (Sonoma County) (O' Farrell et al., 2012), and includes the population found within the Mad River (Humboldt County).

The CC Chinook Salmon once supported economically important in-river commercial fisheries in the late 1800's and early 1900's (Van Kirk, 2004), in-river sport fisheries up to the initial Federal Listing, and contributes to the mixed stock Chinook Salmon ocean fisheries. A common theme across the CC Chinook Salmon ESU is the paucity of historic and current population level data (O' Farrell et al., 2012; Lacy et al., 2014; NMFS, 2016), which limits the ability to manage and conserve this ESU. The CC Chinook Salmon ESU is currently susceptible to the mixed stock Chinook Salmon ocean fishery along the California coast, and therefore spawner escapement data for the CC Chinook Salmon ESU is of particular interest and concern (O' Farrell et al., 2012; Lacy et al., 2014; Satterthwaite et al., 2014; NMFS, 2016). In response to Federal and State listings of anadromous Salmonids and the lack of reliable monitoring data, CDFW and NOAA Fisheries developed and published the California Coastal Salmonid Monitoring Plan (CMP), with the goal of standardizing acceptable methods for enumerating adult salmon and steelhead returns to various streams and rivers for status and trend information (Adams et al., 2011). Monitoring returning adult CC Chinook Salmon populations (spawner escapement) over years has been difficult because most streams are relatively large and wide (e.g. Redwood Cr, Mad R, Eel R, Mattole R, and Russian R), with limited access, flashy hydrology, and high turbidities. Thus, in many cases adult counting weirs and spawning ground surveys are either logistically impossible, or economically unfeasible to obtain quality spawner escapement data (Maxwell, 2007). The Mad River (Humboldt County) falls within these sampling limitations, and recent population abundances of adult CC Chinook Salmon returns to the Mad River have not been determined. There were, however, annual counts of adult CC Chinook Salmon passing through Sweasey Dam's fish ladder (Rm 19.2) from 1938 -1964, with annual abundances ranging from 19 – 3,139 and averaging 825 (SE = 140) (CDFW, in house data). Sweasey Dam was destroyed using dynamite in 1970 due to high sediment load accumulations (Tolhurst, 1995), and since then counts of adult CC Chinook Salmon in the Mad River have not been possible. However, recent advances in hydroacoustic (sonar) technology (DIDSON, ARIS) have provided a much needed tool for enumerating adult salmonid returns to various streams and rivers (Holmes et al., 2006; Maxwell, 2007; Larson, 2013; Metheny et al., 2016; Atkinson et al., 2016; NMFS,

2016), and with less difficulty and more accuracy compared to past sonar applications (Maxwell and Gove, 2004; Maxwell, 2007; Maxwell et al., 2011). A thorough examination of the history, methods, and use of sonars is provided by Maxwell (2007).

Mad River supports annual runs of CC Chinook Salmon, Northern California (NC) steelhead Distinct Population Segment, Southern Oregon/Northern California Coasts (SO/NCC) Coho Salmon, and Southern Oregon/California Coasts Coastal (SO/CC) Cutthroat Trout (Sparkman, 2003). Mad River also provides a recreational sport fishery for NC steelhead, and Mad River Hatchery produces hatchery winter-run steelhead for angler harvest (Sparkman, 2003; CDFW, 2016; NMFS, 2017). CC Chinook Salmon in the Mad River are considered a functionally independent population, and Mad River is considered 'essential' for recovery of the CC Chinook Salmon ESU (NMFS 2016). Prior to the NMFS Coastal Multispecies Recovery Plan (2016), CDFW Anadromous Fisheries Resource Assessment and Monitoring Program (AFRAMP) considered Mad River to be an important contributor to the CC Chinook Salmon ESU, and initiated a sonar program (and species apportionment methods) to enumerate the returns of both CC Chinook Salmon and the NC steelhead. This paper will present sonar estimates of wild CC Chinook Salmon returns to the Mad River in the 2013/14 (pilot year) and 2014/15 seasons.

## **SITE DESCRIPTION**

The Mad River, a regulated stream (Ruth Dam, Rm 77), drains a watershed area of 497 mi<sup>2</sup> within the Coast Range Geomorphic Province and empties into the Pacific Ocean north of Humboldt Bay, Humboldt County, California (Fig.1). The geomorphic province consists of complex folding, faulting, tectonic uplift, volcanism, alluvial valleys, and a broad deltaic floodplain at the terminus of the river (USGS, 1973; Tolhurst, 1995). Mad River basin, elongate in a northwesterly direction, is about 100 miles long, and averages six miles in width (Stillwater Sciences, 2010). The United States Geological Survey (USGS) and California Department of Water Resources (CDWR) operate a gaging station (# 11481000) on the lower Mad River at US HWY 299 bridge (RM 6.5), near Arcata, California. Mad River was listed as sediment, turbidity and temperature impaired in 2002 under section 303(d) of the Clean Water Act (CWA, 2002; SWRCB, 2003; USEPA, 2003). In 2005, NMFS designated Mad River as critical habitat for the CC Chinook Salmon (50 CFR Part 226). Stillwater Sciences (2010) and NMFS (2016) provide a more detailed description of the Mad River basin, including land use, and past and current environmental conditions.



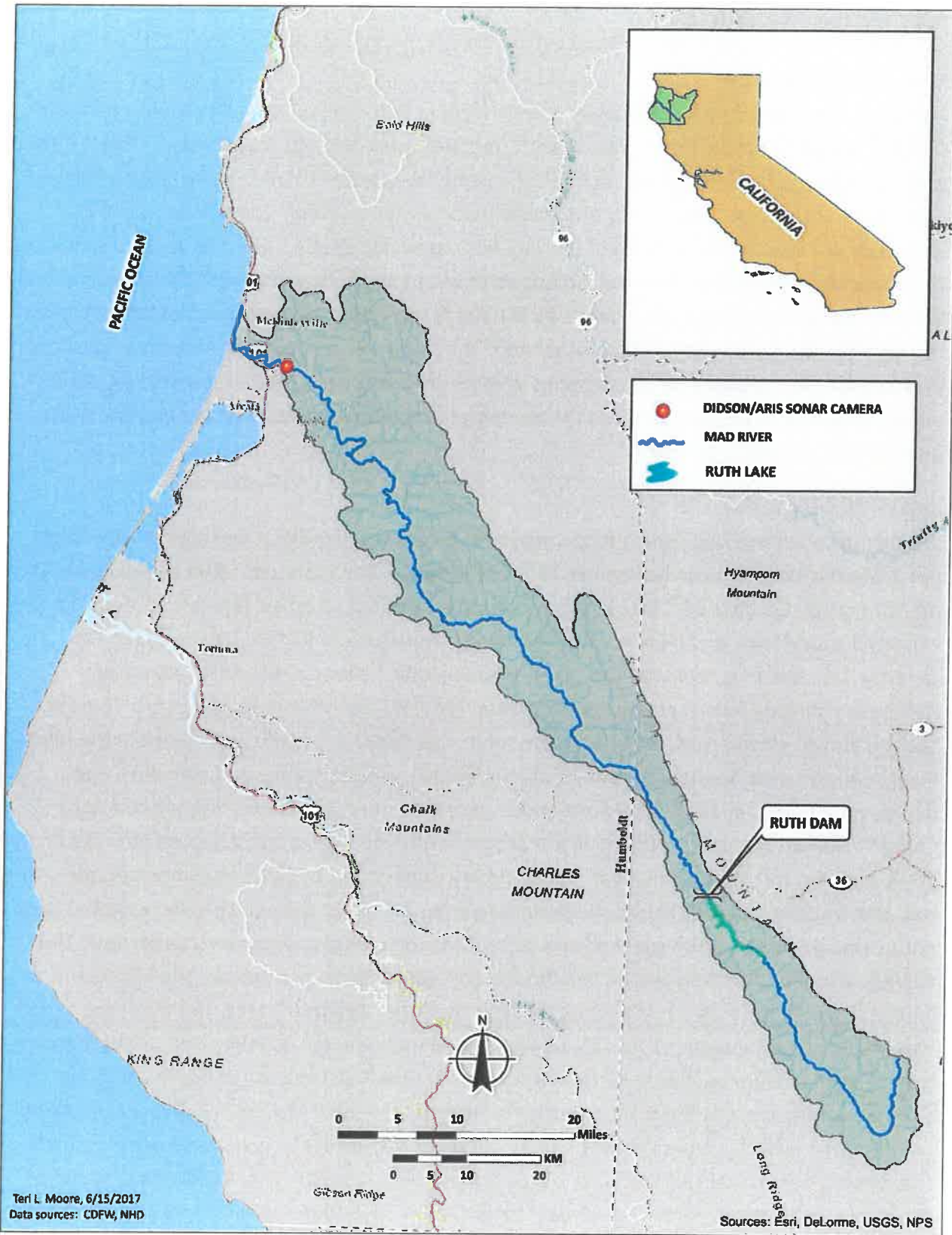


Figure 1. Mad River watershed with sonar site and location of Ruth Dam, Humboldt County, CA.



## METHODS/MATERIALS

### Sonar Site Selection

The sonar site was located in the lower Mad River (Rm 7.0) on Humboldt Bay Municipal Water District (HBMWD) property in a glide habitat unit, just upstream of a low gradient riffle. The site was chosen because HBMWD has at least one personnel on site 24 hrs per day, which ensured some level of security. Additionally and more importantly, few adult Chinook Salmon and steelhead will spawn downstream of this location, as evidenced by surveying downstream areas for spawning redds. In 2013/14, we did not observe any redds downstream of the sonar, and in 2014/15 we counted two redds. However, the redds were not very large, and could have been test digs constructed by large Chinook Salmon. The sonar site also contained a stream bottom profile that was adequate for sonar use as described by Maxwell (2007). A processing station was constructed at the site to house the computer, hard drives, and sonar top box (DIDSON) and command module (ARIS).

### Sonar Deployment

We first installed and deployed a long range dual frequency identification sonar (DIDSON) at Rm 7.0 in the Mad River on November 18<sup>th</sup>, 2013 (Fig. 1). The sonar operated continuously (24 hrs/d) through October 20<sup>th</sup>, 2014 with exception for periods of down-time associated with unexpected shut downs and high stream flows which were unsafe to operate the sonar. On October 20<sup>th</sup>, 2014 we removed the DIDSON and installed a long range ARIS (Adaptive Resolution Imaging Sonar) at the same location. The ARIS operated throughout the Chinook Salmon and steelhead runs. In general, the sonar was deployed nearly year-round in the Mad River to encompass multiple runs of NC steelhead (fall, winter, spring, and summer). The deployment period in 2013/14 did not encompass the entire CC Chinook Salmon run since CC Chinook Salmon begin entering the lower Mad River in late August/early September (Sparkman 2003, authors, this study), however, the deployment period in 2014/15 encompassed the entire run. The DIDSON and ARIS sonars were aimed perpendicular to the current, and esonified the entire channel width which ranged from 20 to 60 m wide, depending upon stream flow. The average width during the Chinook Salmon run was about 35 m, and most of the fish swam within 25 m of the sonar when passing through the sonar beams (n = 48). The tilt of the sonar was manually set between -1° to -3°, which allowed for complete esonification of the channel from stream bottom to stream surface at various stream flows and water depths. Although the stream bottom was continuously esonified as recommended by Maxwell (2007), and Faulkner and Maxwell (2009), we periodically floated sticks on the surface to ensure detections of any fish moving near stream surface areas. Weir panels were placed immediately downstream of the sonar, and extended from the stream bank 1 - 2 m beyond the sonar to prevent fish from swimming behind the sonar camera or too close to the sonar's image start (DIDSON 0.8 m, ARIS 0.7 m). The sonars were checked daily to ensure correct esonification, and manually adjusted as

necessary. During storm events, technicians frequently stayed at the sonar site to adjust the camera depth and beam pattern as necessary, or re-visited the site throughout the day and night. The USGS and CDWR gaging station, located about 0.5 miles downstream, provided real-time flow data which greatly assisted with operating the sonar, and investigating relationships of fish passage and stream discharge.

### Recording and Processing Sonar Files

The sonar recorded files in 20-minute time increments throughout a given day, and data was recorded on external 4 Tb hard drives. Data was then copied onto a second hard drive and brought to the CDFW office in Arcata, CA for processing. We used a non-replicated systematic sample of the first 20 minutes of each hour to estimate adult passage through the sonar beams (Reynolds et al., 2007; Lilja et al., 2008; Xie and Martens, 2014). For each 20-minute file, net movement was defined as the sum of positive upstream movements and negative downstream movements (Xie et al., 2002). Net movement was multiplied by a factor of three to derive hourly estimates of fish passage, and net movement of adults per day was simply the sum of hourly net movements. We used the V5 variance estimator to assess error arising from using a 20-minute sample to represent hourly fish passage, and to determine 95% confidence intervals for total passage each year (Reynolds et al., 2007; Xie and Martens, 2014; Metheny et al., 2016).

In 2013/14 (pilot year), we manually counted and measured all fish > 54 cm moving upstream or downstream through the beams using hand held counters and the DIDSON measuring tool (Maxwell, 2007; Burwen et al., 2010; Gurney et al., 2014; Metheny et al., 2016). A TL (cm) cutoff of 54 cm was used to separate Chinook Salmon jacks (precocious males) from adult Chinook Salmon based upon adult salmonid seining efforts in the Mad River during 2000 – 2002 (CDFW, in house data). In 2014/15, we manually counted and measured all fish > 41 cm (TL) passing through the sonar beams so that we could enumerate both jack and adult Chinook Salmon.

### Species Apportionment

The NC steelhead and SO/NCC Coho Salmon in the Mad River overlap in run timing with the CC Chinook Salmon. In general, the Mad River has year-round runs of steelhead, with the winter-run being the most numerous. The late summer/fall-run steelhead overlaps run timing with Chinook Salmon from late August – November, and the winter-run overlaps run timing in December and occasionally in January. Coho Salmon overlap in run timing from late October – January. Relatively few fall-run steelhead are present (this study) within the Mad River, and the abundance of Coho Salmon is unknown, yet considered low (and negligible) based upon our species apportionment methods and observations. We used various methods for species apportionment near the sonar site, including: snorkeling, foot surveys, past and present angler creel surveys, and hook-and-line sampling. By far the most effective and common method we

used was snorkeling. One-two divers surveyed various stream habitat types (pools, runs, glides) immediately upstream and downstream of the sonar site every other day when conditions allowed. If large numbers of fish were present, the diver(s) would complete a second survey, and counts per species were averaged. The diver(s) noted the number and estimated size per species of each adult observed, and relayed the data to the field technician standing on the stream's edge. The field technician then recorded the data onto a Rite in the Rain® notebook. Species apportionment data was then expressed as a percentage per species, and applied to sonar counts made that day, the day before, and the day after each survey. For time periods that extended beyond days with no surveys, we interpolated proportions between apportionment sampling dates (Carroll and McIntosh, 2011; McEwen, 2013).

### Run-Timing (Temporal Migration Patterns)

Monthly counts of adult Chinook Salmon passage across time were used for describing the general temporal trend in migration. Daily counts were used to specifically define run timing in relation to average stream discharge measured at the USGS and CDWR gaging station. For the 2014/15 data set, which encompassed the entire Chinook Salmon run, we investigated diel migration patterns by pooling total passage for each hour stratum (expressed as a percentage of a given month's total count) across the season, and per month to see if hourly migration patterns varied by month. *A priori*, we hypothesized that upstream migration during months of low flow/clear water periods (e.g. September) would be biased towards time of low light, and in higher flow periods (e.g. October - December) migration across hours would be more equal.

## RESULTS

### Sonar Deployment(s) and Missing Data

The sonar camera operated a total of 1,567 hrs from November 18, 2013 – January 23, 2014 during the Chinook Salmon in 2013/14, after which the CC Chinook Salmon run was over. The sonar camera operated a total of 2,685 hours from August 29, 2014 – December 28, 2014 during the Chinook Salmon run in 2014/15, after which the run was considered over. A total sampling time of 41 hrs (2.5% of total possible hours) was missed during the Chinook Salmon run in 2013/14 and 243 hrs (8.3% of total possible) during the Chinook Salmon run in 2014/15 season. Missed sampling times were attributable to sonar to computer malfunctions (usually a power outage) or when stream flows were too high to safely operate the sonar.

### CC Chinook Salmon Abundance Estimates

#### 2013/14

The estimated abundance of adult Chinook Salmon (TL > 54 cm) returns from November 18, 2013 – January 23, 2014 equaled 2,169 (95% CI = 1,936 – 2,402; CV = 5.4%). A total of 2,526

winter-run steelhead overlapped in run timing with Chinook Salmon from December 2, 2013 – January 23, 2014. We did not enumerate Chinook Salmon jacks in 2013/14 (pilot year).

### 2014/15

The estimated abundance of adult Chinook Salmon (TL > 54 cm) returns during the 2014/15 season equaled 6,384 (95% CI = 5,749 – 7,018; CV = 5.0%), and for jack Chinook Salmon (TL < 55 cm) equaled 1,106 (95% CI = 933 – 1,278; CV = 7.8%). The total run size in 2014/15 equaled 7,490 (95% CI = 6,789 – 8,189; CV = 4.7%). We also estimate 425 late summer/fall-run steelhead (TL > 41 cm), and 352 winter-run steelhead (TL > 41 cm) passed the sonar site by the end of the Chinook Salmon run on December 28, 2014.

### Run Timing

#### Monthly

Adult Chinook Salmon in 2013/14 were already passing the sonar site by the first day of deployment (November 18, 2013), and the run ended on January 23<sup>rd</sup>, 2014. During the 2014/15 season, adult Chinook Salmon first began passing the sonar site on August 29<sup>th</sup>, 2014 and the run ended on December 28<sup>th</sup>, 2014, a total of 122 d. Monthly passage in 2013/14 ranged from 479 – 1,041 and in 2014/15 ranged from 10 to 2,729 (Table 1). November and December 2013 accounted for 78% of total abundance, and in 2014/15 October and November accounted for 80% of total abundance (Table 1).

Table 1. Monthly passage of adult Chinook Salmon (TL > 54 cm) during the 2013/14 and 2014/15 seasons, Mad River, Humboldt County, CA.

Month	Adult Chinook Salmon (TL > 54 cm)	
	2013/14	2014/15
August	ND	10
September	ND	659
October	ND	2,366
November	1,041	2,729
December	649	621
January	479	0
February	0	0
Total:	2,169	6,384

ND = No Data.

### Daily

Daily passage rates in 2013/14 ranged from -12 to 348 and averaged 32 fish/d (SE = 7.8) (Fig 2). In 2014/15, daily passage rates ranged from -3 to 985, and averaged 52 fish/d (SE = 11.9) (Fig. 3). Peaks in passage in 2013/14 occurred on 11/21/13 (N = 348 adults) and 1/12/14 (N = 278 adults), and were associated with peaks in streamflow (Fig. 2). Peaks in adult Chinook Salmon passage in 2014/15 occurred on 9/24/14 (N = 285 adults), 10/20/14 (N = 985 adults), 11/15/14 (N = 387 adults) and 11/21/14 (N = 900 adults), and were associated with relatively moderate rises in streamflow on the day of passage (Fig. 3). The first peak in passage on 9/24/14 occurred on the ascending limb of small rise in stream flow on 9/25/14 (Avg. cfs = 70), the largest peak in passage (N = 985) on 10/20/14 occurred on the ascending limb of a stream flow event which peaked on 10/26/14 (Avg. cfs = 1,630), and the second largest peak in passage (11/21/14) occurred on the ascending limb of a stream flow event which peaked on 11/22/14. On 11/22/14, when average daily discharge equaled 6,500 cfs, passage dropped to 12 adult Chinook Salmon. A total of 2,480 (39% of total abundance) adult Chinook Salmon migrated past the sonar site during the low flow, angling closure period (cfs < 200) in 2014.

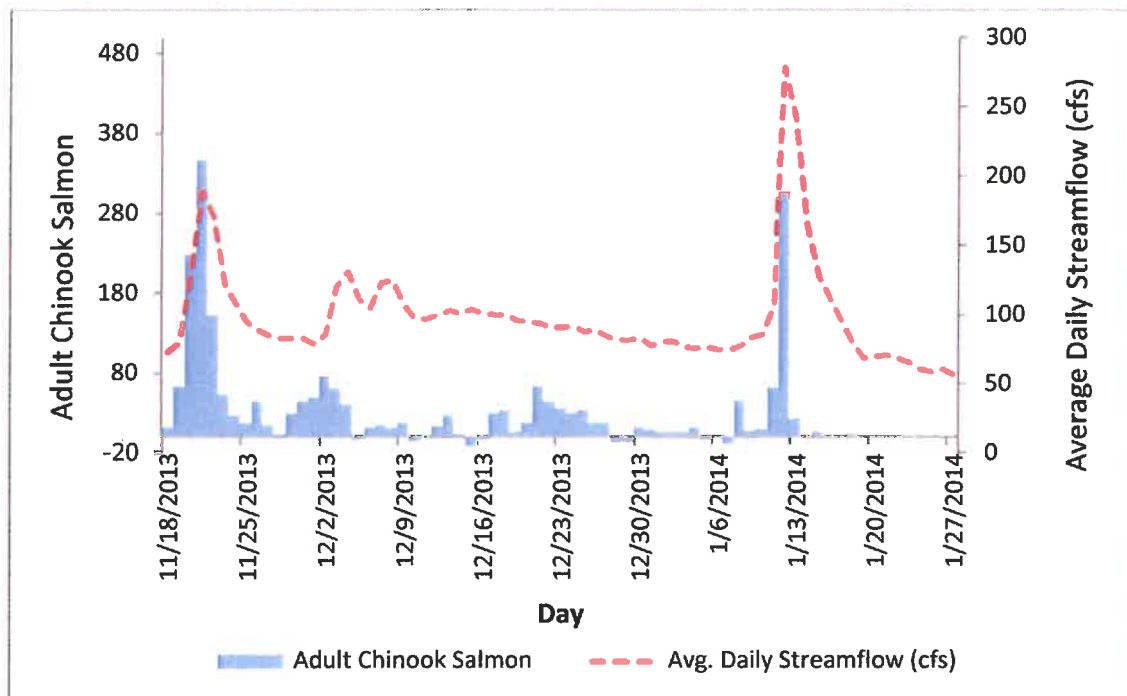


Figure 2. Daily passage estimates for adult CC Chinook Salmon (N = 2,169) in relation to average daily discharge (USGS/CDWR Arcata Gaging Station) in 2013/14, Mad River, Humboldt County, CA.

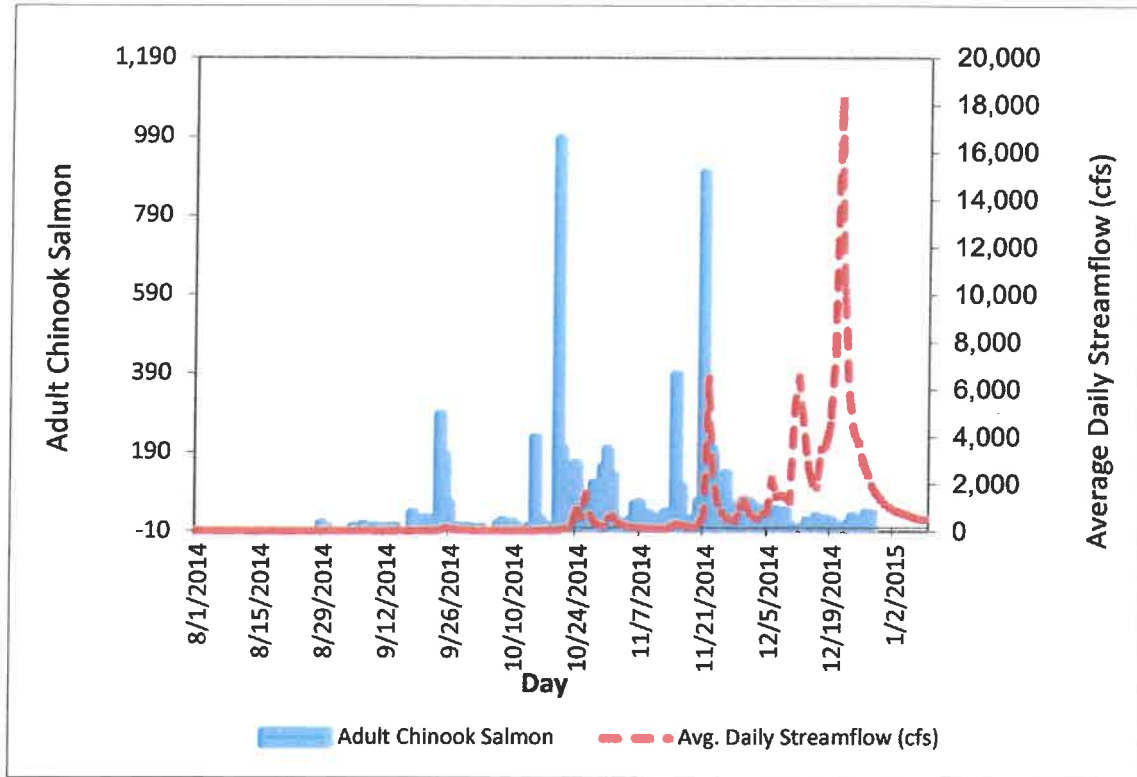


Figure 3. Daily passage estimates for adult CC Chinook Salmon (N = 6,384) in relation to average daily discharge (USGS/CDWR Arcata Gaging Station) in 2014, Mad River, Humboldt County, CA.

**Diurnal (2014/15)**

CC Chinook Salmon (TL > 54 cm) migrated upstream throughout all hours of the day over the course of the run in 2014 (Fig. 4). The peak in upstream migration occurred during 2000, and the period of minimal upstream migration occurred during 0900 (Fig. 4). In general, the period of greatest upstream migration occurred from 1700 – 0300 (57% of total) during periods of suppressed light or darkness, although high passage also occurred during 1000 and 1300 (Fig. 4).



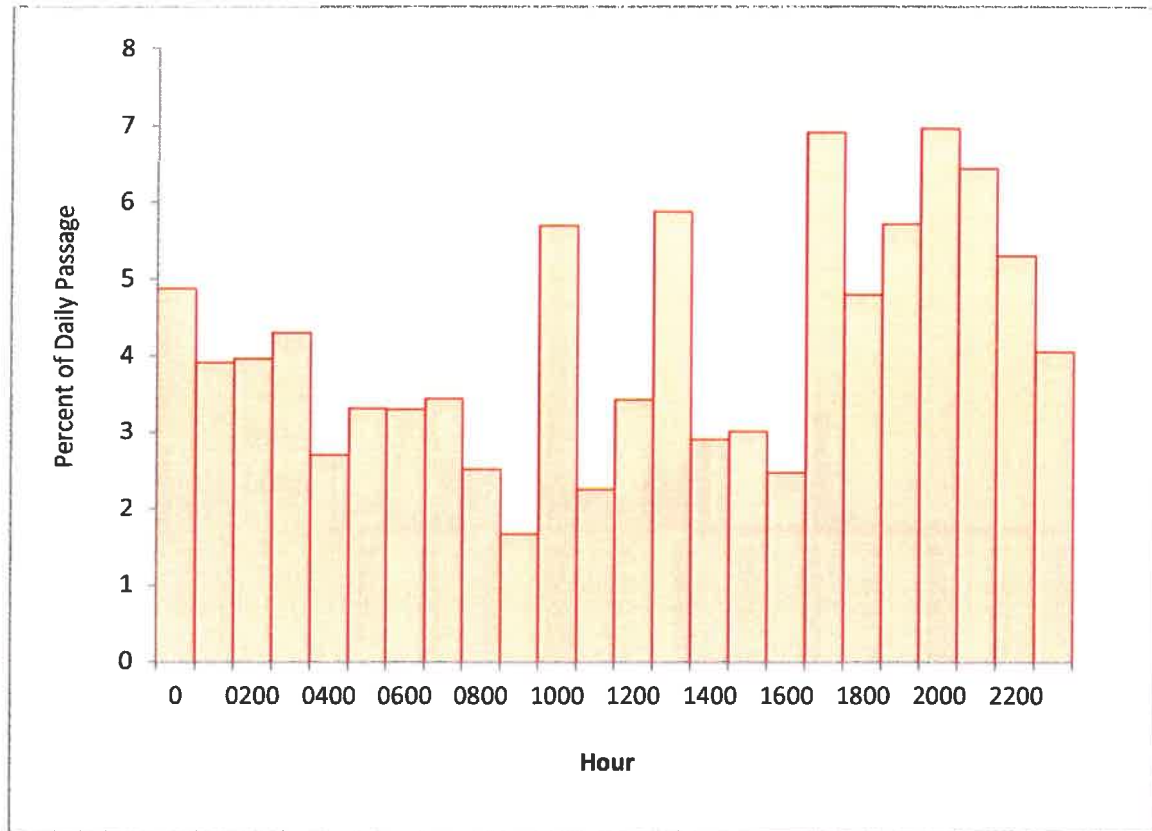


Figure 4. Diel migration pattern of adult CC Chinook Salmon (N = 6,384) in the Mad River from August 29 through December 28, 2014 Humboldt County, CA.

#### *September/October 2014*

The diel pattern in upstream migration in September 2014 showed little movement (1.9% of total) from 0900 – 1400, and contrasted the pattern of upstream migration (28.0% of total) from 0900 - 1400 in October 2014 (Fig. 5). Peak passage in September occurred during 1700 and 1800, compared to 1300 in October, with smaller peaks occurring 1000 and 2100 (Fig. 5).

#### *November/December 2014*

The peak in upstream migration in November 2014 occurred during 1700 and the minimum at 0900 (Fig. 6). Upstream migration was highest from 1700 – 2000, and 1000. In December, a month with higher average discharge, passage peaked during 0700 and was minimal at 0300 (Fig. 6). Upstream passage was highest from 0700 – 1300 (Fig. 6).

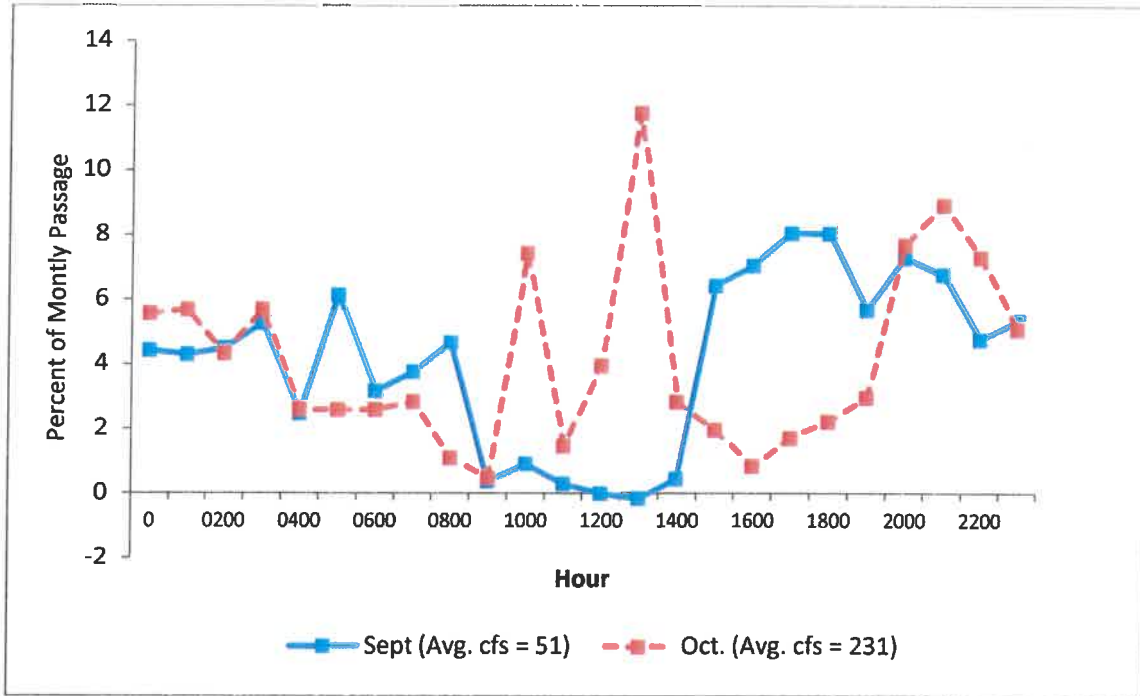


Figure 5. Diel migration pattern of adult CC Chinook Salmon in the Mad River during September and October 2014, Humboldt County, CA.

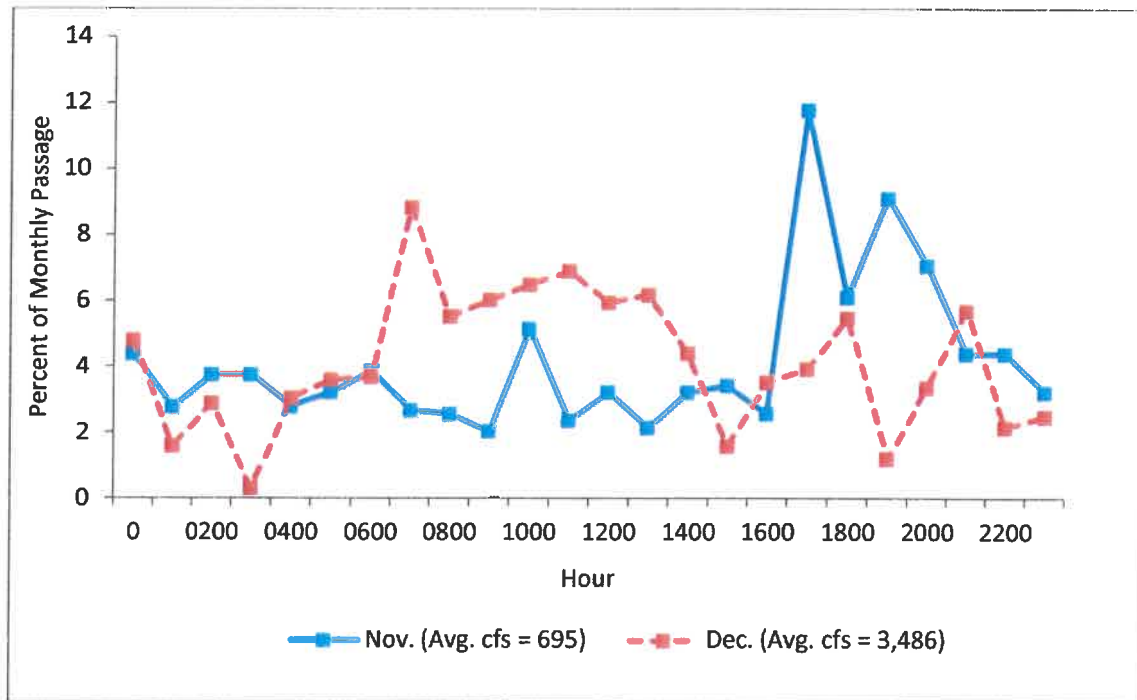


Figure 6. Diel migration pattern of adult CC Chinook Salmon in the Mad River during November and December 2014, Humboldt County, CA.

## DISCUSSION

Mad River makes important contributions to the CC Chinook Salmon ESU (and NC steelhead DPS), however quantifying population spawner abundances (or spawner escapement) using traditional techniques (adult weirs, redd surveys) is impractical, if not unfeasible. Run-size information on CC Chinook Salmon in the Mad River prior to the construction and operation of Sweasey Dam was limited to local newspaper reports and recollections from local residents (Ridenhour et al., 1961; Van Kirk, 2004). Ridenhour (1961) estimated the commercial take of adult Chinook Salmon in the Mad River in 1905 was about 200,000 lbs., which he then equated to about 10,00 adults (if fish averaged 20 lbs.), not counting the sport catch and escapement.

The historical counts of adult CC Chinook Salmon ascending the fish ladder at Sweasey Dam (Rm 19) during 1938 – 1964 ranged from 19 – 3,139, and averaged 825 adults. Since there are several miles of spawning areas below the fish ladder, we consider the counts to represent an index of abundance at best. These annual counts and average count appear low, particularly considering the size of the Mad River basin and the stream length of main-stem accessible habitat, up to Rm 50 (NMFS 2016). Several tributaries upstream of Sweasey Dam (e.g. Maple Cr, Pilot Cr among others) also support CC Chinook Salmon (Stillwater Sciences, 2010; NMFS, 2016). We suspect Sweasey Dam counts were biased low in some years because with most adult salmon counting weirs and ladders, some fish may not migrate through the fish ladder and continue upstream (Murauskas, 2014); rather, some will avoid the ladder and migrate downstream into mainstem areas or tributaries to reproduce. However, Murphy (1951) contended the ladder did not cause the low numbers observed passing upstream, at least up to 1951. Murphy and Shapovalov (1951) stated the ladder was not responsible for the low counts, and suggested that the Eureka Salmon troll fishery may have overly intercepted Mad River Chinook Salmon. Although depressed Klamath River stocks currently restrict commercial ocean fisheries centered out of Eureka CA, there is a commercial ocean harvest of CC Chinook Salmon during times of high abundance for the Klamath stocks. Furthermore, there is in most years an ocean sport fishery that targets adult Chinook Salmon, including the CC Chinook Salmon. Compounding the problem of managing the CC Chinook Salmon ESU, is the lack of quality long term data (O'Farrell et al., 2012; Lacy et al., 2014; NMFS, 2016). Our use of sonar to estimate CC Chinook Salmon returns to the Mad River was designed to provide relevant population level data for a stream that is considered essential and important for the recovery of the CC Chinook Salmon ESU.

### CC Chinook Salmon Abundances

We found that the DIDSON and ARIS sonars, in combination with species apportionment methods, worked very well to enumerate adult CC Chinook Salmon returns to the Mad River in

the 2013/14 and 2014/15 seasons. The sonar site was located downstream of main-stem spawning areas and tributaries which support CC Chinook Salmon, and therefore our counts will not spatially underestimate adult CC Chinook Salmon returns. In 2013/14, the pilot year study which began when Chinook Salmon were already migrating upstream prior to sonar deployment, we estimated 2,169 (CV = 5.4%) adults passed upstream of the sonar site. In 2014/15, in which we completely covered the migration period, we estimated 6,384 (CV = 5.0%) adult CC Chinook Salmon migrated upstream. Additionally, we determined 1,106 Chinook Salmon jacks (CV = 7.8%) migrated upstream, thus, the total return of CC Chinook Salmon equaled 7,490 (CV = 4.7%). Albeit pre-mature with only two years of data analyzed, we suspect the Mad River may be the second largest producer of CC Chinook Salmon within Humboldt County, behind the Eel River. The sonar estimates of CC Chinook Salmon abundances in Redwood Creek, a nearby 7<sup>th</sup> order stream, peaked in the 2013/14 season at 3,487 individuals (includes jacks) (Metheny et. al., 2016), and therefore was much less than our estimate for Mad River returns in the 2014/15 season (N = 7,490). Unfortunately, the Redwood Creek sonar did not operate in the 2014/15 season (Metheny et. al., 2016).

## CC Chinook Salmon Run Timing

### Monthly/Daily

The upstream migration of CC Chinook Salmon in 2013/14 extended into mid-January, unlike 2014/15 when migration ended in December. We suspect the extended migration in January was due to severe drought conditions during the migratory period, in which very low stream flows occurred from September – November, 2013. In 2014/15, we found that migration began in late August and ended in December, 2014. CC Chinook Salmon in the Mad River migrated upstream during low flow periods, and in 2013/14 85% of the counted adults migrated upstream in average daily flows that ranged from 66 – 189 cfs. In 2014/15, 39% of the population migrated past the sonar site when stream flows were less than 200 cfs. The most important months for migration in 2013/14 occurred during November/December (78% of total), and in 2014/15 occurred in October/November (80% of total). Peaks in passage in the Mad River during the 2013/14 season occurred with peaks in discharge, and in 2014/15 occurred on the ascending limb of peaks in discharge. The daily passage rates in 2013/14 ranged from -12 to 348 and averaged 32 adult CC Chinook Salmon/day, and in 2014/15 ranged from -3 to 985 and averaged 52 adults/day. The four peaks in migration in 2014/15 accounted for 40% of the total migration, and indicate that sonar 'down times' should be minimized during periods of migration, particularly when stream discharge has not peaked. Our future use of sonar to enumerate adult returns with respect to stream flows may find an upper limit (threshold) in which migration ceases, or reaches very low levels.

### Diurnal (2014/15)

CC Chinook Salmon (TL > 54 cm) migrated upstream throughout all hours of the day over the course of the run in 2014, with the peak occurring 2000 - 2100, and the minimum during 0900 - 1000. The period of greatest upstream migration occurred from 1700 - 0300 during periods of suppressed light or darkness, however, high passage also occurred from 1000 - 1100 and 1300 - 1400. At a finer resolution (monthly), we found that during low flow periods in September (Avg. cfs = 51) few adults migrated upstream from 0900 - 1400 (1.9% of abundance in September). In December, a month with much higher discharge (Avg. cfs = 3,486), passage peaked from 0700 - 0800 and passage from 0900 - 1400 equaled 36% of total abundance in December. Therefore, more adult CC Chinook Salmon migrated during low light levels or darkness when stream flows were low, and when stream flows were high, migration was higher from morning to mid-day.

### ACKNOWLEDGEMENTS

Funding for the pilot year in 2013/14 was provided by the Sport Fish Restoration Program and funding for 2014/15 was provided by CDFW's Anadromous Fisheries Resource Assessment and Monitoring Program. We thank Humboldt Bay Municipal Water District for un-limited access to the sonar site location, Sergio da Costa (Sound Metrics) for technical assistance and support, and Benjamin Sheppard, Roderick Park, Olivia Carter, and Steven Holt for assisting with processing sonar files to count and measure fish. We thank Teri Moore of CDFW AFRAMP for providing the Mad River watershed map, and Brian Marston (ADFG) and Dan Free (NMFS) for their helpful comments on the manuscript.

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# Continuing Business

Lost Coast Outpost

(1-15-18)

WEED FEED / JOHN ROSS FERRARA / YESTERDAY @ 8:35 A.M.

## Weed Feed: Seven of 10 Northern Spotted Owls Test Positive for Rat Poison From Marijuana Grows, Study Finds



*Northern Spotted Owls*

| [U.S. Forest Service](#).

Rat poison from illegal marijuana grows is working its way up the food chain and harming the federally endangered northern spotted owl, according to a [study put out by UC Davis](#) last week.

The report states that seven out of 10 Northern spotted owls that were found dead in the Emerald Triangle and analyzed for the study tested positive for high levels of rat poison.



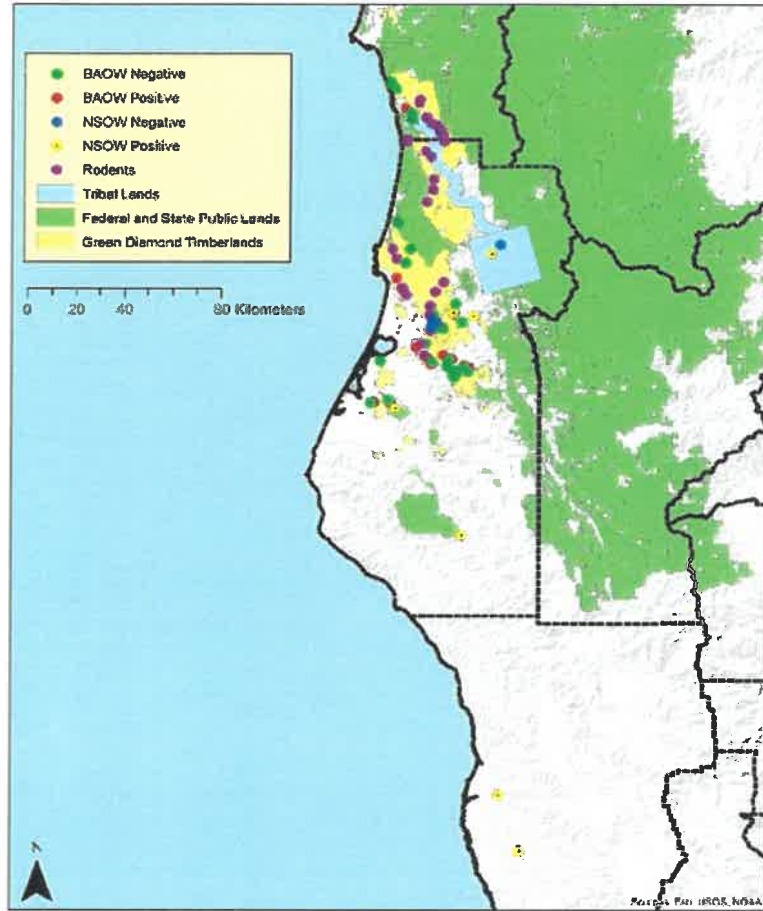
*Jack Dumbacher with the owl collection at the California Academy of Sciences. (2017 California Academy of Sciences) | Photos provided by UC Davis.*

Lead author Mourad Gabriel, a research faculty member with the [UC Davis Karen C. Drayer Wildlife Health Center](#), said in a [UC Davis press release](#) that spotted owls often feed along forest edges, which can be unnaturally created marijuana grow clearings.

Fig. 1. Collection locations for northern spotted owls (NSO; *Strix occidentalis*...) <https://www.ace-eco.org/ops/author/proof.php/1134/figure1.html>

UC Davis.

Fig. 1. Collection locations for Northern Spotted Owls (NSO; *Strix occidentalis caurina*), Barred Owls (BO; *Strix varia*), and rodents and their anticoagulant rodenticide (AR) status in Northwestern California, USA. Positive NSO and BO are represented by yellow and red circles, respectively. The northern study area in Del Norte County and the southern study area in Humboldt County are delineated by dashed county lines.



“When you have thousands of unpermitted grows and only a handful of biologists that regulate that for multiple counties, we’re deeply concerned that there aren’t sufficient conservation protective measures in place,” Gabriel is quoted as saying in the press release. “If no one is investigating the level at which private marijuana cultivators are placing chemicals out there, the fragmented forest landscapes created by these sites can serve as source points of exposure for owls and other wildlife.”





*Mourad Gabriel.*

Gabriel is also responsible for the research in 2012, 2013 and 2015 which linked rat poison from marijuana grows in to the deaths of fishers in Humboldt County.

The Hoopa Valley Tribe and Humboldt State University also coauthored the study.



###

*The Weed Feed is a weekly column written by John Ross Ferrara.*

*The Weed Feed is a one-stop shop for the best local and national cannabis news.*



Discover Sept. 2017  
SECTION H2 PAGE NO. 4



Research ecologist Mourad Gabriel is one of the few scientists studying illegal grow sites in California's overrun national forests.



# High Consequences

Pot growers have turned public lands into industrial agricultural sites. And the ecosystem effects are alarming.

BY JEFF WHEELWRIGHT  
PHOTOS BY MORGAN HEIM





U.S. Forest Service officers collect coils of plastic pipe used to divert water from springs to marijuana plants at an illegal grow site on public lands.

**O**N A HOT August morning, Mourad Gabriel steps out of his pickup onto the gravel road that winds up the side of Rattlesnake Peak. Dark-bearded and muscular, the research ecologist sports a uniform of blue work clothes, sturdy boots and a floppy, Army-style camo hat. He straps on a pistol. "Just to let you know," Gabriel says, sensitive to the impression the gun makes, "it's public land, so I open-carry."

Another 100-degree day is promised. Gabriel and his four field assistants are headed to work in California's Plumas National Forest, a few hours' drive from Lake Tahoe, at the northern terminus of the Sierra Nevada. The U.S. Forest Service (USFS) has enlisted Gabriel to assess the scars from rampant marijuana cultivation. Today's field site: an illegal marijuana plantation known as the Rattlesnake Grow.

Gabriel doesn't take chances because he's been threatened personally. In 2014, someone poisoned his family dog with a pesticide that's used at the grow sites. The intruder crept onto Gabriel's property at night and scattered poisoned meat in his backyard. And last year during raids on plots elsewhere in California, two police dogs were stabbed by men fleeing the scene.

So whenever Gabriel enters a cultivation site with his research team — even one that's been abandoned, as this one is — he always goes in first.

Most of the U.S. domestic marijuana supply is raised in California. Some pot is grown on private property for legal use by medical marijuana patients. These operations can be monitored, and with Californians having legalized recreational pot last November, the regulation is sure to tighten. But in popular pot-growing regions like Humboldt, Mendocino and Trinity counties — closer to the Northern California coast in the so-called Emerald Triangle

— environmental regulation has been slow to catch up. Commandeering streams, growers divert the water into high-tech greenhouses, to the detriment of the aquatic life lower in the drainage, including the threatened coho salmon. Biologists for the California Department of Fish and Wildlife have shown that thirsty marijuana plantations can dry up water sources.

What's more, the rest of the crop — the vast black-market portion — is planted on public or tribal lands by people who ignore the environmental consequences of their activity. When they're captured, some turn out to be Mexican drug cartel workers, and others come from smaller independent groups. U.S. authorities concede that the great majority of these

"trespass grows" are never detected. Even after sites are cleared, the shadowy growers may reclaim them the next year.

"The public doesn't understand the industrial scale of this," says wildlife biologist Craig Thompson.

But if you have heard anything about streams being polluted or animals and birds being poisoned by marijuana production, it's almost certainly because of Gabriel, a soft-spoken scientist who now and then unleashes his inner Rambo.

#### AFTER THE BUST

Gabriel takes his team of biologists over the top of an open, sunbaked ridge and down the other side of the mountain. Immediately, burnt and toppled trunks of pine and fir and head-high tangles of

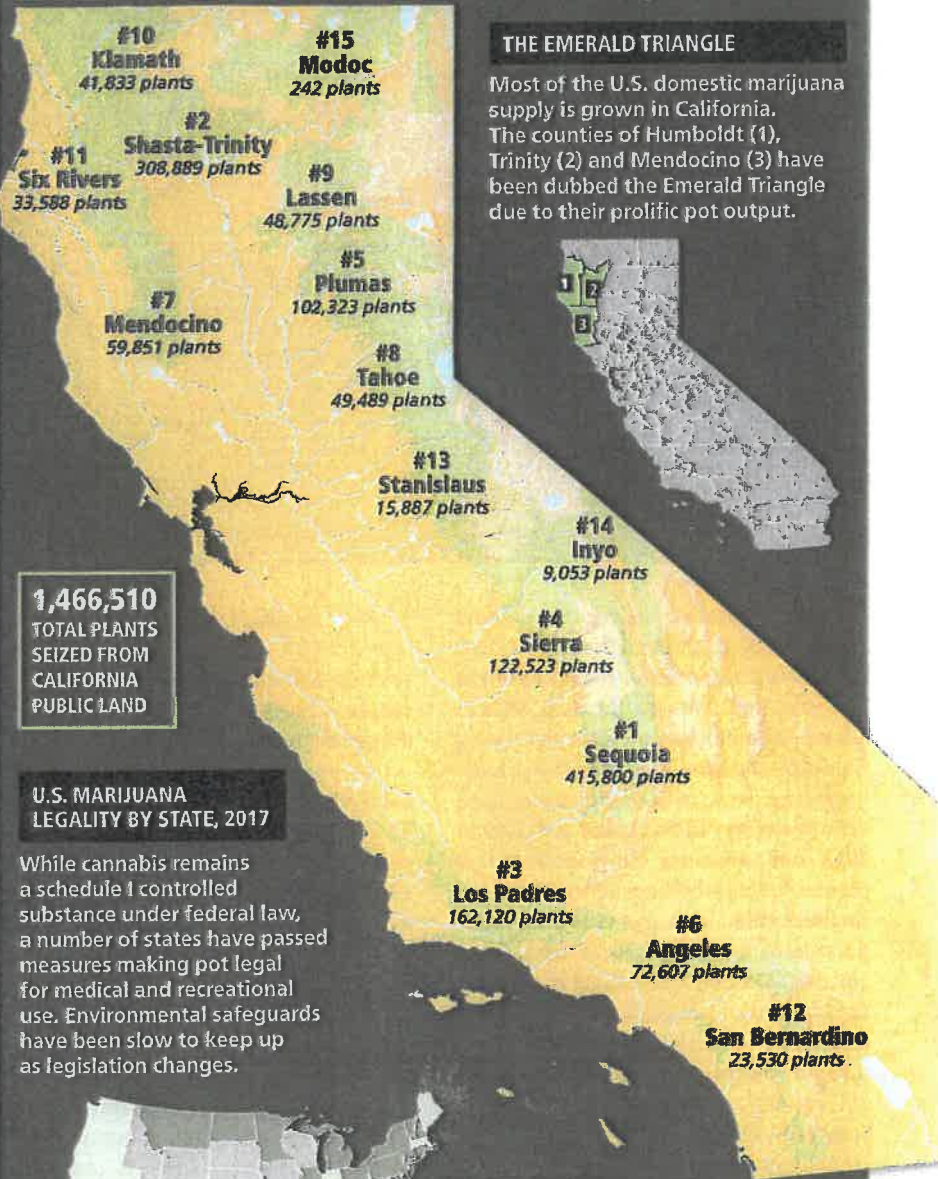


## Trouble in Pot Country

Illegal marijuana grow sites are a big problem in California's national forests. Government stats on California's top 15 national forests for marijuana busts show "trespass grows" happen across the state.



MARIJUANA PLANTS SEIZED IN CALIFORNIA'S NATIONAL FORESTS, 2016



### THE EMERALD TRIANGLE

Most of the U.S. domestic marijuana supply is grown in California. The counties of Humboldt (1), Trinity (2) and Mendocino (3) have been dubbed the Emerald Triangle due to their prolific pot output.

**1,466,510**  
TOTAL PLANTS SEIZED FROM CALIFORNIA PUBLIC LAND

### U.S. MARIJUANA LEGALITY BY STATE, 2017

While cannabis remains a schedule I controlled substance under federal law, a number of states have passed measures making pot legal for medical and recreational use. Environmental safeguards have been slow to keep up as legislation changes.



Sources: National Conference of State Legislatures (U.S. map); U.S. Forest Service (California map)



wild lilac shrubs impede the way. Ten years ago, the Moonlight Fire destroyed 65,000 acres of forest in the Plumas. The marijuana growers stole into the broad footprint left by the blaze in dozens of places. In the section we're hiking, they cut trails and cleared a series of plots on a steep slope above a ravine. Then the trespassers dug out three springs and diverted their flow into half-inch black plastic piping, which they threaded through the cover of vegetation to their network of plots below. The waterlines emptied into tarp-sealed pits that could store hundreds of gallons of water. Having started thousands of marijuana seedlings in plastic cups, the growers planted them among the shrubs throughout the plots. Each bright green

MAPS: ALISON MACKAY/ISTOCK; POT LEAF: MARTIAL RED/SHUTTERSTOCK





Craig Thompson, a USFS biologist, drops a water filter into a High Sierra stream (left) near a marijuana grow site. Tests have turned up pesticides and fertilizers coming from the grows. Wildlife biologist Greta Wengert (above) carefully handles a suspected neurotoxin found in a Gatorade bottle.

plant was irrigated via drip lines, some triggered by a battery-powered timer. Although the mountainside faced north and east, light was no problem. Where it used to be blocked by trees, the strong California sun now slathered the crop.

Gabriel was with the rangers and deputies when they busted the site in 2015 and uprooted more than 16,000 plants. Judging by bags left around the site back then, he suspects at least 4,000 pounds of potent fertilizer were used. He also recorded several empty containers of a concentrated organophosphate insecticide — a lethal nerve poison that's toxic to wildlife.

Gabriel's non-profit organization, Integral Ecology Research Center (IERC), was hired to assess the damage to water sources, soils and sensitive plants and animals. They also inventoried toxic waste, piping, camp materials and trash. Now it's up to the Forest Service to decide how to repair the damage. Gabriel, enlisting local volunteer groups, will assist with the cleanup, too. The service he offers is soup-to-nuts.

"He's passionate. He's a character," says USFS's Thompson, who collaborates with Gabriel on research. "He has continued to shine a light on the issue, though it's still under the radar."

#### CONNECTING THE DOTS

The first glimmer of impacts to wildlife came to Gabriel from fishers. A fisher — a type of weasel whose body is about the size of a housecat's — is a denizen of deep woods. It has a wide face and long furry tail, and it can run up and down trees like the woodrats and squirrels it hunts. Fishers have never been overly abundant in the mountains of the West Coast, and their population plummeted after a century of logging and trapping. In the 21st century, biologists have tried to restore the Pacific fisher by reintroducing young animals and tracking them with radio collars. But the fishers' expansion has been slow because they have been dying more rapidly than researchers expected.

Gabriel joined the fisher reintroduction project in 2009. At the time, he was

completing his Ph.D. at the University of California, Davis. He credits an uncle for interesting him in the outdoors. The uncle was also a taxidermist; hence, young Mourad developed an interest in the interiors of animals. In high school, a vocational aptitude test suggested that he could be a game warden, park ranger or biologist. As an undergrad at Humboldt State University, he took courses supporting all three. Gabriel met his future wife, Greta Wengert, while they were both studying wildlife biology in college. After marrying, the two founded IERC in Blue Lake, Calif.

Gabriel's work for the fisher reintroduction project was lab-based. He conducted necropsies of dead animals that Thompson's field researchers had picked up. Examining a fisher carcass one day, Gabriel found that its organs had turned to mush. The fisher had been poisoned by a compound that blocks clotting and prompts unchecked internal bleeding, a so-called second-generation anticoagulant rodenticide (AR). D-CON, commonly used against mice and rats, is a





Researchers examine a Pacific fisher carcass (left). The animals are struggling in part due to rat poison used by illegal marijuana growers. Forest Service officials catalog fertilizers (above) found at a Northern California grow site. One grow operation can use thousands of pounds of fertilizer.

familiar brand of AR. But how did a forest carnivore absorb a pesticide typically used around farms and houses?

Gabriel remembers wondering if this one fisher was an outlier. "So we went back to the archival liver tissue," he says. When he inspected frozen specimens and collected additional carcasses from colleagues, Gabriel discovered that rodenticides had, if not killed, then at least tainted 85 percent of expired fishers.

"It took a while to connect the dots," he says. From his field experience he was familiar with illegal pot grows, which had plagued the backcountry terrain for 20 years or more. "We've all run into it. We've been trained," Gabriel says. "If you come upon a site, you do a 180 and walk away."

#### MOUNDS OF PESTICIDE

Law enforcement officers from different agencies asked him if rat bait from grow sites might be the culprit. It made sense; rodents and squirrels would gnaw the marijuana plants.

If the growers scattered AR and the rodents were sapped by internal bleeding, they would become easier prey for fishers. Bioaccumulation, as the process is known, would pass the rodenticide up the food chain, where concentrations increase. The fishers in turn might have become prey for bobcats and mountain lions.

Raids turned up empty bags of AR and sometimes even mounds of the pesticide. To test their hypothesis about bioaccumulation, Thompson, Gabriel and state toxicologists tried to tie the levels of AR exposure in fishers with the locations of grow sites found by law enforcement.

The researchers analyzed 46 female fishers that died over five years. Their results showed that the animals that lived longest had the least rodenticide in their livers and the fewest grow sites within their home ranges. Conversely, animals with roughly four or more grow sites nearby died the soonest.

In a 2015 paper in the journal *PLoS ONE*, the researchers stepped back

and examined all the causes of mortality in their collared fishers. Predation accounted for 70 percent of the deaths, disease an additional 16 percent, and poisoning, which until lately hadn't been considered, 10 percent. The new factor might explain why fishers weren't rebounding as fast as they might be. Pesticides might be the major factor in most of the deaths, even those not poisoned outright. "You can argue that the animals that are affected by rodenticide are weaker," Thompson says, "and that the predation rates on them, as I suspect, are higher."

#### SOUNDING THE SIREN

In a parallel case, rodenticides have worked their way into some of California's northern spotted owls, a threatened species. The owls also eat tainted rodents near grow sites. The evidence here is less direct, and depends on analyses of a competing species, the barred owl. For decades, barred owls from Eastern states have been invading the breeding territory of the northern spotted owl



## Animals at Risk

Dried-up streams, polluted water and toxic chemicals from illegal grow sites in Northern California put a number of native species in danger.

### COHO SALMON

*Oncorhynchus kisutch*

Growers divert water from streams, harming this key species.



### PACIFIC FISHER

*Pekania pennanti*

These creatures are among the hardest hit by grow operations.



### SPOTTED OWL

*Strix occidentalis*

Owls eat rodents that have been weakened or killed by rat poison.



### OTHER ANIMALS EXPOSED INCLUDE

- Golden eagles
- Red-tailed hawks
- Bobcats
- Martens
- Great horned owls
- Canada geese
- Kangaroo rats
- San Joaquin kit foxes
- Coyotes
- Mountain lions
- Turkey vultures
- Barn owls
- Minks

Source: California Department of Fish and Wildlife

in California, Oregon and Washington. Already on the ropes from the logging of old-growth woods, spotted owls were disappearing, and so biologists tried a desperate measure: shooting barred owls.

At the Hoopa Valley Indian Reservation in Humboldt County, forestry biologist Mark Higley, who has helped with the fisher project, also takes part in the culling of barred owls. Higley says he and his staff have had run-ins with illegal growers, “taking risks we shouldn’t take.” After Gabriel’s breakthrough with AR and fishers, Higley sent him liver samples of more than 155 barred owls that had been collected at Hoopa. More than half were positive for rodenticide. Gabriel also had positive results from two spotted owls that were hit by cars. Since spotted owls are endangered, Higley and Gabriel use barred owls as a surrogate — their dietary habits are similar — and infer that up to half of spotted owls near grow sites might be exposed to rodenticide. Now Thompson is looking for other examples of bioaccumulation. He’s testing mountain lion scat for rat poison and pesticides.

Only Gabriel, Thompson and a handful of other biologists are investigating the ecological effects of toxins from the trespass grows. The funding opportunities are scant, and the fieldwork is hard and potentially dangerous. Although growers who have been surprised at their plots haven’t hurt anybody — usually they just run away — sometimes shots are fired.

Adding to the frustration, many important questions are nearly impossible to answer. At what levels do agricultural chemicals and rodenticide interfere with fishers’ reproduction? How much poison does it take to weaken an animal enough that it becomes easy prey for fishers and bobcats? Wildlife toxicology’s pitfall is that lab experiments can’t be performed on wild populations, let alone on sensitive, and rare species.

“You have these snippets of field-based evidence,” Gabriel says. “Maybe you could do a liver biopsy on a captive fisher, but it would cause bleeding, and if an anticoagulant were affecting the animal, [the test] could push it over the edge. I’ll leave that work to someone else.” His role, as he sees it, is sounding the siren.

THIS PAGE FROM TOP: NOAA/NMFS/SOUTHWEST FISHERIES SCIENCE CENTER SALMON ECOLOGY TEAM; MORGAN HEIN; J. MARK INGLEY/HOOPA TRIBAL FORESTRY; OPPOSITE: MORGAN HEIN





Growers often squat in primitive camps on public lands, leaving their mess to the Forest Service after harvest time.

he problem is getting worse," he says, frustrated. "Who's documenting this?"

### THE UNSEEN GROWER

Amid the lilac shrubs, pungent with pollen, marks of the Rattlesnake Grow aren't immediately obvious. Soon the paths and waterlines of the growers can be spotted, and then other items like fertilizer bags, heavy-duty plant shears and matted clothing, which the wilderness is swallowing up.

As Gabriel investigates a stream angling toward the ravine, the four techs split into pairs. Two young field biologists push off in opposite directions, using their GPS trackers to measure plot boundaries.

The slanting plot, still faintly pocked with bare spots where the marijuana grew, is about 50 yards wide and 100 yards long. They crisscross the area with cans of spray paint, tagging empty bags of chemicals as they count them. When they take a break, they huddle in the shade thrown by the charred trees.

Walking on a diagonal line across

the site, the biologists collect at least five samples of soil in plastic bags. The samples will be tested for various pesticides. Five samples for 1,500 square yards might not seem like much. "That's all we can get funded for," says Gabriel, who has rejoined the others. He reports spotting boot tracks. "I think they came back and took the tent and sleeping bags, probably sometime last spring."

Of all the species Gabriel studies, the human animal — the unseen grower — is the hardest for him to figure out. "I've visited between 100 and 200 grow sites," he says, leaning against a fallen tree. He wonders, why would growers plant so high up on this ridge with limited water?

"We saw a different approach last week," Gabriel says. "Just 60 meters from a paved road they were growing 5,000 plants. Maybe one criminal organization decides, 'We'll go deep in the wilderness,' and another, 'Let's put it by the road.' You're trading easier access for greater risk."

He sees each site as a piece of a larger puzzle. If researchers could

better understand the selection process, it might be possible to better handle these trespass grows.

Later, over a beer in his motel room, Gabriel says, "There's no way I can do this physically 15 or 20 years from now." He figures he's got eight more years, after which he hopes the field will be big enough for him to exit and do something else, leaving others to carry on the research. He's trying to spur other biologists to study illegal grows too. He wants to track the long-term effects of the chemicals by incorporating specialties like hydrology and soil science.

"As an ecologist, I love working on species of conservation concern," he says. "I want a stable population of fishers and owls. I want basic research *and* applied management. Not science just for the sake of science but science as a *solution*." ■

*Jeff Wheelwright, a contributing editor at Discover, has written two books on environmental science and has reported on wildlife issues for four decades.*

**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: February 1, 2018

Re: **MCMP, LLC Planning Commission Permit Appeal**

**Background**

At the January 11, 2018 Humboldt Planning Commission's hearing for Application Number 10244; Case Numbers ZR-16-001 and SP16-015 by MCMP, LLC, our District submitted written and oral testimony in opposition to the proposed zoning change and project permit. The Planning Commission approved recommending the zoning change to the Board of Supervisors and approved the permit application. On January 17, 2018, our Board conducted a Special Board meeting to discuss these decisions and decide further action by our District, if any. Our Board unanimously decided to file an appeal of the permit for the cannabis concentration manufacturing facility and oppose the zoning change from agricultural to heavy industrial on a property that sits over our aquifer for the source drinking water for the majority of Humboldt County's population. In addition, the Board directed staff to negotiate further engineering mitigation measures that could potentially address the concerns raised by the District at the Planning Commission's hearing.

On January 23, 2018, Supervisor Ryan Sundberg, Mark Benzinger of Mercer Fraser representing MCMP, LLC, President Sheri Woo, and general manager John Friedenbach, met to discuss the District's concerns. On January 26<sup>th</sup>, MCMP, LLC provided a revised Operations Plan & Manual for the cannabis concentration manufacturing facility and responses to our list of concerns discussed on January 23<sup>rd</sup>. See attached documents.

Also on January 26, 2018, per the Board's direction, staff filed the appeal to the Planning Commission's permit approval. See attached appeal document. The fee associated with filing the appeal was \$2, 262.97.

Attached for your reference are relevant news articles and correspondence on this issue.

**Recommendation and Action**

Staff recommends that the Board consider and discuss the responses provided by MCMP, LLC and provide direction to staff as to further action to be taken.

**Attachments:**

MCMP, LLC response to District list of concerns  
MCMP, LLC Operations Plan & Manual  
Revised Permit Conditions by Planning Commission  
Appeal of Planning Commission's Permit Approval  
Relevant correspondence and news articles

## MCMP Humboldt, LLC

January 26, 2018

**VIA EMAIL ONLY**

Mr. John Friedenbach  
General Manager,  
Humboldt Bay Mutual Water District  
P.O. Box 95  
Eureka, CA 95502-0095  
[friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)

**Re: MCMP Humboldt, LLC; Q Overlay Permit Additions**

Dear Mr. Friedenbach:

This letter responds to the Humboldt Bay Municipal Water District's ("District") questions and requests regarding the MCMP, LLC Operations Manual and general operations. The District's comments are restated below, followed by MCMP's response. MCMP prepared these responses in furtherance of our continued efforts to address and resolve the District's concerns.

### **OPERATIONS PLAN**

- 1. Page 75; Section 9 b): provide copy of HMBP to HBMWD. Require and provide copies to HBMWD of SPCC plan and SWPPP encompassing all operations on the property.**

MCMP will provide the cannabis manufacturing facility's Hazardous Materials Business Plan to the District if that facility will handle quantities of hazardous materials that trigger the requirement. The Operations Plan currently states that the facility does not intend to handle hazardous materials in quantities that would require a HMBP

Mercer-Fraser Company will provide a current version of the Essex facility's SWPPP to the District. The facility does not currently have an aggregate aboveground oil storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons and, therefore, is not required to have a SPCC at this time.

- 2. Page 76; Section 9 c): limit amount of on-site storage of hazardous waste, solvents or other chemicals.**

MCMP agrees to limit the amount of onsite storage of hazardous waste, waste solvents, or other waste chemicals. Quantities of waste materials will not exceed 55 gallons. All hazardous waste, solvents, and other chemicals will be disposed of offsite in compliance with all applicable laws and regulations.

- 3. Page 78; Section 11 b): provide copies of all facility inspections to HBMWD within 30 days.**

MCMP will make manufacturing facility inspection reports available for the District's review at the facility within 48 hours' notice of any request by the District.

**4. Page 80; Section 12: No on-site disposal of any waste.**

MCMP will not dispose of any waste onsite. MCMP has revised the Operations Plan to clarify this point. A copy of the proposed revisions to the Operations Plan are attached in redline as Exhibit 1.

**5. Page 81; Section 13 a): delete Acetone and Heptane from possible solvents. Limit to only gaseous: butane, propane and CO2 or liquid ethanol or isopropanol with limited on-site storage quantities.**

MCMP has revised the Operations Plan to remove Acetone and Heptane from the list of possible solvents. (Exhibit 1.) Butane, CO<sub>2</sub>, ethanol and isopropanol are all liquids when pressurized and stored. Estimated quantities of these onsite solvents will vary but shall not exceed 55 gallons per solvent. Estimated quantities of propane, which is also a liquid when pressurized, will also vary, but are not anticipated to exceed 250 gallons.

**6. Page 83; Section 14 a) i) (a): Max amount stored is subject to permit limitations of 50 gallons for ethanol. What are reasonable limits for gases: butane, propane, and CO2?**

MCMP has revised the Operations plan to note the maximum permitted storage of ethanol. (Exhibit 1.)

As discussed above, Butane, CO<sub>2</sub>, ethanol and isopropanol are all liquids when pressurized and stored. Estimated quantities of these onsite solvents will vary but shall not exceed 55 gallons per solvent. Estimated quantities of propane will also vary but are not anticipated to exceed 250 gallons.

**7. Page 83; Section 14 a) i) (c): Is a gas monitoring system required?**

State and local cannabis ordinances do not require a gas monitoring system. A gas monitoring system may be required through the County building permit process. The manufacturing facility will comply with all applicable building code requirements.

**8. Same (d): Is a fire suppression system required? If so, will building design include fire sprinkler flow containment?**

It is assumed that a fire suppression system will be required. State cannabis manufacturing regulations require the facilities to be approved for use by the local fire code official. (See e.g., 17 Cal. Code Regs., § 40225(b).) A final determination on a fire suppression system, including flow containment, will be made by the County fire and building officials.

**9. Same ii): Jeff Smith said CO2 would be used. Plan should state so.**

The Operations Plan states that CO<sub>2</sub> will be used. See section 13(a).

**10. Page 84; same iv): Provide written notification to Humboldt County Building Dept. and HBMWD if any material change occurs.**

MCMP will provide written notification to the County Planning and Building Department and the District if any material change occurs.

**11. Page 84; c): Where will drain for eyewash be plumbed to?**

MCMP anticipates that the drain for the eyewash station will be drained to the onsite septic system.



**12. Page 85; d) ii): Require approval by Humboldt County Building Dept. with notice to HBMWD and public process.**

Approving solvents in UL or ETL systems that are not listed as recommended for use by the manufacturers' instructions is not within the Planning and Building Department's area of knowledge or expertise. As stated in the Operations Plan, use of any solvents not listed will be approved by the system manufacturer or a Professional Engineer. MCMP will provide notice to the District of any change to the list of solvents used in the manufacturing process.

**13. Page 85; f) iii): What is the maximum storage for the chemicals listed?**

As discussed above, maximum storage for Butane, CO<sub>2</sub>, ethanol and isopropanol shall not exceed 55 gallons per solvent. Maximum storage for propane not anticipated to exceed 250 gallons.

**14. Page 88; Attachment 5: HBMWD was not included in Referral Agency notices.**

MCMP understands that the County is looking into this question. MCMP will ensure that the District is properly listed as a referral agency for any future actions relating to the facility.

**GENERAL CONDITIONS/QUESTIONS**

**15. How is surface water draining on site handled? Storm water control basin? Can run off be directed to Essex Road and not the river?**

Surface water will be contained onsite in a stormwater runoff control basin. Runoff cannot be directed towards Essex Road due to the facility's topography.

**16. Locate leach field for septic system located away from river and towards Essex Road.**

The leachfield for the septic system is located away from the river, towards Essex Road. A copy of the site plan is attached as Exhibit 2.

**17. Install sanitary seal as required by California Dept. of Water Resources on water well.**

Mercer-Fraser will install a sanitary seal on the water well.

**18. Provide written notice within 30 days to HBMWD for any permit changes concerning operations on the property filed with any agency.**

MCMP will provide the requested notice for any permit changes concerning the manufacturing facility.

**19. Prepare full EIR specific to the Cannabis Concentration Manufacturing process which includes characterization of all solvents to be used and chemicals to be stored on-site for all handling of them: 1) delivery; 2) storage; 3) use; and 4) disposal, in relation to potential impacts to our Ranney Well intakes for the public drinking water system. Include environmental and public health risk assessment to evaluate levels of significance.**

The Planning Commission has determined that the project would have no impact to water quality. Based on the voluntary limitation of the types and quantities of solvents used in the manufacturing process, the nature of the closed-loop extraction system, and other project changes, MCMP has further decreased, and essentially eliminated, the likelihood of any impacts to water quality.

**20. For lessee operators of Cannabis Concentration Manufacturing facility, include copy of Q zoning restrictions as attachment to and condition of lease agreement.**

MCMP will include a copy of the "Q" zoning restrictions as an attachment to and condition of any lease agreement.

**21. County and Mercer-Fraser consult with the Blue Lake Rancheria Tribe to ensure cultural resources (including culturally significant fish species) are protected.**

Formal tribal consultation under CEQA is not applicable to this project. Moreover, the Blue Lake Rancheria Tribe already provided comments on the project. Nonetheless, MCMP is willing to engage the Blue Lake Rancheria Tribe to listen to additional concerns the tribe may have.

We trust these responses and changes to the Operations Plan satisfy the District's requests. Please let me know if you have any questions. MCMP looks forward to working with the District to address its concerns and maintain a positive working relationship.

Sincerely,



Mark Benzinger

cc: Jeff Smith  
Ryan Sundberg

MCMP, LLC

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Medical Cannabis Manufacturing Facility

90 Glendale Drive, McKinleyville, CA

# Operations Plan & Manual

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# MCMP, LLC

## OPERATIONS MANUAL

### 1) County's Access to the Facility:

- a) All facility personnel will cooperate fully with all conditions in the Use Permit and Use Permit Application requiring that the County, its agents, and employees, be granted access to the facility to seek verification of the information contained within the conditional use permit, permit applications, the Operations Manual, and the Operating Standards at any time before or after the conditional use permit is issued.
- b) The Humboldt County Sheriff's Department will be authorized to have 24 hour access to the facility's security surveillance video.

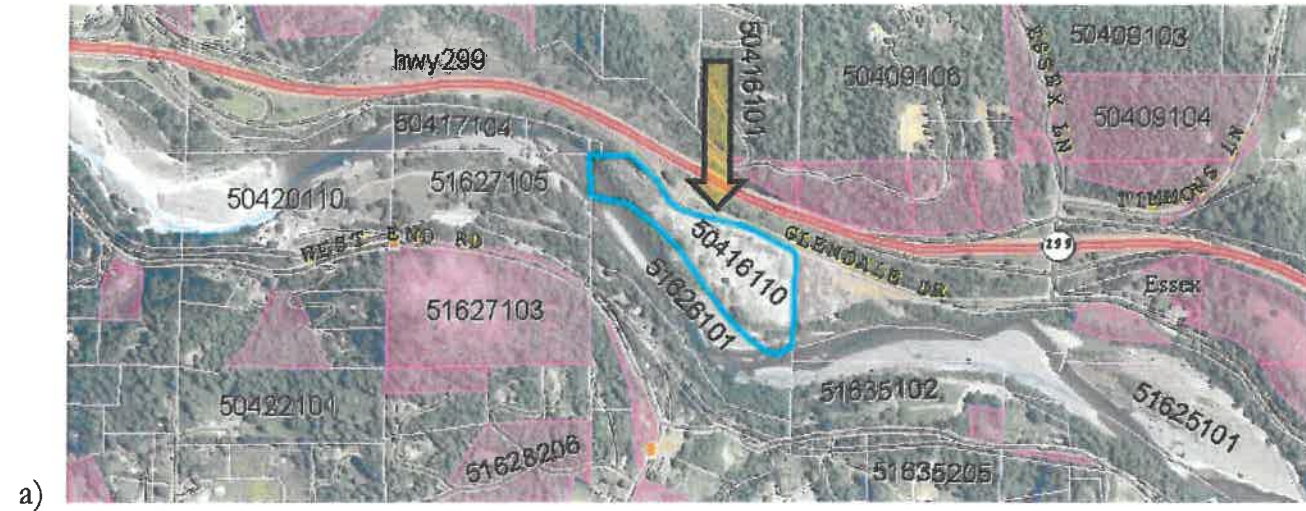
### 2) Staffing & Staff Screening Processes

- a) All candidates for staff positions will undergo criminal background checks as part of the standard screening process. To the maximum effect allowed by California and federal employment law, candidates with a criminal history or a history of drug abuse will be screened from employment.
- b) The facility will require 1 to 4 FTE employees depending on workload.

### 3) Days and Hours of Operation

- a) The facility is not open to the public and will not accept visitors without a specific business purpose.
- b) Hours of operation will typically be from 7 AM to 7 PM; however, during periods of seasonally high workload, the hours of operations within the facility may increase to 24 hours per day. During such extend hours of operations, shipping, receiving, and any other traffic or noise generating activities will be limited to normal working hours.

#### 4) Location Map



#### 5) Security Measures –

- a) The security measures located on the premises will include the following:
- i) Lighting:
    - (1) indoor and outdoor lighting will be controlled by photocell switching, timers, infrared motion sensors and/or other state-of-the-art control systems to maintain an adequate light level at the interior and exterior of the facilities to ensure that personnel and the video surveillance system can effectively monitor the space in and around the facility at all times. Exterior lighting will be directed so as to not pose a nuisance to neighboring properties.
  - ii) Alarm:
    - (1) A security/burglar alarm system will be installed and operated at all appropriate times within the facility. This system will be monitored by a third-party remote central control station which will have the responsibility for automatically providing notification to law enforcement of any breach in the facility's security system.



Communications between the facilities alarm system and the central control station will be uninterruptible by power outage and/or disability of the telephone system. Communications will be powered by an uninterruptible power supply, and transmission will either be by cellular or radio.

iii) Access Control:

- (1) All entrances to the occupied building space of the facility will be restricted by an access control system capable of identifying authorized personnel. The system will also be capable of limiting personnel access to the appropriate locations within the facility depending on the person's job and responsibilities, and also limit facility access to certain times and days as appropriate. 24 hour access to the facility by emergency responders (Fire Dept.) will be provided via a Knox Box.

iv) The Safety of Staff:

- (1) working in concert together, the access control system, lighting, and alarm system, will provide a secure and protected facility for the staff to occupy.

v) Diversion:

- (1) The security measures will secure the medical marijuana against diversion for non-medical purposes by protecting against theft not only from intruders, but also from staff members and visitors. This is done by limiting access both into and within different areas of the facility as necessary and by surveillance monitoring of personnel and visitors at all times when in close proximity to the product. Strict inventory control measures will also be engaged to prevent and detect diversion.

vi) Transport:

- (1) All medical marijuana deliveries will be received at the facility from a State licensed and/or locally permitted licensed transport company; and all Medical Marijuana-Infused Products will be transported to State licensed and/or locally permitted licensed Wholesale/Distribution companies by a State licensed and/or locally permitted licensed transport company.

## **6) Customer Screening, Registration, and Validation Process and Procedures.**

- a) The facility is for the purpose of manufacturing and all products will be sold to State licensed facilities on a wholesale basis. As this is the case, the facility will not be open to the public and will not accept visitors without a specific pre-authorized business purpose. Only authorized representatives of state licensed wholesale customer facilities and appropriately licensed vendors will be allowed to enter the facility and be in close proximity to products and raw materials, but in all cases supervised at all times. Any other vendors or maintenance workers allowed in the facility will be at all times escorted and sequestered from the finished products and raw materials.

#### **7) Inventory control processes and procedures**

- a) The facilities inventory control process includes tracking of all incoming raw and processed materials, including the name and state license number of the cultivator, the testing lab data (as applicable), the strain, the supplier's product tracking identification data, and bill of lading from the transport company.
- b) All incoming raw materials will be assigned a batch number that can be cross-referenced to the above referenced data and stays with the product through the manufacturing process and to final sale to distributors and/or retailers.
- c) All outgoing product will be tracked by SKU, batch number, invoice, and shipping documents; unless the product is not for sale and will be destroyed. The process for documenting product to be destroyed is described separately in this manual.
- d) The methodologies for tracking and Inventory Control of Medical Marijuana and Medical Marijuana-Infused Product may be subject to requirements imposed by the State Licensing Authority and will be adjusted accordingly as required.

#### **8) Measures taken to minimize carbon footprint.**

- a) We believe that everyone has a responsibility to reduce their individual carbon footprint. We will do our part by doing the following activities and more . . .

- i) **Switch it Off:** Turn off the lights when natural light is sufficient and when we leave the room. It's that simple!
- ii) **Climate Control:** Keep our temperature system on a moderate setting while we're in the room.
- iii) **Wasteful Windows:** Use our windows wisely! If our climate control system is on, shut them...if we need a little fresh air, turn off the heat or AC.
- iv) **Minimize Plug Load:** Cut down the number of appliances we are running and we will save big on energy. For example, minimize the number of printers in our office.
- v) **Phantom Power:** Use power strips to easily unplug electronics when not in use.
- vi) **Give it a Rest:** Power our computers down when we're away. A computer turned off uses at least 65% less energy than a computer left on or idle on a screen saver.
- vii) **Switch to CFLs:** Compact fluorescent light bulbs (CFLs) use 75% less energy than incandescent and last up to 10 times longer.

## 9) Description of chemicals stored or discharged:

- a) The facility does not currently intend to handle any hazardous materials in amounts requiring a Hazardous Material Business Plan (HMBP); however, if the facility handles any non-exempt hazardous materials, it will register its hazardous materials with the local agency using the Hazardous Materials/Waste Registration Form so that the local agency can evaluate the storage or use and give notice of any permits or storage/use fees that may apply.
- b) If the facility begins to handle any individual hazardous material or mixture containing a hazardous material which has a quantity at any time during the reporting year equal to or greater than those listed below, it will complete a Hazardous Material Business Plan (HMBP) and submit a copy to the local agency (Humboldt County DHHS Division of Environmental Health) [as well as the Humboldt Bay Municipal Water District](#):
  - i) 500 pounds for solid hazardous materials. [H&SC §25503.5(a)]
  - ii) The following amounts for liquid hazardous materials:

- (a) Lubricating oil as defined by H&SC §25503.5(b)(2)(B): 55 gallons of any type or 275 gallons aggregate quantity on site. H&SC §25503.5(b)(2)(A)]
  - (b) All others, including waste oil: 55 gallons. [H&SC §25503.5(a)]
  - iii) The following amounts of hazardous material gases:
    - (a) Oxygen, Nitrogen, or Nitrous Oxide stored/handled at a physician, dentist, podiatrist, veterinarian, or pharmacist's place of business: 1,000 cubic feet of each material on site. [H&SC §25503.5(b)(1)]
    - (b) All others: 200 cubic feet. [H&SC §25503.5(a)]
  - iv) Amounts of radioactive materials requiring an emergency plan under Parts 30, 40, or 70 of Title 10 Code of Federal Regulations or equal to or greater than applicable amounts specified in items 1, 2, or 3, above, whichever amount is smaller. [H&SC §25503.5(a)]
  - v) Applicable federal threshold planning quantities for extremely hazardous substances listed in 40 CFR Part 355, Appendix A.
- c) Disposal of any chemical, dangerous, or hazardous waste will be conducted in a manner consistent with federal, state and local laws, regulations, rules or other requirements. This may include, but is not limited to, the disposal of all solvents or other chemicals used in the production of Medical Marijuana Concentrate or any Medical Marijuana soaked in a Flammable Solvent for purposes of producing a Medical Marijuana Concentrate. [Quantities of waste material will generally not exceed 55 gallons.](#) Any waste solvents or other chemicals will be handled and disposed of properly by *Safety-Kleen* or another highly qualified and properly licensed contractor.

## 10) Quality/consumer safety control processes, procedures, and documentation.

- a) Product Quality Control:
  - i) In addition to meeting all State and local requirements for product quality control, the standard procedures for operation will include the following:
    - (1) Samples of all raw materials will be screened and tested by an independent State licensed and/or locally permitted licensed laboratory for pesticides, mold, and other undesirable qualities prior to incorporation into the manufacturing process.

- (2) Samples from each batch of finished products will be screened and tested by a State licensed and/or locally permitted licensed independent laboratory for pesticides, mold, and other undesirable qualities prior to release for sale to wholesalers and retailers.
- (3) Documentation of all lab test results will be kept on file.

b) Packaging:

- i) All packaging will meet State requirements for packaging. In advance of State requirements being issued, the facility will follow the following guidelines:
  - (1) Labeling will include a warning if nuts or other known allergens are used, and will include the total weight in grams of cannabis or milligrams of THC in the package.
  - (2) A warning that the item is a medication and not a food will be distinctly and clearly legible on the front of the package.
  - (3) The package label will have a warning that's clearly legible and emphasizes that the product is to be kept away from children.
  - (4) The label will also state that the product contains medical cannabis, and will specify the date of manufacture and batch number.
  - (5) Packaging that makes the product attractive to children will not be used.
  - (6) Any edible cannabis product that is made to resemble a typical food product (e.g., brownie, cake) will be in a properly labeled opaque (non see-through) package.

**11) Health and Safety:**

a) Training.

- i) Prior to engaging in the manufacture of any Edible Medical Marijuana-Infused Product, the Licensee will have an owner or employee who has successfully passed an approved and accredited food safety certification examination as specified in Sections 113947.2 and 113947.3 of the California Retail Food Code. Food safety certification will be achieved by successfully passing an examination from an accredited food protection manager certification organization. The certification organization will be accredited by the American National Standards Institute as meeting the

requirements of the Conference for Food Protection's "Standards for Accreditation of Food Protection Manager Certification Programs."

ii) Employee Knowledge:

- (1) All food (Edible Medical Marijuana-Infused Product) employees will have adequate knowledge of, and will be properly trained in, food safety as it relates to their assigned duties.
- (2) There will be at least one food safety certified owner or employee at the facility responsible for setting policy and providing training to employees. The certified owner or employee need not be present at the food facility during all hours of operation.
- (3) The certified owner or employee will be responsible for ensuring that all employees who handle, or have responsibility for handling, non-prepackaged foods of any kind, have sufficient knowledge to ensure the safe preparation of the food. The nature and extent of the knowledge that each employee is required to have may be tailored, as appropriate, to the employee's duties related to food safety issues.

b) Physical Plant Inspection:

- i) The Facility will welcome inspection of the Medical Marijuana Center by the local fire department, building inspector, or code enforcement officer to confirm that no health or safety concerns are present. It is understood that the inspections may result in additional specific standards to meet local jurisdiction restrictions related to Medical Marijuana. An annual fire safety inspection may result in the required installation of fire suppression devices, or other means necessary for adequate fire safety. [Any inspection reports created as a result of these inspections may be reviewed by the Humboldt Bay Municipal Water District within 48 hours' notice of any request.](#)

c) Sanitary Conditions: The Facility will take all reasonable measures and precautions to ensure the following:

- i) That any person who, by medical examination or supervisory observation, is shown to have, or appears to have, an illness, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination for whom there is a reasonable possibility of contact with Medical Marijuana and Medical Marijuana-Infused Product will be excluded



from any operations which may be expected to result in contamination until the condition is corrected;

- ii) Hand-washing facilities will be adequate and convenient and be furnished with running water at a suitable temperature. Hand-washing facilities will be located in the Facility and where good sanitary practices require employees to wash or sanitize their hands, and provide effective hand-cleaning and sanitizing preparations and sanitary towel service or suitable drying devices;
- iii) That all persons working in direct contact with Medical Marijuana and Medical Marijuana-Infused Product will conform to hygienic practices while on duty, including but not limited to:
  - (1) Maintaining adequate personal cleanliness;
  - (2) Washing hands thoroughly in an adequate hand-washing area(s) before starting work and at any other time when the hands may have become soiled or contaminated; and
  - (3) Refraining from having direct contact with Medical Marijuana and Medical Marijuana Infused Product if the person has or may have an illness, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination, until such condition is corrected.
- iv) That litter and waste are properly removed and the operating systems for waste disposal are maintained in an adequate manner so that they do not constitute a source of contamination in areas where Medical Marijuana and Medical Marijuana-Infused Product are exposed;
- v) That floors, walls, and ceilings are constructed in such a manner that they may be adequately cleaned and each is kept clean and in good repair;
- vi) That there is adequate lighting in all areas where Medical Marijuana and Medical Marijuana Infused Product are stored or sold, and where equipment or utensils are cleaned;
- vii) That there is adequate screening or other protection against the entry of pests. Rubbish will be disposed of so as to minimize the development of odor and minimize the potential for the waste becoming an attractant, harborage, or breeding place for pests;
- viii) That fixtures and other facilities are maintained in a sanitary condition;
- ix) That toxic cleaning compounds, sanitizing agents, and other chemicals will be identified, held, stored and disposed of in a manner that protects against

- contamination of Medical Marijuana or Medical Marijuana-Infused Product and in a manner that is in accordance with any applicable local, state or federal law, rule, regulation or ordinance;
- x) That all operations in the receiving, inspecting, transporting, segregating, preparing, manufacturing, packaging, and storing of Medical Marijuana or Medical Marijuana-Infused Product will be conducted in accordance with adequate sanitation principles;
  - xi) That employees are provided with adequate and readily accessible toilet facilities that are maintained in a sanitary condition and good repair; and
  - xii) That Medical Marijuana and Medical Marijuana-Infused Product that can support the rapid growth of undesirable microorganisms are held in a manner that prevents the growth of these microorganisms.

## 12) Disposal of Waste and Destroyed Product:

- a) Medical Marijuana and Medical Marijuana-Infused Product waste will be made unusable and Unrecognizable prior to leaving the Facility. No cannabis, solvent, or other chemical wastes will be disposed of onsite.
  - i) Methods to make waste unusable and unrecognizable. Medical Marijuana and Medical Marijuana-Infused Product waste will be rendered unusable and unrecognizable through one of the following methods unless another method is prescribed by the County of Humboldt or the State of California:
    - (1) Grinding and incorporating the marijuana waste with non-consumable, solid wastes listed below such that the resulting mixture is at least 50 percent non-marijuana waste:
      - (a) Paper waste;
      - (b) Plastic waste;
      - (c) Cardboard waste;
      - (d) Food waste;
      - (e) Grease or other compostable oil waste;
      - (f) Bokashi, or other compost activators;
      - (g) Other wastes approved by the State Licensing Authority that will render the Medical Marijuana and Medical Marijuana-Infused Product waste unusable and Unrecognizable as marijuana; and
      - (h) Soil.

ii) The methodology for destroying and disposing of Medical Marijuana and Medical Marijuana-Infused Product may be subject to requirements imposed by the State Licensing Authority and will be adjusted accordingly as required.

b) Records of destroyed product:

- i) Records of destroyed raw materials and product will be kept and cross-referenced by batch number and SKU. The weight or volume, as appropriate, will be recorded along with the method of disposal.
- ii) The methodology for recording destroyed Medical Marijuana and Medical Marijuana-Infused Product may be subject to requirements imposed by the State Licensing Authority and will be adjusted accordingly as required.

**13) Medical Marijuana Concentrate Production.**

- a) The facility may produce Water-Based Medical Marijuana Concentrate and Food-Based Medical Marijuana Concentrate, and may also produce Solvent-Based Medical Marijuana Concentrate using only the following solvents: butane, propane, CO2, ethanol, and/or isopropanol, ~~acetone, and/or heptane~~.
- b) The Facility will, regardless of the method of extraction or category of concentrate being produced, do the following:
  - i) Ensure that the space in which any Medical Marijuana Concentrate is to be produced is a fully enclosed room and clearly designated on the current diagram of the Facility.
  - ii) Ensure that all applicable sanitary rules are followed.
  - iii) Ensure that the standard operating procedure for each method used to produce a Medical Marijuana Concentrate on its Licensed/Permitted Premise includes, but need not be limited to, step-by-step instructions on how to safely and appropriately:
    - (1) Extract cannabinoids and other essential components of Medical Marijuana;
    - (2) Purge any solvent or other unwanted components from a Medical Marijuana Concentrate,
    - (3) Clean all equipment, counters and surfaces thoroughly; and

- (4) Dispose of any waste produced during the processing of Medical Marijuana in accordance with all applicable local, state and federal laws, rules and regulations. See – “Disposal of Waste and Destroyed Product.”
- iv) Establish written and documentable quality control procedures designed to maximize safety for employees and minimize potential product contamination.
- v) Establish written emergency procedures to be followed by employees in case of a fire, chemical spill or other emergency.
- vi) Have a comprehensive training manual that provides step-by-step instructions for each method used to produce a Medical Marijuana Concentrate on its Facility. The training manual will include, but need not be limited to, the following topics:
- (1) All standard operating procedures for each method of concentrate production used at that Facility;
  - (2) The Medical Marijuana-Infused Products Manufacturer’s quality control procedures;
  - (3) The emergency procedures for the licensed/permitted premises;
  - (4) The appropriate use of any necessary safety or sanitary equipment;
  - (5) The hazards presented by all solvents used within the Facility as described in the material safety data sheet for each solvent;
  - (6) Clear instructions on the safe use of all equipment involved in each process and in accordance with manufacturer’s instructions, where applicable; and
  - (7) Any additional periodic cleaning required to comply with all applicable sanitary rules.
- vii) Provide adequate training to every employee prior to that individual undertaking any step in the process of producing a Medical Marijuana Concentrate.
- (1) Adequate training will include, but need not be limited to, providing a copy of the training manual and live, in-person instruction detailing at least all of the topics required to be included in the training manual.
  - (2) The individual providing training will sign and date a document attesting that all required aspects of training were conducted and that he or she is

confident that the trainee can safely produce a Medical Marijuana Concentrate.

- viii) Maintain clear and comprehensive records of the name and signature of every individual who engaged in any step related to the creation of a Production Batch of Medical Marijuana Concentrate and the step that individual performed.
- ix) Business Records Required.

#### 14) Production of Solvent-Based Medical Marijuana Concentrate:

- a) Subsequent to obtaining Land-Use Entitlement (i.e. Use Permit) and prior to operation, the facility will have obtained a Certificate of Occupancy, permit final inspection, or other appropriate evidence acceptable to the County of Humboldt that the facility meets or exceeds California Title 24 Codes as applicable to the project. The following considerations will be incorporated into the building permit application submittal:
  - i) Flammable Solvent Determinations. If a Flammable Solvent is to be used in the processing of Medical Marijuana into a Medical Marijuana Concentrate, then a Licensed Architect, Certified Industrial Hygienist, or Professional Engineer, as appropriate will:
    - (a) Establish a maximum amount of Flammable Solvents and other flammable materials that should be stored within that Facility in accordance with applicable laws, rules and regulations. [Quantities of butane, CO<sub>2</sub>, ethanol, and isopropanol will not exceed 55 gallons per solvent. Quantities of propane will not exceed 250 gallons.](#)
    - (b) Determine what type of electrical equipment, which may include but need not be limited to outlets, lights, junction boxes, will be installed within the room in which Medical Marijuana Concentrate are to be produced or Flammable Solvents are to be stored in accordance with applicable laws, rules and regulations.
    - (c) Determine whether a gas monitoring system will be installed within the room in which Medical Marijuana Concentrate are to be produced or Flammable Solvents are to be stored, and if required the system's specifications, in accordance with applicable laws, rules and regulations. [The manufacturing facility shall comply will all applicable building code requirements.](#)

- (d) Determine whether fire suppression system must be installed within the room in which Medical Marijuana Concentrate are to be produced or Flammable Solvents are to be stored, and if required the system's specifications, in accordance with applicable laws, rules and regulations. A final determination on a fire suppression system, including flow containment, will be made by the County fire and building officials.
- ii) CO2 Solvent Determination. If CO2 is used as solvent at the Facility, then the a Licensed Architect, Certified Industrial Hygienist, or Professional Engineer will determine whether a CO2 gas monitoring system must be installed within the room in which Medical Marijuana Concentrate are to be produced or CO2 is stored, and if required the system's specifications, in accordance with applicable laws, rules and regulations.
- iii) Exhaust System Determination. A Licensed Architect, Certified Industrial Hygienist, or Professional Engineer will determine whether a fume vent hood or exhaust system will be installed within the room in which Medical Marijuana Concentrate are to be produced, and if required the system's specifications, in accordance with applicable laws, rules and regulations.
- iv) Material Change. If a Material Change is made to the equipment or a concentrate production procedure, in addition to all other requirements, a report will be obtained from a Licensed Architect, Certified Industrial Hygienist, or Professional Engineer re-certifying its standard operating procedures and, if changed, its Facility and equipment as well.
- v) Manufacturer's Instructions. The Licensed Architect, Certified Industrial Hygienist, or Professional Engineer will review and consider any information provided to the Medical Marijuana-Infused Products Manufacturer by the designer or manufacturer of any equipment used in the processing of Medical Marijuana into a Medical Marijuana Concentrate.
- vi) Records Retention. The facility will maintain copies of all reports received from a Licensed Architect, Certified Industrial Hygienist, or Professional Engineer on its Facility. Such reports will be maintained on the Premises until the facility ceases production of Medical Marijuana Concentrate.
- b) The facility will ensure that all equipment, counters and surfaces used in the production of a Solvent-Based Medical Marijuana Concentrate will be food-



grade and will not react adversely with any of the solvents to be used in the Facility. Additionally, all counters and surface areas will be constructed in a manner that reduces the potential development of microbials, molds and fungi and can be easily cleaned.

- c) The facility will ensure that the room in which Solvent-Based Medical Marijuana Concentrate shall be produced will contain an emergency eye-wash station. [The eyewash station will be drained to the onsite septic system.](#)
- d) The facility will ensure that a professional grade, closed-loop extraction system capable of recovering the solvent is used to produce Solvent-Based Medical Marijuana Concentrate (unless using water, ethanol, or isopropanol methods);
- i) UL or ETL Listing.
- (1) If the system is UL or ETL listed, then a Medical Marijuana-Infused Products Manufacturer will use the system in accordance with the manufacturer's instructions.
- ii) If the system is UL or ETL listed but the facility intends to use a solvent in the system that is not listed in the manufacturer's instructions for use in the system, then, prior to using the unlisted solvent within the system, the Medical Marijuana-Infused Products Manufacturer will obtain written approval for use of the non-listed solvent in the system from either the system's manufacturer or a Professional Engineer after the Professional Engineer has conducted a peer review of the system. In reviewing the system, the Professional Engineer shall review and consider any information provided by the system's designer or manufacturer. [The manufacturer will provide written notification to the County Planning and Building Department and the Humboldt Bay Municipal Water District if any material change occurs.](#)
- iii) If the system is not UL or ETL listed, then there will be a designer of record. If the designer of record is not a Professional Engineer, then the system will be peer reviewed by a Professional Engineer. In reviewing the system, the Professional Engineer may review and consider any information provided by the system's designer or manufacturer. [The manufacturer will provide written notification to the County Planning and Building](#)

Department and the Humboldt Bay Municipal Water District if any material change occurs.

- e) Ethanol or Isopropanol. The Facility need not use a professional grade, closed-loop system extraction system capable of recovering the solvent for the production of a Solvent-Based Medical Marijuana Concentrate if ethanol or isopropanol are the only solvents being used in the production process.
- f) The facility will ensure that all solvents used in the extraction process are food-grade or at least 99% pure;
- i) A material safety data sheet for each solvent used or stored on the Facility will be obtained and made readily available. Receipts of purchase for all solvents used or to be used in an extraction process will be maintained.
  - ii) Denatured alcohol will not be used to produce a Medical Marijuana Concentrate.
  - iii) All Flammable Solvents or other flammable materials, chemicals and waste will be stored in accordance with all applicable laws, rules and regulations. At no time will the facility store more Flammable Solvent on its Facility than the maximum amount established for the Facility by the a Licensed Architect, Certified Industrial Hygienist, or Professional Engineer. Quantities of butane, CO<sub>2</sub>, ethanol, and isopropanol will not exceed 55 gallons per solvent. Quantities of propane will not exceed 250 gallons.
  - iv) The facility will ensure that the appropriate safety and sanitary equipment, including personal protective equipment, will be provided to, and appropriately used by, each employee engaged in the production of a Solvent-Based Medical Marijuana Concentrate; and a properly trained employee will be present at all times during the production of a Solvent-Based Medical Marijuana Concentrate whenever an extraction process requires the use of pressurized equipment.
  - v) Ethanol and Isopropanol: If the Facility only produces Solvent Based Medical Marijuana Concentrate using ethanol or isopropanol at its Facility and no other solvent, then it shall be relieved from the criteria above in this section titled "Production of Solvent-Based Medical Marijuana Concentrate." Instead the facility will follow the criteria for water based

(non-solvent) extraction. Regardless of which rule is followed, the ethanol or isopropanol will be food grade or at least 99% pure and denatured alcohol will not be used.

**15) Water-Based Medical Marijuana Concentrate and Food-Based Medical Marijuana Concentrate.**

- a) When engaging in the production of a Water-Based Medical Marijuana Concentrate or a Food-Based Medical Marijuana Concentrate the facility will:
- i) The facility will ensure that all equipment, counters and surfaces used in the production of a Concentrate is food-grade including ensuring that all counters and surface areas were constructed in such a manner that it reduces the potential for the development of microbials, molds and fungi and can be easily cleaned.
  - ii) The facility will ensure that all equipment, counters, and surfaces used in the production of a Concentrate are thoroughly cleaned after the completion of each Production Batch.
  - iii) The facility will ensure that any room in which dry ice is stored or used in the processing Medical Marijuana into a Medical Marijuana Concentrate is well ventilated to prevent against the accumulation of dangerous levels of CO<sub>2</sub>.
  - iv) The facility will ensure that the appropriate safety or sanitary equipment, including personal protective equipment, is provided to, and appropriately used by each employee engaged in the production of a Concentrate.
  - v) The facility will ensure that only finished drinking water and ice made from finished drinking water is used in the production of a Water-Based Medical Marijuana Concentrate.
  - vi) The facility will ensure that if propylene glycol or glycerin is used in the production of a Food-Based Medical Marijuana Concentrate, then the propylene glycol or glycerin to be used is food-grade.
  - vii) The facility will ensure it follows all of the process criteria related to the production of a Solvent-Based Medical Marijuana Concentrate if a pressurized system is used in the production of a Water-Based Medical Marijuana Concentrate or a Food-Based Medical Marijuana Concentrate.

REVISIONS	BY
12/04/17	BR

**PACIFIC AFFILIATES**  
 CONSULTING ENGINEERS  
 900 W. WATERFRONT DRIVE, EUREKA, CA 95501  
 TEL (707) 445-3001 FAX (707) 445-3003



**OVERALL SITE PLAN**  
PACIFIC AFFILIATES, INC. HEREBY HEREBY RESERVES ITS COMMON LAW RIGHTS IN THESE PLANS AND DRAWINGS AND AGREES TO BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THESE PLANS AND DRAWINGS WITHOUT NOTICE TO ANY OTHER PARTY. THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT THE WRITTEN PERMISSION OF PACIFIC AFFILIATES, INC. NOR ARE THEY ASSIGNED TO ANY THIRD PARTY WITHOUT THE WRITTEN PERMISSION OF PACIFIC AFFILIATES, INC.

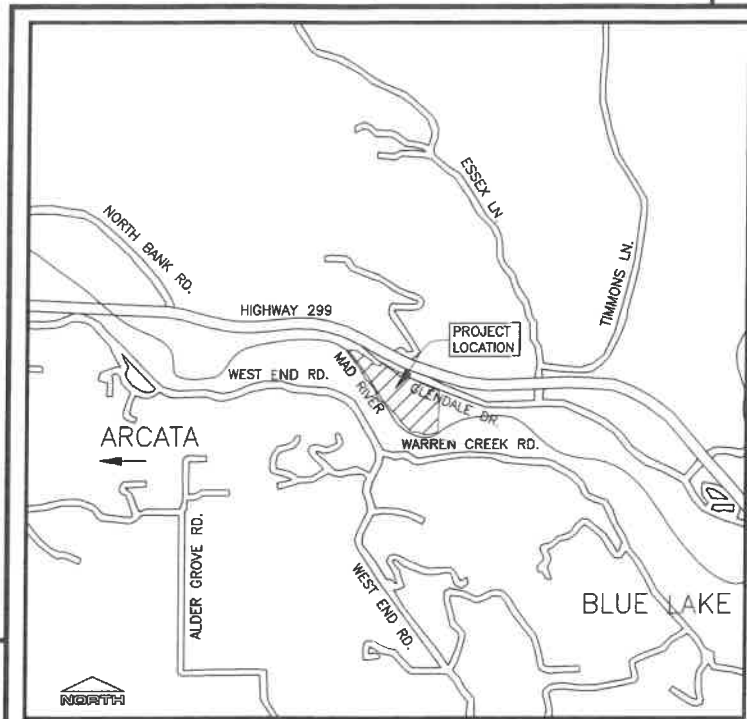
**MERCER FRASER**  
 90 GLENDALE DR.  
 BLUE LAKE, CA  
 APN 504-161-010

Date: June 14, 2017  
 Scale: AS NOTED  
 Drawn by: BR

SHEET NUMBER  
**C-1**

JOB NUMBER  
 15-1887

FOR PLAN REVIEW ONLY - NOT FOR CONSTRUCTION



**VICINITY MAP**  
 SCALE: N.T.S.

**PROJECT INFORMATION**

OWNERS: MERCER FRASER CO.  
 OWNER ADDRESS: PO BOX 1003, EUREKA, CA 95502  
 DRAFTSPERSON: BRIANNE REILLY  
 ENGINEER: PACIFIC AFFILIATES, TRAVIS SCHNEIDER  
 PROJECT ADDRESS: 90 GLENDALE DR., BLUE LAKE, CA 95525  
 APN #: 504-161-010  
 ZONING: AG  
 WATER: EXISTING ON-SITE WELL  
 ELECTRICAL: PG&E  
 TREES TO BE REMOVED: 0  
 CUT/FILL: NET <10 CY  
 CONSTRUCTION SPOILS TO REMAIN ON SITE

**PROJECT DESCRIPTION**

PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF A 5,000 SQUARE FOOT MANUFACTURING FACILITY AND ASSOCIATED PRIVATE SEWAGE DISPOSAL SYSTEM.

**LEGEND**

- EXISTING DRAINAGE DIRECTION
- GRADING LIMITS
- SUBJECT PROPERTY LINES
- PROPERTY LINES
- EASEMENT LINE
- EXISTING OVERHEAD ELECTRIC
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED FENCE
- FIBER ROLL
- 100 YEAR FLOOD ZONES
- STREAM-SIDE MANAGEMENT ZONE
- <P> CONCRETE

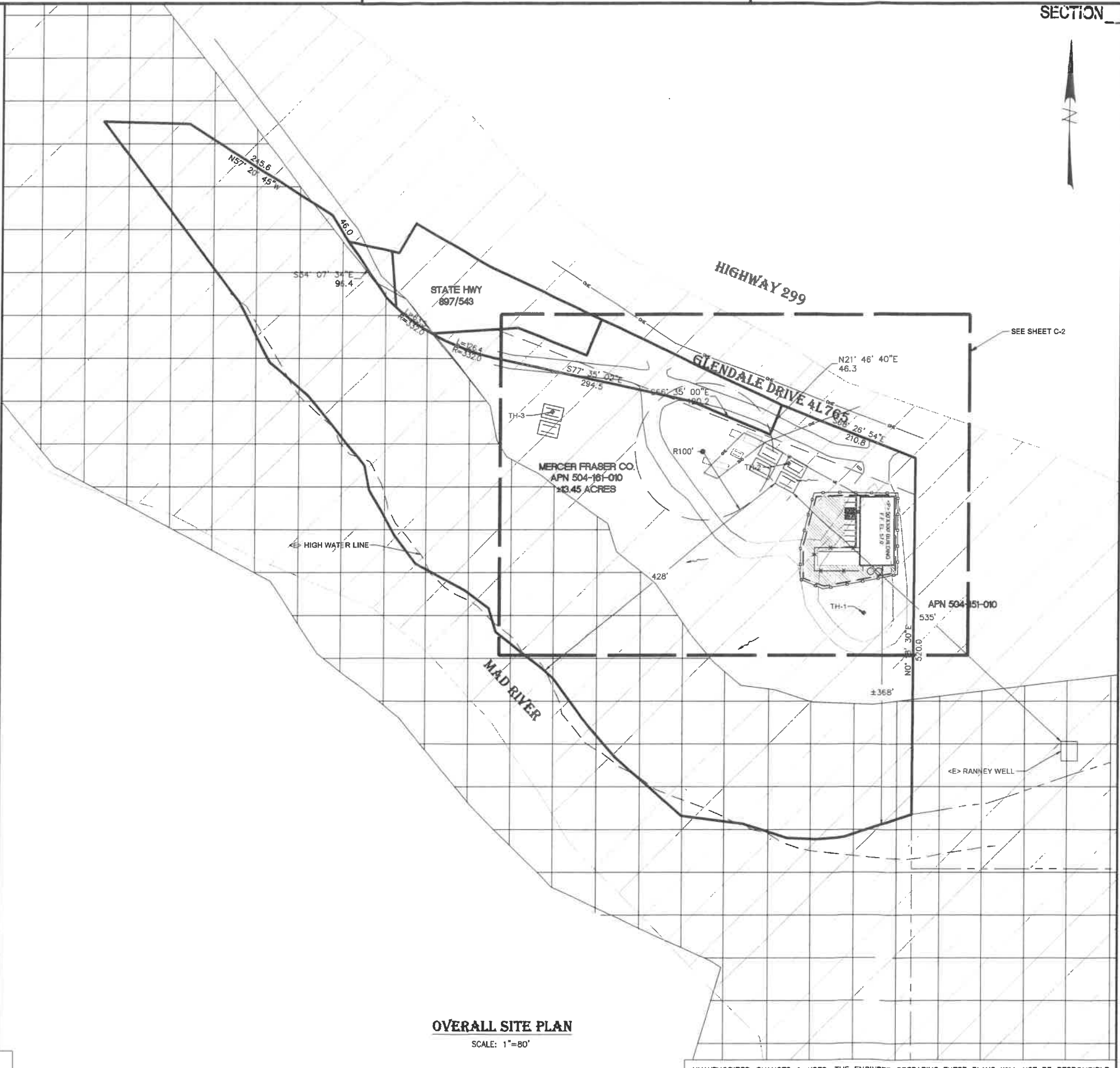
**ABBREVIATIONS**

- EXISTING
- PROPOSED
- DWY DRIVEWAY

**PARKING CALCULATIONS:**

INDUSTRIAL USE:  
 1 SPACE/1500 SQUARE FEET = 4 SPACES

LOCATIONS AND ELEVATIONS SHOWN ARE PROVIDED FOR INFORMATION ONLY. SUCH INFORMATION MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AGENCIES INVOLVED AND VERIFYING LOCATIONS OF ALL UTILITIES THAT MAY BE IMPACTED BY HIS/HER WORK.



**OVERALL SITE PLAN**  
 SCALE: 1"=80'

UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

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 APN #: 504-161-010  
 ZONING: AG  
 WATER: EXISTING ON-SITE WELL  
 ELECTRICAL: PG&E  
 TREES TO BE REMOVED: 0  
 CUT/FILL: NET <10 CY  
 CONSTRUCTION SPOILS TO REMAIN ON SITE

**PROJECT DESCRIPTION**

PROPOSED PROJECT INCLUDES THE CONSTRUCTION OF A 5,000 SQUARE FOOT MANUFACTURING FACILITY AND ASSOCIATED PRIVATE SEWAGE DISPOSAL SYSTEM.

**LEGEND**

- - - - - EXISTING DRAINAGE DIRECTION
- - - - - GRADING LIMITS
- - - - - SUBJECT PROPERTY LINES
- - - - - PROPERTY LINES
- - - - - EASEMENT LINE
- - - - - EXISTING OVERHEAD ELECTRIC
- - - - - PROPOSED UNDERGROUND ELECTRIC
- - - - - PROPOSED FENCE
- - - - - FIBER ROLL
- [Hatched Box] 100 YEAR FLOOD ZONES
- [Hatched Box] STREAM-SIDE MANAGEMENT ZONE
- [Symbol] <P> CONCRETE

**ABBREVIATIONS**

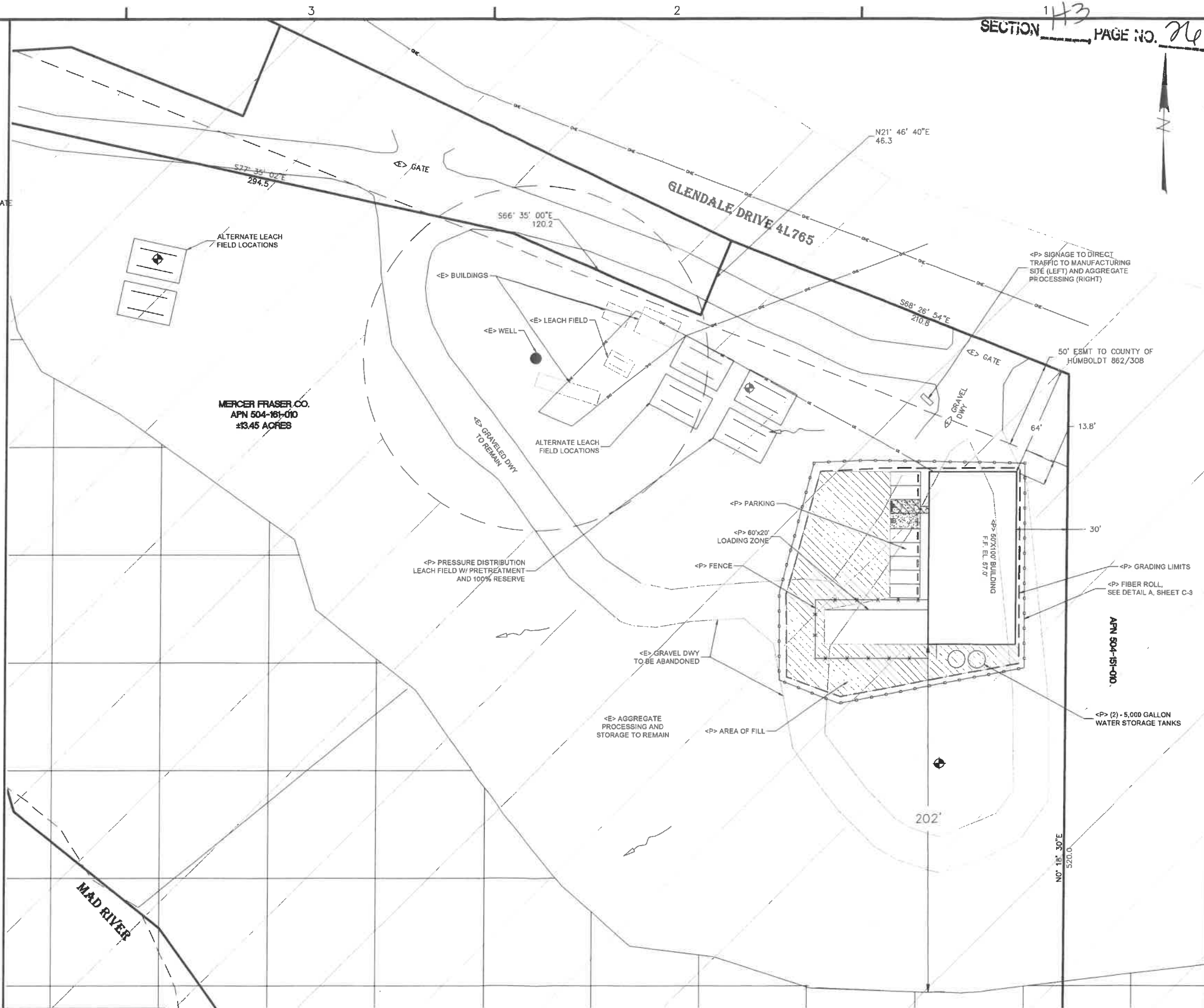
- <E> EXISTING
- <P> PROPOSED
- DWY DRIVEWAY

**PARKING CALCULATIONS:**

INDUSTRIAL USE:  
 1 SPACE/1500 SQUARE FEET = 4 SPACES

**PROJECT NOTES**

1. THIS PROPERTY IS LOCATED WITHIN INLAND ZONING PORTION OF HUMBOLDT COUNTY.
2. BASED ON HUMBOLDT COUNTY GIS FEMA FLOOD ZONES, THIS PROPERTY IS LOCATED WITHIN ZONE A - 100 YEAR FLOOD ZONE.
3. THE BASE FLOOD ELEVATION FOR THE SITE IS 55 FEET PER ELEVATION CERTIFICATE DATED NOVEMBER 28, 2017 PREPARED BY PACIFIC AFFILIATES AND AS PER A SITE SURVEY CONDUCTED BY PACIFIC AFFILIATES.
4. ALL IMPROVEMENTS SHOWN ON THIS PLAN ARE PER AERIAL PHOTOGRAPHY AND ARE APPROXIMATE LOCATIONS ONLY.
5. DIRECTIONS OF RUNOFF SHOWN ARE APPROXIMATE.
6. BASED ON THE GRAVEL SURFACE OF THE PROPERTY, PARKING FOR A LARGE NUMBER OF VEHICLES CAN BE ACCOMMODATED. APPROXIMATE LOCATIONS OF INDIVIDUAL PARKING SPACES HAVE BEEN IDENTIFIED ON THE PLAN.
7. ACCESSIBLE (ADA) PARKING SHALL CONFORM TO TITLE 24 REQUIREMENTS.
8. PROPERTY LINES ARE BASED ON PRELIMINARY TITLE REPORT DATED FEBRUARY 11, 2016.
9. BUILDING SITE TO BE GREATER THAN 200 FEET FROM WATERCOURSES.
10. EXTERIOR LIGHTING SHALL NOT BE DIRECTED BEYOND THE BOUNDARIES OF THE PARCEL PER HUMBOLDT COUNTY CODE ZONING REGULATIONS.
11. SIGNS SHALL BE PER HUMBOLDT COUNTY CODE ZONING REGULATIONS.
12. PLEASE NOTE THAT EASEMENTS ARE BASED ON PRELIMINARY TITLE REPORT DATED FEBRUARY 11, 2016.
13. NO KNOWN HISTORICAL BUILDINGS ARE LOCATED ON SITE.
14. NO KNOWN HAZARDOUS WASTE OR SUBSTANCE SITES ARE LOCATED WITHIN 400 FT. OF SUBJECT SITE.



LOCATIONS AND ELEVATIONS SHOWN ARE PROVIDED FOR INFORMATION ONLY. SUCH INFORMATION MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AGENCIES INVOLVED AND VERIFYING LOCATIONS OF ALL UTILITIES THAT MAY BE IMPACTED BY HIS/HER WORK.

**SITE PLAN**  
 SCALE: 1"=30'

UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

FOR PLAN REVIEW ONLY - NOT FOR CONSTRUCTION

REVISIONS	BY
12/04/17	BR

**PACIFIC AFFILIATES**  
 CONSULTING ENGINEERS  
 990 W. WATERFRONT DRIVE, EUREKA, CA 95501  
 TEL (707) 445-3001



**SITE PLAN**

PACIFIC AFFILIATES, INC. HEREBY EXPRESSLY RESERVES ITS COMMON LAW AND STATUTORY RIGHTS AND DOES NOT WARRANT THAT THESE PLANS AND DRAWINGS ARE NOT TO BE REPRODUCED, COPIED, REPRODUCED, TRANSMITTED, OR OTHERWISE DISCLOSED TO ANY THIRD PARTY WITHOUT THE EXPRESS WRITTEN PERMISSION OF PACIFIC AFFILIATES, INC. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE.

**MERCER FRASER**  
 90 GLENDALE DR.  
 BLUE LAKE, CA  
 APN 504-161-010

Date: June 14, 2017  
 Scale: AS NOTED  
 Drawn by: BR

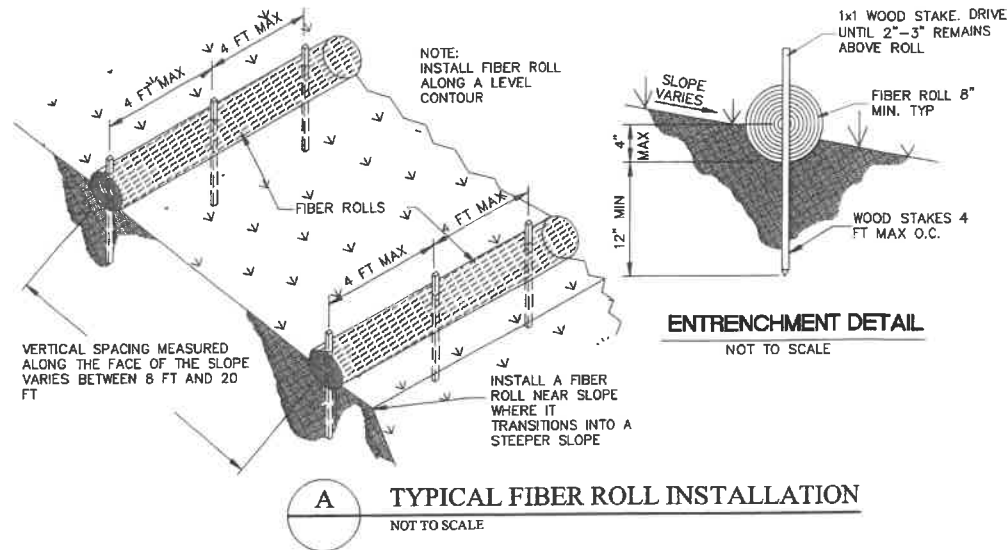
SHEET NUMBER  
**C-2**  
 JOB NUMBER  
 15-1887



**EROSION CONTROL NOTES:**

1. ALL SURFACE WATER DRAINAGE SHOULD BE CONTROLLED TO FLOW AWAY FROM THE ADJACENT PROPERTIES. ALL EROSION CONTROL METHODS SHALL BE IN COMPLIANCE WITH HUMBOLDT COUNTY DEPARTMENT OF PUBLIC WORKS REQUIREMENTS.
2. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM PUBLIC STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. ALL ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY.
3. AFTER SEWER AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED BY THE ENGINEER OF RECORD. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ALL EROSION AND SEDIMENT CONTROL MEASURES. SHOULD EROSION AND SEDIMENT CONTROL MEASURES FAIL, THE ENGINEER OF RECORD SHALL PROVIDE A FINAL REPORT TO THE HUMBOLDT COUNTY BUILDING DEPARTMENT PRIOR TO OCCUPANCY.
5. APPLY VEGETATIVE STABILIZATION (I.E. MULCH AND/OR TEMPORARY SEEDING AS APPROVED BY ENGINEER) WITHIN 7 DAYS OF LAND CLEARING OR GRADING TO ANY PORTION OF THE SITE THAT IS PLANNED TO BE IDLE FOR MORE THAN 45 DAYS.
6. THE EROSION AND SEDIMENT CONTROL MEASURES WILL BE OPERABLE DURING THE RAINY SEASON (OCTOBER 15-APRIL 15).
7. DURING THE RAINY SEASON, ALL PAVED AREAS WILL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE WILL BE MAINTAINED SO THAT SEDIMENT-LADEN RUNOFF DOESN'T ENTER THE STORM DRAINAGE SYSTEM.
8. CONTRACTOR SHALL HAVE TOOLS, EQUIPMENT, AND MATERIALS TO PROVIDE EROSION CONTROL MEASURES MADE NECESSARY BY A CONSTRUCTION OPERATION, ON THE JOB SITE BEFORE BEGINNING THAT OPERATION.
9. ADJACENT PROPERTIES SHALL BE PROTECTED FROM STORM WATERS, MUD, SILT, ETC. ON A DAILY BASIS.
10. EXCESSIVE DUST SHALL BE CONTROLLED AT ALL TIMES DURING CONSTRUCTION AND UNTIL FINAL COMPLETION. THE CONTRACTOR, WHEN HE/SHE OR HIS/HERS SUBCONTRACTOR ARE OPERATING EQUIPMENT ON SITE, SHALL PREVENT FORMATION OF EXCESSIVE AIRBORNE NUISANCES BY WATERING AND/OR TREATING THE SITE OF THE WORK IN SUCH A MANNER THAT WILL CONFIRM DUST PARTICLES TO THE IMMEDIATE SURFACE OF THE WORK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY DUST FROM HIS OWN ACTIVITIES OR HIS SUBCONTRACTORS ACTIVITIES IN PERFORMING THE WORK UNDER THIS CONTRACT AND SHALL BE RESPONSIBLE FOR ANY CITATIONS, FINES, OR CHARGES RESULTING FROM DUST NUISANCES. DUST CONTROL WILL BE DONE ON A DAILY BASIS.
11. ALL EROSION & SEDIMENT CONTROL WORK SHALL CONFORM TO SEC. 331-12 OF THE HUMBOLDT COUNTY LAND USE AND ORDINANCE AND TO SECTION 20-3 OF CALTRANS STANDARD SPECIFICATIONS.

SECTION H3 PAGE NO. 27



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FOR PLAN REVIEW ONLY - NOT FOR CONSTRUCTION

PLANS CERTIFIED FOR CONSTRUCTION BY ENGINEER OF RECORD ON \_\_\_\_\_ SIGNATURE

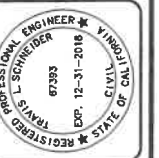
**DETAILS**

MERCER FRASER  
90 GLENDALE DR.  
BLUE LAKE, CA  
APN 504-161-010

Date: June 14, 2017  
Scale: AS NOTED  
Drawn by: BR

SHEET NUMBER  
**C-3**

JOB NUMBER  
15-1887



**PACIFIC AFFILIATES**  
CONSULTING ENGINEERS  
990 W. WATERFRONT DRIVE, EUREKA, CA 95601  
TEL (707) 446-3001 FAX (707) 445-3003

REVISIONS	BY
12/04/17	BR



**COUNTY OF HUMBOLDT**  
**PLANNING AND BUILDING DEPARTMENT**  
**CANNABIS SERVICES DIVISION**

3015 H Street Eureka CA 95501  
Fax: (707) 268-3792 Phone: (707)445-7541

**Applicant**

MCMP LLC  
PO Box 1006  
Eureka, CA 95502

**Owner**

Mercer Fraser Company  
PO Box 1006  
Eureka, CA 95502

**Agent**

Lenders Construction Services LLC  
Attn.: Jeff Smith  
PO Box 6218  
Eureka, CA 95502

Date: January 23, 2018  
Note by: Ethan Amezcua

**NOTE TO FILE**

RE: Correction to Decision Letter  
Permit Application No.: 10244  
APN: 504-161-010  
Case No.: SP16-015

The original decision letter you received had the wrong last date to appeal by and is a Scrivener's Error. Please refer to the corrected decision letter with changes marked in **RED**.



**CURRENT PLANNING DIVISION  
PLANNING AND BUILDING DEPARTMENT  
COUNTY OF HUMBOLDT**

3015 H Street, Eureka, CA 95501  
Phone (707) 445-7541 • Fax (707) 268-3792  
<http://www.humboldt.gov/ora/156>

**Applicant**  
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PO Box 1006  
Eureka, CA 95502

**Owner**  
Mercer Fraser Company  
PO Box 1006  
Eureka, CA 95502

**Agent**  
Lenders Construction Services LLC  
Attn.: Jeff Smith  
PO Box 6218  
Eureka, CA 95502

**CORRECTED Notice of Planning Commission Decision**

**Date:** January 18, 2018

**Assessor Parcel Number:** 504-161-010

**Apps No.** 10244

**Permit:** SP-16-015

**Contact:** Michelle Nielsen - 268-3708

**Description**

MCMP, LLC, Glendale area; Application Number 10244 (filed February 26, 2016); Case Numbers SP16-015, ZR16-001; Assessor Parcel Number (APN) 504-161-010. A Zone Reclassification (ZR) to change the zoning of APN 504-161-010 from Agriculture General (AG) to Heavy Industrial with a Qualified combining zone (MH-Q) in order to implement the General Plan land use designation of Industrial, Resource Related (IR). The proposed zoning change will also better reflect the existing use of the property as Mercer Fraser Company's gravel yard and concrete batch plant operations. Also a Special Permit to develop and operate a cannabis products manufacturing facility of approximately 5,000 square feet in size. The facility will produce medical cannabis products using both nonvolatile and volatile solvents. According to the applicant's plan of operation, the facility may operate 24 hours a day during peak season, and will have a maximum of four (4) full time employees. The facility will not be open to the general public and will not accept visitors. Water is provided by an on-site well and the applicant will develop an on-site septic system to serve the new facility and appurtenant on-site parking facilities. **The Zone Reclassification to change the principal zoning of the property from Agriculture General (AG) to Heavy Industrial (MH) must be approved by the Board of Supervisors before the Special Permit for cannabis manufacturing is effective because cannabis activities are allowed on properties zoned MH, but they are not allowed on properties zoned AG.**

**Decision**

The project was approved by the Planning Commission on January 11, 2018 by Resolution 18-02 and is subject to the attached Conditions of Approval.

**Appeals**

This project may be appealed by any aggrieved person within **10 working** days. The last day to appeal to the Board of Supervisors is 5:00 p.m. on **January 26, 2018**. Information regarding appeals is included with this notice.

**Conditions of Approval**

Please review these conditions carefully as other permits may be required before the project commences. In accordance with County Code, this approval may be revoked or rescinded, in whole or in part, if certain grounds are found to exist [See Humboldt County Code §312-14].

**Effective Date**

If no appeal is initiated, the day after all appeal periods end will become the effective date of the permit. If an appeal has been initiated the effective date will depend on the outcome of the appeal.

**Expiration Date**

You will receive an expiration letter stating the effective date and the expiration date at the end of the appeal period.

**Extensions**

If the conditions for your project cannot be met before the expiration date, you may apply for an extension with the Planning Division. Extension applications must be submitted with the appropriate fees before the permit expiration date. If the permit expires, a new permit application must be filed and accompanied by applicable fees. The new permit may be subject to different processing requirements and standards. Contact your assigned planner if you have any questions about extensions.

**Changes or Modifications to Project**

If your project needs minor changes or major modifications, review and approval of the project by the Planning Division is required. Applications for changes or modifications must be filed and accompanied by applicable fees. Contact your assigned planner if you think your project needs to be changed or modified.



CURRENT PLANNING DIVISION  
PLANNING AND BUILDING DEPARTMENT  
COUNTY OF HUMBOLDT

3015 H Street, Eureka, CA 95501  
Phone (707) 445-7541 • Fax (707) 268-3792  
<http://www.humboldt.gov/156>

<b>Applicant</b> MCMP LLC PO Box 1006 Eureka, CA 95502	<b>Owner</b> Mercer Fraser Company PO Box 1006 Eureka, CA 95502	<b>Agent</b> Lenders Construction Services LLC Attn.: Jeff Smith PO Box 6218 Eureka, CA 95502
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### Notice of Planning Commission Recommendation

**Date:** January 18, 2018  
**Assessor Parcel Number:** 504-161-010      **Apps No.** 10244  
**Permit:** ZR-16-001 and SP-16-015  
**Contact:** Michelle Nielsen - 268-3708

#### Description

MCMP, LLC, Glendale area; Application Number 10244 (filed February 26, 2016); Case Numbers SP16-015, ZR16-001; Assessor Parcel Number (APN) 504-161-010. A Zone Reclassification (ZR) to change the zoning of APN 504-161-010 from Agriculture General (AG) to Heavy Industrial with a Qualified combining zone (MH-Q) in order to implement the General Plan land use designation of Industrial, Resource Related (IR). The proposed zoning change will also better reflect the existing use of the property as Mercer Fraser Company's gravel yard and concrete batch plant operations. Also a Special Permit to develop and operate a cannabis products manufacturing facility of approximately 5,000 square feet in size. The facility will produce medical cannabis products using both nonvolatile and volatile solvents. According to the applicant's plan of operation, the facility may operate 24 hours a day during peak season, and will have a maximum of four (4) full time employees. The facility will not be open to the general public and will not accept visitors. Water is provided by an on-site well and the applicant will develop an on-site septic system to serve the new facility and appurtenant on-site parking facilities. **The Zone Reclassification to change the principal zoning of the property from Agriculture General (AG) to Heavy Industrial (MH) must be approved by the Board of Supervisors before the Special Permit for cannabis manufacturing is effective because cannabis activities are allowed on properties zoned MH, but they are not allowed on properties zoned AG.**

#### Decision

The Planning Commission recommended the approval of the project on January 11, 2018 by Resolution 18-03 and is subject to the attached **REVISED** Conditions of Approval.

#### Conditions of Approval

Please review these conditions carefully as some, or all, of the **REVISED** Conditions of Approval must be completed prior to scheduling a date for the project to be heard by the Board of Supervisors. Other permits may be required before the project commences. In accordance with County Code, this approval may be revoked or rescinded, in whole or in part, if certain grounds are found to exist (See Humboldt County Code §312-14).

#### Date of hearing before the Board of Supervisors

Upon completion of the required conditions in the **REVISED** Conditions of Approval, a date will be set for this item to be heard before the Board of Supervisors.





CURRENT PLANNING DIVISION  
PLANNING AND BUILDING DEPARTMENT  
COUNTY OF HUMBOLDT

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Attn.: Jeff Smith  
PO Box 6218  
Eureka, CA 95502

### Notice of Planning Commission Decision

**Date:** January 18, 2018

**Assessor Parcel Number:** 504-161-010

**Apps No.** 10244

**Permit:** SP-16-015

**Contact:** Michelle Nielsen - 268-3708

#### Description

MCMP, LLC, Glendale area; Application Number 10244 (filed February 26, 2016); Case Numbers SP16-015, ZR16-001; Assessor Parcel Number (APN) 504-161-010. A Zone Reclassification (ZR) to change the zoning of APN 504-161-010 from Agriculture General (AG) to Heavy Industrial with a Qualified combining zone (MH-Q) in order to implement the General Plan land use designation of Industrial, Resource Related (IR). The proposed zoning change will also better reflect the existing use of the property as Mercer Fraser Company's gravel yard and concrete batch plant operations. Also a Special Permit to develop and operate a cannabis products manufacturing facility of approximately 5,000 square feet in size. The facility will produce medical cannabis products using both nonvolatile and volatile solvents. According to the applicant's plan of operation, the facility may operate 24 hours a day during peak season, and will have a maximum of four (4) full time employees. The facility will not be open to the general public and will not accept visitors. Water is provided by an on-site well and the applicant will develop an on-site septic system to serve the new facility and appurtenant on-site parking facilities. **The Zone Reclassification to change the principal zoning of the property from Agriculture General (AG) to Heavy Industrial (MH) must be approved by the Board of Supervisors before the Special Permit for cannabis manufacturing is effective because cannabis activities are allowed on properties zoned MH, but they are not allowed on properties zoned AG.**

#### Decision

The project was approved by the Planning Commission on January 11, 2018 by Resolution 18-02 and is subject to the attached Conditions of Approval.

#### Appeals

This project may be appealed by any aggrieved person within **10 working** days. The last day to appeal to the Board of Supervisors is 5:00 p.m. on January 25, 2018. Information regarding appeals is included with this notice.

#### Conditions of Approval

Please review these conditions carefully as other permits may be required before the project commences. In accordance with County Code, this approval may be revoked or rescinded, in whole or in part, if certain grounds are found to exist [See Humboldt County Code §312-14].

**Effective Date**

If no appeal is initiated, the day after all appeal periods end will become the effective date of the permit. If an appeal has been initiated the effective date will depend on the outcome of the appeal.

**Expiration Date**

You will receive an expiration letter stating the effective date and the expiration date at the end of the appeal period.

**Extensions**

If the conditions for your project cannot be met before the expiration date, you may apply for an extension with the Planning Division. Extension applications must be submitted with the appropriate fees before the permit expiration date. If the permit expires, a new permit application must be filed and accompanied by applicable fees. The new permit may be subject to different processing requirements and standards. Contact your assigned planner if you have any questions about extensions.

**Changes or Modifications to Project**

If your project needs minor changes or major modifications, review and approval of the project by the Planning Division is required. Applications for changes or modifications must be filed and accompanied by applicable fees. Contact your assigned planner if you think your project needs to be changed or modified.

## ATTACHMENT 1

REVISED CONDITIONS OF APPROVAL

## APPROVAL OF THE SPECIAL PERMIT IS CONDITIONED ON THE FOLLOWING TERMS AND REQUIREMENTS WHICH MUST BE SATISFIED.

1. The applicant shall submit an amendment to the approved Reclamation Plan for Special Permit Application No. SP 26-88. The applicant shall secure all necessary approvals for the Reclamation Plan amendment prior to commencing any ground disturbance necessary to initiate the development of this facility, including any associated infrastructure. The Reclamation Plan shall consider potential changes to lighting and glare, and noise levels that may occur when mining operations enter the reclamation phase.
2. The applicant shall secure a grading permit prior to commencing any ground disturbance. The grading permit shall be prepared by a qualified professional engineer. The plan shall identify the cubic yards of all proposed grading and shall incorporate the erosion control measures listed below. The applicant shall be responsible for implementing the erosion control measures.
  - A. Minimize soil exposure during the rainy season by proper timing of grading and construction;
  - B. Retain natural vegetation where feasible;
  - C. Vegetate and mulch denuded areas to protect them from winter rains;
  - D. Divert runoff from steep denuded slopes and critical areas with barriers or ditches;
  - E. Minimize length and steepness of slopes by benching, terracing, or constructing diversion structures;
  - F. Trap sediment-laden runoff in basins to allow soil particles to settle out before flows are released to receiving waters; and
  - G. Inspect sites prior to significant rain events to ensure control measures are working properly and correct problems as needed.
3. The applicant shall secure permits for all structures related to the commercial cannabis activity. The plans submitted for building permit approval shall be consistent with the project description and approved project site plan. A letter or similar communication from the Building Division verifying that all structures related to the cannabis cultivation are permitted will satisfy this condition.
4. Applications for grading and building permits shall be referred to the North Coast Air Quality Management District (NCAQMD) for review and consultation. Dust control practices during grading and construction shall achieve compliance with NCAQMD fugitive dust emission standards.
5. The approved building plans shall meet all applicable fire codes, including fire suppression infrastructure requirements deemed necessary for the project by the Building Inspection Division. Sign off on the Occupancy Permit by the Building Division shall satisfy this requirement.
6. The applicant shall secure all necessary approvals and permits from the Division of Environmental Health and the Regional Water Quality Control Board for the on-site sewage disposal system, Hazmat, and solid waste prior to the issuance of the building permit. A letter

from those agencies indicating approval has been issued will satisfy this condition.

7. All repositioned stockpiles or berms, either in their entirety or partially, shall be replaced in-kind with similar earthworks, or structures, to maintain and attenuate noise and aesthetic impacts associated with the mining and processing operation. The Building Permit application for the development of the manufacturing facility shall include plans prepared by a qualified professional engineer that demonstrate the replacement earthworks or structures provide equivalent noise attenuation and aesthetic buffering as the existing berm/stockpile that is to be relocated for the review and approval of the Planning Director. The earthwork plans shall incorporate the General Plan sedimentation and erosion control measures in specified in standard WR-S13. The approved earthworks shall be developed the prior to occupancy of the manufacturing facility.
8. The applicant shall submit a site plan drawn to scale and meeting the requirements of Building Inspection's Plot Plan Checklist for the review and approval of the Planning Director. The site plan shall show
  - a) Compliance with the setbacks of the Heavy Industrial (MH) zone.
  - b) Location of easements of record.
  - c) Adequate off-street parking, including the location of the dedicated 10 foot by 60 foot loading space.
  - d) Compliance with emergency vehicle access requirements as per the Humboldt County Code Section 3111 et seq. (Fire Safe Regulations)
  - e) Landscaping Plan if the parking facility contains 5 or more vehicles as required by the General Plan Standard Section UL-S5.
9. The applicant shall install security fencing at the perimeter of the manufacturing facility. The fencing shall be compatible with the surrounding uses and buffer the visibility of the manufacturing facility by the fence's design and/or use of landscaping. Plant materials used for landscaping shall be non-invasive and shall not be pyrophytic.
10. The applicant shall post notices on the project site regarding potential of flooding from the failure of Ruth Dam in a major seismic event. The content of the notices are to include maps showing the inundation areas and location of evacuation routes. The premises shall be equipped with radio receivers (preferably battery-operated) capable of receiving emergency broadcasts and instructions. The owners and employees of the proposed facility will monitor such information during flood warning and respond accordingly.
11. The applicant shall secure a building permit prior to installing signage for the commercial cannabis manufacturing facility. The signage plan shall be subject to the review and approval of the Planning Director. Signage shall be compatible and not distract from the surrounding uses in the area.
12. The applicant shall be compliant with the County of Humboldt's Certified Unified Program Agency (CUPA) requirements regarding hazardous materials. A written verification of compliance shall be required before any provisional permits may be finalized. Ongoing proof of compliance with this condition shall be required at each annual inspection in order to keep the permit valid.
13. The applicant is responsible for receiving all necessary permits and/or approvals from other state and local agencies.

14. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.

**\*15. The applicant shall install a double check valve system to the existing well to prevent backflow.**

**\*16. Alcohol stored on the project site shall not exceed fifty (50) gallons.**

**Ongoing Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:**

1. The project shall be developed, operated and maintained in accordance with the project description, the Operating Plan, Security Plan, approved project site plan, approved Visitor Serving Operations Plan, and floor plan. Access to the rooms where commercial cannabis is present shall be restricted so that no one under the age of 21 is allowed entry. Changes to the project except for Minor Deviations to the Plot Plan as provided in Section 312- 11.1, shall require Modification of this permit.
2. All materials used for the manufacturing of commercial medical cannabis shall be stored inside the manufacturing facility.
3. Consistent with Section 11362.775 of the Health and Safety Code, until or unless amended, all manufacturing operations shall comply with the following standards:
  - A. Operations consist of either or both of the following:
    - (1) Use only manufacturing processes that do not involve the use of volatile compounds such as butane. (Alcohol may be used as a solvent.); and/or.
    - (2) Use only manufacturing processes that use solvents exclusively within a closed-loop system that meets all the following requirements:
      - a. The system is designed to recapture and contain solvents during the manufacturing process, and otherwise prevent the off-gassing of solvents into the ambient atmosphere to mitigate the risks of ignition and explosion during the manufacturing process.
      - b. A licensed engineer certifies that the system was commercially manufactured, safe for its intended use, and built to codes of recognized and generally accepted good engineering practices, including, but not limited to, the American Society of Mechanical Engineers (ASME), the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), or OSHA Nationally Recognized Testing Laboratories (NRTLs).
      - c. The system has a certification document that contains the signature and stamp of a professional engineer and the serial number of the extraction unit being certified.
      - d. All volatiles shall be disposed at a facility licensed accept such materials, and in accordance with State and County regulations.
  - B. The building used for cannabis activity shall meet all required fire, safety, and building code requirements in one or more of the following:
    - (1) The California Fire Code.
    - (2) The National Fire Protection Association (NFPA) standards.
    - (3) International Building Code (IBC).
    - (4) The International Fire Code (IFC).



- (5) Other applicable standards, including complying with all applicable fire, safety, and building codes in processing, handling, and storage of solvents or gasses.
4. All new and existing outdoor lighting shall be compatible with the existing setting and directed within the property boundaries.
5. Commercial cannabis activity shall be conducted in compliance with all laws and regulations as set forth in the Humboldt County Commercial Medical Marijuana Land Use Ordinance (CMMLUO), as may be amended from time to time, as applicable to the permit type.
6. Possession of a current, valid required license, or licenses, issued by any agency of the State of California in accordance with the MAUCRSA, as may be amended from time to time, and regulations promulgated thereunder, as soon as such licenses become available.
7. Possession of a current, valid permit or license, issued by the Humboldt County Department of Health and Human Services-Environmental Health Division, as soon as such permits or licenses become available.
8. All persons hiring employees to engage in commercial processing of medical cannabis shall comply with the following Employee Safety Practices:
- A. Implement safety protocols and provide all employees with adequate safety training relevant to their specific job functions, which may include:
- 1) Emergency action response planning as necessary;
  - 2) Employee accident reporting and investigation policies;
  - 3) Fire prevention;
  - 4) Hazard communication policies, including maintenance of material safety data sheets (MSDS);
  - 5) Materials handling policies;
  - 6) Job hazard analyses; and
  - 7) Personal protective equipment policies, including respiratory protection.
- B) Visibly post and maintain an emergency contact list which includes at a minimum:
- 1) Operation manager contacts;
  - 2) Emergency responder contacts;
  - 3) Poison control contacts.
- C) At all times, employees shall have access to safe drinking water and toilets and handwashing facilities that comply with applicable federal, state, and local laws and regulations. Plumbing facilities and water source must be capable of handling increased usage without adverse consequences to neighboring properties or the environment.
9. Odors shall be contained on the property on which the Cannabis activity is located. To implement this requirement air filtration and ventilation equipment is to be maintained in good working condition and monitored on an on-going basis to limit potential adverse odor emission impacts to employees and/or properties located in the vicinity. If the County receives any odor complaints, the permit holder shall work with the Building Official to correct odor concerns.
10. **Permit Duration.** The Permit shall be valid for one year from the effective date of approval, and on the anniversary date of such effective each year thereafter, unless an annual compliance inspection has been completed and the permit has been found to comply with all conditions of approval. In the event the inspection finds noncompliance, a written notification of shall be provided to the permit holder identifying the items not in compliance and the action the permit holder may take to cure the noncompliance. Failure to cure the noncompliance shall

result in termination of the permit. The process of notification, re-inspection and appeal of any noncompliance determination shall be as set forth in sections 55.4.1.2.2 and 55.4.13 of the CMMLUO.

11. **Transfers.** Transfer of any leases or permits approved by this project is subject to the review and approval of the Planning Director for conformance with CMMLUO eligibility requirements, and agreement to permit terms and acknowledgments. The fee for required conformance with conditions review shall accompany the request. The request shall include the following information:
  - (1) Identifying information for the new Owner(s) and management as required in an initial permit application;
  - (2) A written acknowledgment by the new Owner in accordance as required for the initial Permit application;
  - (3) The specific date on which the transfer is to occur; and
  - (4) Acknowledgement of full responsibility for complying with the existing Permit; and
  - (5) Execution of an Affidavit of Non-diversion of Medical Cannabis.
12. **Modifications to the Facility.** Prior to making any modifications to a permitted facility, the permittee shall submit to the Planning Director a request for determination of County approvals, together with the appropriate fee. The request shall contain a description sufficiently detailed to allow the Planning Director to determine what permits and other approvals, are needed, and whether a modified Permit is required.
13. **Inspections.** The permit holder and subject property owner are to permit the County or representative(s) or designee(s) to make inspections at any reasonable time deemed necessary to assure that the activities being performed under the authority of this permit are in accordance with the terms and conditions prescribed herein.
14. The operation shall participate in the Medical Cannabis Track and Trace Program administered by the Humboldt County Agricultural Commissioner, when available.
15. The manufacturing operations shall use the following best management practices to ensure the safety of employees and the manufactured product:
  - A. Ensure that the space in which any Medical Marijuana product is to be manufactured is a fully enclosed room and clearly designated on the approved floor plan.
  - B. Ensure that all applicable sanitary rules are followed.
  - C. Ensure that the standard operating procedure includes, but need not be limited to, step-by-step instructions on how to safely and appropriately:
    - a. Conduct all necessary safety checks prior to commencing handling;
    - b. Prepare Medical Marijuana for manufacturing;
    - c. Clean all equipment, counters and surfaces thoroughly; and
    - d. Dispose of any waste produced during the manufacturing of Medical Marijuana in accordance with all applicable local, state and federal laws, rules and regulations.
  - D. Establish written and documentable quality control procedures designed to maximize safety for employees and minimize potential product contamination.
  - \*E. **Emergency procedures shall be written and stamped by an industrial hygiene engineer.** Establish written emergency procedures to be followed by employees in case of a fire, chemical spill or other emergency.

- F. Have a comprehensive training manual that provides step-by-step instructions for manufacturing medical marijuana products on its Licensed Premises. The training manual shall include, but need not be limited to, the following topics:
- a. All standard operating procedures used at that Licensed Premises;
  - b. The quality control procedures;
  - c. The emergency procedures for the Licensed Premises;
  - d. The appropriate use of any necessary safety or sanitary equipment;
  - e. The hazards presented by all chemicals and solvents used within the Licensed Premises as described in the material safety data sheet for each chemical and solvent;
  - f. Clear instructions on the safe use of all equipment involved in each process and in accordance with manufacturer's instructions, where applicable; and
  - g. Any additional periodic cleaning required to comply with all applicable sanitary rules.
- G. Provide adequate training to every employee prior that to that individual undertaking any step in manufacturing a Medical Marijuana product.
- \*a. Adequate training shall include, but need not be limited to, **drills at least every quarter per year**, providing a copy of the training manual for that Licensed Premises and live, in-person instruction detailing at least all of the topics required to be included in the training manual.
  - b. The individual training each employee shall sign and date a document attesting that all required aspects of training were conducted and that he or she is confident that the trainee can safely handle and distribute a Medical Marijuana product.
  - c. The employee that received the training shall sign and date a document attesting that he or she can safely implement all standard operating procedures, quality control procedures, and emergency procedures, operate all equipment, use all safety, sanitary and other equipment and understands all hazards presented by the chemicals and solvents to be used within the Licensed Premises and any additional period cleaning required to maintain compliance with all applicable sanitary rules.
- H. Maintain clear and comprehensive records of the name and signature of every individual who engaged in any step related to the manufacturing of any Medical Marijuana product and the step that individual performed.
16. Persons engaging in the manufacturing of any Medical Marijuana product shall:
- A. Be over 21 years of age.
  - B. Not have been convicted of a felony for the illegal possession for sale, sale, manufacture, transportation, or cultivation of a controlled substance; a violent crime, as specified in subdivision © of Section 667.5 of the Penal Code; a serious crime, as specified in subdivision © of Section 1192.7 of the Penal Code; or a crime involving fraud, deceit, or embezzlement
  - C. Ensure that all equipment, counters and surfaces used in the manufacturing of any Medical Marijuana product is food-grade including ensuring that all counters and surface areas were constructed in such a manner that it reduces the potential for the development of microbials, molds and fungi and can be easily cleaned.
  - D. Ensure that all equipment, counters, and surfaces used in the manufacturing of any Medical Marijuana product are thoroughly cleaned after the completion of each Production Batch.
  - E. Ensure that the appropriate safety or sanitary equipment, including personal protective equipment, is provided to, and appropriately used by, each person engaged in the manufacturing of any Medical Marijuana product.

**Informational Notes:**

1. If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 50 foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99.

2. This permit approval shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date"); except where construction under a valid building permit or use in reliance on the permit has commenced prior to such anniversary date. Once initiated, the use is subject to the Permit Duration and Renewal provisions set forth in Condition of Approval #10 of the On-Going Requirements /Development Restrictions, above. The period within which construction or use must be initially commenced may be extended as provided by Section 312-11.3 of the Humboldt County Code.

\* Indicates revisions adopted by the Humboldt County Planning Commission on January 11, 2018.



RECEIPT

Receipt # C 9621 Receipt Date 1/26/2018 Receipt Type Fee Payment Received By Elanah Adler

PROJECT INFORMATION			
Apps #	14005	Key Parcel Number	504-161-010-000
Case Numbers	SP16-015A		
Cannabis Project?	No		

PAYER INFORMATION	
Applicant Name	Humboldt Bay Municipal Water District
Applicant Phone	707-443-5018
Address 1	Attn.: John Friedenbach
Address 2	Po Box 95
City	Eureka
State	CA
Zip	95502

PAYMENT	
Cash Amount \$	Credit Card Amount \$
Other Amount \$	Check Amount \$2,262.97
Check #	44258
Amount Paid	\$2,262.97

FEE DETAIL				
Planning Fees				
<a href="#">Edit Table</a>   <a href="#">First 50</a>   <a href="#">Previous</a>   <a href="#">Next</a>   <a href="#">Last</a>   <a href="#">All</a>   <a href="#">Search Table</a>				
No.	Category	Fee Name	Fee Type	Fee Amount
<input type="checkbox"/>	1	Deposit	Technology Fee: Public Hearing Review Permit	Miscellaneous \$75.00
<input type="checkbox"/>	2	Flat Fee	Appeal to Board of Supervisors	Public Hearing \$750.00
<input type="checkbox"/>	3	Other Dept.	Appeal or Rehearing	Public Works \$250.00
<input type="checkbox"/>	4	Other Dept.	Post App. Review: Appeal to Board of Supervisors	County Counsel \$491.97
<input type="checkbox"/>	5	Other Dept.	Project Appeal	Environmental Health \$596.00
<input type="checkbox"/>	6	Other Dept.	Review Fee	Building Division \$100.00
<b>Total:</b>				<b>\$2,262.97</b>
<a href="#">Edit Table</a>   <a href="#">First 50</a>   <a href="#">Previous</a>   <a href="#">Next</a>   <a href="#">Last</a>   <a href="#">All</a>   <a href="#">Search Table</a>				

NOTES
Notes





Andrea A. Matarazzo

Partner

andrea@pioneerlawgroup.net

direct: (916) 287-9502

January 26, 2018

Humboldt County Board of Supervisors  
825 5th Street  
Eureka, CA 95501

**RE: Appeal of Planning Commission Approval of Special Permit for  
Project SP-16-015**

To the Humboldt County Board of Supervisors:

The Humboldt Bay Municipal Water District ("HBMWD") appeals the January 11, 2018 Planning Commission decision to approve a special permit for a 5,000-square foot volatile and non-volatile cannabis manufacturing facility, and to approve an Addendum to the Environmental Impact Report ("EIR") as satisfying the requirements of the California Environmental Quality Act ("CEQA").

The project approval coincides with a zoning change request requiring Board approval for the subject project. As it pertains to this appeal, HBMWD further opposes the zoning change request by the project applicant, MCMP, LLC, from Agricultural Exclusive (AE) to Heavy Industrial with a Qualified overlay zone (MH-Q). (Project ZR 16-001.) HBMWD reserves the right to submit further objections to the zoning change request and to submit further information in support of its appeal of the Planning Commission's actions before the Board of Supervisors.

HBMWD is a municipal water district supplying high quality water to the greater Humboldt Bay Area. Its responsibilities to the residents and businesses of Humboldt County necessitate that HBMWD vigorously protect the supply and quality of its water sources. HBMWD owns many of the surrounding properties to this proposed project property and operates Ranney wells in the adjoining Mad River that supplies many of the downstream municipalities. This project, the manner in which it was processed, and its attempt to skirt an adequate environmental analysis, threaten the area's water supply, water quality, and other environmental resources, as well as HBMWD's ability to ensure it can meet its responsibilities to its consumers.

The project and the County's truncated process of reviewing it violate state and federal environmental regulations, including but not limited to the state's Planning &

Zoning Law, commercial cannabis statutes and regulations, federal and state water quality regulations, and CEQA.

**1. Supplemental Environmental Review of the Project is Required Under CEQA. The Addendum is Insufficient to Analyze and Mitigate the New and Substantially More Severe Environmental Impacts of the Proposed Project, Which Conflicts with the County's Policies and Regulations.**

Under CEQA, an addendum to an EIR is only appropriate if none of the following conditions are present:

- Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant, environmental effects or a substantial increase in the severity of previously identified significant effects; or
- New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
  - The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - Significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(CEQA Guidelines, § 15162.)

The County's Addendum fails to analyze the new and substantially more severe environmental impacts peculiar to the proposal to place manufacturing facility (involving a volatile and non-volatile solvents and other chemicals) on a property that sits near the collection wells for a municipal water district servicing approximately 66% of Humboldt County's residents. (See, e.g., Pub. Resources Code, § 21166; CEQA Guidelines, §§ 15162-16164, 15168.) A conclusory comparison of the effects of a manufacturing facility to the existing aggregate surface mining is the extent of the Addendum's environmental "analysis." (Staff Report, p. 49.)

The Addendum describes the project and its new uses as a "resource-related industrial use" that has "fewer and less substantial impacts than the existing use." (Staff Report, p. 49.) This project description is misleading, and the conclusions derived from it lack the evidentiary support CEQA requires. The Addendum attempts to sidestep important environmental issues and minimizes potential environmental risks by mischaracterizing manufacturing impacts, including potentially significant offsite and cumulative impacts, and by overstating the overall degraded quality of the existing site due to extensive mining activities. To comply with CEQA and meaningfully evaluate the potential impacts of the project, the County's environmental review must be substantially revised to start with an accurate and meaningful description of the proposed project as well as the existing environmental setting or "baseline." (CEQA Guidelines, § 15125.)

Furthermore, a manufacturing facility and the resulting environmental effects are different from a gravel mine. In many ways, the potential environmental impacts of manufacturing uses are not comparable to those of a quarry, yet the Addendum provides no substantive discussion or analysis of the potentially significant impacts, necessary mitigation, or a reasonable range of alternatives to use of the site as a commercial cannabis manufacturing facility. Nor are these fundamental elements of CEQA compliance provided in any of the previous iterations of the County's environmental review upon which the project purports to rely. For example, no discussion is provided regarding potential water supply impacts, water quality impacts, the project's likely energy demands or air quality emissions, odors, or other critical issue areas such as groundwater and soil resources, land uses (such as agricultural resources), tribal cultural resources, biological resources (particularly fisheries), and impacts related to recreation, climate change and the potential to exacerbate existing hazardous conditions.

Potentially significant impacts to recreation and sensitive uses at the park across the river, and to the public who regularly swim in that portion of the Mad River, have not been evaluated. The impacts of industrial cannabis manufacturing and the odors cannabis facilities produce are potentially significant conflicts with recreational uses in the vicinity, which must be properly evaluated before the project can be approved. The Addendum fails to address the potentially significant impacts of odor from a

manufacturing plant – which the applicant proposes to operate at all hours – will have on neighbors and nearby parks, and what potential mitigation or alternatives are available. These are new and substantially more severe environmental impacts that were not analyzed in the original environmental documents.

As explained below, current drafts of the County's new comprehensive commercial cannabis ordinance require a six-hundred-foot setback of manufacturing facilities from sensitive uses such as schools and public parks. Nothing about this particular project dictates or even suggests that it should be treated differently from other potential cannabis facilities in the County. The project conflicts with the County's policies and regulations regarding commercial cannabis facilities, and the permit should be denied on this basis alone.

**2. Failure to Provide Proper Notice to Neighbors and Other Agencies, Including HBMWD.**

HBMWD received no notice or information concerning this proposed project until mere days before the January Planning Commission hearing. Any alleged "delay" in the appearance of HBMWD in these proceedings is a delay orchestrated by the County and the applicant, neither of whom can credibly claim "inadvertence" in overlooking notice to HBMWD. HBMWD is a neighboring property owner with intake facilities mere feet from the project site. Moreover, as a municipal water district, HBMWD is a public agency having jurisdiction by law over natural resources affected by this project. When information concerning this project was circulated in June of 2016, it was not sent to HBMWD, the neighboring property owner most directly affected by the proposed project. (See Staff Report, p. 89.) The County's extremely late notice to HBMWD was a prejudicial failure to proceed in the manner required by law, and it delayed HBMWD's meaningful comment as a public agency and as a member of the affected community.

**3. As Proposed, the County Cannot Make the Required Finding that the Project Will Not Be Detrimental to the Public Health, Safety, or Welfare or Materially Injurious to Properties or Improvements in the Vicinity.**

The Humboldt County Code requires permit applications to evidence that the new use, as proposed and conditioned, will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity. (Humboldt County Code §312-17.1.4.) In support of this finding, County staff merely restates this provision, asserts that the project is consistent with the General Plan and the proposed re-zone to MH-Q, and that it is not expected to cause significant environmental damage. (See Staff Report, pg. 49.) The Addendum's conclusory discussions of environmental effects lack the requisite evidentiary support to make the

necessary findings. For example, the Addendum and the prior documents upon which it purports to rely fail to adequately analyze the project's potential adverse impacts to visual resources and aesthetics as well as odors and water quality in relation to HBMWD or the nearby public park and its users.

The nearby Ranney wells rely on the porous groundwater basin surrounding the subject property to filter and collect water. This basin acts as a natural filter to ensure the water supplied to the Humboldt Bay municipalities is of sufficient quality. The potential solvents to be utilized, and the safe threshold of amounts that may be stored, used and discharged must be fully described and analyzed. Potential mitigation and alternatives must be explored. Approving this project without sufficient environmental review puts a significant portion of the area's water supply at risk.

**4. The Proposed Project Fails to Properly Describe, and the EIR Addendum Fails to Analyze, Potential Significant Risks to Water Quality from Solvents Associated with Commercial Cannabis Manufacturing.**

The project proposes the conditional use of commercial cannabis manufacturing. In the project application, the applicant provided an Operations Manual; however, the applicant acknowledges that it will not operate the facility. Rather, the applicant will lease the facility to be operated by someone else. It is unclear from the Operations Manual what, how, or in what quantity the actual operator will utilize solvents in the manufacturing of products. The prior EIRs upon which the Addendum purports to rely generally analyzed the effects of gravel mining; they did not assess impacts peculiar to this project or its proposed manufacturing uses. The Addendum fails to comply with CEQA, which requires the County meaningfully discuss and disclose the project's environmental impacts in an environmental impact report.

**5. The Addendum Fails to Analyze Potentially Significant Impacts to Water Supply.**

The Addendum purports to rely on previous environmental analysis and assessments regarding the risks associated with surface gravel mining in the area. Those prior documents did not analyze the potential impacts, mitigation measures, and alternatives for the storage, use, and discharge of manufacturing solvents on the water supply. As explained above, the nearby Ranney wells provide water to a significant portion of residents in the Humboldt Bay region. The Addendum fails to account for the potentially significant impacts on water supply and water quality that will occur from a disruption to the operation of the Ranney wells caused by the manufacturing facility. These impacts must be fully analyzed, and appropriate mitigation and alternatives



proposed to ensure a safe and reliable water supply in terms of both quantity and quality.

**6. The EIR Addendum Fails to Analyze Potentially Significant Impacts Associated with Energy Use, Climate Change, and the Potential for the Project to Exacerbate Existing Hazards.**

The Addendum does not analyze the unique impacts associated with energy use, climate change, and the potential to exacerbate existing hazards resulting from the decision to site a 24-hour operational manufacturing facility in an environmentally sensitive area near the Ranney wells. Reliance on prior EIRs that are largely irrelevant to this project as a substitute for examining this novel use fails to account for potentially significant environmental impacts peculiar to the project and the parcel, which violates CEQA.

**7. Approval of the Proposed Project is Contrary to the Public Interest.**

The County is in the process of preparing a comprehensive land use ordinance for the commercial cultivation, processing, manufacturing, distribution, testing and sale of medicinal or adult use cannabis. (Commercial Cannabis Land Use Ordinance, Planning Commission Hearing Draft, Jan. 11, 2018, §55.4.6.4.4, (c).) The County has held public scoping meetings and workshops to intelligently design the ordinance to eliminate numerous potential issues for a complex industry. Recently, at the same night as this project, the Planning Commission reviewed the proposed ordinance.

The current ordinance, drafted in haste in 2016 to protect local rights, is bereft of any substantial discussion on cannabis manufacturing facilities. Approving this project now will contravene the important work of the County staff, the Board of Supervisors, and the public to create a regime that is fair to the public, the industry, and the neighbors of proposed cannabis projects.

A number of important differences between the proposed ordinance and this project exist. First, the current ordinance establishes reasonable setbacks for commercial cannabis cultivation facilities from sensitive uses such as churches, schools, and public parks. (Humboldt County Code, §§ 314-55.4.11, (d).) Although the current code does not extend this rule to manufacturing facilities, this clear oversight is corrected in the proposed ordinance. (*Ibid.*) Under the new code, manufacturing facilities must be six hundred feet from any public park. (Commercial Cannabis Land Use Ordinance, Planning Commission Hearing Draft, Jan. 11, 2018, §55.4.6.4.4, (c).) This is particularly important, because the staff report fails to detail the distance between its proposed manufacturing site and HBMWD's park on the adjacent parcel across the Mad River. The park is regularly used by families who enjoy the area for

picnics and to play in the river. According to the information provided regarding the proposed project, the manufacturing facility will be in close proximity not only to picnickers on the banks, but also the public that regularly wade into the Mad River.

Second, the proposed ordinance only allows flammable (volatile) manufacturing in MH zones that are accompanied by the Industrial General (IG) land use designation in the General Plan. (55.4.8.2.1.) The property is in the Industrial Resource (IR) land use designation and does not propose a General Plan amendment to resolve this inconsistency. Approving this project as proposed will conflict with the public policies that reflect the County's better judgment in the drafting the comprehensive ordinance, as well as the underlying environmental analysis in the EIR for the proposed ordinance.

For the foregoing reasons, HBMWD respectfully requests that the Board of Supervisors deny the project, or in the alternative, continue the matter so that an EIR, Supplemental EIR or Subsequent EIR can be prepared in compliance with CEQA to analyze the project's new and substantially more severe environmental impacts that are absent from consideration in the Addendum.

Sincerely,



Andrea A. Matarazzo



SECTION H3 PAGE NO. 49  
**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

828 SEVENTH STREET, PO BOX 95 • EUREKA, CALIFORNIA 95502-0095

OFFICE 707-443-5018 ESSEX 707-822-2918

FAX 707-443-5731 707-822-8245

EMAIL [OFFICE@HBMWD.COM](mailto:OFFICE@HBMWD.COM)

Website: [www.hbmwd.com](http://www.hbmwd.com)

**BOARD OF DIRECTORS**

SHERI WOO, PRESIDENT  
NEAL LATT, VICE-PRESIDENT  
J. BRUCE RUPP, SECRETARY-TREASURER  
BARBARA HECATHORN, DIRECTOR  
MICHELLE FULLER, DIRECTOR

**GENERAL MANAGER**

JOHN FRIEDENBACH

January 29, 2018

Humboldt County Board of Supervisors  
825 5<sup>th</sup> Street  
Eureka, CA 95501

Dear Supervisors,

Our District has had and continues to have a good working relationship with the Board of Supervisors. It is in this spirit of communication and transparency that we are sending this letter. At the January 11, 2018 Planning Commission meeting, the commission voted 3-2 to recommend a re-zoning request for Mercer Fraser property APN 504-161-010 and a special use permit for a 5,000 square foot cannabis extraction manufacturing facility to be sent to the Board of Supervisors for final approval.

Our Board has several concerns about this. One is the lack of notification by the Planning Department for a development project that is proposed on a parcel adjacent to two of our Ranney Collector wells on the Mad River. Our District learned about this project via a public notice that was published in the newspaper less than two weeks prior to a Planning Commission hearing. During the Commission's hearing, County staff admitted that there was no agency referral sent to our District. See the attached aerial photo of the project location in relation to our operations on the Mad River.

The District supplies domestic water to seven municipal agencies on a wholesale basis. The municipalities served by the District are the Cities of Arcata, Blue Lake and Eureka, and the Fieldbrook, Humboldt, Manila and McKinleyville Community Services Districts. Via our wholesale relationship, the District serves water to an estimated population of 88,000 people (approximately 66% of the entire Humboldt County), and to numerous businesses, industries and educational institutions, including the vast number of tourists that visit Humboldt County and consume water in restaurants, motels, etc. located within those municipalities. In addition, the District's diversion works and operational control center are located at Essex, just northeast of Arcata on the Mad River and immediately downstream of the Applicant's parcel.

Four Ranney collectors (Stations, Pump Stations, or PS), supply water to the domestic system for drinking water purposes. The Ranney collectors house multiple large electric-driven pumps and associated equipment, and are capable of pumping approximately 20 MGD. The collectors draw water from the aquifer via lateral pipes located 60 to 90 feet beneath the bed of the river. The process of bringing water up from the aquifer through the sands and gravel of the riverbed provides a natural filtration process which results in water that is very high in quality. Two of our Ranney collectors, Station 2 to the west and Station 3 to the east, are located on adjacent parcels (APN 516-27-105 and APN 504-15-110 respectively)

to the Applicant's parcel. See the attached aerial photo that depicts the proximity of our Ranney collectors to the proposed cannabis extraction manufacturing project.

Consequently, ANY contamination originating from the Applicant's parcel would immediately impact up to 3 (75%) of our domestic water supply sources and our industrial surface water source (PS#6 on the aerial photo).

Although we are appealing the Planning Commission's decision to you, the District is also working with Mercer Fraser to see if we can arrive at mutually agreeable mitigation factors to add using the Q layer zoning overlay, should the heavy industrial zoning change be approved. We have also offered to purchase the parcel, or an easement that would allow continued gravel extraction but prohibit any other use.

Manufacturing accidents generally occur due to both engineering and human errors. Engineered mitigations added to the Q zoning overlay may add some degree of assurance against drinking water contamination. But human error, including lack of compliance with operations manuals and/or lack of enforcement and oversight, adds to the risks of manufacturing accidents. We have learned that Mercer Fraser will not be operating the cannabis extraction manufacturing facility but will instead be leasing it out; therefore, Mercer Fraser will not be in direct control of its operations. This too adds another layer of concern for us.

Given the location of the project site and the geology underlying it as part of the Mad River aquifer structure, the Directors of the Humboldt Bay Municipal Water District believe that it is NOT in the interest of public health and safety to change the zoning on this parcel to heavy industrial, which would allow increased industrial activities directly over our environmentally sensitive drinking water source that serves the majority of Humboldt County residents.


Sincerely,



Sheri Woo  
Board President





155' Buffer Zone   
 Distance from PS #2:  
 PS #1: 1570'  
 PS #6: 1978'



5 ON 50WA 3H NOL1286

# Mercer Fraser APN Map 2018



Dee Dee Simpson

SECTION H3, PAGE NO. 52

From: noreply@getstreamline.com  
Sent: Sunday, January 28, 2018 10:39 AM  
To: Dee Dee Simpson  
Subject: Form submission from Humboldt Bay Municipal Water District

Name:  
Jack Miller

Email Address:  
[REDACTED]

Phone:  
[REDACTED]

Comments:

Dear Board of Directors of the Humboldt Bay Municipal Water District,

I have several brief comments inspired by the recent and ongoing controversy over the proposed Mercer-Fraser cannabis facility within the Mad River Flood Plain immediately upstream of one of the Districts Ranney wells. My wife and I attended your Special Meeting regarding this subject on January 17, 2018.

1. We were both very impressed with the deliberations of the Board and their handling of this issue to date. We fully support the Board's actions and their proposed future actions.
2. I was most alarmed by reports of up to 32,000 gallons of diesel fuel stored at the Mercer-Fraser site. I hope it is true that this fuel has been removed. But it makes me wonder how Mercer-Fraser currently manages and/or stores fuel for ongoing gravel mining and processing operations at the site? What about fuel storage at other gravel mining operations and other industrial operations along the Mad River?
3. Taking a step back, this all make me wonder what other time bombs are currently located within the Mad River floodplain upstream of the District's Ranney wells? It seems to me that if the District has limited information regarding this issue, it should immediately plan and implement a comprehensive survey of the upstream environment including the North Fork upstream to at least the Korb Mill and along the main stem to at least the Mad River Fish Hatchery.
4. Last, but certainly not least, is the issue of forest herbicides widely used in the Mad River Watershed. I am currently unaware of any information documenting the testing for possible herbicide contamination of the District's water before it reaches our tap. Any information on this subject would be greatly appreciated.

Best, Jack Miller

**From:** Michael Ives [REDACTED]  
**Sent:** Monday, January 22, 2018 3:40 PM  
**To:** John Friedenbach  
**Subject:** Fwd: Mercer-Fraser Cannabis Extraction Facility  
**Attachments:** Screen Shot 2018-01-15 at 10.43.54 AM.png

Dear Mr. Friedenbach

I am forwarding you the email I sent to Mr. John Ford (HCPBD Director) on January 17th. As of today I have not received a response from the Planning Department. I also cc'd Supervisor Sundberg as noted below.

----- Forwarded Message -----

**Subject:** Mercer-Fraser Cannabis Extraction Facility  
**Date:** Wed, 17 Jan 2018 11:30:47 -0800  
**From:** Michael Ives [REDACTED]  
**To:** [jford@co.humboldt.ca.us](mailto:jford@co.humboldt.ca.us)  
**CC:** Sundberg, Ryan <[RSundberg@co.humboldt.ca.us](mailto:RSundberg@co.humboldt.ca.us)>

Dear Director Ford

I spoke with you at the State of McKinleyville conference today and asked you a few questions about the Mercer-Fraser special permit. I indicated that according to the Humboldt GIS portal, the distance between the NW corner of the HBMWD Park (AP 516-351-002) and the proposed Mercer-Fraser cannabis extraction facility (AP 504-161-010) is less than the 600 ft setback (CCLUO 55.4.6.4.4c ) required for commercial cannabis production or processing. I am including a graphic supporting my position. Could you please have one of your planners look into this and either confirm or dispute this finding? Also the distance between the AP 504-161-010 and AP 516-351-002 property line is about 95ft. If this is added to the distance shown between the southern boundary of the planned building and the southern boundary of AP 516-351-002 (shown as 368ft on the staff report ZR-16-001 pp 18-19) that comes to a distance of 462ft. Any information you can provide that exempts M-F from the CCLUO regulations or my reading of them, I would be interested in hearing that argument as well. Thank you for your time on this matter.

Applicable CCLUO language....

**55.4.6.4.4 Setbacks**

*Sensitive Receptors - Six hundred feet (600') from a School Bus Stop, Church or other Place of Religious Worship, Public Park, or Tribal Cultural Resource. For purposes of this section, the setback requirement applicable to Public Parks, other than lands managed for open space and/or wildlife habitat, shall only be applied to designated and developed recreational facilities such as picnic areas and campgrounds, trails, river and fishing access points, and like facilities under public ownership.*

55.4.7 CANNABIS SUPPORT FACILITIES

*Cannabis Support Facilities include facilities for Distribution, Off-Site Processing, Enclosed Nurseries, Community Propagation Centers and Cannabis Testing and Research Laboratories. All Cannabis Support Facilities must meet or exceed the setbacks from Sensitive Receptors and Tribal Ceremonial Sites specified under 55.4.6.4.4(c) and (d), unless waived or reduced pursuant to 55.4.6.4.4(f).*

55.4.8.2 MANUFACTURING

*Manufacturing Sites must comply with all applicable performance standards, as well as meet the Eligibility Criteria specified in Section 55.4.6.3.1 and 55.4.6.3.2 as well as comply with the Siting Criteria specified in Sections 55.4.6.4.1, 55.4.6.4.2, 55.4.6.4.3, and 55.4.6.4.4 (c), (d) and (g). Manufacturing activities may then be permitted as follows:*

--  
Regards,  
Michael Ives



SEAC The B... Express... f McKin... f McKin... Web M... Track... f McKin... f McKin... 53500 Comm... Hi X... New... How to

webgis.co.humboldt.ca.us/HCEGIS2.0/

### boldt County Web GIS

Parcel APN, or Location

Planning & Building Department WebGIS Portal Comments Help

504-151-026 504-151-027 504-151-028

504-161-010 516-261-001 516-261-002 516-261-045 516-052

Mad River Warren Creek

516-251-010 516-251-006 516-251-012 516-251-014 516-251-008 516-352-005 516-352-004 516-352-002

516-048 0382 Degrees

516-251-000 504-142-013 504-142-012

516-251-011 516-251-013 516-251-014 516-251-008

ESSEX LN GLENDARE

Layer List

**Measurement**

524.4 Feet

Measurement Result

Feet

FSA, Microsoft | Healthy Rural Roads | NRCS | California Co



« DC UPDATE, w/ REP. JARED HUFFMAN: In New Radio Series, the Congressman is Grilled on Solar Tariffs, Banking for the Cannabis Industry and The Shutdown (/2018/jan/31/dc-update-w-rep-jared-huffman/)

Don't Be Alarmed: The CDFW Will Be Locating Roosevelt Elk by Helicopter and Shooting Them With Net Guns for Science » (/2018/jan/31/dont-be-alarmed-cdfw-will-be-locating-roosevelt-el/)

RYAN BURNS (/AUTHOR/RYAN-BURNS) / TODAY (/2018/JAN/31/) @ 10:37 A.M. / LOCAL GOVERNMENT (/CATEGORIES/LOCAL-GOVERNMENT/)

## With Controversial Project Heading to Board, Mercer-Fraser President Flew County Supervisor and Staff to Sacramento Event in a Private Plane

Two weeks ago, at a festive reception and awards ceremony in downtown Sacramento, First District Supervisor Rex Bohn was installed as chair of the Rural County Representatives of California (<http://www.rcrcnet.org/>) (RCRC). The organization is an influential lobbying group that represents 35 California counties, and until two weeks ago no Humboldt County supervisor had ever served as the group's chair. So Bohn's ascension to the position was cause for celebration, and indeed, a good-sized entourage made the trip to Sacramento to commemorate the occasion.

Four of the county's five supervisors were in attendance, along with several prominent local business leaders, some members of county staff, State Senator Mike McGuire and others. Below are some photos posted to Facebook by Tracy D'Amico, deputy clerk of the Board of Supervisors.



Tracy Sperling D'Amico  
about 2 weeks ago

Rex was sworn in as RCRC President tonight. Very well deserved. I love my job and my work family. They do so much for so many. Fun was had by all.



47 2 Share

Commented on Tracy Sperling D'Amico's public post



Tracy Sperling D'Amico And just look at all his peeps! All so proud of him.



1 · about 2 weeks ago

Some of these folks drove down to the state Capitol. Fourth District Supervisor Virginia Bass, who was already heading to Sacramento for a meeting of the California State Association of Counties, said she



managed to keep up with the lead-footed Bohn until Willits, where she lost sight of him.

SECTION HB, PAGE NO. 57

But others traveled in private planes on flights donated by two local business leaders. One plane, a 2004 Pilatus PC-12 (pictured here (<http://www.airport-data.com/aircraft/photo/001265410.html>)), is owned by ACV Group LLC, a corporation whose CEO, Justin Zabel, is president of local construction firm Mercer-Fraser — a company with a controversial project currently pending before the Board of Supervisors.

Fifth District Supervisor Ryan Sundberg was on that flight, though he opted to pay for his seat (more on that in a minute). Two county staffers — Chief Administrative Officer Amy Nilsen and Clerk of the Board of Supervisors Kathy Hayes — were also on the flight.

A second plane, belonging to Shafer's Ace Hardware owner Jack Rieke, carried Second District Supervisor Estelle Fennell, D'Amico and Sheriff William Honsal — this according to the county's public information officer, Sean Quincey, who said the staffers were on the clock.

"Nobody took overtime as everyone is a management & confidential employee," Quincey said in an email. "Honsal took 2 hours of vacation (he was in plain clothes for the trip)."

All but Sundberg rode for free, and Quincey said those who had the flight donated to them will be required to report the gift to the state's Fair Political Practices Association through a Statement of Economic Interest — Form 700 (<http://www.fppc.ca.gov/Form700.html>).

In an email Fennell said Rieke had been invited to the event and had room on his plane. "It was a great way to get to the meeting and Rex's swearing in all in a half a day."

Sundberg told the *Outpost* he paid \$217 for his seat on the Zabel-run corporation's plane because as a governor's appointee to the California Coastal Commission he has to do everything by the book. "There are strict rules," he said. "They could kick you off if you took something for free from a transportation company." He said he wrote a personal check for the \$217 "so I had proof."

This fare, according to Zabel, was calculated by taking the total operating costs and dividing them by the number of passengers.

Photos from the RCRC event posted on social media show the four supervisors — Sundberg, Bohn, Bass and Fennell — celebrating Bohn's new position with a variety of local guests. Zabel was there along with Rob McBeth of Arcata's O&M Industries (<http://www.omindustries.com/>), Humboldt County Public Works Director Tom Mattson (who was also in Sacramento on other county business), former Eureka City Manager and current Humboldt Community Services District board member David Tyson, Sheriff Honsal, Rieke, D'Amico, and Terra Carver, executive director of the Humboldt County Growers Alliance, a marijuana industry group.

Bohn's son Trevor also posted photos from the event, including this one, which shows Zabel in the background:



Mercer-Fraser, as you may recall, is currently petitioning the county with a controversial re-zone request for property it owns along the Mad River near Glendale (<https://lostcoastoutpost.com/2018/jan/11/water-district-says-proposed-mercfraser-marijua/>). The Eureka construction firm wants the zoning on its 13.5-acre parcel changed to heavy industrial so it can build a 5,000-square-foot commercial cannabis extraction manufacturing facility (a hash lab, effectively) onsite.

A recommendation to approve the rezone request — along with a special permit for the manufacturing facility — was narrowly approved by the Humboldt County Planning Commission (<https://lostcoastoutpost.com/2018/jan/12/planning-commission-approves-mercfraser-rezone/>) earlier this month despite vociferous objections from some local residents and dire warnings from staff and board members of the Humboldt Bay Municipal Water District, who turned out in force to argue that allowing heavy industrial activity on the property, which lies entirely within the Mad River's 100-year floodplain, would jeopardize the water supply for roughly two-thirds of Humboldt County residents.

Project proponents, meanwhile, noted that Mercer-Fraser has had a gravel mining operation at that location for years, and the underlying land use designation was already changed during the county's General Plan Update process, along with other properties upstream. Therefore, they argue, the zoning needs to be changed for the sake of consistency with the established land use. And they say that since the cannabis extraction facility would operate on a closed-loop system it poses no risk to the nearby water supply.

The rezone and special permit request is now being appealed to the Board of Supervisors, meaning Sundberg will play a key role in deciding whether to approve or deny the Mercer-Fraser request. And some say the Fifth District supervisor opened himself to criticism by accepting a ride on Zabel's plane, whether he paid for the seat or not.

"I would think this would raise a lot of concerns for people in the community," said Ryan Emenaker, a professor of political science at College of the Redwoods.

Emenaker said there are two ways to look at the ethical requirements of elected officials. One is by the letter of the law, and Emenaker said he'd be surprised if Sundberg's actions violated any legal statutes. "But the higher-level requirement is to avoid even the *appearance* of impropriety," he said. Sundberg's plane ride, he believes, crossed that line.

"I would like to get that flight, too, [but] nobody's going to offer it to me," Emenaker said. He noted that there are no commercial flights between Humboldt County and Sacramento, and regarding Sundberg he said,

"You're getting this additional perk purely because of the position you're in. I think it would at least appear to the broader public that the reason this benefit was extended was to influence or sway the vote in some way."

SECTION H3 PAGE NO. 59

Reached by phone on Tuesday, Zabel seemed to find that suggestion absurd. He said the flight was his idea and had been planned for weeks. "I was already going that way," he said. Told that some might consider it inappropriate for a CEO with a controversial project before the county to donate private plane rides to county staff and an elected official, Zabel insisted that's not how things work.

"Wouldn't you agree that any project that comes before the Planning Commission or the Board of Supervisors, it's not a matter of whether you know or don't know [the applicant]; it's based on the merits of the project?" Zabel said. He added that the plane is available for anyone to lease.

The Outpost asked Sundberg whether hitching a ride on Zabel's plane creates at least the appearance of impropriety.

"I hope not," he said. "I mean, I had to pay the full amount."

Sundberg went on to say that if not for the ride on Zabel's plane he wouldn't have been able to attend the RCRC event because he needed to be at a "State of McKinleyville" meeting the following morning. He also said he planned to meet with both the Humboldt Municipal Water District and Mercer-Fraser personnel in an effort to "work something out"

Zabel, it should be noted, is Sundberg's appointee to the county's Aviation Advisory Committee. Is Sundberg's relationship with Zabel too cozy? Kathleen Lee, a lecturer in the politics department at Humboldt State University, said such distinctions can be tough to draw in the realm of local politics.

"When you look at the way local government operates, there's a lot of cronyism behind the scenes, just because it involves so many personal relationships," Lee said, speaking about local governments generally and not Humboldt County in particular. "People get elected not so much because of their ideological or political positions but because they have more contacts in the community."

Lee agreed with Ememaker that elected officials should consider both the letter of the law and appearances. "But when you come down to appearances, bad appearances is something that needs to be addressed at the ballot box," Lee said.

Asked to comment specifically on Sundberg's decision to fly on Zabel's plane, Lee said, "It seems very cozy, especially seeing as you have a pending controversial upcoming decision." But she also noted that county supervisors aren't like judges; they're not required to be impartial.

"They have a perspective," she said. "I think you see this with the entirety of the burgeoning cannabis economy. There's been this interesting ideological flip." Liberal local elected officials, she said, "tend to want more restrictions than [the officials] who tend to be more conservative, more pro-business."

Now that cannabis operations are legitimate business in California, established business leaders like Zabel are getting in on the game. And they have friends in high places. Supervisors, Lee said, come into office with "a whole set of relationships in the community. It's generally why they get elected."

Bass made a similar point. "We all know each other in this community; we're all friends," she said. "A lot of us have been friends way prior to our political world."

SECTION H3, PAGE NO. 60

But Jennifer Kalt, director of Humboldt Baykeeper and a critic of Mercer-Fraser's Glendale project, said personal relationships shouldn't be allowed to influence public policy.

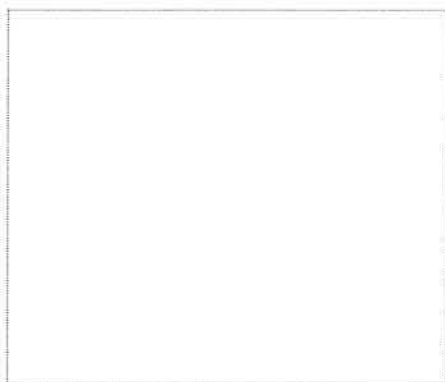
"I'm constantly shocked how people just shrug and act like the oligarchy of developers around here is just the way it is, like there's nothing we can do about it," she said. As for Sundberg's flight to Sacramento, Kalt said, "I think it's outrageous."

People contacted for this story seem to fall into one of two categories — those who see accepting a ride on Zabel's plane as a clear breach of political protocol, a decision that calls into question the validity of the pending Mercer-Fraser decision, and those who are taken aback by that perspective, unable to see any cause for concern.

Humboldt County Planning and Building Department Director John H. Ford said via email that Mercer-Fraser's Glendale project won't come to the board before late February and more likely early March.

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(<https://twitter.com/home?status=With%20Controversial%20Project%20Heading%20to%20Board%2C%20Mercer-Fraser%20President%20Flew%20County%20Supervisor%20and%20Staff%20to%20Sacrame>  
project-headed-board-mercer-fraser-p/)



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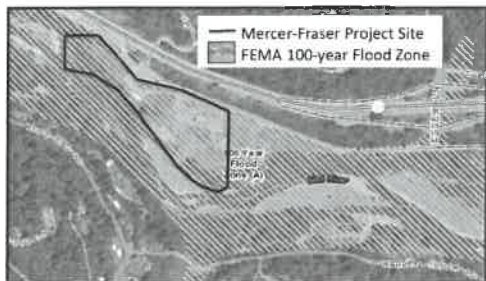
## Speak Out

Eureka-based Mercer-Fraser Company Seeks Special Allowance for Floodplain Hash Lab

Jennifer Kalt

*from Humboldt Baykeeper***Speak Out**

Last Updated: 30 January 2018



On January 17, the Humboldt Bay Municipal Water District Board voted unanimously to appeal the Humboldt County Planning Commission's approval of a cannabis extraction and manufacturing facility just upstream from the intakes for the drinking water supply for more than 88,000 Humboldt County residents. On January 29, the District released its appeal and related documents.

**Drinking Water for 88,000 People At Risk**

"Water quality is critical to this community. We have got to err on the side of protecting this water," said Director Bruce Rupp, who represents constituents in Eureka and Cutten. The HBMWd supplies water to the cities of Eureka, Arcata, and Blue Lake, as well as the Community Service Districts that supply drinking water to Cutten, McKinleyville, Manila, Samoa, Glendale, and Fieldbrook.

The District also voted unanimously to oppose the rezoning of the Mercer-Fraser property to "Heavy Industry," since that change could allow a wide range of industrial manufacturing. The County maintains that other industrial activities would require a Conditional Use Permit – cold comfort from an agency that rarely rejects development and too often fails to enforce its regulations and conditions of permit approval.

The decision ultimately rests with the Board of Supervisors, which will consider the appeal and the rezone on Feb. 27 or soon thereafter.

**Take Action! Urge the Board of Supervisors to protect our drinking water, the Mad River, and salmon!**

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**Floodplains are for Flood Waters and Fish**

Developing floodplains is poor planning for a variety of reasons. Paving floodplains constrain flood waters, leading to more severe flooding and erosion downstream. Reducing natural floodplains jeopardizes salmon, steelhead, and other protected species by restricting access to low-gradient spawning, resting, and rearing habitat. The potential for accidental volatile chemical spills and other damage during floods is of great concern for the river and fish as well as our primary public drinking water supply.

The Mad River is considered critical habitat for coho salmon, which are threatened by development of floodplains and riparian areas that when undeveloped, filter pollutants and slow down runoff. Floodplains provide migration corridors for juvenile and adult coho salmon. Because of their importance to coho and other salmonids, major efforts are being made to restore floodplain habitats all over the North Coast in an effort to prevent the coho from going extinct.

The County General Plan adopted last October includes a policy of protecting floodplains from development for these very reasons. The General Plan also notes that "areas not served by urban services are not suitable for a broader range of industrial uses." The property does not have public water or sewer services, so the cannabis factory would rely on a well and a septic system in the floodplain.

Furthermore, the County has a very sensible ordinance on the books, which prohibits "storage or processing of materials that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal or plant life." Yet the Planning Commission recommends changing the zoning from "Agriculture General" to "Heavy Industry" to allow cannabis extraction using volatile chemicals.

Heavy industry simply does not belong on floodplains, no matter how safe a developer promises to be. The Supervisors should approve a change in zoning to allow the gravel processing to continue without allowing cannabis manufacturing and other heavy industry. Otherwise, we can be sure that floodplains on every river in the county will be at risk of industrial development.

Eureka-based Mercer-Fraser Co. is a paving contractor, gravel mine operator, and owner of the property in question. Mercer-Fraser Vice President Justin Zabel is also an officer of McMp LLC, the developer of the proposed cannabis extraction facility.

**Thank the Humboldt Bay Municipal Water District** for protecting our drinking water and the Mad River!

Sheri Woo: [woo@hbmwd.com](mailto:woo@hbmwd.com)

Barbara Hecathorn: [hecathorn@hbmwd.com](mailto:hecathorn@hbmwd.com)

Michelle Fuller: [fuller@hbmwd.com](mailto:fuller@hbmwd.com)

Bruce Rupp: [rupp@hbmwd.com](mailto:rupp@hbmwd.com)

Neal Latt: [latt@hbmwd.com](mailto:latt@hbmwd.com)

John Friedenbach: [friedenbach@hbmwd.com](mailto:friedenbach@hbmwd.com)

**Image:** Mercer-Fraser's proposed cannabis extraction facility is within the Mad River's 100-year flood zone along Highway 299 between Blue Lake and McKinleyville.



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Letters + Opinion » Mailbox January 25, 2018

## 'Absurd'

Editor:

It is with some alarm that I read that our drinking water (for 88,000 Humboldt County residents) is now at risk because a poorly thought out "heavy industrial" zone ended up in the updated Humboldt County General Plan (NCJ Daily, Jan. 18). The area in question is located on the north shore of the Mad River in Glendale, within 2,000 feet of the water intake facilities that provide many of us water from Ruth Lake.

It seems absurd that this zone was changed to "heavy industrial" in the plan, so close to the county water supply intake. On Jan. 11, the general manager of the Humboldt Bay Municipal Water District warned the county that approving a proposed site-zoning change from "ag-general" to "resource-related industrial" opens the door to potentially widespread drinking water impacts from any accidental hazardous material releases. He said, "There may be no bigger issue brought before this Planning Commission this year ... that deals with health and safety and welfare, than protecting ... the source water for the public drinking water system."

In response, the planning commission merely pointed to the General Plan's "heavy-industrial" designation, stated the site zoning had to be consistent with it, and proceeded to OK it with a majority vote.

Isn't government supposed to ensure that our water is OK? With all the lead poisoning in the national news, you would think cool heads would prevail and make sure our county water supply is safe, no matter what! I am so glad that the head of the Humboldt Bay Municipal Water District was trying to keep us safe but I am also stunned that a public health concern of this magnitude was greeted by a rubber stamp from the county planning commission.

Apparently, there are currently 30,000 gallons of diesel fuel stored there now. In an earthquake, would we have diesel coming out of what remains of our taps? I don't know about you, but this seems irresponsible in the extreme to me. Rather than approving this change, the planning commission could have found a way to create mitigations for this and any other industrial waste risks on the site.

The planning commission answers to the county board of supervisors. I urge the supervisors to direct planning staff to come up with creative ways to solve this problem and ensure the safety of our water supply now and in the future. If the General Plan has a mistake, there must be a way to fix it.

*Margaret Draper, Arcata*

# Water district fights rezone in Glendale

Daniel Mintz

MAD RIVER UNION

GLENDALÉ - Citing potential threats to the drinking water supply of the county's major cities and several communities, the Humboldt Bay Municipal Water District will appeal a cannabis manufacturing permit approval.

At its Jan. 17 meeting, the district's Board of Directors voted to file an appeal of county Planning Commission permit approval Jan 11 for a cannabis manufacturing facility at a 13.5 acre Glendale area site that borders the Mad River.

The project is being advanced by the Eureka-based Mercer Fraser company, which runs a gravel mining and processing operation at the site.

But it's not the project itself that concerns the district - a more vexing action is an associated zoning change from an agricultural to heavy industrial category. District officials are deeply concerned about the potential for chemical spills from future industrial uses, as hazardous substances could contaminate domestic water supply through a water well at the site and nearby Mad River collector wells.

John Friedenbach, the water district's general manager, said the district's domestic use water would be vulnerable in the case of a spill.

"It's not like a contamination at a gas station site where there's been a spill that's contaminated the ground or the groundwater and you're al-

GLENDALÉ ♦ A3

♦ FROM A1  
lowed to clean that up over time," he continued. "In our situation, if our water source is contaminated, we are not prepared to purify that water through any treatment process."

The only treatment the district's system is set up for is removal of turbidity - suspended matter - from the river water, he added.

"So if the water source gets contaminated, we're basically shut down - the water source is shut down," Friedenbach said.

The rezoning needs a Board of Supervisors sign-off but the permit approval has to be appealed for the Board of Supervisors to review it.

Friedenbach said the appeal will be filed because

the permit and the rezoning are inter-related.

The district serves the cities of Arcata, Eureka and Blue Lake, and the greater Eureka, McKinleyville, Manila and Fieldbrook/Glendale community areas. Friedenbach said the service areas combined account for two-thirds of the county's population.

The rezoning is related to the county's recently-approved update of the General Plan. The Board of Supervisors re-categorized the project site under the industrial designation and the plan and the site's zoning must be consistent. County Planning Director John Ford was at the district board meeting and one of the issues discussed was lack of notification on

the Planning Commission permit and rezoning hearing. Friedenbach said the district learned of it only through a general newspaper public notice printed two weeks before the hearing.

"County staff did admit that our water district was not included in the formal agency referral process," he continued.

He said the county did send a late notification about a week before the hearing. "That was very concerning to us," Friedenbach continued.

Asked about public reaction to the situation, Friedenbach said attendance at the district board meeting was robust, consisting of over 30 people.

"I suspect when the application goes to the Board

of Supervisors, that room will be filled," he continued. "We've received a lot of phone calls and emails from people supporting the appeal." At the Planning Commission hearing, Friedenbach said the district may file a lawsuit to challenge the rezone. Asked if litigation will be pursued if the appeal's rejected, he said, "It's too early to speculate on that, we'll have to see how the process unfolds."

*Mad River Union*

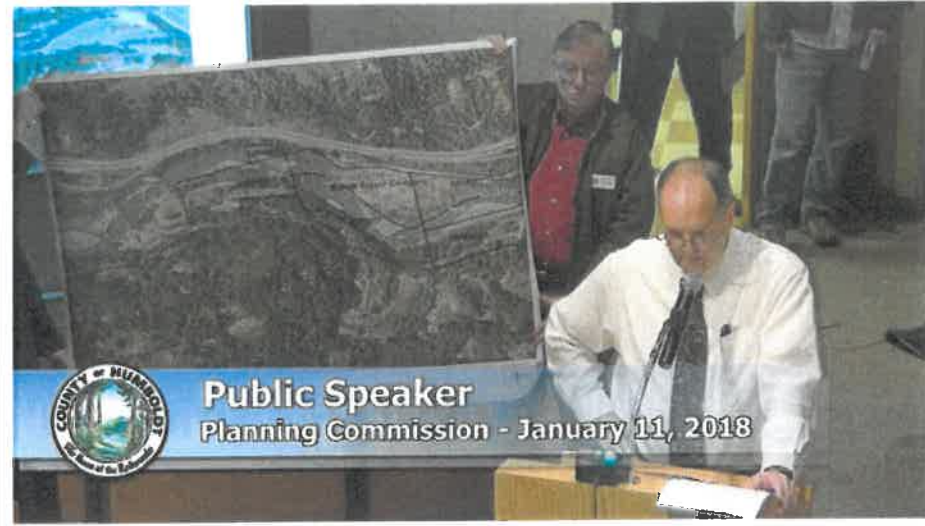
*4/24/2018*

### Humboldt Municipal Water Board Ready to Appeal Planning Commission Decision

POSTED BY LINDA STANSBERRY ON MON, JAN 22, 2018 AT 1:42 PM

*North Coast Journal*

click to enlarge



SCREENSHOT

Friedenbach and staff address the County Planning Commission about

John Friedenbach, general manager of the Humboldt Bay Municipal Water District, told the *Journal* today that his agency plans to appeal the Humboldt County Planning Commission's Jan. 12 decision to recommend rezoning of a parcel adjacent to the Mad River in Glendale. The property, owned by the Mercer Fraser Co., is currently in use as a gravel quarry and slated to become the future home of a cannabis extraction operation. This necessitated its rezoning for heavy industrial use.

Citing concerns about possible contamination of the county water supply, Friedenbach was joined by most of his staff and several community members to speak out during public comment at the commission's Jan. 11 meeting. Although the proposal includes a closed-loop system that would ostensibly protect against contamination of the water table, the site is on a flood plain, meaning that a natural disaster could potentially result in dangerous chemicals being swept into the water system, putting the health of thousands of Humboldt County residents at risk.

"Any contamination originating from the applicant's parcel would immediately impact up to three (75 percent) of our domestic water supply sources," Friedenbach wrote in his initial letter to the commission.

Despite this pushback, the planning commission ultimately voted 3-2 to approve the zoning change. Planning Commissioners Alan Bongio and Brian Mitchell abstained from the vote without comment as to why.

Friedenbach said the water district board held an emergency meeting last week and ultimately decided to appeal that decision, which means they have to file paperwork by Friday and pay \$2,260. The Board of Supervisors are slated to decide the issue Feb. 27.

"It's a pricey appeal, but it's worth it," he told the *Journal* this morning. "Simultaneously, our board directed staff to negotiate with Mercer Fraser on permit restrictions."

Asked how he felt once the planning commission had made its Jan. 12 decision, Friedenbach said he was "disappointed."

"I think the interests of the majority of the population of Humboldt County should be more important than the interests of one company to start a cannabis corporation."

Like 5 Share 0 Comment 0 Favorite 0 Share

Tags: John Friedenbach, Mercer Fraser, Alan Bongio, Brian Mitchell, Image

## Humboldt Bay water district to appeal Mercer-Fraser pot facility

### Mercer-Fraser plan for manufacturing site along Mad River prompts concerns

By Will Houston, Eureka Times-Standard

Friday, January 19, 2018

The Humboldt Bay Municipal Water District Board of Directors voted this week to appeal Mercer-Fraser Company's proposed construction of a cannabis edibles and concentrate manufacturing facility that the district [claims has the potential to contaminate drinking water for 88,000 county residents](#).

A permit to build the proposed 5,000-square-foot manufacturing facility at 90 Glendale Drive was approved by the county Planning Commission in a narrow vote on Jan. 11, with the water district seeking to appeal that decision to the county Board of Supervisors. The site is currently used for Mercer-Fraser gravel mining operations and is located along the northern bank of the Mad River east of one of the water district's pumps that feed water to local cities and communities.

"Our board asked that we try to negotiate with Mercer-Fraser to see if there could be some acceptable mitigation and restriction measures put on their permitting process," the water district's General Manager John Friedenbach said Friday.

Mercer-Fraser representatives told the Planning Commission that the facility would be following all state and local laws, and that the solvents they would use to make concentrates would be limited to gases — which can only leak into the air — and about 50 gallons of ethanol.

The district's main concern, as brought up by its board members at the Planning Commission meeting, was not the construction of the cannabis facility, but a proposed zoning classification change that would allow the facility along with other industrial uses to be allowed along the site. The proposed zoning change would be from "agriculture general" to "qualified heavy industrial."

Planning and Building Department John Ford previously said this zoning change would limit what types of industrial uses can occur on the property to those that had already existed on the property. Any other uses would have to obtain a conditional use permit, which requires a public hearing.

Ford also told the Planning Commission the proposed zoning change must occur because the recently adopted county General Plan changed the allowed land uses on the site from grazing to "industrial resource related."

On Friday, Ford said that the water district would not be able to appeal the zoning classification change, but said the change will be going before the board of supervisors anyway. The Mercer-Fraser permit cannot be approved unless the zoning change occurs, Ford said.

The permit for the cannabis facility can be appealed, which Ford said would result in staff having to respond to any issues raised by the district and require them to notify the board that there has been an appeal filed. Ford said that both the zoning change and the permit would ever be placed on the board's consent calendar, which are items deemed non-controversial and can be approved in a single vote.

Ford said the zoning change and the permit are likely to go before the board in February, with Feb. 27 being the more likely date.

*Will Houston can be reached at 707-441-0504.*

URL: <http://www.times-standard.com/general-news/20180119/humboldt-bay-water-district-to-appeal-merc-er-fraser-pot-facility>

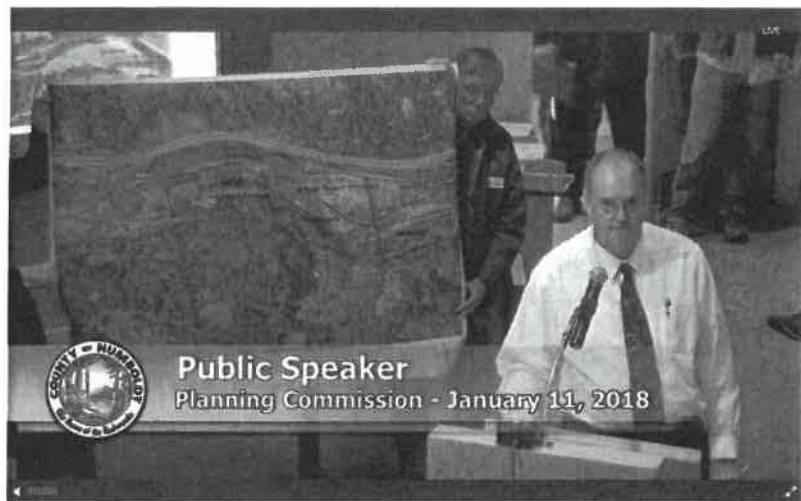
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Jan 12, 2018

RYAN BURNS / TODAY @ 12:33 P.M. / LOCAL GOVERNMENT

## Planning Commission Approves Mercer-Fraser Rezone Request, Sending Proposed Marijuana Extraction Plant Project to Board of Supervisors



*John Friedenbach, general manager of the Humboldt Bay Municipal Water District, urged the Planning Commission to reject Mercer-Fraser's proposal. | Screenshot from streaming video.*

The Humboldt County Planning Commission last night narrowly approved a rezone request for a 13.5-acre parcel along the Mad River owned by Eureka construction company Mercer-Fraser. The vote, which came in at 3-2 with two commissioners abstaining, sends a project proposal that includes a 5,000-square-foot cannabis extraction facility to the Board of Supervisors for final approval.

The approval came despite vigorous opposition from staff and board members of the Humboldt Bay Municipal Water District (HBMWD), who said that rezoning the parcel from agricultural to heavy industrial, as requested, would jeopardize the drinking water of roughly two-thirds of county residents.

“There may be no bigger issue brought to the Planning Commission this year that deals with public health and welfare,” water district General Manager John Friedenbach said during the public comment period.

But Jeff Smith, the agent for the applicant (and himself a former planning commissioner), said the heavy industrial zone merely reflects the activity that’s been happening on that property for years, including gravel mining. It also serves to align the zoning with new land use designations approved during the county’s General Plan Update process, he said. And he tried to allay concerns about hazardous materials at the site by noting that any new types of activities there — including the proposed cannabis extraction facility — will require additional permitting and be subject to further public review.

The property sits on the north bank of the Mad River just west of Blue Lake, and it’s flanked by pump houses — or Ranney collectors — managed by the Humboldt Bay Municipal Water District. The public comment period at last night’s meeting was dominated by water district representatives and area residents expressing concerns about any potential threats to the water supply.

But a few commissioners — chiefly Fifth District representative Ben Shepherd — pushed back, noting the long history of industrial uses along this stretch of the Mad River, including the City of Blue Lake's sewage treatment plant.

Friedenbach, speaking on behalf of the water district, led off the public comment by questioning the adequacy of environmental review for the project, and he said the district "may litigate" over the alleged shortcomings.

Third District Commissioner Noah Levy noted that the water district is "not just another neighbor" and asked Friedenbach how he distinguishes between the gravel and aggregate activities that have taken place for decades and this latest proposal.

"It's the change to heavy industrial zoning that opens the door to anything that qualifies under that zone," Friedenbach responded.

HBMWD Board Chair Sheri Woo said she is concerned that volatile chemical solvents used in the cannabis extraction process could impact nearby groundwater, especially since there's already a well on the property.

Michelle Fuller, who's a water board member as well as the environmental program director with the Blue Lake Rancheria, said there was inadequate consultation with the tribe over the potential impacts to water quality and archeological sites.

Representing Mercer-Fraser, Smith followed this string of speakers and worked to assuage their fears. He pointed out that during the now-completed General Plan Update process, the county changed the land use on this parcel to "industrial resource-related," and he said that both state law and county code require zoning to be consistent with land use.

Thus, he said, "It has to be rezoned."

He went on to note that there are provisions — spelling out in what's called a Q-zone overlay — that limit what can be done on the parcel, so the rezone would not open the floodgates to any and all uses allowed in heavy industrial zones, at least not without further public review and additional permits.

And, addressing concerns about the volatile solvents used in the production of hash oil, Smith said most of them, including butane, propane and carbon dioxide, are gases that would "vent into the atmosphere" rather than contaminate groundwater if they somehow escaped the closed-loop system proposed for the project.

Levy pointed out that the staff report listed liquid solvents as well. Smith acknowledged this, admitting that he'd forgotten what all was in the original proposal, but he said the company was unlikely to use any of the liquid solvents except alcohol.

When the item came back to the commission for consideration, Planning and Building Director John H. Ford explained that the cannabis activities proposed for the site will have to comply with county regulations, and he said staff had included modifications to the plan in an effort to safeguard public health.

"We tried to identify uses that would *not* jeopardize the water supply, because we *all* drink that water," Ford said.

Levy said that while he understands the importance of making zoning consistent with land use, he found it ironic that the change was being forced because of a gravel-mining operation that operated for decades in violation of the zoning on the books.

Fourth District Commissioner Kevin McKenny said the “elephant in the room” was cannabis, an industry that “most of us don’t know much about.” He suggested that mitigation measures can be put in place to reduce whatever risks are involved, and while he doesn’t know what those measures might be for, say, butane and propane, industrial hygiene engineers could be hired to figure it out, mitigating the fear of the unknown.

Under further questioning from commissioners, Smith agreed to strike many of the proposed solvents for the extraction process, leaving only propane, butane, CO2 and alcohol.

Levy said that while he respects Mercer-Fraser as professionals and believes they designed the project carefully, his concerns, including their failure to get buy-in from the water district, meant, “I am gonna have a hard time supporting this project.”

But Shepherd said he did support the proposal because he feels in recognizes existing uses on the site. “I hear the concern, but to me it doesn’t rise to the level to oppose the project,” he said, and then made a motion to accept it.

McKenny said he would second the motion, but only if they included some additional conditions of approval. These included a double-check valve system on the proposed well to prevent back-flow; quarterly safety training and drills for staff at the cannabis extraction facility; and a limit of 50 gallons for the amount of alcohol that could be kept onsite.

Shepherd agreed to these conditions and called for a vote. He, McKenny and Chair Robert Morris, who represents the Second District, cast yes votes. Levy and At-Large Commissioner Dave Edmonds voted no. And commissioners Brian Mitchell (at-large) and Alan Bongio (First District) abstained.



# NEWS BLOG [archivesrss](#)

« [Trinidad Memorial Lighthouse Moved](#)

Thursday, January 11, 2018

ENVIRONMENT / NATURAL RESOURCES / GOVERNMENT

## UPDATE: Blue Lake Area Rezoning Could Threaten Water Supply, Says District Manager

POSTED BY LINDA STANSBERRY ON THU, JAN 11, 2018 AT 12:36 PM

UPDATE: The project was approved by the Planning Commission and now moves to the Board of Supervisors.

Previously:

The Humboldt County Planning Commission meets tonight to discuss a slate of items, including an 18,676-square-foot cannabis grow in Miranda, changes to the Commercial Medical Marijuana Land Use Ordinance and the rezoning of a Blue Lake gravel pit owned by Mercer Fraser Co. that will also allow the company to launch its own cannabis edibles line. This final item has drawn the attention of the Humboldt Bay Municipal Water District, whose general manager, John Friedenbach, said in an email to the *Journal* that the requested zoning change — from Agricultural to Heavy Industrial — may have consequences for most of Humboldt County's drinking water.




The parcel, which is on Glendale Drive between Blue Lake and Arcata, is adjacent to the Mad River and, according to Friedenbach, between the HBMWD's collector's 2 and 3, as well as immediately upstream from Collector 1 and Industrial Station 6's surface water intake. What this means, according to Friedenbach, is heavy industrial activities "have the potential to negatively impact the integrity of our drinking water source for our district and 88,000 residents of Humboldt County."

HBMWD intends to ask the the planning commission to pull the item from its consent agenda — which usually consists of routine items passed in one action without discussion — so it can be discussed publicly, giving residents the opportunity to weigh in. According to the text of the staff report on the item, the zone reclassification is intended to "better reflect the existing use of the property as Mercer Fraser Co.'s gravel yard and concrete batch plant operations." The zoning reclassification is coupled with approval of a special permit for a 5,000-square-foot cannabis processing facility that will include a commercial kitchen for making edibles.

"The volatile compounds used in their processing (heavy industrial) is a major concern to us as is any future potential heavy industrial use," Friedenbach said in his email.

The *Journal* has reached out to both Friedenbach and Mercer Fraser for further comment. Reviewing the item, it does not appear that Mercer Fraser is expanding its gravel and concrete operations, but rather the land must be rezoned to accommodate cannabis manufacturing. The report includes the recommendation that the extraction facility use a closed-loop system for any solvents —the operations plan indicates butane, propane, CO2, ethanal and isopropanol will be used — disposing them off-site. According to the report, the full text which can be found here, staff found "there is no substantial evidence that the proposed project will have a significant effect on the environment."

### about the author

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@lcstansberry

Bio:  
Linda Stansberry is a staff writer of the *North Coast Journal*.

### more from the author

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The Blue Lake Rancheria, County Department of Public Works, County Division of Environmental Health and North Coast Regional Water Quality Control Board have all added their comments to the item. The planning commission will meet tonight at 6 p.m. in the Board of Supervisor's Chambers.

*Editor's note: This post originally referred to the proposed site as being in Blue Lake when, in fact, the property is in Glendale, which is in the Blue Lake area but not within its jurisdiction. The Journal regrets any confusion.*

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Tags: Mercer Fraser, John Friedenbach, Planning Commission, cannabis, Blue Lake, Mad River, Image

## speaking of...

### Attorney General Reverses Obama-Era Marijuana Protections

by Thadeus Greenson

### UPDATE: Fortuna Passes Registration Requirements for Personal Use Cannabis Grows

by Thadeus Greenson

### Fast Food Giant Launches 'Munchie Meals' Targeting Recreational Stoner Cash


by Thadeus Greenson

MORE »

## Comments

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Add a comment



 Wholesale was the claim at LOCO.....


NCJ is different: and the rezoning of a Blue Lake gravel pit owned by Mercer Fraser Co. that will also allow the company to launch its own cannabis edibles line.....

Wholesale aint necessarily gonna be like retail with M-F labeling at point of sale to consumer.....

If the site is paved with big parking lot, curbs, contained drainage, emergency containment systems, etc.....then no big deal .....and the building facility is nearest the highway..... only 5000 square feet....

More intrigued as to who, why M-F is getting into commercial dope (maybe owners are existing black market growers).....guess they are lacking with road construction contracts and not getting work, affecting profits.....

report  like  dislike

Posted by HENCHMAN OF JUSTICE on 01/11/2018 at 5:01 PM 

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by Thadeus Greenson



# New Business

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**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

To: Board of Directors  
From: John Friedenbach  
Date: February 2, 2018  
Subject: District's Safety Program

Once again it is time for our annual employee recognition regarding workplace safety. Dale and I will provide an overview of our program and accomplishments at our Board meeting next week. This memo provides a brief introduction.

**PRIORITY AND PLACE**

Achieving employee safety and public safety is a top priority for the District. I am pleased to work for an organization that values this objective and takes safety seriously.

The Board has adopted five goals which support our District Mission. Goal Number 1 is Safety and Public Health. It reads:

- Employ safe work practices to ensure worker and public safety at all times. Strive for no on-the-job reportable injuries each year.
- Operate the regional water system in accordance with state and federal safe drinking water laws and regulations at all times to protect public health.

The District has a "safety philosophy" as well as a strong safety program. The Board has consistently supported our safety philosophy and program.

**COMPONENTS OF THE PROGRAM**

Important components of the District's safety program are as follows:

- 1) Buy-in and support *from* Management. We need to set the standard and "walk the talk."
- 2) Buy-in and involvement *by* the employees.
- 3) A meaningful Injury, Illness and Prevention Plan (this is a regulatory requirement).
- 4) An active Safety Committee that is listened to and supported. Our committee is comprised of the Superintendent, one Supervisor, and two employees (one from the Maintenance Department and one from Operations). Membership on the committee rotates each year. Attached for your information are minutes from the last safety committee meeting for you to see the sort of things that are brought up and addressed.
  - a. A meaningful training program. The District has an extensive training program which supports not only employee safety, but ongoing operations, and emergency response activities too. We use ACWA/JPIA's extensive "lending library" for training resources (such as DVDs, videos, manuals), and we also use the North Coast Safety Consortium for local classroom training. Attached is this year's safety training program which lists the training topic as well as who will be leading it.

- 5) Properly fitted and maintained Personal Protective Equipment (PPE) which is suited to the job. The District provides employees with the necessary PPE such as hardhats, safety glasses, hearing protection, respirators, self-contained breathing apparatus, and protective electrical gear. The District trains in its proper use and care. As a matter of policy, the District also reimburses employees for the cost of safety shoes appropriate to the position.
- 6) Other Resources – Safety Manual. The District has developed and maintains a comprehensive safety manual to guide work practices, as well as meet various regulatory requirements. The Table of Contents of our Safety Manual is attached for your information. We will have one copy available at the meeting next week for you to see.
- 7) Recognition – The District instituted a safety incentive/reward program for full-time regular employees. The District pays \$200 incentive to each current employee who has been employed for at least six months and meets the criteria listed below. The District also awards one grand prize of \$500, based on a drawing of all eligible employees. This year, **Brian Newell** is the grand prize winner.

**Criteria to be eligible for incentive award:**

1. Participate in at least seventy five percent (75%) of monthly safety meetings during the calendar year. For newly hired employees that meet the eligibility requirements, percentage applies to eligible monthly safety meetings.
2. Wear appropriate PPE when required on the job.
3. 3a. Provide one safety awareness or preventative suggestion to supervisor and have it documented at a safety meeting or with the Safety Committee.  
3b. Report an incident or near miss incident or unsafe conditions.  
3c. Receive a “satisfactory” rating on annual performance evaluation under the “Safe Practices” category.

One of  
3 per  
calendar  
year

I am proud of the “safety culture” developed at the organization, and the results we have achieved. We have employees who “think about” safety and routinely employ safe work practices. As a result, we have had very few on-the-job injuries. Additionally, the District participates in ACWA/JPIA’s Commitment to Excellence Program (see attached) and continues to strive for implementation of best practices to prevent injuries and claims.

I would also like to acknowledge that Dale Davidsen, our Superintendent, and Chris Merz our Assistant Maintenance Supervisor who are instrumental in the continuation of the safety culture that exists within the organization today along with all of our employees who work safely every day. Both individuals continue to promote and grow this safety awareness.

Once again, Dale and I wish to thank the Board for your support in this area. It really makes a difference.

**Attachments:**

- 2018 Safety Training Program Topics and minutes from last meeting
- Table of Contents from Safety Manual
- ACWA/JPIA Commitment to Excellence

HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
Workplace Illness and Injury Prevention Program  
Safety Committee Meeting

## Minutes

Date: January 24, 2018

1. **Meeting** called to order at 1100 hrs.
2. **Members** Attending: Dale Davidsen  
Seth Stone  
Dave Corral  
Chris Merz
3. **Minutes** were approved from Meeting 17\_4 on October 30, 2017. M/S/C Merz/Stone.

**Old Business:**

- A. Bill W. had requested eyeglass inserts for full face respirators and SCBAs. *(An order has been made with the current list of prescriptions that have been submitted. Now waiting for order to be completed and shipped. Chris to follow-up)-(Completed-remove)*
- B. Confirm that the process of SDS conversion is still happening and make sure updates are being taken place as products are being received. Also verify that we have the SDS sheets with pictograms on them. *(Conversion is still in progress. Once complete, Chris will create a final SDS binder. Dale & John will review material before it goes into circulation. NLT ~~1-18-18~~ 2-24-18)*
- C. It has been noted that after the remodel of Line Shed #5 there are two old 55 gallon drums of Alum located at the TRF sitting in the carport. The chemical is old and needs to be disposed of properly. Along with this the Caustic Soda solution could also be disposed of also. We will look into methods and cost of disposal. *(Waiting for response from contractor to sign District contract and schedule a date to start work. ) NLT ~~1-31-18~~ 4-12-18)*
- D. It has been brought to attention that our eyewash stations might not be in compliance with supplied water temperature according to ANSI standards. We will also look into Cal/OSHA regulations and discuss options. *(Through research it was discovered that Cal/OSHA does not regulate to the ANSI standard regarding this subject. Eyewash stations are on backorder and will be installed ASAP once received NLT ~~12-18-17~~ 4-12-18)*
- E. Clean-up/disposing of expired out dated lab materials and hazardous materials at Essex/TRF. *(Materials have been collected and a manifest has been created. Transport of materials to HWMA needs to be scheduled. NLT ~~7/5/17~~ 11-1-17)-(Complete-remove)*
- F. Through recent compliance training it has been brought to attention that the district should look into purchasing bloodborne pathogen containment kits and possibly create a written exposure plan. *(Through research with North Coast Safety Consortium, a written exposure*

*plan was not necessary to complete due to the lack and threat of exposure. Training on this subject matter has been covered in employee first aid training. Exposure kits have been purchased and will be installed ASAP NLT ~~10-11-17~~ 11-1-17)-(Complete-remove)*

- G. A suggestion has also been made about purchasing an AED defibrillator for Ruth Hydro due to the response time for medical aid in that area. *(Purchase has been approved and will be ordered. NLT 12-20-17) )-(Complete-remove)*
- H. It has been brought to attention that a different kind of stokes litter called a "SKED" would be ideal for tight area confined space rescues. *(Through discussion the idea of having a compact alternative to a stokes litter is a good idea for field work. Dale approved purchasing. Currently trying to resource a vendor for purchase. NLT-12-20-17) )-(Complete-remove)*
- I. Mario Palmero made a suggestion of removing dredging spoils around fence line around Pump Station #6 fore-bay on the downstream side, due to a potential fall hazard. *(Material will be removed ASAP to eliminate hazard)-(Complete-remove)*

4. **New Business**

- A. It has been noted that some areas marked, "Keep Clear" around the maintenance shop could be touched up with paint due foot traffic wear. Dually noted was that the electrical danger areas around Essex could be evaluated also and touched up as needed.

5. **Meeting** adjourned: 1159 hrs.

6. **Next** meeting scheduled for April 12, 2018.

Prepared by: Chris Merz

Copy: Manager  
Superintendent  
Maintenance Supervisor  
Operations Supervisor  
Bulletin board and file



## Safety/Training Program 2018

This is the Safety and Training schedule for 2018. Meetings will be scheduled well in advance to prepare all personnel in order to attain maximum participation. These classes will be scheduled in the planner for 2018 for everyone's reference.

<p><b>JAN Code of Safe Practices (WIIP):</b> Annual Reference Material: HBMWD Policy Class Time: 1 hour</p>	Dale
<p><b>EAP Overview-Dam Safety Plan:</b> Annual Reference Material: HBMWD Policy and procedure Class Time: ½ hour</p>	Dale
<p><b>Generator Air Quality Permit Requirement:</b> Annual Reference Material: AQMD Permits Class Time: ½ hour</p>	Mario/Larry
<p><b>FEB Chlorine Leak Response/Cl<sub>2</sub> Leak 'B' Kit:</b> Annual Reference Material: HBMWD Policy and procedures (Will try to coordinate with County Hazmat/AFD to do training scenario) Class Time: 4hrs</p>	Chris/Ryan/Mario/Larry
<p><b>Hearing &amp; Respiratory Exams:</b> Annual Class Time: 1 hour</p>	Chris/Becky
<p><b>MAR Rigging Safety:</b> Annual Reference Material: NCCCO Crane operator training handbook/JPIA video Class Time: 1 hour</p>	Keith/Russell
<p><b>Asbestos &amp; Silica Handling:</b> Annual Reference Material: Review of HBMWD safety manual policy, procedures &amp; exposure control plan. Training video also. Class Time: 1 hour</p>	Chris

**APR Confined Space/Gas Detectors:** Annual

Reference Material: Review of HBMWD policy,  
& training video.

Class Time: 1 hour

Ryan/Paul/Dave

**Heat Illness Prevention Program:** Annual

Reference Material: Review of HBMWD policy  
& precautions. JPIA training video

Class Time: 1 hour

Chris

**May Traffic Control:** Annual

Reference Material: Cal Trans Reference Book, JPIA video,  
And employee handbook review District equipment

Class Time: 1.5 hrs.

Ryan

**Machine Equipment Safety:** 3yrs

Reference Material: Review of HBMWD policy  
& JPIA training video.

Class Time: 1 hour

Keith/Russell

**JUN Forklift Safety:** Annual

Reference Material: JPIA videos and Handbook  
Practice Exercise

Class Time: 2.5 hours

Chris

**JUL Respirator Safety/Fit Testing:** Annual

Reference Material: District Safety Manual & JPIA video.  
Fit test for each employee.

Class Time: 2 hours

Mario/Larry

**Aug Lockout Tagout:** Annual

Reference Material: Review of HBMWD safety procedures.  
JPIA video.

Class Time: 1 hour

Paul/Dave

**Arc Flash Awareness:** 2yrs

Reference Material: Review of practices & safety procedures  
to avoid exposure. NTT training manuals. JPIA video

Class Time: 1 hour

Paul/Dave

**SEP Trench and Excavation Safety:** Annual

Reference Material: PowerPoint presentation on safe practices and procedures. Review of HBMWD shoring equipment.  
Class Time: 2 hours

Ryan/Chris

**OCT Sight and Sound Safety:** 3yrs

Reference Material: District Safety manual. JPIA video.  
Class Time: 1 hour

Chris

**NOV S.D.S./Right to Know/Spill Prevention:** Annual

Reference Materials: District safety manual & JPIA video  
Class Time: 1 hour

Chris

**DEC ISI/Sperian SCBA Training:** Annual

Reference Material: District safety manuals & user's manuals  
Class Time: 2 hours

Mario/Larry

## Humboldt Bay Municipal Water District Safety Manual

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#### General Policies/Plans

1. Workplace Illness & Injury Prevention Program
2. Code of Safe Practices
3. General Emergency Action Plan for Each Facility (Including fire protection component)
4. OSHA Inspection Procedure

#### Hazard Materials/Chemicals Plans

5. Hazard Communications Program
6. Chemical Hygiene Plan
7. Chlorine Emergency Procedures
8. Process Safety Management (for chlorine system)
9. Risk Management Plan (for accidental release of chlorine)

#### Safe Work Practices and Procedures

10. Respiratory Protection Program
11. Silica Exposure Control Plan & Job Site Inspection Form
12. Confined Spaces Policy & Procedures
13. Energy (Lockout) Policy
14. Hot Work Permit
15. Heat Illness Prevention Program



ASSOCIATION OF CALIFORNIA WATER AGENCIES  
**JOINT POWERS**  
INSURANCE AUTHORITY

# Commitment to Excellence

## **HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

and the Association of California Water Agencies/Joint Powers Insurance Authority (ACWA/JPIA) in mutual support for ensuring the most consistent, cost effective, and broadest possible affordable insurance coverage and related services, and in partnership with all ACWA/JPIA members, and in the interest of reducing **Humboldt Bay Municipal Water District's** insurance costs, commit to a program of excellence that, through the implementation of "best practices" reduces the potential and frequency of:

- **Vehicle Losses**
- **Infrastructure Related Losses**
- **Construction Related Losses**
- **Employment Practices Claims**
- **Ergonomic (Musculoskeletal) and Fall Injuries**

*Walt "Andy" Sells*  
Signature (CEO, ACWA/JPIA)

*Carol Risch*  
Signature (General Manager)

*[Signature]*  
Signature (Board Member)

*[Signature]*  
Signature (Board Member)

*[Signature]*  
Signature (Board Member)

*[Signature]*  
Signature (Board Member)

*[Signature]*  
Signature (Board Member)



# H. R. LABOUNTY SAFETY AWARDS PROGRAM NOMINATION FORM



Agency: Humboldt Bay Municipal Water District

Employee Nominated:

Name: Maintenance Department

Job Classification: \_\_\_\_\_

Reason for Nomination:

Fabrication and Design of A New Pressure Washer Trailer

(See attached Word document for detailed description)

This nomination addresses risk reduction "best practices" in the JPIA's  
Commitment to Excellence Program.  
(Check all that apply.)

<input checked="" type="checkbox"/>	Vehicle Operations
<input type="checkbox"/>	Construction
<input checked="" type="checkbox"/>	Ergonomics/Falls
<input type="checkbox"/>	Infrastructure
<input type="checkbox"/>	Other

Nominated by: Chris Merz  
Signature:   
Date: January 4, 2018  
General Manager: John Friedenbach  
Date: January 4, 2018

**H.R. LaBounty Safety Award Nomination****Fabrication and Design of A New Pressure Washer Trailer**

The District's portable pressure washer trailer was in need of replacement. It had been originally constructed from an old military surplus tank trailer. To say the least it wasn't built to go down the road at a high rate of speed, nor did it have any mechanism to stop itself either. This limited its ability to be utilized out in the field on remote jobsites. Ergonomically the trailer was not too user friendly. The tank was very high off the ground which made filling difficult. Due to the height of the tank on the trailer water weight would make the trailer sway and tow erratically. With a list of changes needed, the maintenance department got started with a basic idea of how the new trailer should be constructed. The first step was a purchase of a 10,000lb dual axle trailer with electric trailer brakes. Then a framework was fabricated to support a larger poly tank reservoir that was made to be unbolted if needed. Racks were built to hold additional hoses and attachments. The pressure washer unit framework itself was modified in a way to be mounted to the new trailer but also removable for servicing. In the end, after a lot of hard work and thought, a new pressure washer trailer was created. It is now low enough to the ground to be filled ergonomically and towed in a safe manner. Having a roadworthy trailer as a platform now makes this piece of equipment better utilized for field work. Once again, the HBMWD maintenance crew did great job and we are lucky to have such a talented group of individuals.



SEER  
IRINE



BELOW  
MARK





SECTION F2 PAGE NO. 5









Engineering

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# PROJECT COMPLETION REPORT

*North Coast Integrated Regional Water Conservation Plan*

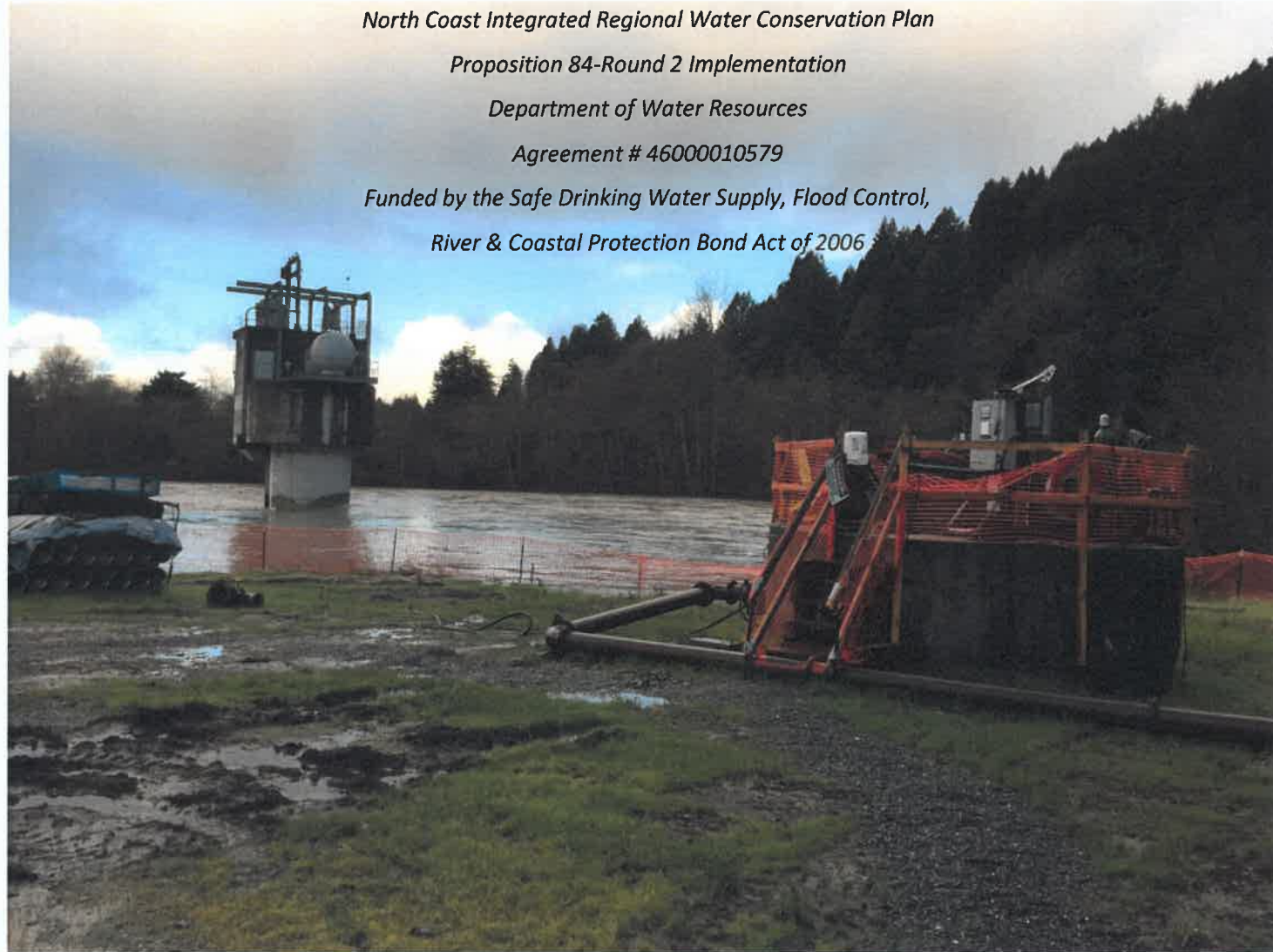
*Proposition 84-Round 2 Implementation*

*Department of Water Resources*

*Agreement # 46000010579*

*Funded by the Safe Drinking Water Supply, Flood Control,*

*River & Coastal Protection Bond Act of 2006*



Humboldt Bay Municipal Water District Ranney Collectors 1 & 1A  
Rehabilitation Project

January 2018

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## Executive Summary

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Humboldt Bay Municipal Water District provides 2/3 of Humboldt County's population with drinking water through the use of four Ranney collectors located along the Mad River, just East of Arcata, California. The collectors have laterals projecting out radially to direct water into the Ranney collectors' wells. From there, the water can be pumped out, treated, and delivered to municipal customers. Recent investigations showed that the original laterals are approaching the end of their useful service life and need to be replaced.

The District is working on a phased replacement of all of the laterals in all of the collector wells. This project focused on the 2nd phase; installing new laterals in Collectors 1 and 1A by projecting new stainless steel laterals out from the existing caisson. During construction, cores were bored through the concrete caissons and ports installed from which the laterals were attached. The original sub-grantee agreement called for four to six 12-inch diameter stainless steel screen laterals to be installed in Collectors 1 & 1A. The laterals were to vary from 30-80 feet in length, with a minimum of 600-feet of stainless steel screen to be ordered. When the project went out to bid for contractors, the plans called for two new laterals on Collector 1 and three new laterals on Collector 1A, each made of 12" diameter 304 stainless steel piping measuring 150' long. In August 2016, it was decided to add a third port in Collector 1 (Change Order #4) on the basis that more screen would slow the velocities, ultimately extending the life of the collector. While drilling to place the laterals in Collector 1, the drill encountered hard rock and deflected causing the lengths of laterals to be shortened to C-1 90' and C-2 80'. The addition of a third lateral in Collector 1 did not materialize due to winter storms and constraints on working in the river coming from California Department of Fish and Wildlife (CDFW). In order to compensate for only achieving 170' of the planned 300' of laterals on Collector 1, it was decided to install a fourth port in Collector 1A in November 2016 (Change Order #7) and attach the lateral in January 2017 (Change Order #9). The Lengths of the laterals in Collector 1A are as follows: C-1 140', C-2 130', C-3 150', and C-4 145'. Due to the additional costs from the additional ports and lateral, it was requested in Amendment 6 on March 27, 2017 that funds be taken from Project Management and Planning/Design/Environmental Documentation budgets (\$43,640.00 and \$60,532.28 respectively) and re-allocate them to Construction Implementation, as well as, move \$46,936.36 of the funding match from Task 10.1 to Task 10.4. The Project was originally scheduled to be completed in September 2016 but project timeline amendments were granted first in Amendment 4 to December 2016 and then in Amendment 6 to June 2017. These extensions were due to the fact that the Long-Term Streambed Alteration Agreement with California CDFW only allows work in the river between May 15<sup>th</sup> and October 15<sup>th</sup> and that the prior project schedule was unachievable. The Project was completed June 6, 2017.

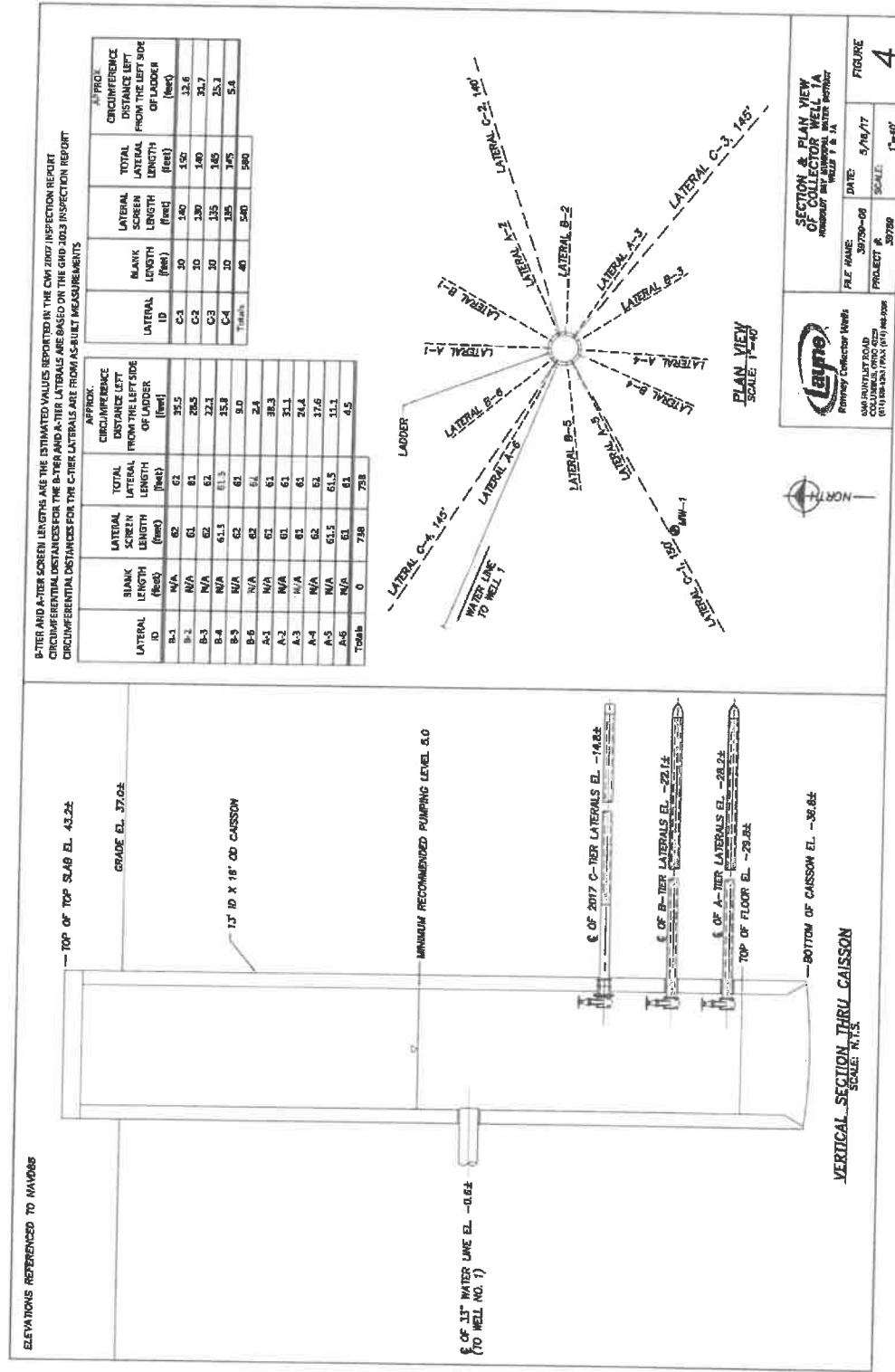
## Reports and/or Products

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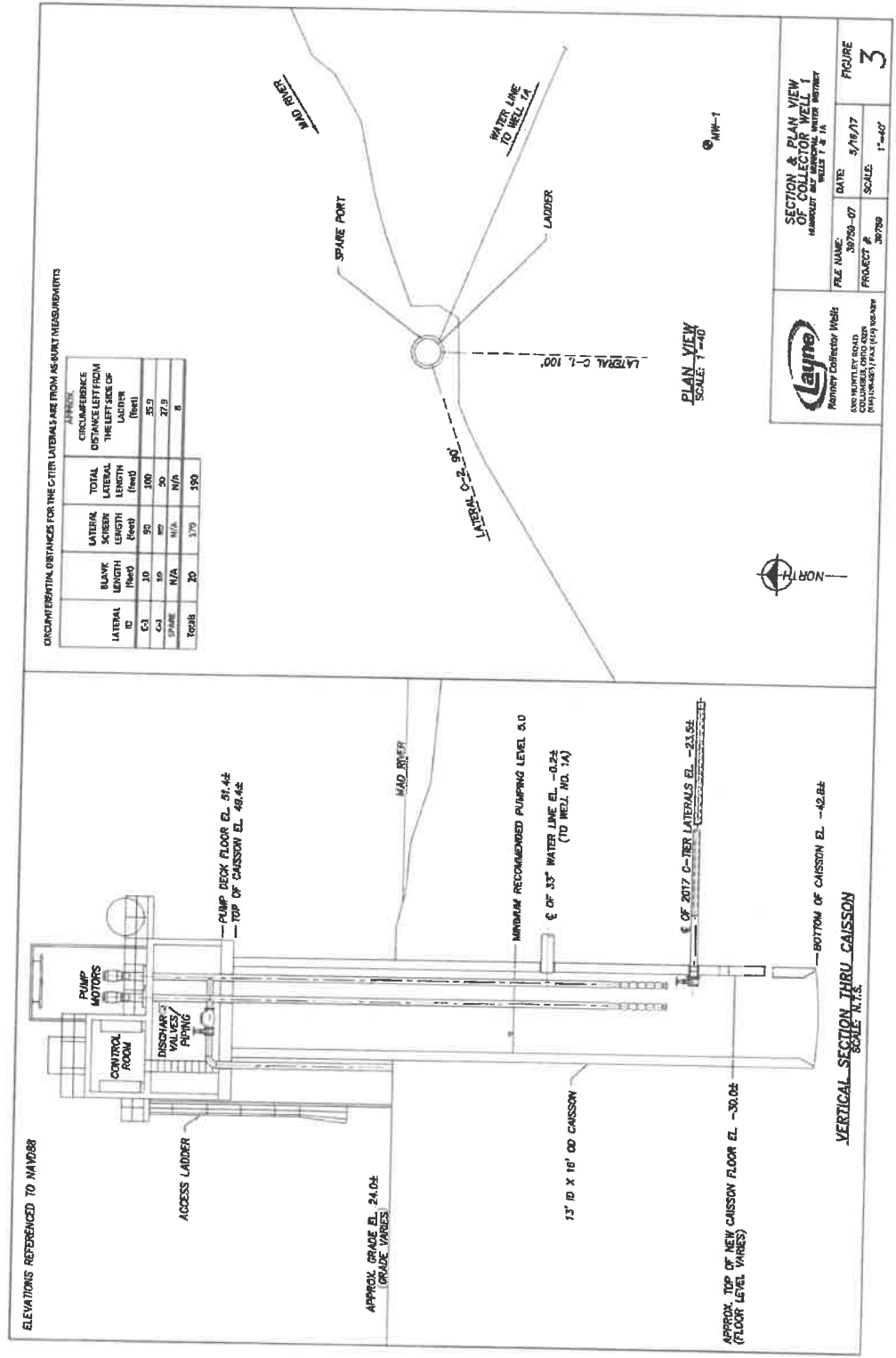
### ***Final Evaluation Report***

Attached is the Final Report from Layne Christensen Company, the contractor on the project, which includes the comparison between the pre-project performance tests versus the post-project performance tests. The multiple-rate step test showed a 75 percent improvement in the specific capacity values of the new laterals compared to the old laterals. These results can be attributed to new screen efficiency and the placement of the new laterals in both collectors decreasing the drawdown by almost 50 percent.

As built drawings











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**BOARD OF DIRECTORS**

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NEAL LATT, VICE-PRESIDENT  
J. BRUCE RUPP, SECRETARY-TREASURER  
BARBARA HECATHORN, DIRECTOR  
MICHELLE FULLER, DIRECTOR

**GENERAL MANAGER**

JOHN FRIEDENBACH

January 11, 2018

This letter is confirmation that Humboldt Bay Municipal Water District met the State goals under the Department of Water Resources Grant Agreement #46000010579. The rehabilitation of Ranney Collector 1&1A will provide a reliable supply of high quality drinking water to HBMWD customers, reduce impacts to groundwater, and improve energy efficiency of the wholesale water system. During the replacement of the laterals, impacts to the surrounding environment and river channel were minimized by containing construction activities to the existing confines of Collectors 1&1A and implementing a Storm Water Pollution Prevention Plan.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Friedenbach".

John Friedenbach



**Project Photo**



**Figure 1: Projection pipe that the screened laterals were installed within**



**Figure 2: Collector 1, winter-time river flows**



**Figure 3: Rocks removed while installing projection pipes for new laterals**



Figure 4: New screened laterals being lifted into caisson



Figure 5: Installation of new laterals inside the caisson of collector





Figure 6: Percolation pond; used to settle water pumped out of the collectors during construction



Figure 7: Revegetation of field, after percolation pond was removed

**Problems Discussion/Resolutions**

The largest problem occurred when pushing laterals C-1 and C-2 in Collector 1. Layne Construction hit hard material and, in the case of C-1, deflected upward 30-31" and slightly right. Because of this, Laterals C-1 and C-2 ended up being 100 feet long each instead of the planned 150 feet. A new port was installed in Collector 1, in the hopes of adding a third lateral to regain the 100 lost feet. However, time ran out to push the third lateral due to termination of work on the riverbed on October 15<sup>th</sup> per the Long-Term Lake and Streambed Alteration Agreement with CDFW. These time constraints were not applicable to Collector 1A, since it is located in the upland terrain. This allowed the additional lateral in Collector 1A to recover the length lost in the Collector 1 laterals.

The other problems encountered were incidental construction issues such as: the diaphragm in a pressure reducing valve failing and filling the caisson of Collector 1 with water; an old control line breaking while lowering materials into the caisson with a crane; an old valve stems and siphon tube being in the way of construction equipment; muddy areas caused by a mix of construction traffic and rain; and construction equipment needing to be moved due to the rising river. All of which were easily resolved in a timely manner.

**Final Project Schedule**

Task	Work Task Title	Proposed Date	Actual Date
10.1	Project Management	Apr'15-Jul'16	Sep'14-Jul'17
10.1a	Contract Administration	Sept'14-Jul'16	Sep'14-Jun'17
10.1b	Labor Compliance Program	Sept'14-Jul'16	Sep'14-Jun'17
10.1c	Progress Reporting	Sept'14-Jul'16	Sep'14-Jul'17
10.1d	Monthly Invoicing	May'16-Jul'16	Apr'15-Jul'17
10.1e	Project Monitoring Plan	Sep'14-Oct'14	Apr'15-Jan'17
10.2	Land purchase/Easement	N/A	N/A
10.2	Land purchase/Easement Tasks	N/A	N/A
10.3	Planning/Design/Engineering/ Environmental Documentation	Jan'07-Jul'15	Oct'08-Oct'15
10.3a	Feasibility Studies	Jan'07-Oct'13	Oct'08-Oct'15
10.3b	Assessment and Preliminary Studies	Oct'14-Dec'14	Oct'14-Dec'14
10.3c	Final Design Plans and Specifications	Mar'15-May'15	Jan'15-Oct'15

10.3d	Environmental Documentation and Permitting	Apr'15-Jul'15	Jan'15-July'15
10.4	Construction/ Implementation	Jul'15-May'16	Jul'15-Jun'17
10.4a	Construction Contracting	Jul'15-Sep'15	Nov'15-May'16
10.4b	Project Construction	Dec'15-May'16	May'16-Jun'17
10.4c	Project Construction: Inspection and Management	Dec'15-May'16	May'16-Jun'17

## Costs and Dispositions of Funds

### *Invoices for Reimbursement and Grant Sharing*

	DWR Invoice	Cost Share	Date Invoice Submitted to State	Amount of Invoice	Date Check was Received	Amount of Check
Invoice #1	Invoice #1	\$ 234,679.71	11/12/14	\$0.00	N/A	N/A
Invoice #2	Invoice #2	\$ 706.81	12/12/14	\$0.00	N/A	N/A
Invoice #3	Invoice #4	\$ 3,285.90	2/11/15	\$0.00	N/A	N/A
Invoice #4	Invoice #7	\$ 19,417.64	5/18/15	\$ 16,802.47	11/2/15	\$ 15,962.35
Invoice #5	Invoice #23	\$ 652,850	11/15/16	\$ 43,176.95	2/15/17	\$ 38,859.26
Invoice #6	Invoice #24	\$ 3,189.94	12/13/16	\$ 272,042.51	3/6/17	\$ 244,838.26
Invoice #7	Invoice #25	\$ 3,863.80	1/20/17	\$ 198,764.51	4/10/17	\$ 178,888.06
Invoice #8	Invoice #26	\$ 1,441.84	2/15/17	\$ 31,665.28	5/12/17	\$ 28,498.75
Invoice #9	Invoice #29	\$ 46,936.36	5/16/17	\$ 104,172.28	10/27/17	\$93,755.05
Totals		\$966,372.00		\$666,624.00		\$600,801.73

**Final Funds Disbursement***Labor Costs*Humboldt Bay Municipal Water District-Personnel Hours Summary Table

Invoice # #1-9

Date: 11/12/2014-2/28/2017

Work Performed:

## Task 10.1 (Budget Category A): Direct Project Administration

Employee	Classification	Work Performed	Hours	Hourly Rate	Total
Danielle Allred	Grant Administrator	Reviewing grant documents and setting up project files.	3.5	\$ 24.73	\$ 86.56
Danielle Allred	Grant Administrator	Reviewing draft grant agreement and associated documents; filing. Prop 84 grant orientation conference call.	7	\$ 25.32	\$ 177.24
John Friedenbach	Business Manager	Prop 84 grant orientation conference call and discussion.	2	\$ 69.56	\$ 139.12
Becky Moyle	Accounting & HR Specialist	Prop 84 grant orientation conference call and discussion.	2	\$ 58.41	\$ 116.82
Carol Rische	General Manager	Prop 84 grant orientation conference call and discussion.	2	\$ 81.75	\$ 163.50
Danielle Allred	Grant Administrator	Preparing and submitting documents for Invoice #1 and Progress Report #1.	4.5	\$ 25.32	\$ 113.94
John Friedenbach	Business Manager	Reviewing Invoice #1 and Progress Report #1 for submittal.	2	\$ 69.56	\$ 139.12
Carol Rische	General Manager	Conference meetings to discuss project progress.	1	\$ 81.75	\$ 81.75
Danielle Allred	Grant Administrator	Preparing and submitting documents for Invoice #2 and Progress Report #2. Creating a sources & uses of funds tracking spreadsheet. Reviewing and tracking down deliverables.	4	\$ 25.32	\$ 101.28
John Friedenbach	Business Manager	Reviewing Invoice #2 and Progress Report #2 for submittal.	2	\$ 69.56	\$ 139.12
Carol Rische	General Manager	Conference meetings to discuss project progress, hydrology and water supply studies.	4	\$ 81.75	\$ 327.00
Danielle Allred	Grant Administrator	Preparing and submitting documents for Invoice #3 and Progress Report #3. Maintaining grant project files. Preparing request for Grant Agreement Amendment.	8	\$ 25.32	\$ 202.56
John Friedenbach	Business Manager	Reviewing Invoice #3 and Progress Report #3 for submittal. Reviewing Grant Agreement Amendment	5	\$ 69.56	\$ 347.80



		Request.			
Carol Rische	General Manager	Conference meetings to discuss project progress, hydrology and water supply studies.	7	\$ 81.75	\$ 572.25
Sherrie Sobol	Administrative Assistant	Preparation of Invoice #5, grant records filing,	4	\$ 50.25	\$ 201.00
John Friedenbach	Business Manager	Reviewing Invoice #5 and Prepare Progress Report #4&5 for submittal.	7	\$ 73.42	\$ 513.94
Sherrie Sobol	Administrative Assistant	Preparation of Invoice #6, grant records filing,	5	\$ 50.25	\$ 251.25
John Friedenbach	Business Manager	Reviewing Invoice #6 and Prepare Progress Report #6 for submittal.	9	\$ 73.42	\$ 660.78
Dale Davidsen	Superintendent	Conference meetings to administer project.	1	\$ 90.84	\$ 90.84
Paul Helliker	General Manager	Conference meetings to administer project.	1	\$ 85.93	\$ 85.93
Sherrie Sobol	Administrative Assistant	Preparation of Invoice #7, grant records filing,	4.5	\$ 50.25	\$ 226.13
John Friedenbach	Business Manager	Reviewing Invoice #7 and Prepare Progress Report #7 for submittal.	7	\$ 73.42	\$ 513.94
Dale Davidsen	Superintendent	Conference meetings to administer project.	1	\$ 90.84	\$ 90.84
Paul Helliker	General Manager	Conference meetings to administer project.	1	\$ 85.93	\$ 85.93

Total \$ 5,428.63

Task 10.2 (Budget Category B): Land Purchase/Easements

Employee	Classification	Work Performed	Hours	Hourly Rate	Total

Total \$ -

Task 10.3 (Budget Category C): Planning/Design/Engineering/Environmental Documentation

Employee	Classification	Work Performed	Hours	Hourly Rate	Total
Paul Jorgensen	Electrician	Crane operation and assisting divers (from MM Diving, Inc.)	64	\$ 43.72	\$ 2,798.08
Paul Jorgensen	Electrician	Crane operation and assisting divers (from MM Diving, Inc.)	14.5	\$ 65.58	\$ 950.91
Paul Jorgensen	Electrician	Crane operation and assisting divers (from MM Diving, Inc.)	1.5	\$ 87.44	\$ 131.16

Total \$ 3,880.15



## Task 10.4 (Budget Category D): Construction/Implementation

Employee	Classification	Work Performed	Hours	Hourly Rate	Total
John Friedenbach	Business Manager	Construction progress meetings.	2	\$ 73.42	\$ 146.84
Dale Davidsen	Superintendent	Construction progress meetings.	2	\$ 90.84	\$ 181.68
Paul Helliker	General Manager	Construction progress meetings.	2	\$ 85.93	\$ 171.86
John Friedenbach	Business Manager	Construction progress meetings.	2	\$ 73.42	\$ 146.84
Dale Davidsen	Superintendent	Construction progress meetings.	2	\$ 90.84	\$ 181.68
Paul Helliker	General Manager	Construction progress meetings.	2	\$ 85.93	\$ 171.86
John Friedenbach	Business Manager	Construction progress meetings.	2	\$ 73.42	\$ 146.84
Dale Davidsen	Superintendent	Construction progress meetings.	2	\$ 90.84	\$ 181.68
Paul Helliker	General Manager	Construction progress meetings.	2	\$ 85.93	\$ 171.86
Total					\$ 853.92

GHD-Personnel Pay Summary Table

Project History



Project History Report

Time: 11:15:47  
Date: 1/23/2018

From Period: 01/2016 Thru Period: 12/2018

Summary Selection: Employee Responsible

Level: Project Resp Type: PM Co Code: Use Maps: N  
Map Code: Map Level: A/S Values: S Value: Patrick F Kaspari

Multi Level Selection: None

Restrict By: None Budget: Current Status: All  
Ind: Min Value: Currency: Project Chargeable: Both Chargeable and Non Chargeable  
Max Value: Project w/o N Activity:

Project: 11110031-PW HBMWD COLL 1 & 1A LATERAL CM

Phase: 01-BIDDING & CONTRACT ASSISTANCE Task  
Co: Rev Type: Org

Account	EVC Code	EVC Name	Cls	Actv	L/E	R/O	B/N	Hours	Cost	Effort
5010001	1001648	Kaspari, Patrick F	210	OG01	L	R	B	387.00	20,767.66	69,660.00
5010001	1003267	Van Sickle, Barry L	288	OG01	L	R	B	36.00	2,700.00	5,940.00
5010001	1003062	Stevens, Nathan	340	OG01	L	R	B	358.75	13,156.62	39,462.50
5010001	1003062	Stevens, Nathan	350	OG01	L	R	B	7.00	235.58	770.00
5010001	1003062	Stevens, Nathan	361	OG01	L	R	B	59.00	1,689.13	6,490.00
5010001	1004588	White, Brittany K	362	OG67	L	R	B	6.50	165.00	708.50
5010001	1004773	Gill, Jax M	760	OG01	L	R	B	0.25	3.75	21.75
5010001	1000801	Davis, Scott J	807	OG69	L	R	B	5.50	152.90	550.00
5010001	1000691	Costa-Franklin, Lind	908	OG74	L	R	B	0.75	16.13	60.00
5010001	1000691	Costa-Franklin, Lind	909	OG74	L	R	B	1.50	31.01	120.00
5010001	1000525	Casillas, Lindley	958	OG73	L	R	B	5.75	88.20	506.00
5010001	1000525	Casillas, Lindley	965	OG73	L	R	B	0.00	0.00	0.00
5010002	1000525	Casillas, Lindley	958	OG73	L	O	B	1.00	23.03	88.00
5710545	06005	DO NOT USE - FedEx -	314	E			B	0.00	20.78	22.86
5710649	20013	Times-Standard**2096	521	E			B	0.00	1,001.02	1,101.12
5710940	1000525	Casillas, Lindley		OG73	E		B	0.00	27.00	40.50
5710940	1000691	Costa-Franklin, Lind		OG74	E		B	0.00	9.00	13.50
5710940	1000801	Davis, Scott J		OG69	E		B	0.00	22.00	33.00
5710940	1004773	Gill, Jax M		OG01	E		B	0.00	1.00	1.50
5710940	1001648	Kaspari, Patrick F		OG01	E		B	0.00	1,526.00	2,289.00
5710940	1003062	Stevens, Nathan		OG01	E		B	0.00	1,721.00	2,581.50
5710940	1003267	Van Sickle, Barry L		OG01	E		B	0.00	144.00	216.00
5710940	1004588	White, Brittany K		OG67	E		B	0.00	26.00	39.00
<b>Totals</b>								<b>869.00</b>	<b>43,526.71</b>	<b>130,714.73</b>

END OF REPORT

PrjHistory.htm[1/23/2018 11:17:05 AM]

Project History



**Project History Report**

Time: 10:36:09  
Date: 1/24/2018

From Period: 01/2016 Thru Period: 12/2018

Summary Selection: Employee Responsible

Level: Project Resp Type: PM Co Code: Use Maps: N  
Map Code: Map Level: A/S Values: S Value: Patrick F Kaspari

Multi Level Selection: None

Restrict By None Budget: Current Status: All  
Ind: Min Value: Currency: Project Chargeable: Both Chargeable and Non Chargeable  
Max Value: Project w/o N  
Activity:

Project: 11110030-HBMWD-COLL 1&1A LATERAL BIDDING

Phase 01-BIDDING & CONTRACT ASSISTANCE Task  
Co Org  
Rev Ttype

Account	EVC Code	EVC Name	Cls	Actv	L/E	R/O	B/N	Hours	Cost	Effort
5010001	1001648	Kaspari, Patrick F	210	OG01	L	R	B	49.50	2,553.82	8,910.00
5010001	1002379	O'Gorman, Susan T	330	OG58	L	R	B	1.25	49.72	156.25
5010001	1003062	Stevens, Nathan	361	OG01	L	R	B	43.50	1,242.71	4,785.00
5010001	1000801	Davis, Scott J	807	OG69	L	R	B	0.00	0.00	0.00
5010001	1000691	Costa-Franklin, Lind	909	OG74	L	R	B	1.50	31.01	120.00
5010001	1000525	Casillas, Lindley	958	OG73	L	R	B	3.25	49.40	286.00
5710940	1000525	Casillas, Lindley		OG73	E		B	0.00	13.00	19.50
5710940	1000691	Costa-Franklin, Lind		OG74	E		B	0.00	6.00	9.00
5710940	1000801	Davis, Scott J		OG69	E		B	0.00	0.00	0.00
5710940	1001648	Kaspari, Patrick F		OG01	E		B	0.00	198.00	297.00
5710940	1002379	O'Gorman, Susan T		OG58	E		B	0.00	5.00	7.50
5710940	1003062	Stevens, Nathan		OG01	E		B	0.00	174.00	261.00
<b>Totals</b>								99.00	4,322.66	14,851.25

END OF REPORT

PrjHistory.htm[1/24/2018 10:36:49 AM]

Project History



**Project History Report**

Time: 10:32:04  
Date: 1/24/2018

**From Period:** 01/2016      **Thru Period:** 12/2018

**Summary Selection:** Employee Responsible

**Level:** Project      **Resp Type:** PM      **Co Code:**      **Use Maps:** N  
**Map Code:**      **Map Level:**      **A/S Values:** S      **Value:** Patrick F Kaspari

**Multi Level Selection:** None

**Restrict By:** None      **Budget:** Current      **Status:** All  
**Ind:**      **Min Value:**      **Currency:** Project      **Chargeable:** Both Chargeable and Non Chargeable  
**Max Value:**      **Project w/o Activity:** N

**Project:** 11110031-PW HBMWD COLL 1 & 1A LATERAL CM

**Phase:** 02-PW-CONSTRUCTION OBSERVATION FIELD      **Task**  
**Co**      **Org**  
**Rev Type**

Account	EVC Code	EVC Name	Cls	Actv	L/E	R/O	B/N	Hours	Cost	Effort
5010001	1003062	Stevens, Nathan	340	FG44	L	R	B	108.25	7,351.62	17,211.75
5710940	1003062	Stevens, Nathan		FG44	E		B	0.00	433.00	1,190.75
<b>Totals</b>								108.25	7,784.62	18,402.50

**END OF REPORT**

*Project costs*

## Invoice Summary Table-Submitted for Reimbursement

Grantee: Humboldt Bay Municipal Water District  
 Invoicing Period: 6/28/2013 - 2/28/2017

Project 10: HBMWD Ranney Collectors 1 and 1A Lateral Replacement

Invoice Description	Notes	Invoice Amount
<b>Task 10.1 (Budget Category A) Direct Project Management</b>		
Grantee Personnel Hours	See Personnel Hours Summary Table	\$ 5,428.64
GHD - General Engineering	See GHD Personnel Pay Summary Table	\$ 372.00
North Valley Labor Compliance Services	Prevailing Wage Labor Compliance	\$ 5,775.00
<i>Subtotal Task 10.1(Budget Category A)</i>		\$ 11,575.64
<b>Task 10.2 (Budget Category B): Land Purchase/Easement</b>		
<i>Subtotal Task 10.2 (Budget Category B)</i>		\$ -
<b>Task 10.3 (Budget Category C): Planning/Design/Engineering/Environmental Documentation</b>		
Grantee Personnel Hours	See Personnel Hours Summary Table	\$ 4,380.53
GHD - General Engineering	See GHD Personnel Pay Summary Table	\$ 65,491.25
Keenan Supply	Materials	\$ 57,627.21
Englund Marine & Industrial Supply	Materials	\$ 80.32
Eureka Boiler Works	Materials	\$ 133.86
Fastenal	Materials	\$ 672.35
Eureka Boiler Works	Materials	\$ 61.70
Pierson Building Center	Materials	\$ 141.75
MM Diving, Inc.	Additional work performed on 1 & 1A	\$ 29,400.00
MM Diving, Inc.	Original dive contract price	\$ 71,800.00
<i>Subtotal Task 10.3(Budget Category C)</i>		\$ 229,788.97
<b>Task 10.4 (Budget Category D) Construction Implementation</b>		
Grantee Personnel Hours	See Personnel Hours Summary Table	\$ 1,000.76
GHD	See GHD Personnel Pay Summary Table	\$ 50,702.50
Layne Christensen Company	Original Construction Contract	\$ 1,729,400.00
Layne Christensen Company	Additional Construction-Change Orders	\$ 72,648.10
United Rentals	Materials	\$ 111.78
Kernen Construction	Materials	\$ 143.10
Fastenal	Materials	\$ 63.13
<i>Subtotal Task 10.4 (Budget Category D)</i>		\$ 1,854,069.37
<b>Total</b>		\$ 2,095,433.98



***Summary of Project Costs***

The total project cost was \$2,485,000. The Prop 84 grant covered \$666,600, with the remaining \$1,818,400 being funded by the revenue from the municipal customers. The original budget for the project was \$1,632,996, with the construction implementation taking up \$1,170,824 of the budget. The lowest cost bid for the construction was \$2,204,500. The final construction costs came in \$64,371 under the bid at \$1,960,129, due to Change Order #1 which dictated that some of the construction work would be completed using the District's Force Account labor to save money.



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

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**BOARD OF DIRECTORS**

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NEAL LATT, VICE-PRESIDENT

J. BRUCE RUPP, SECRETARY-TREASURER

BARBARA HECATHORN, DIRECTOR

MICHELLE FULLER, DIRECTOR

**GENERAL MANAGER**

JOHN FRIEDENBACH

January 11, 2018

This letter is confirmation that Humboldt Bay Municipal Water District has accounted for the funds disbursed under Department of Water Resources Grant Agreement #46000010579, Project 10: Humboldt Bay Municipal Water District Ranney Collectors 1 and 1A Lateral Replacement, separately from all other funds. Audit and accounting procedures were maintained in accordance with generally accepted principles and practices. The complete and accurate records of all invoices, receipts and disbursements were assembled and will be retained at Humboldt Bay Municipal Water District's Office at 828 7<sup>th</sup> Street, Eureka, California as required by the above mentioned agreement.

Humboldt Bay Municipal Water District required that all subcontractors maintain their own books, records, and other documents pertinent to their work in accordance with generally accepted accounting principles and practices.

Sincerely,

A handwritten signature in blue ink, appearing to read "John Friedenbach".

John Friedenbach

## Additional Information

### *Project Benefits*

After the replacement of the laterals, pump tests were performed in Collector 1A to compare with pre-construction flows. The tests were conducted at rates of approximately 3.8 MGD, 6.0 MGD, and 9.0 MGD and the drawdown and specific capacity were analyzed with the following results:

	Drawdown (ft, Collector 1A Only)	Specific Capacity (gpm/ft, Collector 1A Only)
Pre-Test Step 1 (3.7 MGD)	7.0	368
Post-Test Step 1 (3.8 MGD)	4.0	658
Pre-Test Step 2 (6.1 MGD)	12.9	328
Post-Test Step 2 (5.9 MGD)	6.7	609
Pre-Test Step 3 (9.1 MGD)	21.3	296
Post-Test Step 3 (8.9 MGD)	11.3	555

The tests show that the increased length and enhanced screens of the new laterals decreased the drawdown by approximately 50% and the increase in working lateral screen length achieved an increase in the specific capacity by more than 75%. These project results will allow the District to produce the volume of water needed during off peak power times of the day to keep energy costs down.

This project, along with the upcoming replacement of the pumps in Collector 1 in 2019/2020, will ensure that the Humboldt Bay Area will have reliable drinking water for the next several decades.

**Certification from Professional Engineer**

6/7/17 cc: Great Admin

For the benefit of Humboldt Bay Municipal Water District  
Exempt from Recording Fees  
GC 27383

Return to:  
GHD Inc.  
718 Third Street  
Eureka, CA 95501

**NOTICE OF COMPLETION**

NOTICE is hereby given that the undersigned, Patrick Kaspari, Civil Engineer with GHD Inc., 718 Third Street, Eureka, CA 95501, the agent of the owner of the improvements situated in the County of Humboldt, State of California, and described as follows, to wit:

Completion of the HBMWD Collectors 1&1A Rehabilitation Project. Work included the furnishing of all labor, material, equipment, supervision for the construction of 770 LF of 12-inch diameter, stainless steel, laterals in Collectors 1&1A along with valves, fittings, testing, and necessary earthwork at the HBMWD Essex Control Center, 7270 West End Road, Arcata, California.

That Humboldt Bay Municipal Water District as the owner of the improvements in fee did enter into a contract with Layne Christensen Company for the construction of:

**Collectors 1&1A Rehabilitation Project**

That on June 6, 2017 the said contract, as a whole, was actually completed by Layne Christensen Co.

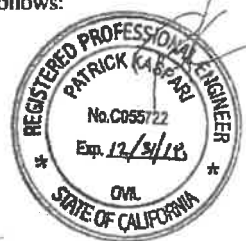
The name and address of the owner of said improvements is as follows:

Humboldt Bay Municipal Water District  
7270 West End Road  
Arcata, CA 95521

GHD Inc.

BY

  
Patrick Kaspari, PE  
District Engineer



Verification for NON-INDIVIDUAL owner: I, the undersigned, declare under penalty of perjury under the laws of the State of California that I am the General Manager of the aforesaid interest or estate in the property described in the above notice; that I have read the said notice, that I know and understand the contents thereof, and that the facts stated therein are true and correct.

6/7/18 Eureka, CA  
Date and Place

  
(Signature of person signing on behalf of owner)

nac:doy

H.B.M.W.D. JUN 30 2017

**2017-010838**

Recorded - Official Records  
Humboldt County, California  
Kelly E. Sanders, Recorder  
Recorded by: HUMBOLDT BAY MUNICIPAL WATER  
Pages: 1

Recording Fee: \$ 0.00  
Tax Fee: \$0  
Clerk: se Total: \$0.00  
Jun 15, 2017 at 01:22:57



Humboldt Bay Municipal Water District  
Exempt from Recording Fees  
GC 27383

Return to:  
HBMWD  
828 7<sup>th</sup> Street  
Eureka, CA 95501

**NOTICE OF COMPLETION**

NOTICE is hereby given that the undersigned, John Friedenbach, General Manager, Humboldt Bay Municipal Water District, 828 7<sup>th</sup> Street, Eureka, CA 95501, the owner of the improvements situated in the County of Humboldt, State of California, and described as follows, to wit:

Completion of the HBMWD Collectors 1&1A Rehabilitation Project. Work included the furnishing of all labor, material, equipment, supervision for the construction of 770 LF of 12-inch diameter, stainless steel, laterals in Collectors 1&1A along with valves, fittings, testing, and necessary earthwork at the HBMWD Essex Control Center, 7270 West End Road, Arcata, California.


That Humboldt Bay Municipal Water District as the owner of the improvements in fee did enter into a contract with Layne Christensen Company for the construction of:

**Collectors 1&1A Rehabilitation Project**

That on June 6, 2017 the said contract, as a whole, was actually completed by Layne Christensen Co.


The name and address of the owner of said improvements is as follows:

Humboldt Bay Municipal Water District  
7270 West End Road  
Arcata, CA 95521

BY:   
John Friedenbach, General Manager  
Humboldt Bay Municipal Water District

Verification for NON-INDIVIDUAL owner: I, the undersigned, declare under penalty of perjury under the laws of the State of California that I am the General Manager of the aforesaid interest or estate in the property described in the above notice; that I have read the said notice, that I know and understand the contents thereof, and that the facts stated therein are true and correct.

June 13, 2017, Eureka, CA  
Date and Place

  
(Signature of person signing on behalf of owner)

noc.doc



***Post-Performance Report***

The post-performance report will be written annually in September for the years of 2018-2027. The report will include the time period of the report, project description, project benefits, expected project benefits vs. actual project benefits, any additional costs or benefits that were not expected, and reporting to confirm that the output indicators and targets of the project are being met.

Targets and project benefits achieved will be determined by analyzing the pumping capacity of Collector 1 & 1A and the river flow rate over the year.



January 29, 2018

Mr. John Friedenbach  
General Manager  
Humboldt Bay Municipal Water District  
828 Seventh St, PO Box 95  
Eureka, CA 95502-0095

Subject: Time Extension #1  
FEMA-DR-1911-CA, Baja Earthquake  
Cal OES 0009, Blue Lake Fieldbrook Pipeline Support Retrofit  
Subrecipient: Humboldt Bay Municipal Water District, FIPS 023-91000

Dear Mr. Friedenbach,

The California Governor's Office of Emergency Services (Cal OES) received your letter dated November 14, 2017 requesting a six (6) month time extension to November 7, 2018, for completion of the Blue Lake Fieldbrook Pipeline Support Retrofit project. The current approved completion date for the project is May 7, 2018. Cal OES reviewed the history of this project and has determined that the time extension is warranted based on the factors listed in your letter.

The approved budget and scope of work remain unchanged for this project. A time extension is approved and all work must be completed by November 7, 2018. Please submit a revised work schedule for the project.

If you have any questions, please contact Mr. Anthony Roggio, State Hazard Mitigation Specialist, at [anthony.roggio@caloes.ca.gov](mailto:anthony.roggio@caloes.ca.gov).

Sincerely,

JENNIFER L. HOGAN,  
State Hazard Mitigation Officer



**Memorandum**

February 01, 2018

To: HBMWD Board Members Ref. No.: 8411162

From: Patrick Kaspari, PE Tel: 707-443-8326

cc: John Friedenbach, HBMWD General Manager

**Subject: Mad River Crossing Issued for Bid Contract Documents**

Dear Board Members,

Attached to this memo, and in your Board Packets, will be the contract Plan Sheets for the Blue Lake/Fieldbrook Glendale CSD Mad River Crossing Project. A copy of the Technical Specifications and other contract documents will be available at the HBMWD Eureka Office for your review if you wish. We will request Board approval to release these documents for bid at the February 8, 2018 Board Meeting. The intent is to release the bid documents on February 9, 2018, have bids due back on March 7<sup>th</sup>, and award the contract at the March 8<sup>th</sup> Board Meeting.

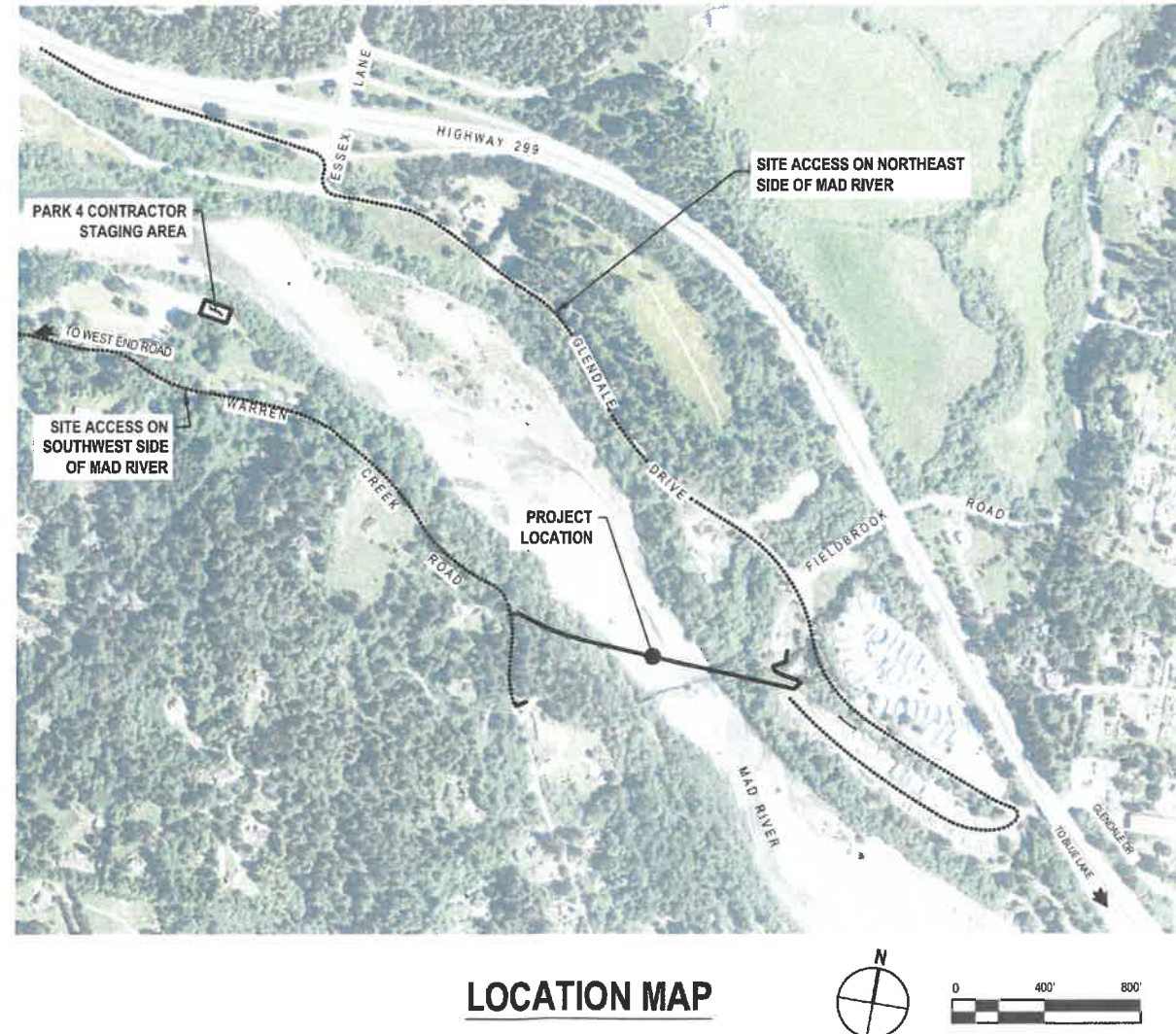
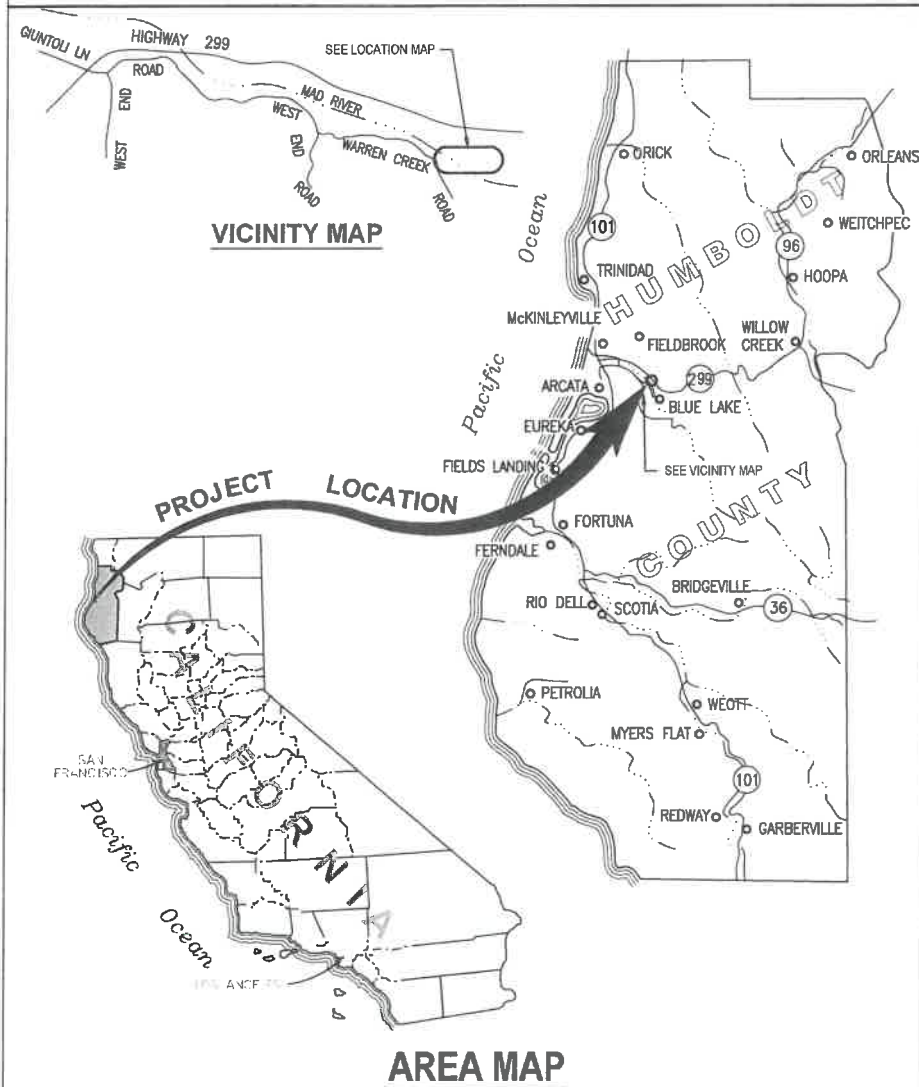
There is one item of note that I would like to bring to the Board's attention. On January 25<sup>th</sup> 2018, John Friedenbach, Chris Harris, Dale Davidsen and I met with Rick Hanger of FGCSO and Randy Sundberg to discuss the annexation of the Sundberg parcel into FGCSO, and HBMWD obtaining a construction easement across the Sundberg's property. As part of this meeting, all parties agreed that HBMWD would, as part of this project, relocate the Sundberg water service connection that will be interrupted by this project onto the FGCSO water main along Glendale Avenue. On Monday, January 29<sup>th</sup>, John, Dale and I meet with Randy at his property and agreed on a location for the new service. The connection was surveyed in this week, but is not yet shown on the plan set that is in your Board Packet. This connection detail will be completed prior to the Board Meeting on February 8<sup>th</sup> and will be included with the Bid documents. If you have any questions on this connection, I would be happy to address them at the Board Meeting.

Sincerely,

Patrick Kaspari, P.E.  
District Engineer

# HUMBOLDT BAY MUNICIPAL WATER DISTRICT MAD RIVER PIPELINE CROSSING

FEBRUARY 2018



## APPROVALS

PLANS AND SPECIFICATIONS APPROVED BY THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT, COUNTY OF HUMBOLDT, STATE OF CALIFORNIA, THIS 8TH DAY OF FEBRUARY, 2018.

**GENERAL MANAGER**  
JOHN FRIEDENBACH

SIGNED

### BOARD OF DIRECTORS

SHERI WOO	PRESIDENT
NEAL LATT	VICE PRESIDENT
J. BRUCE RUPP	SECRETARY-TREASURER
BARBARA HECATHORN	DIRECTOR
MICHELLE FULLER	DIRECTOR

**ENGINEER: GHD Inc.**  
PATRICK KASPARI, PE

SIGNED

2/08/2018

## SHEET INDEX

SHEET NO.	DRAWING	DESCRIPTION	SHEET NO.	DRAWING	DESCRIPTION
<b>GENERAL</b>					
1	G-001	COVER SHEET	8	C-101	PIPELINE PLAN & PROFILE
2	G-002	ABBREVIATIONS & SYMBOLS	<b>CIVIL SITE</b>		
3	G-003	GENERAL NOTES	<b>CIVIL DETAILS</b>		
4	G-004	EXISTING CONDITIONS & SURVEY CONTROL	9	C-401	CONNECTION & ABANDONMENT DETAILS
5	G-005	BORING LOGS 1 OF 2	10	C-501	CIVIL DETAILS 1 OF 2
6	G-006	BORING LOGS 2 OF 2	11	C-502	CIVIL DETAILS 2 OF 2
7	G-101	CONSTRUCTION STAGING & ACCESS PLAN AND OVERALL CONSTRUCTION PLAN KEY			

No.	Issue	Drawn	Approved	Date
A	ISSUE FOR BID	NS	PK	2/9/18



Bar is one inch on original size sheet  
0 1"

Reuse of Documents  
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**GHD**  
GHD Inc.  
718 Third Street  
Eureka California 95501 USA  
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com

Drawn	S. DAVIS	Designer	N. STEVENS
Drafting Check	P. KASPARI	Design Check	P. KASPARI
Project Manager	P. KASPARI	Date	1/12/2018
This document shall not be used for construction unless signed and sealed for construction.		Scale	AS NOTED

Client	HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
Project	MAD RIVER PIPELINE CROSSING		
Title	COVER SHEET		
Project No.	8411162		
Original Size	ANSI D	Sheet No.	G-001
		Sheet	1 of 1



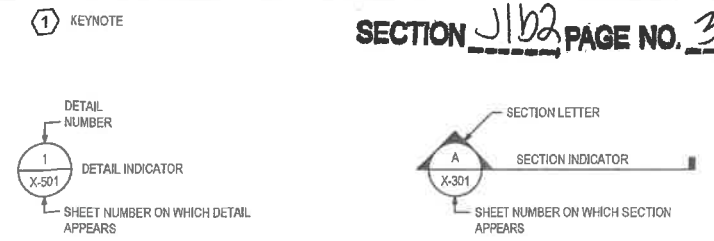
### ABBREVIATIONS

Ø	DIAMETER	GRD, G	GROUND	S	SOUTH SLOPE
AB	AGGREGATE BASE	GV	GATE VALVE	SB	SEDIMENT BASIN
ABDN	ABANDONED	HBMWD	HUMBOLDT BAY MUNICIPAL WATER DISTRICT	SD	STORM DRAIN
AC	ACRE, ASPHALT CONCRETE	HC	HANDICAP	SDCB	STORM DRAIN CATCH BASIN
ACP	ASBESTOS CEMENT PIPE	HCR	HANDICAP ACCESSIBLE RAMP	SDI	STORM DRAIN INLET
ACM	ASBESTOS CONTAINING MATERIAL	HDPE	HIGH-DENSITY POLYETHYLENE	SDMH	STORM DRAIN MANHOLE
AD	AREA DRAIN	HMA	HOT MIX ASPHALT	SDCO	STORM DRAIN CLEANOUT
ADA	AMERICANS WITH DISABILITIES ACT	HORIZ	HORIZONTAL	SF	SILT FENCE
ALGN	ALIGNMENT	HT	HEIGHT	SG	SUBGRADE
APPROX	APPROXIMATE	HP	HIGH POINT	SHLDR	SHOULDER
ARV	AIR RELEASE VALVE	INV	INVERT	SHT	SHEET
ASB	AGGREGATE SUBBASE	INST	INSTALL	SIM	SIMILAR
ASPH	ASPHALT	IRR	IRRIGATION	SL	STREETLIGHT
BC	BEGIN CURVE	JP	JOINT POLE	SMH	SIGNAL MANHOLE
BEG	BEGIN	JT	JOINT TRENCH	SS	SANITARY SEWER
BFP	BACK FLOW PREVENTER	L	LEFT	SSCO	SANITARY SEWER CLEANOUT
BFV	BUTTERFLY VALVE	L+	LENGTH (CURVE)	SSFM	SANITARY SEWER FORCE MAIN
BLDC	BUILDING CORNER	LF	LINEAR FEET	SSMH	SANITARY SEWER MANHOLE
BLDG	BUILDING	LAT	LATERAL	SSPS	SANITARY SEWER PUMP STATION
BMP	BEST MANAGEMENT PRACTICES	LIP	LIP OF GUTTER	SST	STAINLESS STEEL
BO	BLOW OFF	LP	LIGHT POLE, LOW POINT	STA	STATION
BOD	BOTTOM OF DOCK	LPFH	LIGHT POLE, HIGH POINT	STD	STANDARD
BOL	BOLLARD	LS	LANDSCAPE	SW	SIDEWALK
BSW	BACK OF SIDEWALK	LSA	LANDSCAPE ARCHITECT	T	TELEPHONE
BV	BALL VALVE	MA	MEDICAL AIR	TC	TOP OF CURB
BVC	BEGIN VERTICAL CURVE	MAX	MAXIMUM	TD	TRENCH DRAIN
BW	FINISHED GRADE AT BOTTOM OF WALL	MEP	MECHANICAL/ELECTRICAL/PLUMBING	TEL	TELEPHONE
C	CONCRETE OR CIVIL	MF	MEDIA FILTER	TEMP	TEMPORARY
CB	CATCH BASIN	MH	MANHOLE	TFC	TOP FACE OF CURB
C&G	CURB AND GUTTER	MIN	MINIMUM	TG	TOP OF GRATE ELEVATION
CG&SW	CURB, GUTTER & SIDEWALK	MJ	MECHANICAL JOINT	THK	THICK
CI	CAST IRON OR CURB INLET	MPVC	MIDPOINT OF VERTICAL CURVE	TOD	TOP OF DOCK
CIP	CAST IRON PIPE	MON	MONUMENT	TOE	TOE OF SLOPE
CL	CENTERLINE	N	NORTHING COORDINATE	TRC	TOP OF ROLLED CURB
CLR	CLEAR	(N)	NORTHING	TW, TOW	TOP OF WALL
CMN	COMMUNICATION	NCRA	NORTH COAST RAILROAD AUTHORITY	TS	TOP OF SLAB
CMP	CORRUGATED METAL PIPE	NO	NUMBER	TYP	TYPICAL
CO	CLEAN OUT	NTS	NOT TO SCALE	UNO	UNLESS NOTED OTHERWISE
CCNC	CONCRETE	OHE	OVERHEAD ELECTRIC	U/G	UNDERGROUND
CONST	CONSTRUCTION OR CONSTRUCT	O.R.	OFFICIAL RECORDS	VC	VERTICAL CURVE
CONF	CONFORM TO EXISTING	(P)	PROPOSED	W	WEST, WATER
CR	CONDENSATE RETURN	P	PAVEMENT ELEVATION	WM	WATER METER
CU	CUBIC	PA	PLANTER AREA	WTR	WATER
CWSC	CALIFORNIA WATER SERVICE COMPANY	PB	PULL BOX	WV	WATER VALVE
CY	CUBIC YARD	PCC	POINT OF COMPOUND CURVATURE	WWF	WELDED WIRE FABRIC
D=	DELTA (CURVE)	PE	PLAIN END	W	WITH
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY	PERF	PERFORATED	YDS	YARDS
DEMO	DEMOLISH	PH	POTHOLE		
DEPT	DEPARTMENT	PI	POINT OF INTERSECTION		
DEPT	DEPARTMENT	PID	POINT ID		
DI	DROP INLET, DUCTILE IRON	PIV	POST INDICATOR VALVE		
DIA	DIAMETER	PL	PROPERTY LINE		
DIP	DUCTILE IRON PIPE	PM	PARKING METER		
DOM	DOMESTIC	PMH	POWER MANHOLE		
DW	DOMESTIC WATER	POC	POINT ON CURVE		
DWG	DRAWING	POI	POINT OF INTERSECTION		
E	EASTING COORDINATE, ELECTRIC	PP	POWER POLE		
EC	END CURVE	PRC	POINT OF REVERSE CURVATURE		
EG	EXISTING GRADE	PRUE	PRIVATE UTILITY EASEMENT		
EL, ELEV	ELEVATION	PT	POINT OF TANGENCY		
ELEC	ELECTRICAL	PUE	PUBLIC UTILITY EASEMENT		
EP	EDGE OF PAVEMENT	PVC	POLYVINYL CHLORIDE PIPE		
EVA	EMERGENCY VEHICLE ACCESS	R	RIGHT		
EX, EXIST.	EXISTING	R=	RADIUS (CURVE)		
(E)		RC	RELATIVE COMPACTION		
(F)	FUTURE	RCP	REINFORCED CONCRETE PIPE		
FA	FIRE ALARM	REQ	REQUIRED		
FIC, FC	FACE OF CURB	RIM	RIM ELEVATION		
FD	FOUND	RJ	RESTRAINED JOINT		
FDC	FIRE DEPARTMENT CONNECTION	RP	RADIUS POINT		
FF, FFE	FINISHED FLOOR ELEVATION	RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER		
FG	FINISH GRADE	RPPA	REDUCED PRESSURE PRINCIPLE ASSEMBLY		
FH	FIRE HYDRANT	RSC	RECEIVING AND SUPPORT CENTER		
FL	FLOW LINE	RW, ROW	RIGHT OF WAY		
FLG	FLANGE	RW	RECYCLED WATER		
FOUND	FOUNDATION				
FS	FINISHED SURFACE				
FT	FOOT, FEET				
FW	FIRE WATER				
G	GAS, GROUND ELEVATION				
GB	GRADE BREAK				
GCS	GROUND CONTROL STATION				
GDT	GROUND DATA TERMINAL				
GI	GALVANIZED IRON				
GI	GREASE INTERCEPTOR				

### SYMBOLS LEGEND

NEW	EXISTING	
		CONCRETE SURFACE
		BOLLARD
		SPOT ELEVATION
		DOWN GUY
		STREET LIGHT
		UTILITY POLE
		ELECTRICAL HANDHOLE
		STORM DRAIN DROP INLET
		STORM DRAIN CATCH BASIN
		GAS VALVE
		STORM DRAIN MANHOLE
		SANITARY SEWER MANHOLE
		ELECTRICAL MANHOLE
		FIRE HYDRANT
		WATER VALVE
		IRRIGATION HANDLE
		STREET LIGHT HANDHOLE
		TREE TRUNK AND DIAMETER
		SURVEY CONTROL MONUMENT
		BORING
		POTHOLE
		CASING ANODE TEST STATION
		PLUG VALVE
		BUTTERFLY VALVE
		REDUCER
		AIR RELEASE VACUUM VALVE
		BLOW OFF
		INSPECTION PORT
		CURB AND GUTTER
		ASPHALT EDGE
		BUILDING FACE
		FENCE
		GUARD RAIL
		HAND RAIL
		MAJOR CONTOUR
		MINOR CONTOUR
		TREE DRIPLINE
		COMMUNICATION OVERHEAD (AT&T)
		COMMUNICATION UNDERGROUND (AT&T)
		CATV DATA OVERHEAD (COMCAST)
		CATV DATA UNDERGROUND (COMCAST)
		ELECTRICAL OVERHEAD (PG&E)
		ELECTRICAL UNDERGROUND (PG&E)
		JOINT TRENCH (ELECTRICAL & COMMUNICATION)
		NATURAL GAS UNDERGROUND (PG&E)
		SANITARY SEWER
		STREET LIGHT POWER UNDERGROUND
		STORM DRAIN UNDERGROUND
		WATER LINE UNDERGROUND
		NON-POTABLE WATER LINE UNDERGROUND
		RETAINING WALL
		WATER EDGE
		COUNTY PARCEL LINE

### ANNOTATION



### SHEET NOTES

- ABBREVIATIONS AND SYMBOLS ON THIS SHEET APPLY ONLY TO THE CIVIL DRAWINGS, REFER TO OTHER DISCIPLINES FOR APPLICABLE ABBREVIATIONS AND SYMBOLS NOT PROVIDED HERE.
- THIS IS A STANDARD ABBREVIATION AND LEGEND SHEET, THEREFORE, SOME ABBREVIATIONS AND LEGEND SYMBOLS MAY APPEAR ON THIS SHEET AND MAY NOT BE USED ON THIS PROJECT.

		Drawn <b>S. DAVIS</b> Designer <b>N. STEVENS</b> Drafting Check <b>P. KASPARI</b> Design Check <b>P. KASPARI</b> Project Manager <b>P. KASPARI</b> Date <b>1/12/2018</b>	Client <b>HUMBOLDT BAY MUNICIPAL WATER DISTRICT</b> Project <b>MAD RIVER PIPELINE CROSSING</b> Title <b>ABBREVIATIONS &amp; SYMBOLS</b> Project No. <b>8411162</b> Original Size <b>ANSI D</b> Sheet No. <b>G-002</b>
		This document shall not be used for construction unless signed and sealed for construction.	Scale <b>AS NOTED</b> Sheet <b>2</b> of <b>1</b>



# GENERAL NOTES

- GENERAL
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS.
- CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST THREE WORKING DAYS PRIOR TO COMMENCEMENT OF WORK OR IF WORK HAS BEEN SUSPENDED FOR A PERIOD OF ONE OR MORE DAYS (WEEKENDS AND HOLIDAYS EXCEPTED).
- THE CONTRACTOR SHALL HAVE A SUPERINTENDENT OR REPRESENTATIVE ON SITE AT ALL TIMES DURING CONSTRUCTION.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL CONDITIONS CONTAINED IN PROJECT RELATED PERMITS AND IN OBTAINING ANY OTHER PERMITS THAT MAY BE REQUIRED.
- CONTRACTOR SHALL CONDUCT FIELD REVIEW AND VERIFY ALL LINES, LEVELS AND CONDITIONS PRIOR TO BEGINNING OF ANY WORK. SUBMIT TO DISTRICT A LIST OF IDENTIFIED PROBLEM AREAS.
- ALL MATERIALS REQUIRED FOR THE COMPLETE EXECUTION OF THE PROJECT SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED. ALL CONSTRUCTION MATERIALS AND METHODS SHALL COMPLY WITH THE PROJECT CONSTRUCTION CONTRACT DOCUMENTS.
- EXISTING FACILITIES INCLUDING, BUT NOT LIMITED TO ROADS, SIDEWALKS, WALLS, FENCES AND STRUCTURES DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO MATCH ORIGINAL CONDITION AND TO THE SATISFACTION OF THE AGENCY HAVING JURISDICTION OVER THE IMPROVEMENTS WITHOUT ADDITIONAL COST TO THE DISTRICT.
- ALL LANDSCAPING AND IRRIGATION SYSTEMS OR OTHER PRIVATE IMPROVEMENTS DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED IN KIND OR AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO OWNER.
- ALL UNDERGROUND IMPROVEMENTS SHALL BE INSTALLED, TESTED, AND APPROVED PRIOR TO FINAL PAVING.
- CONTRACTOR SHALL RESTORE OR REPLACE ANY DAMAGED MONUMENTS RESULTING FROM THEIR OPERATION AND SHALL BEAR ALL COSTS OF SUCH REPLACEMENT, INCLUDING FILING OF A CORNER RECORD.
- THE CONTRACTOR SHALL RECORD THE GPS COORDINATES OF ALL NEW VALVES, BENDS, AND CONNECTIONS TO THE EXISTING SYSTEM. SUBMIT NORTHING AND EASTING COORDINATE INFORMATION TO THE DISTRICT USING THE HORIZONTAL DATUM: US STATE PLANE CCS 1983, CALIFORNIA ZONE 1
- EXISTING SHRUBBERY AND TREES SHALL BE REMOVED OR TRIMMED ONLY AS DIRECTED BY THE ENGINEER AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE DISTRICT AND THE DISTRICT'S REPRESENTATIVES HARMLESS FROM ANY AND ALL LIABILITY, REAL AND/OR ALLEGED, IN CONJUNCTION WITH THE PERFORMANCE OF THIS PROJECT.
- A SET OF PLANS AND A SET OF SPECIFICATIONS SHALL BE KEPT AT ALL TIMES AT THE JOB SITE ON WHICH ALL CHANGES OR VARIATIONS IN THE WORK, INCLUDING EXISTING UTILITIES, ARE TO BE RECORDED AND/OR CORRECTED DAILY AND SUBMITTED TO THE ENGINEER WHEN THE WORK TO BE DONE IS COMPLETED.
- CONTRACTOR SHALL CONFORM TO EXISTING STREETS, SURROUNDING LANDSCAPES, AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, GRADING, ETC., AND AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADE OR CROSS SLOPES, LOW SPOTS, OR HAZARDOUS CONDITIONS.
- THE DISTRICT RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO REPAIR DAMAGE IN CONSTRUCTION ACCESS ROUTES.
- NOTE THAT ALL FITTINGS, BENDS, ELBOWS, ETC. SHOWN ON THESE PLANS ARE PROVIDED AS A GUIDE TO THE CONTRACTOR. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING ALL FITTINGS REQUIRED TO MAKE CONNECTIONS TO EXISTING SERVICES IN CONFORMANCE WITH THE INTENT SHOWN ON THE PLANS.
- CONSTRUCTION EQUIPMENT SHALL NOT ENTER RIPARIAN AREAS.
- THE CONTRACTOR SHALL TAKE PREVENTATIVE MEASURES TO AVOID ANY SPILLS OR LEAKS ON THE SITE FROM PETROLEUM PRODUCTS. THE CONTRACTOR SHALL PREPARE A SPILL PREVENTION AND RESPONSE PLAN THAT WILL BE APPROVED BY THE ENGINEER. THIS PLAN MUST BE IMPLEMENTED AND ADHERED TO BY THE CONTRACTOR. AT A MINIMUM, THIS PLAN SHALL REQUIRE THAT STAGING, STORAGE AND REFUELING AREAS, AND ANY EQUIPMENT REPAIR OR SIMILAR ACTIVITY TAKING PLACE SHALL OCCUR AT LEAST 100 FEET FROM ANY ACTIVE CHANNEL OR DITCH. REFUELING SHALL ONLY OCCUR IN AREAS APPROVED BY THE ENGINEER.
- ELECTRICAL POWER IS NOT AVAILABLE AT THE SITE AND CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY NECESSARY POWER.
- CONTRACTOR HAS THE OPTION OF HOT TAPPING INTO THE DISTRICT'S EXISTING WATER LINE TO PROVIDE NECESSARY WATER. HOT TAP SHALL REQUIRE A BACKFLOW PREVENTER ASSEMBLY, AND CONTRACTOR SHALL SUBMIT PROPOSED HOT TAP ASSEMBLY FOR REVIEW AND APPROVAL BY DISTRICT AND ENGINEER PRIOR TO INSTALLATION.

- REFER TO THE GEOTECHNICAL REPORT:
  - FINAL GEOTECHNICAL REPORT, HUMBOLDT BAY MUNICIPAL WATER DISTRICT, WATER TRANSMISSION PIPELINE REPLACEMENT UNDER MAD RIVER, BLUE LAKE AND FIELDBROOK-GLENDALE COMMUNITY SERVICES DISTRICT, HUMBOLDT COUNTY, CALIFORNIA, BY CRAWFORD & ASSOCIATES INC, DECEMBER 14, 2017.

- CONSTRUCTION
  - HOURS OF WORK
    - DAYTIME WORK HOURS SHALL BE LIMITED TO THE HOURS OF 7:00AM TO 7:00PM, MONDAY THROUGH SATURDAY, EXCEPT AS IDENTIFIED BELOW FOR TUNNELING ACTIVITIES. CONSTRUCTION OUTSIDE OF THESE HOURS, ON SUNDAY, OR LEGAL OR COUNTY HOLIDAYS SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
    - CONTINUOUS PULLBACK MAY BE REQUIRED DURING THE FINAL SEGMENT OF THE HDD PROCESS WHEN THE HDPE PIPELINE IS INSTALLED. DURING THIS PHASE OF THE HDD PROCESS, CONSTRUCTION COULD REQUIRE SOME NIGHTTIME WORK PERIODS FOR INSTALLATION OF THE WATER MAIN. IF REQUIRED, NIGHTTIME WORK PERIODS SHALL BE COORDINATED WITH THE ENGINEER IN ADVANCE, AND APPROVAL SHALL BE GIVEN BY THE ENGINEER PRIOR TO ANY WORK OCCURRING OUTSIDE THE HOURS DESCRIBED ABOVE.

- HOURS FOR EQUIPMENT DELIVERY
  - EQUIPMENT DELIVERY, SUPPLY DELIVERY, AND SERVICE/FUELING VEHICLES SHALL ONLY ENTER AND EXIT SITE WORK AREAS BY THE APPROVED ACCESS ROADS DURING REGULAR WORKING HOURS AS DESCRIBED ABOVE.
- TRAFFIC CONTROL
  - THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE ROADWAYS DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY SIGNS, BARRICADES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVEYANCE, AND SAFETY OF THE PUBLIC.
  - THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM HUMBOLDT COUNTY PRIOR TO BEGINNING THE WORK. AS PART OF THE ENCROACHMENT PERMIT PROCESS, THE CONTRACTOR SHALL PREPARE TRAFFIC CONTROL PLANS FOR REVIEW AND ACCEPTANCE OF PLANNED WORK WITHIN THE PUBLIC RIGHT-OF-WAY. THE DEVELOPMENT AND IMPLEMENTATION OF THE TRAFFIC CONTROL PLANS SHALL INCLUDE, BUT NOT NECESSARILY BE LIMITED TO, TRAFFIC CONTROLS, SIGNS, AND FLAGGERS CONFORMING WITH THE CURRENT CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- CLEANING, TRASH, DEBRIS, AND STORAGE
  - THE SITE SHALL BE KEPT FREE OF TRASH AT ALL TIMES. ALL ITEMS USED FOR CONSTRUCTION PURPOSES SHALL BE REMOVED FROM THE SITE AT THE COMPLETION OF CONSTRUCTION.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATE OFF-SITE DISPOSAL OF ALL REMOVED OR DEMOLISHED CONSTRUCTION WASTE, INCLUDING BUT NOT LIMITED TO ALL NON-REUSED BITUMINOUS PAVEMENT, CONCRETE, REINFORCEMENT, AND SPOILS AS REQUIRED BY THE ENGINEER AND PER THE SPECIFICATIONS.
  - STORAGE OF CONSTRUCTION MATERIAL AND EQUIPMENT ON STREETS WILL NOT BE PERMITTED.
  - A CONTAINED AND COVERED AREA ON-SITE SHALL BE USED FOR STORAGE OF CEMENT BAGS, PAINTS, FLAMMABLES, OILS, FERTILIZERS, PESTICIDES, OR ANY OTHER MATERIALS THAT HAVE POTENTIAL FOR BEING DISCHARGED TO THE MAD RIVER BY WIND OR STORM WATER RUNOFF IN THE EVENT OF A MATERIAL SPILL.
  - ALL TEMPORARY ON-SITE CONSTRUCTION PILES SHALL BE SECURELY COVERED WITH A TARP OR OTHER DEVICE TO CONTAIN DEBRIS.
- UTILITY LOCATION
  - LOCATIONS OF ALL EXISTING UTILITIES MAY NOT BE SHOWN OR ARE SHOWN AS APPROXIMATE ONLY. THE CONTRACTOR SHALL POTHOLE TO LOCATE AND USE EXTREME CAUTION WHEN WORKING NEAR THE UTILITIES. THE CONTRACTOR SHALL PROVIDE SUPPORT FOR ALL CROSSING UTILITIES EXPOSED DURING CONSTRUCTION. ANY AND ALL DAMAGE SHALL BE IMMEDIATELY REPAIRED AND/OR RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
  - CONTRACTOR TO FIELD LOCATE ALL OVERHEAD UTILITIES PRIOR TO START OF CONSTRUCTION.
  - CONTRACTOR SHALL POTHOLE AND VERIFY THE EXACT LOCATION, SIZE, TYPE, MATERIAL, AND ELEVATION OF ALL PERTINENT UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. THEIR VERIFICATION SHALL BE COORDINATED BY THE CONTRACTOR WITH THE APPROPRIATE UTILITY ENTITY. THE CONTRACTOR SHALL COOPERATE WITH UTILITY OWNERS TO EXPEDITE THE RELOCATION OR ADJUSTMENT OF THEIR UTILITIES TO MINIMIZE INTERRUPTION OF SERVICE AND DUPLICATION OF WORK. THE CONTRACTOR SHALL EXERCISE CARE WHEN WORKING NEAR EXISTING UTILITIES AND SHALL BE RESPONSIBLE FOR ALL DAMAGE, BREAKS, AND/OR LEAKS. IF DAMAGE OCCURS, THE CONTRACTOR SHALL REPAIR UTILITY AT NO ADDITIONAL EXPENSE.
  - CONTRACTOR SHALL CONFIRM THAT UNDERGROUND SERVICE ALERT (USA) HAS BEEN NOTIFIED AND UTILITIES ARE MARKED OUT IN ACCORDANCE WITH STATE LAW AND THE CONTRACT DOCUMENTS PRIOR TO ANY EXCAVATION.
  - CONTRACTOR SHALL NOT BEGIN EXCAVATION UNTIL ALL EXISTING UTILITIES HAVE BEEN MARKED IN THE FIELD BY THE UTILITY OWNER RESPONSIBLE FOR THAT PARTICULAR UTILITY. THE CONTRACTOR SHALL NOTIFY EACH UTILITY OWNER AT LEAST 48 HOURS BEFORE STARTING WORK.
- HYDROFRACTURE CONTINGENCY PLAN AND PERMITTING
  - COMPLIANCE WITH SURFACE SPILL AND HYDROFRACTURE CONTINGENCY PLAN
    - THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OUTLINED IN THE HORIZONTAL DIRECTIONAL DRILLING SURFACE SPILL AND HYDROFRACTURE CONTINGENCY PLAN, HUMBOLDT BAY MUNICIPAL WATER DISTRICT B/LFG CSD WATER TRANSMISSION PIPELINE REPLACEMENT, MAD RIVER HDD CROSSING, DATED DECEMBER 20, 2017.
  - COMPLIANCE WITH CITY, COUNTY, AND STATE PERMITS
    - CONTRACTOR IS RESPONSIBLE FOR THE ACQUISITION OF AND COMPLIANCE WITH ANY RELEVANT CITY, COUNTY, OR STATE PERMITS NEEDED FOR THE PROPOSED CONSTRUCTION ACTIVITIES INCLUDING, BUT NOT LIMITED TO, TRAFFIC AND ENCROACHMENT PERMITS RELATED TO THE DELIVERY AND HAULING OF CONSTRUCTION EQUIPMENT AND MATERIALS, AND TRAFFIC CONTROL MEASURES (TRAFFIC SAFETY PLAN). THE CONTRACTOR MUST FOLLOW ALL PERTINENT REQUIREMENTS FOR HAULING LARGE VEHICLES OR EQUIPMENT TO THE PROJECT SITE. IF A COUNTY, STATE, OR CITY ROAD IS USED FOR HEAVY EQUIPMENT TRANSPORT OR WIDE LOADS, PERTINENT CLEARANCES MUST BE OBTAINED.
    - DISTRICT HAS OBTAINED CONFIRMATION FROM THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, CALIFORNIA STATE WATER QUALITY CONTROL BOARD, AND U.S. ARMY CORPS OF ENGINEERS THAT PERMITS FROM THEIR AGENCIES ARE NOT REQUIRED FOR THIS PROJECT.
    - DISTRICT SHALL PERFORM BIRD SURVEY PRIOR TO THE START OF THE WORK AND SHALL FLAG ANY NESTS LOCATED ALONG WITH ANY REQ. EXCLUSION ZONES. CONTRACTOR SHALL MAINTAIN FLAGGING AS NECESSARY AND KEEP ALL EQUIPMENT AND PERSONNEL OUTSIDE EXCLUSION ZONES.

# DUST AND EXHAUST CONTROL NOTES

- TO ADDRESS THE POTENTIAL FOR DUST AND EXHAUST GENERATION, THE CONTRACTOR IS REQUIRED TO IMPLEMENT THE FOLLOWING BMPs, WHICH APPLY TO GROUND DISTURBING MAINTENANCE ACTIVITIES AND EQUIPMENT EXHAUST.
- ALL EXPOSED SURFACES (E.G., PARKING AREAS, STAGING AREAS, SOIL PILES, GRADED AREAS, AND UNPAVED ACCESS ROADS) SHALL BE WATERED AS NECESSARY DURING DUSTY CONDITIONS.
  - IF LOOSE MATERIAL BECOMES AIRBORNE DURING TRANSPORTATION, ALL HAUL TRUCKS TRANSPORTING SOIL, SAND, OR OTHER LOOSE MATERIAL OFF-SITE SHALL BE COVERED.
  - DISTURBED ROADWAYS SHALL BE RE-PAVED AS SOON AS POSSIBLE FOLLOWING WORK IN THE AREA, AS APPROPRIATE.
  - ALL VISIBLE MUD OR DIRT TRACKED-OUT ONTO ADJACENT PUBLIC ROADS SHALL BE REMOVED USING WET POWER VACUUM STREET SWEEPERS, DAILY OR MORE FREQUENTLY AS NECESSARY. THE USE OF DRY POWER SWEEPING IS PROHIBITED.
  - CONTRACTOR SHALL CONDUCT ALL EARTH DISTURBING OPERATIONS IN SUCH A MANNER AS TO PRECLUDE WIND BLOWN DIRT AND DUST AND RELATED DAMAGE TO NEIGHBORING PROPERTIES. SUFFICIENT WATERING TO CONTROL DUST IS REQUIRED AT ALL TIMES. CONTRACTOR SHALL ASSUME LIABILITY FOR CLAIMS RELATED TO WIND BLOWN MATERIAL. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SEDIMENT AND EROSION CONTROL. IF THE DUST CONTROL IS INADEQUATE AS DETERMINED BY THE ENGINEER, THE CONSTRUCTION WORK SHALL BE TERMINATED UNTIL CORRECTIVE MEASURES ARE TAKEN.
  - IDLING TIMES SHALL BE MINIMIZED BY SHUTTING EQUIPMENT OFF WHEN NOT IN USE.
  - ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

# WATER SYSTEM NOTES

- ALL MATERIALS TO BE IN CONTACT WITH POTABLE WATER SHALL BE NSF-61 APPROVED.
- AT WATER LINE CROSSINGS WITH UTILITIES, THE MINIMUM VERTICAL CLEARANCE SHALL BE 12 INCHES.
- EXCAVATIONS MUST BE KEPT DEWATERED AT ALL TIMES SO AS NOT TO ALLOW CONTAMINATED WATER TO ENTER WATER MAINS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION, DIAMETER, AND TYPE OF EXISTING PIPE SO THAT THE NEW PIPE CAN BE PROPERLY ALIGNED WITH AND FITTED TO THE EXISTING PIPE. THE CONTRACTOR SHALL VERIFY THE TYPE, SIZE AND CONDITION OF EXISTING PIPE PRIOR TO INSTALLING NEW PIPE CONNECTIONS. THE PIPE SHALL BE INSPECTED FOR CORROSION OR OTHER CONDITION THAT WOULD PREVENT AN ADEQUATE CONNECTION
- DEFLECTION OF PIPE AT JOINTS SHALL COMPLY WITH MANUFACTURER'S SPECIFICATIONS.
- BENDS MAY NOT BE USED EXCEPT WHEN SHOWN ON THE PLANS OR PERMITTED BY THE ENGINEER.
- THRUST RESTRAINT SHALL BE PROVIDED AT TEES AND BENDS BY MECHANICAL METHODS UNLESS NOTED OTHERWISE. ON ALL TIE INS AND CONNECTIONS, THERE SHALL BE NO UNRESTRAINED JOINTS WITHIN TEN (10) FEET OF THE CONNECTION OR TIE IN UNLESS NOTED OTHERWISE.
- ALL BOLTED FITTINGS AND VALVES WHICH ARE BURIED SHALL BE WRAPPED WITH A MINIMUM 16 MILS POLYETHYLENE.
- ALL FITTINGS, VALVES, AND MATERIALS TO ACCOMPLISH TIE INS SHALL BE ON THE JOB SITE AND CHECKED FOR PROPER FIT PRIOR TO ANY SHUTDOWN OF EXISTING WATER MAINS. ALL TIE INS SHALL BE MECHANICALLY RESTRAINED.
- NOTE THAT ALL FITTINGS, BENDS, ELBOWS, ETC. SHOWN ON THESE PLANS ARE PROVIDED AS A GUIDE TO THE CONTRACTOR. CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING ALL FITTINGS REQUIRED TO MAKE CONNECTIONS TO EXISTING SERVICES IN CONFORMANCE WITH THE INTENT SHOWN ON THE PLANS.
- TIE-INS TO EXISTING MAINS SHALL BE MADE AFTER CHLORINATION, BACTERIAL, AND PRESSURE TESTS ARE COMPLETED AND APPROVED BY ENGINEER. TIE-INS AND SYSTEM INTERRUPTIONS SHALL BE COORDINATED WITH THE DISTRICT AND CUSTOMERS, AND A MINIMUM OF 14 CALENDAR DAYS NOTICE SHALL BE PROVIDED BY THE CONTRACTOR TO THE ENGINEER PRIOR TO ANY INTERRUPTION IN SERVICE. EXCAVATIONS BY THE CONTRACTOR FOR TIE INS MUST BE APPROVED THE DAY BEFORE WORK IS TO COMMENCE AT EACH TIE IN.
- EXISTING PIPE SHALL NOT BE CUT AND ABANDONED UNTIL THE NEW PIPE IS INSTALLED, TESTED, AND APPROVED BY THE ENGINEER.
- MISALIGNMENT SHALL BE CORRECTED BY THE REALIGNMENT OF THE NEW PIPE TO BE CONNECTED. CONTRACTOR SHALL PROVIDE ALL FITTINGS AND PIPE MATERIALS NEEDED TO CONNECT THE NEW PIPE TO THE EXISTING PIPE.
- IF THE TOTAL DEFLECTION OF ALL JOINTS IN THE TIE IN AREA IS 11.25 DEGREES OR GREATER, ADEQUATE RESTRAINT MUST BE PROVIDED.
- PIPES TO BE DEMOLISHED SHALL BE REMOVED EITHER BY SAW CUTTING, REMOVING A COMPLETE PIPE SECTION TO AN EXISTING JOINT, OR OTHER ADEQUATE MEANS WHICH RESULTS IN A CLEAN JOINT FOR CAPPING AND CONNECTING TO A NEW PIPE.
- WATER FROM TESTING WATERLINES IS TO BE FLUSHED FROM THE PIPE, DECHLORINATED, AND DISPOSED OF PER THE SPECIFICATIONS. FLUSHING SHALL NOT BEGIN UNTIL AN APPROVED DECHLORINATION AND DISPOSAL MECHANISM IS IN PLACE AND FUNCTIONING.

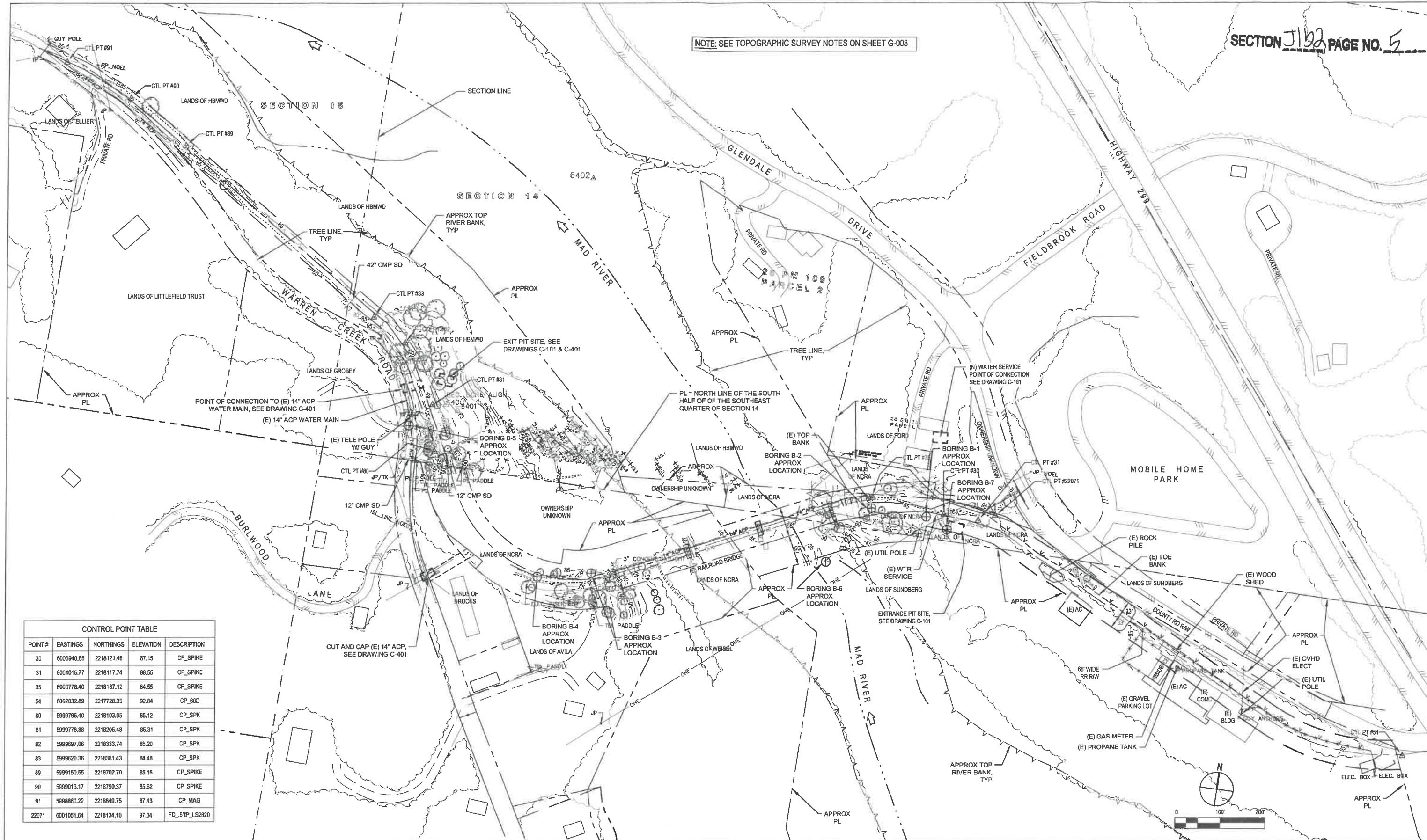
# TOPOGRAPHIC SURVEY NOTES PAGE NO. 4

- THE PURPOSE OF THIS SURVEY DATA PRESENTED HEREIN IS TO SUPPLEMENT A PRIOR SURVEY PERFORMED IN 2014 BY POINTS WEST SURVEYING FOR THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT (HBMWD) PROJECT TO REPLACE THE WA1 LINE THAT NOW EXISTS ON THE AMRR RAILROAD BRIDGE. THIS ADDITIONAL WORK IS A TOPOGRAPHIC SURVEY (ONLY); ADJACENT PROPERTY LINES ARE APPROXIMATE ONLY BASED ON ASSESSOR PARCEL MAPS. SURVEY WAS PERFORMED IN MAY AND JUNE 2017, AND SUPPLEMENTED FURTHER BY ADDITIONAL TOPOGRAPHIC SURVEY WORK IN DECEMBER 2017.
- SURVEY UPDATE INCLUDES AREA ON WESTERLY SIDE OF RIVER ON HBMWD PROPERTY IDENTIFIED AS AREA FOR RECEIVING PIT OF HORIZONTAL DIRECTIONAL DRILL (HDD), A STRIP OF LAND 100 FEET LONG ON THE OLD RAILROAD BED PROPOSED FC ACCESS, AND A STRIP 10-15' WIDE ALONG THE PROPOSED PIPE ALIGNMENT. TREES 12 INCH AND BIGGER WERE LOCATED EXCEPT ON THE STRIP CROSSING RIVER BED. ON THE EAST SIDE OF THE RIVER, THE TOPOGRAPHY WAS UPDATED TO REFLECT THE GROUND AS FILLED NEAR THE BEGINNING OF THE PROPOSED BORE AND A STRIP OF LAND ON THE SUNDBERG PARCEL BEING CONSIDERED AS A 'LADOWN' AREA. NO UNDERGROUND UTILITIES WERE LOCATED IN 'LADOWN' AREA. IN DECEMBER 2017, ADDITIONAL AREAS ON BOTH SIDES OF RIVER WERE SURVEYED. THE AREA ADJACENT TO LANDS OF FORT INCLUDES AN AREA FOR WHICH NO UNDERGROUND UTILITY MAPPING WAS AVAILABLE. CURRENT OWNER (RELATED TO ORIGINAL UTILITY INSTALLER, NOW DECEASED) HAS NO KNOWLEDGE OF LOCATION OF EXISTING UNDERGROUND UTILITIES ORIGINAL TOPOGRAPHIC SURVEY DATA FROM 2014 WAS NOT VERIFIED/MODIFIED EXCEPT AS NOTED ABOVE.
- THE FOLLOWING SURVEY NOTES 1 THROUGH 9 ARE TAKEN FROM 2014 SURVEY; SURVEY CONTROL FOR THIS WORK IS BASED ON ORIGINAL WORK - SEE NOTE 2 BELOW.
  - THE PURPOSE OF THIS SURVEY IS TO SHOW EXISTING TOPOGRAPHY, PROPERTY LINES AND/OR EASEMENTS IN THE VICINITY OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT (HBMWD) WATER LINE WHICH CROSSES THE MAD RIVER OVER AN EXISTING AMRR RAILROAD BRIDGE IN GLENDALE, CALIFORNIA. SURVEY WAS PERFORMED BETWEEN MAY AND AUGUST 2017. UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON TIES MADE IN THE FIELD TO VISIBLE UTILITY STRUCTURES AND PLANS PROVIDED BY PG&E AND HBMWD. AN UNDERGROUND CROSSING OF A SUDDENLINK CABLE LINE ALONG BRIDGE WAS LOCATED- IT RUNS UNDERGROUND ON WEST SIDE FROM A POLE DROP, THEN ON A CONDUIT ACROSS BRIDGE WHERE IT TH GOES OVERHEAD ON EAST SIDE. HBMWD CONNECTIONS TO LANDS OF SUNDBERG WERE LOCATED AS WELL AS WATER METERS ON EAST SIDE OF BRIDGE- NO PLANS SHOWING SIZE OR ROUTING WERE AVAILABLE ON THOSE CONNECTIONS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR THAT THEY ARE IN THE EXACT LOCATION SHOWN. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
  - COORDINATES FOR THIS SURVEY ARE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) BASED ON A GPS SURVEY. THE MAPPING ANGLE IS 1 DEGREE 19 MINUTES 43 SECONDS- ROTATE BEARINGS COUNTERCLOCKWISE BY THIS ANGLE TO OBTAIN 'TRUE' OR GEODETIC BEARINGS. GRID DISTANCES SHOWN SHOULD BE DIVIDED BY THE COMBINED SCALE FACTOR OF 0.99999675 TO OBTAIN GROUND DISTANCES. BOTH MAPPING ANGLE AND COMBINED SCALE FACTOR ARE TAKEN AT CONTRC POINT NUMBER 1. HORIZONTAL CONTROL IS BASED ON NGS PID 'AC8254', AN NGS HPGN NETWORK POINT IN ARCATO (2010.0 EPOCH). VERTICAL CONTROL IS BASED ON NGS PID 'LV0608', NAVD 83 DATUM.
  - ORTHOPHOTO IS FROM NATION AGRICULTURAL IMAGERY PROGRAM (NAIP), DATED 2016, AND IS INTENDED FOR GENERAL ORIENTATION PURPOSES ONLY AND MAY NOT REFLECT CURRENT SITE CONDITIONS INCLUDING LOCATION OF RIVER, GRAVE ETC.
  - ONLY TREES 12 INCH AND LARGER WERE LOCATED DURING THE COURSE OF THIS SURVEY. NUMEROUS OTHER TREES EXIST AND ARE NOT SHOWN.

		Bar is one inch on original size sheet 						Drawn S. DAVIS Designer N. STEVENS		Client HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
								Drafting Check P. KASPARI Design Check P. KASPARI		Project MAD RIVER PIPELINE CROSSING		
								Project Manager P. KASPARI Date 1/12/2018		Title GENERAL NOTES		
A ISSUE FOR BID		NS PK 2/9/18						This document shall not be used for construction unless signed and sealed for construction.		Project No. 8411162		
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NOTE: SEE TOPOGRAPHIC SURVEY NOTES ON SHEET G-003



CONTROL POINT TABLE				
POINT #	EASTINGS	NORTHINGS	ELEVATION	DESCRIPTION
30	6000940.86	2218121.46	87.15	CP_SPIKE
31	6001015.77	2218117.74	88.55	CP_SPIKE
35	6000778.40	2218137.12	84.55	CP_SPIKE
54	6002032.89	2217728.35	92.84	CP_60D
80	5999796.40	2218103.05	85.12	CP_SPK
81	5999776.88	2218205.48	85.31	CP_SPK
82	5999597.06	2218333.74	85.20	CP_SPK
83	5999620.36	2218381.43	84.48	CP_SPK
89	5999150.55	2218702.70	85.15	CP_SPIKE
90	5999013.17	2218790.37	85.62	CP_SPIKE
91	5988860.22	2218849.75	87.43	CP_MAG
22071	6001051.64	2218134.10	97.34	FD_5"IP_LS2820

	Bar is one inch on original size sheet 	GHD Inc. 718 Third Street Eureka California 95501 USA T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com	Drawn S. DAVIS Designer N. STEVENS Client <b>HUMBOLDT BAY MUNICIPAL WATER DISTRICT</b>
			Drafting Check P. KASPARI Design Check P. KASPARI Project Manager P. KASPARI Date 1/12/2018 Title <b>MAD RIVER PIPELINE CROSSING</b> Existing Conditions & Survey Control Project No. 8411162
Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. ©2018 GHD			Original Size ANSI D Sheet No. <b>G-004</b> Scale AS NOTED Sheet 4 of 1



### UNIFIED SOIL CLASSIFICATION (ASTM D 2487-06)

MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES		GRAPHIC SYMBOL	SOIL GROUP NAME
GRAVELS	Clean	Cu $\geq 4$ AND $1 < Cc \leq 3$		GW WELL-GRADED GRAVEL
	>60% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	Cu $< 4$ AND/OR $1 > Cc > 3$		GP POORLY-GRADED GRAVEL
SANDS	Clean	Cu $\geq 6$ AND $1 < Cc \leq 3$		SW WELL-GRADED SAND
	>60% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	Cu $< 6$ AND/OR $1 > Cc > 3$		SP POORLY-GRADED SAND
SILTS AND CLAYS	Inorganic	PI $\leq 7$ AND PLOTS ON OR ABOVE "A" LINE		CL LEAN CLAY
	Organic	PI $\leq 4$ AND PLOTS BELOW "A" LINE		ML SILT
LIQUID LIMIT < 50	Inorganic	PI PLOTS ON OR ABOVE "A" LINE		CH FAT CLAY
	Organic	PI PLOTS BELOW "A" LINE		MH ELASTIC SILT
LIQUID LIMIT > 50	Inorganic	PI PLOTS ON OR ABOVE "A" LINE		OH ORGANIC CLAY OR SILT
	Organic	PI PLOTS BELOW "A" LINE		PT PEAT

**NOTE:** Cu = D<sub>60</sub>/D<sub>10</sub>; Cc = (D<sub>30</sub>)<sup>2</sup>/D<sub>10</sub>D<sub>60</sub>

**BLOW COUNT**  
The number of blows of a 140-lb. hammer falling 30-inches required to drive the sampler the last 12-inches of an 18-inch drive. The notation S00.4 indicates 4-inches of penetration achieved in 50 blows.

**PLASTICITY CHART**  
For classification of fine-grained soils and silts. Plot Liquid Limit (LL) on the x-axis and Plasticity Index (PI) on the y-axis. The chart shows regions for CL, OL, CH, OH, MH, and ML.

**GROUND WATER LEVELS**  

- Auger or backhoe cuttings
- Shelby tube
- Standard Penetration (SPT)
- Bulk Sample
- Modified California 2"
- California Standard 2.5"
- Rock core

**ADDITIONAL TESTS**  

- C - Consolidation
- CP - Compaction Curve
- CR - Compressibility Testing
- CU - Consolidated Undrained Triaxial
- DS - Direct Shear
- EI - Expansion Index
- P - Permeability
- PA - Partial Size Analysis
- PI - Plasticity Index
- PP - Pocket Penetrometer
- R - R-Value
- SE - Sand Equivalent
- SG - Specific Gravity
- SL - Shrinkage Limit
- SW - Swell Potential
- TV - Pocket Torvane Shear Test
- UC - Unconfined Compression
- UU - Unconsolidated Undrained Triaxial

### CALTRANS SOIL & ROCK LOGGING MANUAL (2010)

LEGEND OF ROCK MATERIALS		PERCENT CORE RECOVERY (RCR) & ROCK QUALITY DESIGNATION (RQD)	
	SEDIMENTARY ROCK	RCR = $\frac{L}{T} \times 100\%$	RQD = $\frac{L}{T} \times 100\%$
	METAMORPHIC ROCK		

**WEATHERING DESCRIPTORS FOR INTACT ROCK**

DESCRIPTION	CHEMICAL WEATHERING-DISCOLORATION AND/OR OXIDATION	GENERAL CHARACTERISTICS
FRESH	NO DISCOLORATION, NOT OXIDIZED.	HAMMER RINGS WHEN CRYSTALLINE ROCKS ARE STRUCK.
SLIGHTLY WEATHERED	DISCOLORATION OR OXIDATION IS LIMITED TO SURFACE OR, ON SHORT DISTANCE FROM FRACTURES, SOME FELDSPAR CRYSTALS ARE DULL.	HAMMER RINGS WHEN CRYSTALLINE ROCKS ARE STRUCK. BODY OF ROCK NOT WEATHERED.
MODERATELY WEATHERED	DISCOLORATION OR OXIDATION EXTENDS FROM FRACTURES USUALLY THROUGHOUT. FELDSPATHIC MINERALS ARE "MUSTY," FELDSPAR CRYSTALS ARE "CLOUDY."	HAMMER DOES NOT RING WHEN ROCK IS STRUCK. BODY OF ROCK IS SLIGHTLY WEATHERED.
INTENSIVELY WEATHERED	DISCOLORATION OR OXIDATION THROUGHOUT. ALL FELSPARS AND Fe-Mg MINERALS ARE ALTERED TO CLAY TO SOME EXTENT. ON CHEMICAL ALTERATION PRODUCES Fe-SiTi DISAGGREGATION, SEE GRAIN BOUNDARY CONDITIONS.	DIAL SOUND WHEN STRUCK WITH HAMMER, USUALLY CAN BE BROKEN WITH MODERATE TO HEAVY MANUAL PRESSURE OR BY LIGHT HAMMER BLOW WITHOUT BURSTING TO FLAKES OF WEAKNESS SUCH AS IMPROPER OR HORIZONTAL FRACTURES. ON VERTICAL, ROCK IS SHORTELY WEATHERED.
DECOMPOSED	DISCOLORATION OR OXIDATION THROUGHOUT, BUT RESISTANT MINERALS SUCH AS QUARTZ MAY BE UNALTERED. ALL FELSPAR AND Fe-Mg MINERALS ARE COMPLETELY ALTERED TO CLAY.	CAN BE GRANULATED BY HAND, RESISTANT MINERALS SUCH AS QUARTZ MAY BE PRESENT AS "STRINGS" OR "DUMPS."

### LOG OF BORING B1

PROJECT NO: 15-245.1  
 PROJECT: HBWMD Pipeline Crossing  
 LOCATION: East Side of Mad River  
 CLIENT: GHD  
 LOGGED BY: NEM  
 DEPTH OF BORING: 17.5 (ft)

BEGIN DATE: 10/20/2015  
 COMPLETION DATE: 10/20/2015  
 SURFACE ELEVATION: 60.00 (ft)  
 WATER CONDITION: Dry During Drilling  
 READING TAKEN: Hammer Efficiency: 75.2%

DRILLING CONTRACTOR: Geo-Ex Subsurface  
 DRILLING METHOD: Hollow-Stem Auger  
 DRILL RIG: CME 450  
 HAMMER TYPE: Autohammer (140lbs, 30" drop)  
 SAMPLER TYPE & SIZE: SPT/CalMod/Bulk  
 BOREHOLE DIAMETER: 4"  
 BACKFILL METHOD: Native Soil Backfill

ELEVATION (ft)	DEPTH (ft)	FIELD SAMPLE NO.	LABORATORY SAMPLE NO.	DESCRIPTION	REMARKS
61.0	1.0	1	1	Lean CLAY (CL); 5YR 4/6 (reddish brown), dry, moderately stiff, 10% sand.	Excluded from soil test log.
60.0	2.0	2	2	CLAYEY SAND WITH GRAVEL (SC); 5YR 4/4 (brown), dry, stiff, 20-30% fine to medium sand (low to medium), occasional coarse gravel to boulders; gravels are basalt, quartzite, quartz, diabase.	19 29 21 131.1 PI
59.0	3.0	3	3	Lean CLAY (CL); 10YR 4/2 (dark grayish brown), dry to moist, stiff, 10% sand.	16 33 21 PI
58.0	4.0	4	4	METAMORPHIC ROCK, Meta-Argillite, 10YR 5/1 (very dark gray), dry to moist, moderately to slightly weathered, moderately hard to hard.	Bedrock, rock appears to be massive but fractures and stress easily during drilling.
57.0	5.0	5	5	METAMORPHIC ROCK, Meta-Argillite, Moderately soft.	Other zone
56.0	6.0	6	6	METAMORPHIC ROCK, Meta-Argillite, Hard to bedrock.	Bottom of stratum at 17.5 ft SPT

### LOG OF BORING B2

PROJECT NO: 15-245.1  
 PROJECT: HBWMD Pipeline Crossing  
 LOCATION: East Side of Mad River  
 CLIENT: GHD  
 LOGGED BY: NEM  
 DEPTH OF BORING: 24 (ft)

BEGIN DATE: 10/20/2015  
 COMPLETION DATE: 10/20/2015  
 SURFACE ELEVATION: 62.44 (ft)  
 WATER CONDITION: Dry During Drilling  
 READING TAKEN: Hammer Efficiency: 73.2%

DRILLING CONTRACTOR: Geo-Ex Subsurface  
 DRILLING METHOD: Hollow-Stem Auger  
 DRILL RIG: CME 450  
 HAMMER TYPE: Autohammer (140lbs, 30" drop)  
 SAMPLER TYPE & SIZE: SPT/CalMod/Bulk  
 BOREHOLE DIAMETER: 4"  
 BACKFILL METHOD: Native Soil Backfill

ELEVATION (ft)	DEPTH (ft)	FIELD SAMPLE NO.	LABORATORY SAMPLE NO.	DESCRIPTION	REMARKS
62.4	0.0	1	1	Lean CLAY (CL); 7.5YR 4/6 (brown), dry, moderately stiff, 10% sand.	Excluded from soil test log.
61.4	1.0	2	2	SANDY lean CLAY (CL); 7.5YR 4/4 (brown), dry, stiff, 10% sand, 10% fine to medium sand, 10% fine to coarse sand.	53
60.4	2.0	3	3	GRAVELLY lean CLAY WITH SAND (CL); 7.5YR 4/4 (brown), dry, stiff, up to 60% fine to coarse sand rounded to subangular gravel, 20% fine to medium sand, 10% fine to coarse sand.	19 32 107.4 PI
59.4	3.0	4	4	Lean CLAY (CL); 10YR 4/2 (dark grayish brown), dry to moist, 10% sand.	
58.4	4.0	5	5	Lean CLAY (CL); 10YR 4/2 (dark grayish brown) with 2.0YR 2/2 (pinkish brown) staining, 10YR 5/1 (gray) with some 2.5YR 3/3 (dark reddish brown) and minor decomposed to 2.5YR 2/2 (light olive brown), moderately to slightly weathered, moderately soft to soft.	Dense below 15', difficult to-site residual soil
57.4	5.0	6	6	METAMORPHIC ROCK, Meta-Argillite, some 2.5YR 3/3 (dark reddish brown) staining, 10YR 5/1 (gray) with some 2.5YR 3/3 (dark reddish brown) and minor decomposed to 2.5YR 2/2 (light olive brown), moderately to slightly weathered, moderately soft to soft.	Bedrock
56.4	6.0	7	7	METAMORPHIC ROCK, Meta-Argillite, 10YR 5/1 (gray), fresh, moderately hard to hard.	Bottom of stratum at 24 ft SPT

### LOG OF BORING B3

PROJECT NO: 15-245.1  
 PROJECT: HBWMD Pipeline Crossing  
 LOCATION: West Side of Mad River  
 CLIENT: GHD  
 LOGGED BY: NEM  
 DEPTH OF BORING: 35 (ft)

BEGIN DATE: 10/18/2015  
 COMPLETION DATE: 10/18/2015  
 SURFACE ELEVATION: 63.47 (ft)  
 WATER CONDITION: Dry During Drilling  
 READING TAKEN: Hammer Efficiency: 75.2%

DRILLING CONTRACTOR: Geo-Ex Subsurface  
 DRILLING METHOD: Hollow-Stem Auger  
 DRILL RIG: CME 450  
 HAMMER TYPE: Autohammer (140lbs, 30" drop)  
 SAMPLER TYPE & SIZE: SPT/CalMod/Bulk  
 BOREHOLE DIAMETER: 4"  
 BACKFILL METHOD: Tremie Grouted

ELEVATION (ft)	DEPTH (ft)	FIELD SAMPLE NO.	LABORATORY SAMPLE NO.	DESCRIPTION	REMARKS
63.5	0.0	1	1	Lean CLAY (CL); 5YR 4/4 (reddish brown), dry, moderately stiff, 10% sand.	Excluded from soil test log.
62.5	1.0	2	2	SANDY lean CLAY (CL); 10YR 4/6 (dark yellowish brown), dry, stiff, 10% fine to medium sand, 30% fine sand, minor woody organic.	
61.5	2.0	3	3	Lean CLAY (CL); 10YR 4/6 (dark yellowish brown), dry, stiff, 10% fine sand, some 3.5YR 2/2 (dark brown) staining in fractures, moderately weathered, moderately hard.	Microcrystalline quartz cobbles, hard, fresh, 8" SPT 62 (right grayish green)
60.5	3.0	4	4	GRAVELLY lean CLAY WITH SAND (CL); 10YR 4/3 (brown), dry to moist, very stiff, 10-20% fine to medium angular gravel (reddish rock, 10YR 5/2 grayish brown), dense.	In-situ residual soil
59.5	4.0	5	5	METAMORPHIC ROCK, Meta-Argillite, 7.5YR 4/3 (brown) with 1.5YR 2/2 (very dark brown) staining in fractures, moderately weathered, moderately hard.	Bedrock

**NOTE:** SEE SHEET G-004 FOR A PLAN VIEW OF APPROXIMATE BORING LOCATIONS AND SHEET C-101 FOR AN INTERPRETATION OF THE GEOTECHNICAL PROFILE ALONG THE HDD ALIGNMENT. REFERENCE THE GEOTECHNICAL REPORT, "HUMBOLDT BAY MUNICIPAL WATER DISTRICT, WATER TRANSMISSION PIPELINE REPLACEMENT UNDER MAD RIVER, BLUE LAKE AND FIELDBROOK-GLENDALE COMMUNITY SERVICES DISTRICT." CRAWFORD & ASSOCIATES, DECEMBER 14, 2017, FOR ADDITIONAL INFORMATION. THE GEOTECHNICAL REPORT IS INCLUDED AS AN ATTACHMENT TO THE TECHNICAL SPECIFICATIONS.

### LOG OF BORING B4

PROJECT NO: 15-245.1  
 PROJECT: HBWMD Pipeline Crossing  
 LOCATION: West Side of Mad River  
 CLIENT: GHD  
 LOGGED BY: NEM  
 DEPTH OF BORING: 15.5 (ft)

BEGIN DATE: 10/18/2015  
 COMPLETION DATE: 10/18/2015  
 SURFACE ELEVATION: 65.22 (ft)  
 WATER CONDITION: Dry During Drilling  
 READING TAKEN: Hammer Efficiency: 75.2%

DRILLING CONTRACTOR: Geo-Ex Subsurface  
 DRILLING METHOD: Hollow-Stem Auger  
 DRILL RIG: CME 450  
 HAMMER TYPE: Autohammer (140lbs, 30" drop)  
 SAMPLER TYPE & SIZE: SPT/CalMod/Bulk  
 BOREHOLE DIAMETER: 4"  
 BACKFILL METHOD: Native Soil Backfill

ELEVATION (ft)	DEPTH (ft)	FIELD SAMPLE NO.	LABORATORY SAMPLE NO.	DESCRIPTION	REMARKS
65.2	0.0	1	1	GRAVELLY lean CLAY (CL); 5YR 4/4 (reddish brown), dry, moderately stiff, 20% fine to medium gravel, 10% sand.	Excluded from soil test log to 3.2 feet, gravel to test log
64.2	1.0	2	2	Lean CLAY (CL); 5YR 4/4 (reddish brown), dry, stiff, 10% sand.	
63.2	2.0	3	3	CLAYEY SAND WITH GRAVEL (SC); 10YR 4/6 (dark reddish brown), dry, stiff, 10% sand.	In-situ residual soil
62.2	3.0	4	4	Lean CLAY WITH SAND (CL); 10YR 4/1 (dark gray), dry to moist, stiff.	Same color as bedrock but still residual soil
61.2	4.0	5	5	Lean CLAY WITH SAND (CL); 10YR 3/4 (gray), dry to moist, stiff.	Bedrock
60.2	5.0	6	6	METAMORPHIC ROCK, Meta-Argillite, 10YR 4/1 (dark gray), becoming darker with depth, starts as moderately hard and slightly weathered, rock to fresh and hard at 15.5 feet.	Bottom of borehole at 15.5 ft SPT

### LOG OF BORING B5

PROJECT NO: 15-245.2  
 PROJECT: HBWMD Phase 2  
 LOCATION: 64 ft Sta. 9+00  
 CLIENT: GHD  
 LOGGED BY: NEM  
 DEPTH OF BORING: 48 (ft)

BEGIN DATE: 9/18/2017  
 COMPLETION DATE: 9/18/2017  
 SURFACE ELEVATION: 104 (ft)  
 WATER CONDITION: NA (ft)  
 READING TAKEN: 9/18/2017  
 HAMMER EFFICIENCY: NA

DRILLING CONTRACTOR: Geo-Ex Subsurface  
 DRILLING METHOD: Rotary Wire-Line  
 DRILL RIG: CME 45  
 HAMMER TYPE: NA  
 SAMPLER TYPE & SIZE: HQ Core  
 BOREHOLE DIAMETER: 4 in  
 BACKFILL METHOD: Generative backfill

ELEVATION (ft)	DEPTH (ft)	FIELD SAMPLE NO.	LABORATORY SAMPLE NO.	DESCRIPTION	REMARKS
104.0	0.0	1	1	SILT SAND WITH GRAVEL (SM); 10YR 6/2 (light brown), approximately 40% fine plasticity sand, 30% gravel to subangular sand, 30% fine to medium sand.	Auger used to start log
103.0	1.0	2	2	SANDY lean CLAY (CL); 10YR 4/6 (dark yellowish brown), 80% medium plasticity fine to very clayey and low to medium toughness, 30% poorly graded sand, 10% subangular fine gravel.	
102.0	2.0	3	3	GRAVELLY lean CLAY (CL); 10YR 4/6 (dark yellowish brown), 70% medium plasticity fine to 10% sand, 20% fine to medium sand with occasional pebbles to coarse gravel.	
101.0	3.0	4	4	Lean CLAY (CL); in-situ residual soil and bedrock.	
100.0	4.0	5	5	METAMORPHIC ROCK, Meta-Argillite, weathering dark, light yellowish brown, intensely weathered, soft to moderately soft, increasing hardness with depth.	Excluded from soil test log; auger to HQ core. Cash 67ft to 14 ft.
99.0	5.0	6	6	Light brownish gray, moderately weathered, moderately hard, moderately to slightly hard and brittle, fractures show discoloration but are unfractured and slight.	

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 Sacramento, CA 95822  
 (916) 455-4225

PROJECT NUMBER: 15-245.1  
 PROJECT: HBWMD Pipeline Crossing  
 BORING: B3  
 ENTRY BY: NEM  
 CHECKED BY: RDS SHEET 1 of 2

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PROJECT NUMBER: 15-245.1  
 PROJECT: HBWMD Pipeline Crossing  
 BORING: B3  
 ENTRY BY: NEM  
 CHECKED BY: RDS SHEET 2 of 2

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 (916) 455-4225

PROJECT NUMBER: 15-245.1  
 PROJECT: HBWMD Pipeline Crossing  
 BORING: B4  
 ENTRY BY: NEM  
 CHECKED BY: RDS SHEET 1 of 1

**Crawford & Associates, Inc.**  
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 Rocklin, CA 95677  
 (916) 455-4225

PROJECT NUMBER: 15-245.2  
 PROJECT: HBWMD Phase 2  
 BORING: B5  
 ENTRY BY: NEM  
 CHECKED BY: RDS SHEET 1 of 2

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 Designer: N. STEVENS  
 Drafting Check: P. KASPARI  
 Design Check: P. KASPARI  
 Project Manager: P. KASPARI  
 Date: 1/12/2018

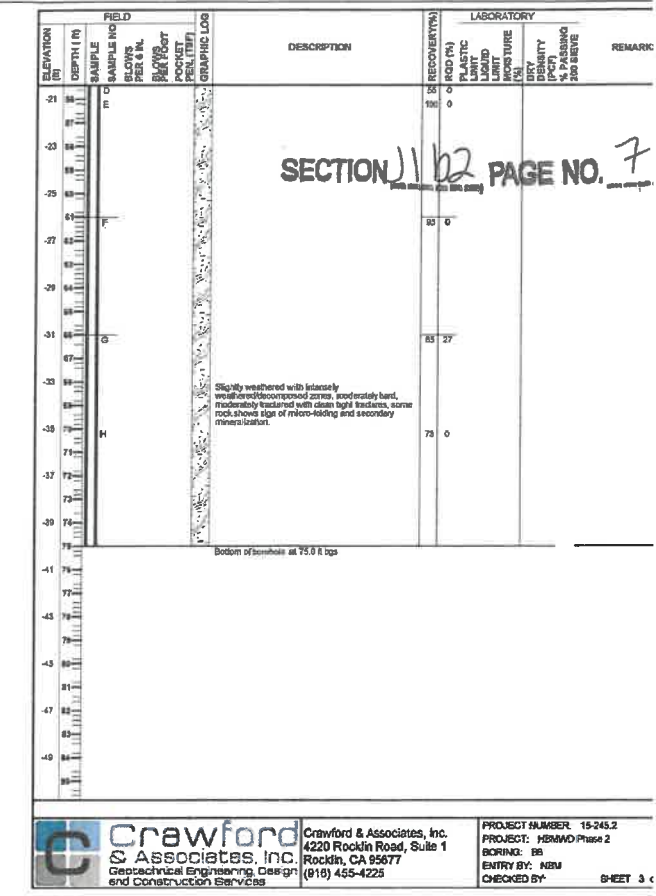
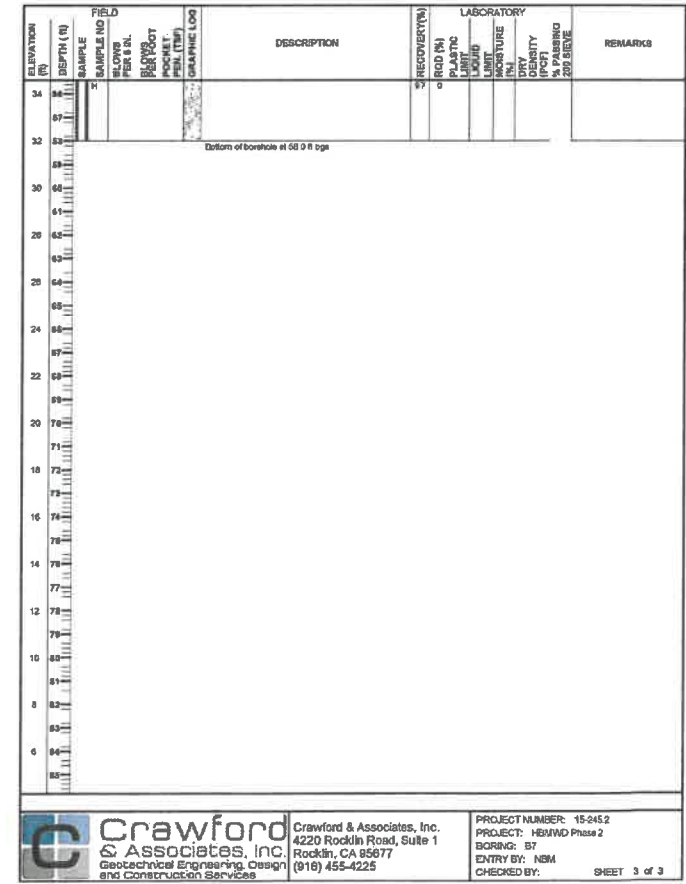
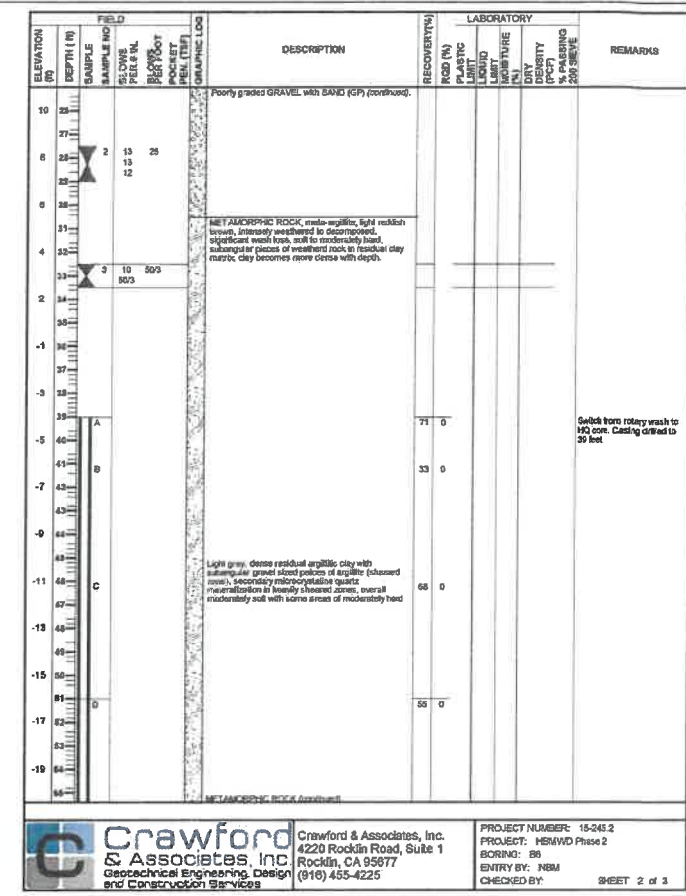
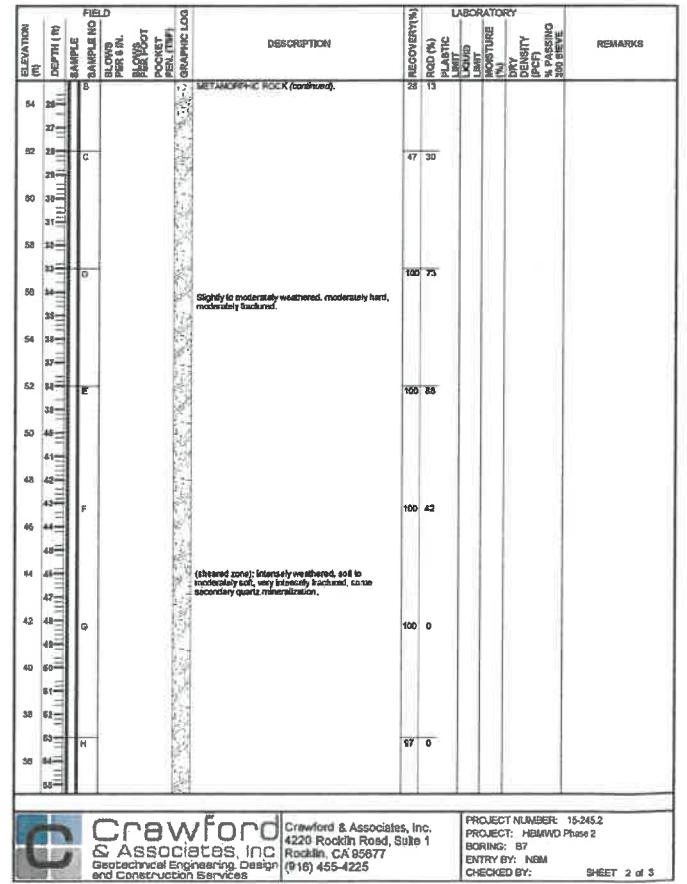
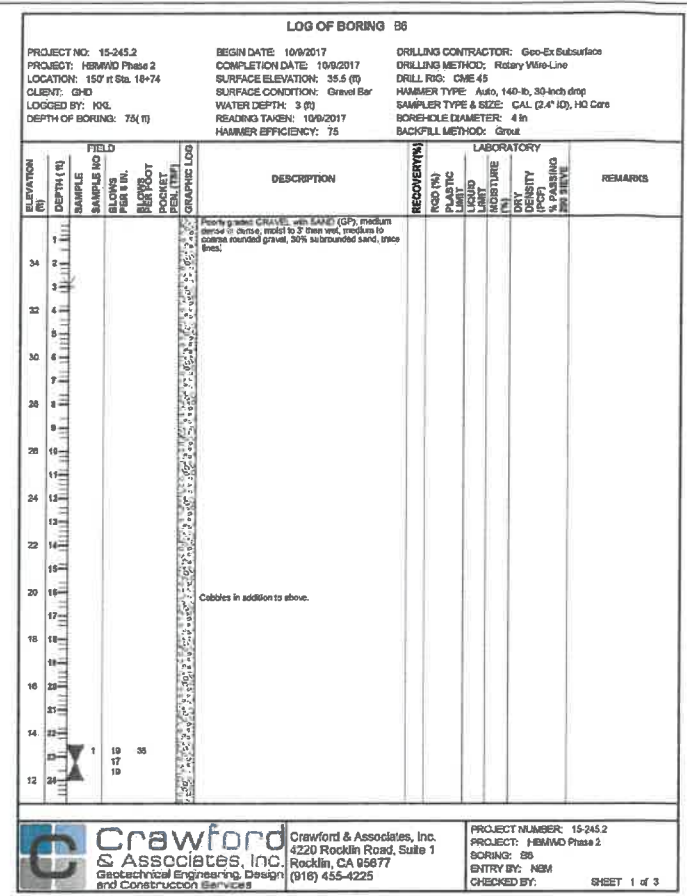
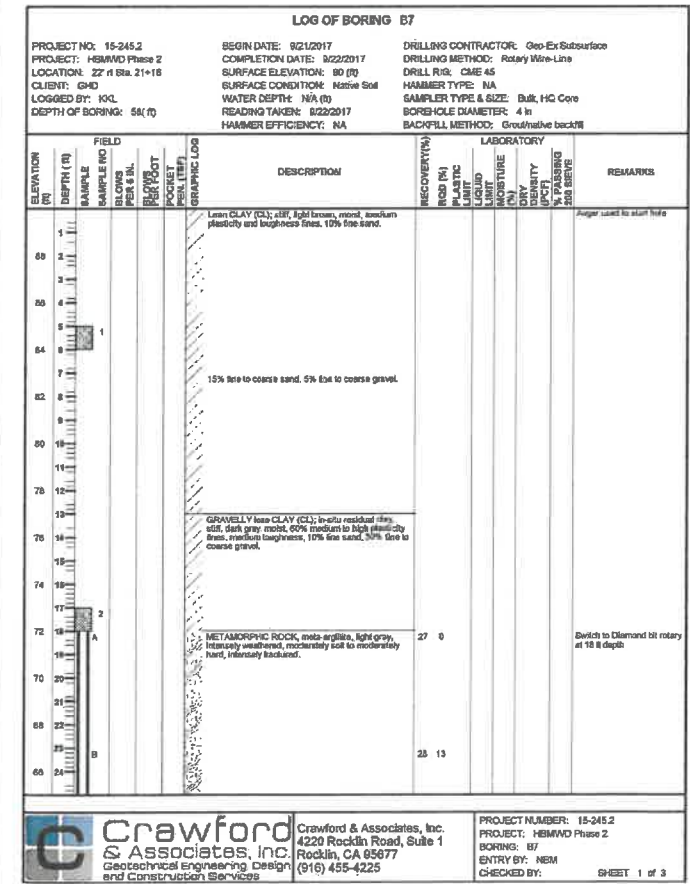
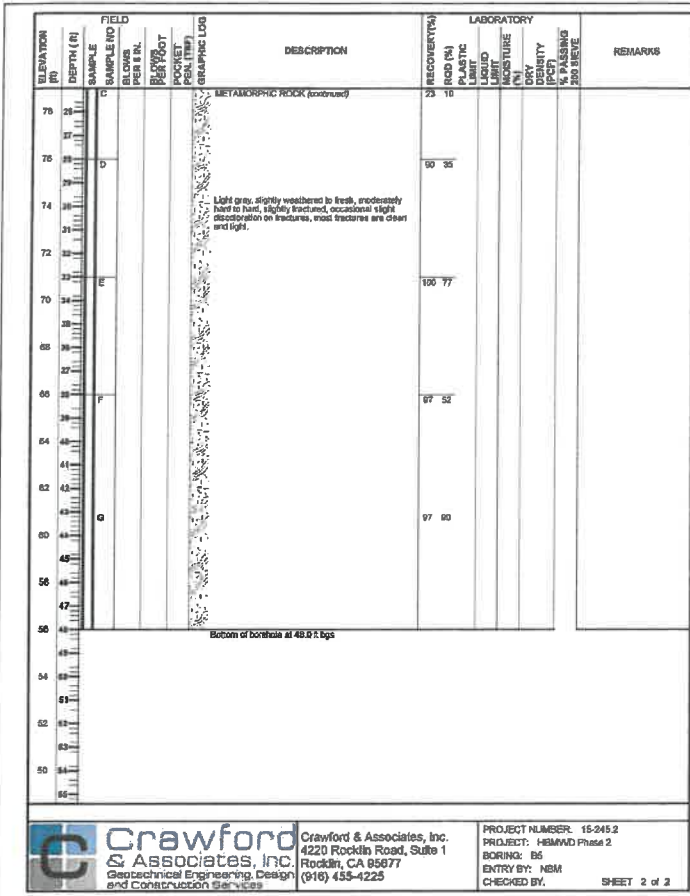
Client: HUMBOLDT BAY MUNICIPAL WATER DISTRICT  
 Project: MAD RIVER PIPELINE CROSSING  
 Title: BORING LOGS 1 OF 2

Project No: 8411162  
 Original Size: ANSI D  
 Sheet No: G-005

Scale: AS NOTED

Project No: 8411162  
 Sheet No: G-005  
 Sheet 5 of 11





**NOTE:**  
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Project Manager	P. KASPARI	Date	1/12/2018
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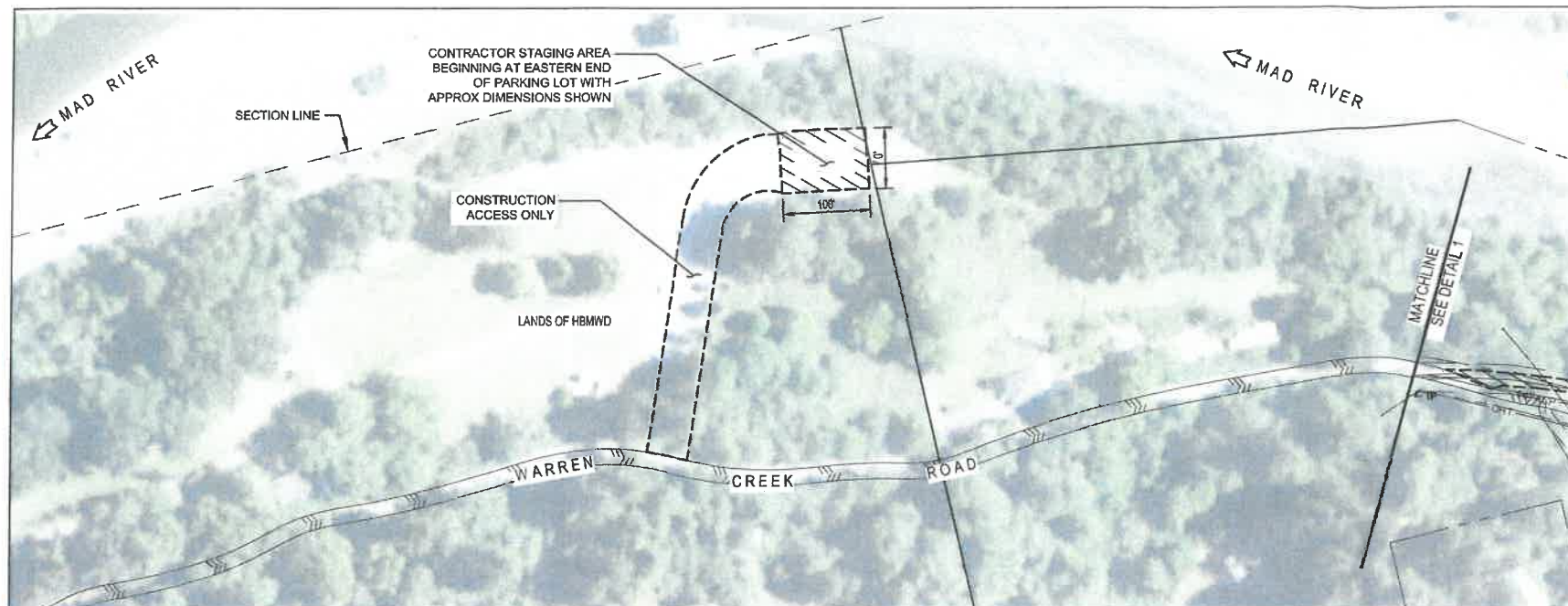
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Project	MAD RIVER PIPELINE CROSSING		
Title	BORING LOGS 2 OF 2		
Project No.	8411162	Original Size	ANSI D
Sheet No.	G-006	Scale	AS NOTED



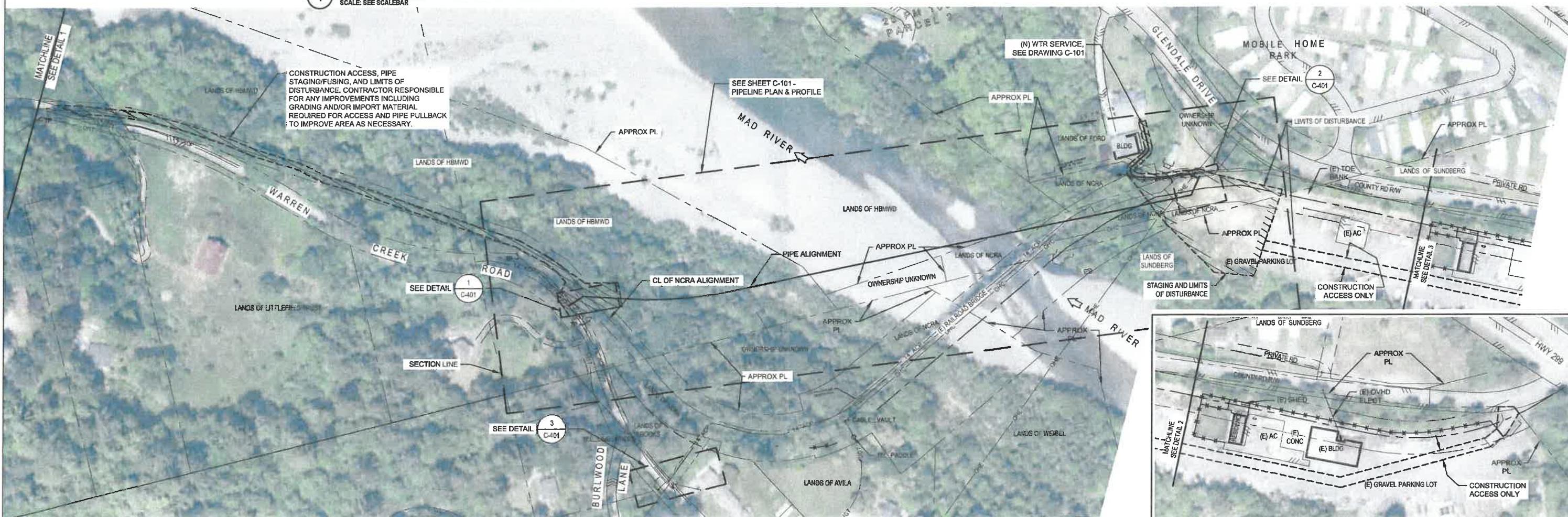
**SHEET GENERAL NOTES**

- CONTRACTOR IS REQUIRED TO PROVIDE ANY FENCING OR OTHER SECURITY ITEMS NECESSARY TO SECURE STAGING AREAS AND WORK SITE. DISTRICT WILL NOT BE RESPONSIBLE FOR ANY LOSS OF CONTRACTOR'S EQUIPMENT, MATERIALS, ETC. DUE TO THEFT, VANDALISM, OR OTHER HUMAN OR NATURAL CAUSES.

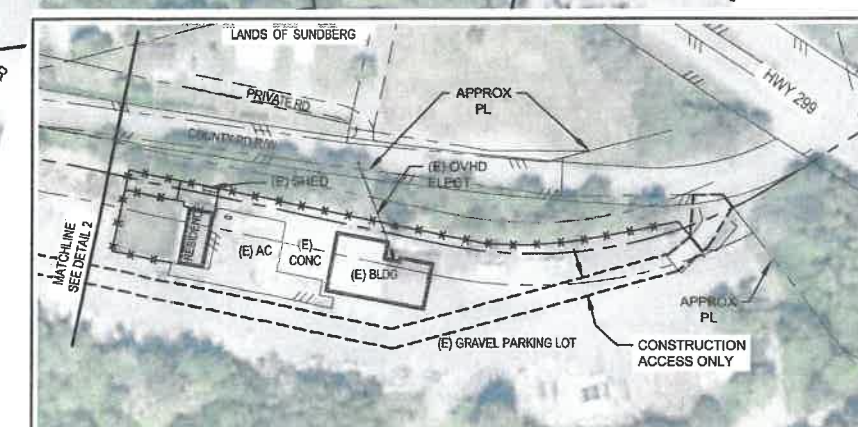
SECTION J1b2 PAGE NO. 8



**1 PARK 4 STAGING AND ACCESS**  
SCALE: SEE SCALEBAR



**2 OVERALL CONSTRUCTION PLAN KEY, STAGING, AND ACCESS**  
SCALE: SEE SCALEBAR



**3 EAST SIDE CONTINUATION - ACCESS PLAN**  
SCALE: SEE SCALEBAR

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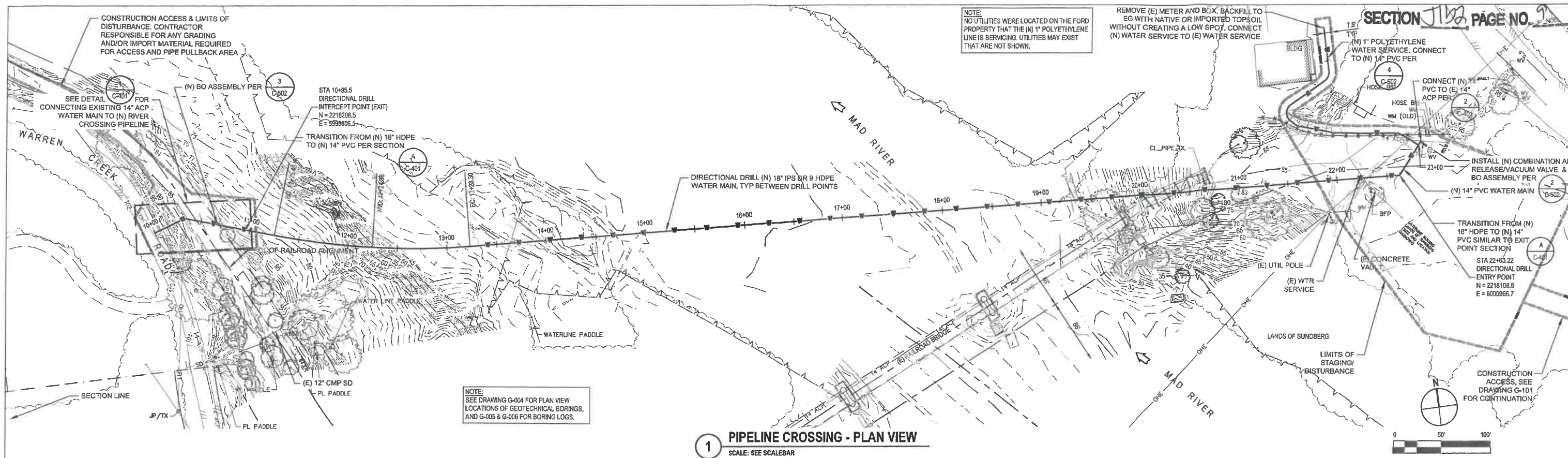


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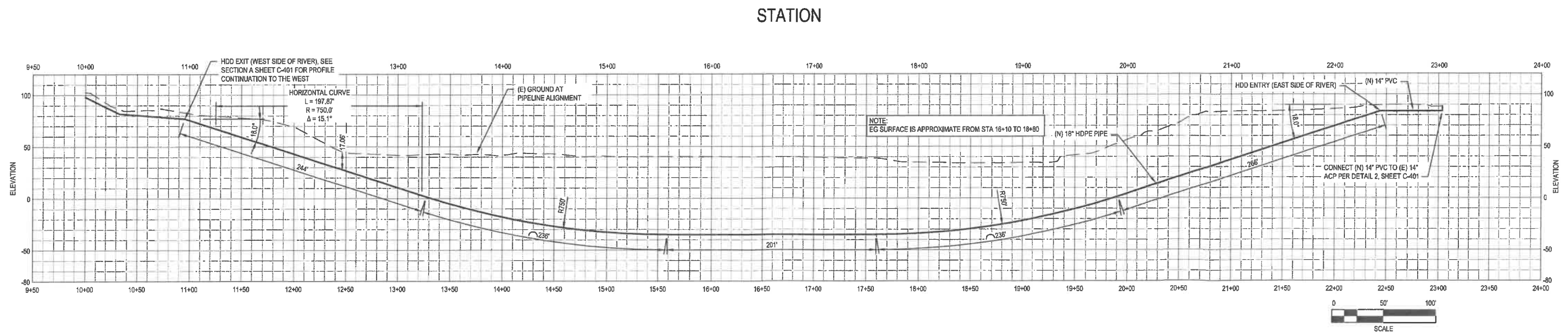
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Title	<b>CONSTRUCTION STAGING &amp; ACCESS PLAN AND OVERALL CONSTRUCTION PLAN KEY</b>		
Project No.	8411162		
Original Size	ANSI D	Sheet No.	<b>G-101</b>
		Sheet	7 of 1





**1 PIPELINE CROSSING - PLAN VIEW**  
SCALE: SEE SCALEBAR



**2 PIPELINE CROSSING - PROFILE**  
SCALE: SEE SCALEBAR

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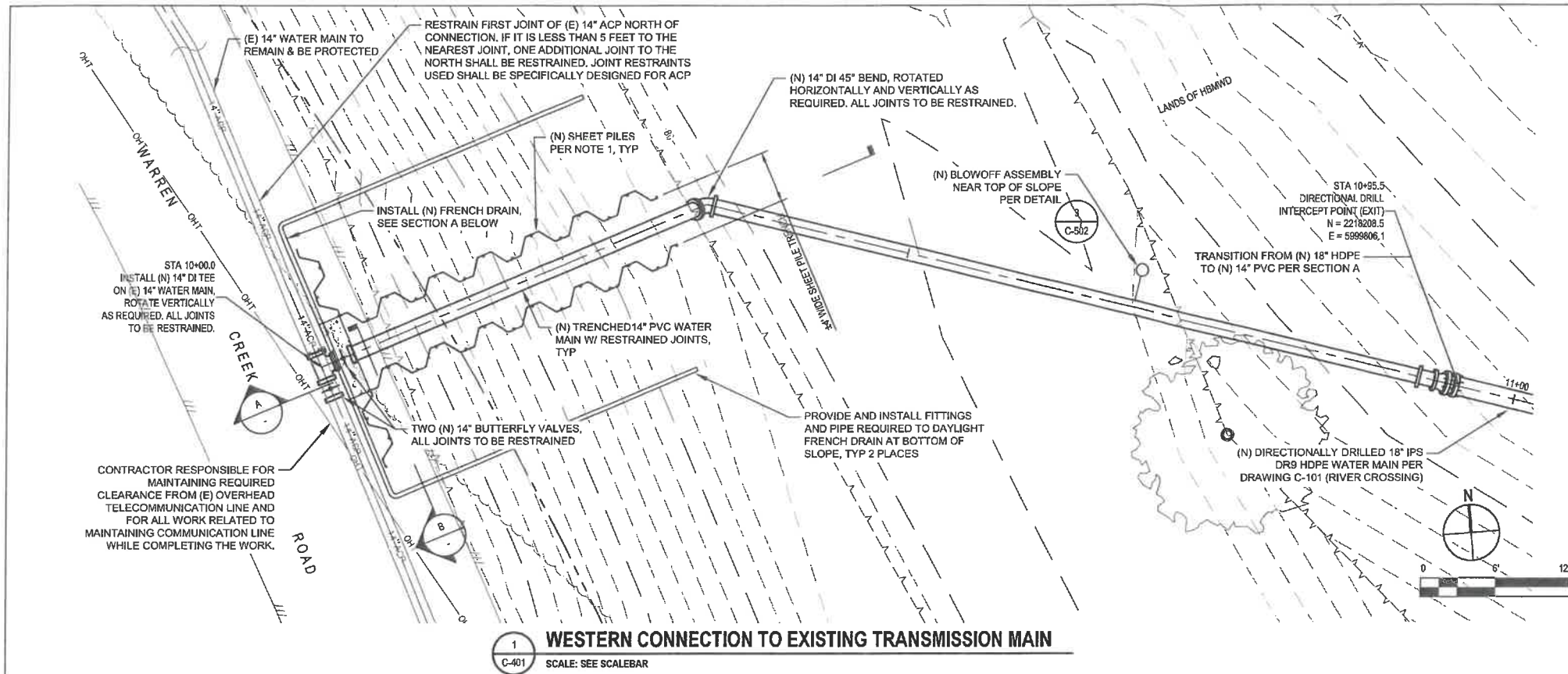


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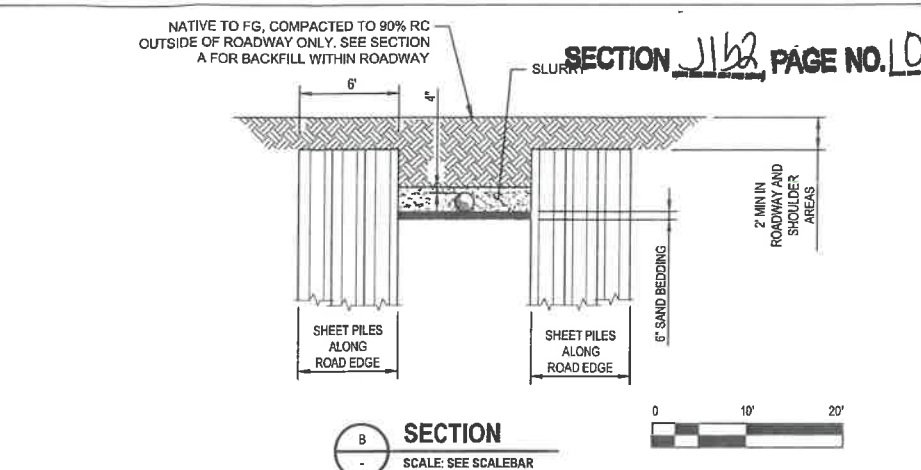
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Title	<b>PIPELINE PLAN AND PROFILE</b>		
Project No.	8411162		
Original Size	ANSI D	Sheet No.	<b>C-101</b>
			Sheet 8 of 1

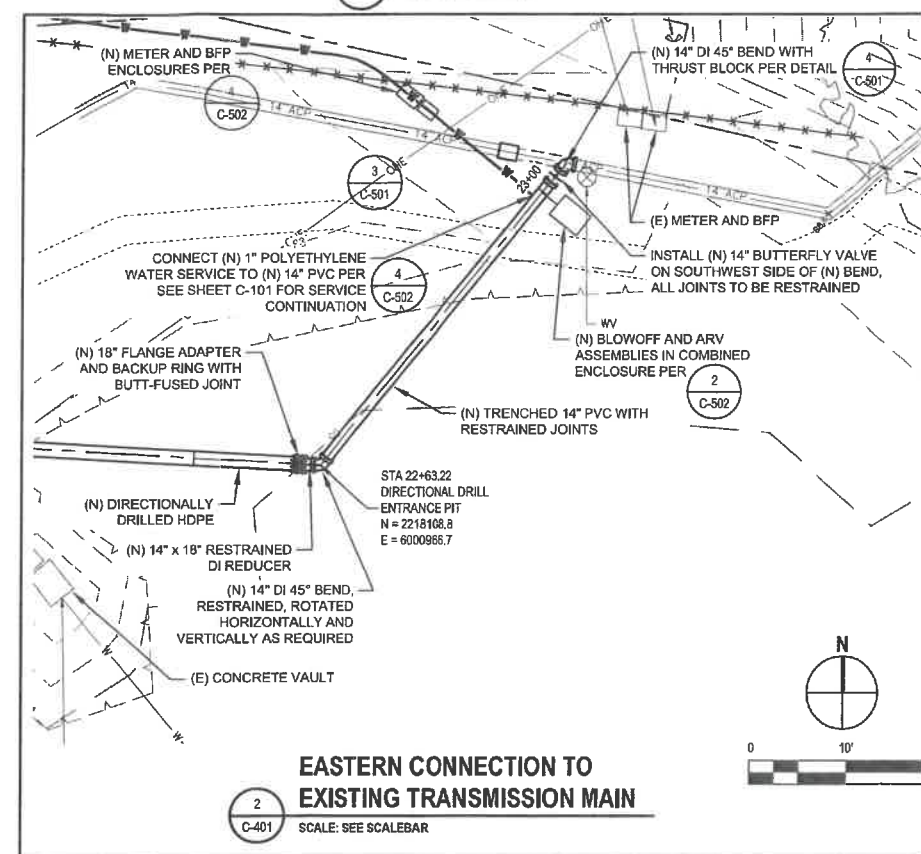




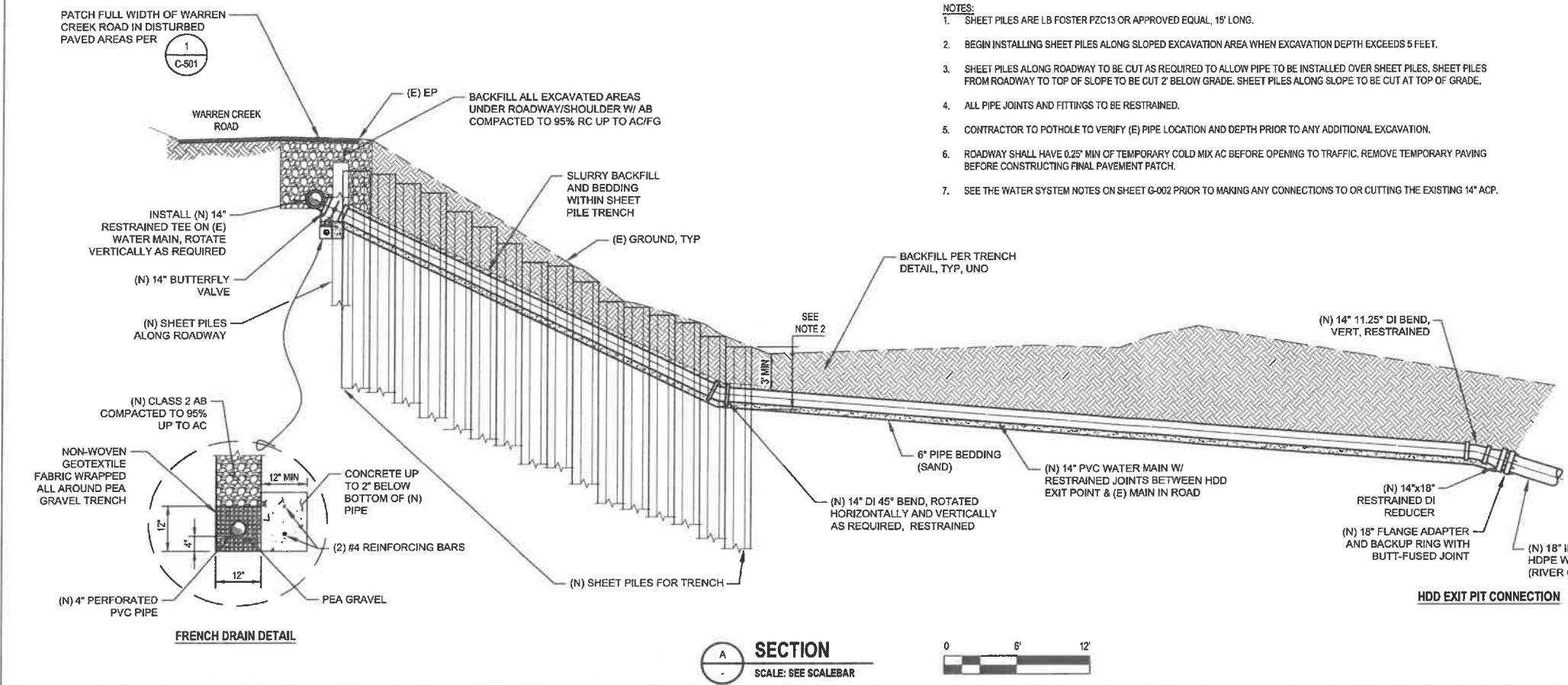
1 WESTERN CONNECTION TO EXISTING TRANSMISSION MAIN  
SCALE: SEE SCALEBAR



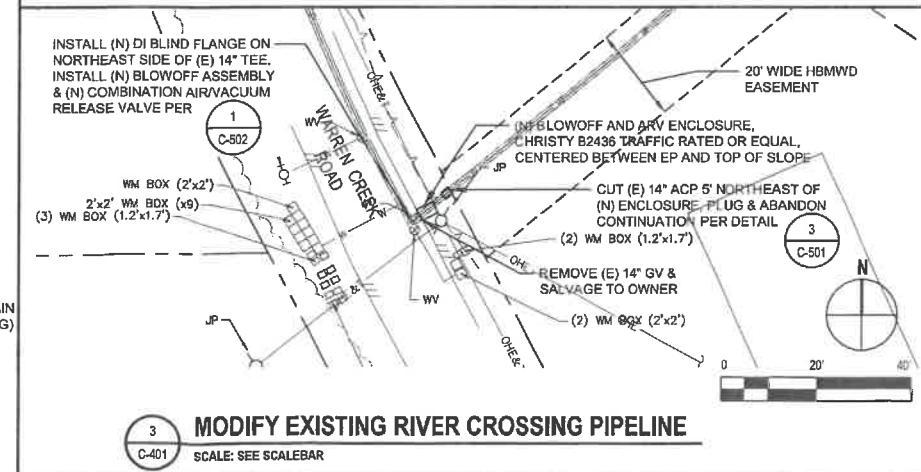
B SECTION  
SCALE: SEE SCALEBAR



2 EASTERN CONNECTION TO EXISTING TRANSMISSION MAIN  
SCALE: SEE SCALEBAR



A SECTION  
SCALE: SEE SCALEBAR



3 MODIFY EXISTING RIVER CROSSING PIPELINE  
SCALE: SEE SCALEBAR

- NOTES:
1. SHEET PILES ARE LB FOSTER PZC13 OR APPROVED EQUAL, 15' LONG.
  2. BEGIN INSTALLING SHEET PILES ALONG SLOPED EXCAVATION AREA WHEN EXCAVATION DEPTH EXCEEDS 5 FEET.
  3. SHEET PILES ALONG ROADWAY TO BE CUT AS REQUIRED TO ALLOW PIPE TO BE INSTALLED OVER SHEET PILES. SHEET PILES FROM ROADWAY TO TOP OF SLOPE TO BE CUT 2' BELOW GRADE. SHEET PILES ALONG SLOPE TO BE CUT AT TOP OF GRADE.
  4. ALL PIPE JOINTS AND FITTINGS TO BE RESTRAINED.
  5. CONTRACTOR TO POTHOLE TO VERIFY (E) PIPE LOCATION AND DEPTH PRIOR TO ANY ADDITIONAL EXCAVATION.
  6. ROADWAY SHALL HAVE 0.25" MIN OF TEMPORARY COLD MIX AC BEFORE OPENING TO TRAFFIC. REMOVE TEMPORARY PAVING BEFORE CONSTRUCTING FINAL PAVEMENT PATCH.
  7. SEE THE WATER SYSTEM NOTES ON SHEET G-002 PRIOR TO MAKING ANY CONNECTIONS TO OR CUTTING THE EXISTING 14" ACP.

A ISSUE FOR BID		NS	PK	2/9/18
No.	Issue	Drawn	Approved	Date



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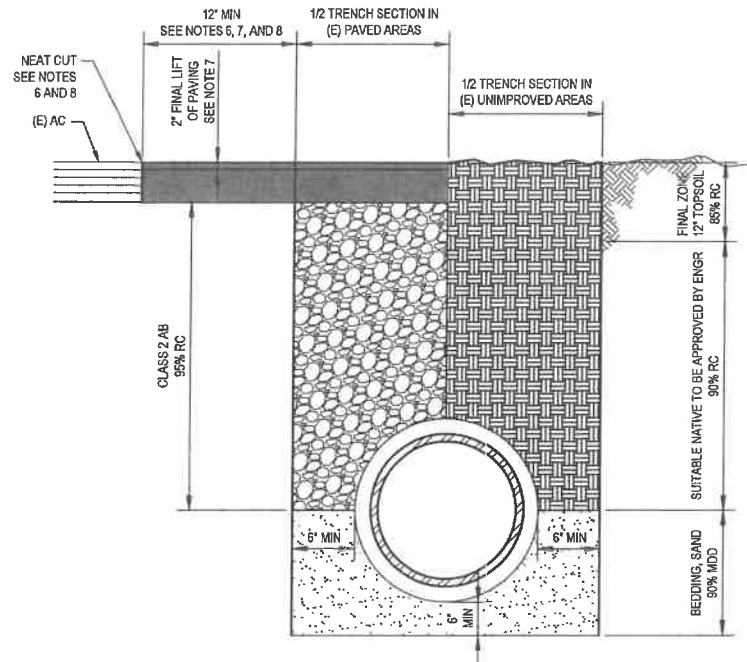


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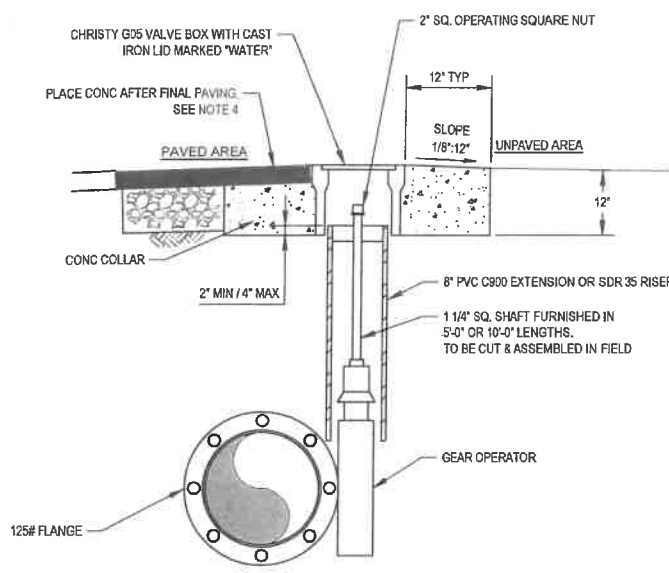
Client	HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
Project	MAD RIVER PIPELINE CROSSING		
Title	CONNECTION AND ABANDONMENT DETAILS		
Project No.	8411162		
Original Size	ANSI D	Sheet No.	C-401
		Scale	AS NOTED





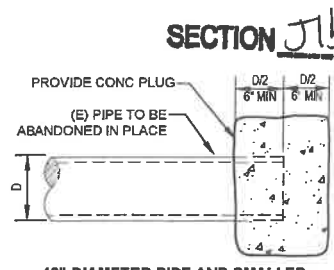
- NOTES:**
- REFER TO THE SPECIFICATION SECTION 31 23 00 (TRENCHING, BACKFILLING, AND COMPACTING) FOR EXCAVATION AND BACKFILL REQUIREMENTS.
  - ASPHALT CONCRETE (AC) MUST BE SAWCUT FULL DEPTH.
  - IF DISTANCE BETWEEN EDGE OF TRENCH TO EDGE OF PAVEMENT IS 4' OR LESS, THEN REPLACE ALL AC UP TO EDGE OF PAVEMENT.
  - FINAL PAVING SHALL CONSIST OF THE FULL WIDTH OF WARREN CREEK ROAD FOR THE ENTIRE SECTION DISTURBED.
  - THESE ARE MINIMUM REQUIREMENTS. IF OTHER JURISDICTIONAL (CITY, COUNTY, STATE) AGENCY REQUIREMENTS EXCEED THOSE SHOWN, THE HIGHER REQUIREMENTS SHALL BE MET.
  - ASPHALT CONCRETE (AC) MUST BE SAWCUT FULL DEPTH.
  - AC SHALL BE TYPE B, 1/2\"/>

**1 TYPICAL TRENCH SECTIONS IN IMPROVED AND UNIMPROVED AREAS**  
C-501 NOT TO SCALE

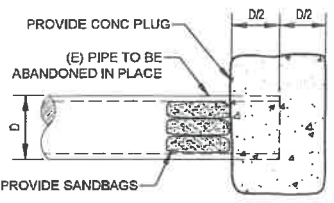


- NOTES:**
- VALVE BOX & LID SHALL BE RATED FOR AASHTO H-20 LOADINGS AS MANUFACTURED BY CHRISTY (No. G05).
  - ALL LIDS & GRADE RINGS SHALL HAVE MACHINED SEATING SURFACES.
  - EXTENSIONS SHALL BE AS MANUFACTURED FOR THE VALVE BOX SUPPLIED OR HDPE OR PVC PIPE OF CORRECT SIZE CAN BE USED.
  - VALVE BOX IS PLACED AFTER ROADWAY IS PAVED, CONSTRUCT CONC BASE TO TOP OF PAVEMENT.

**2 STANDARD BUTTERFLY VALVE INSTALLATION DETAIL**  
C-501 NOT TO SCALE



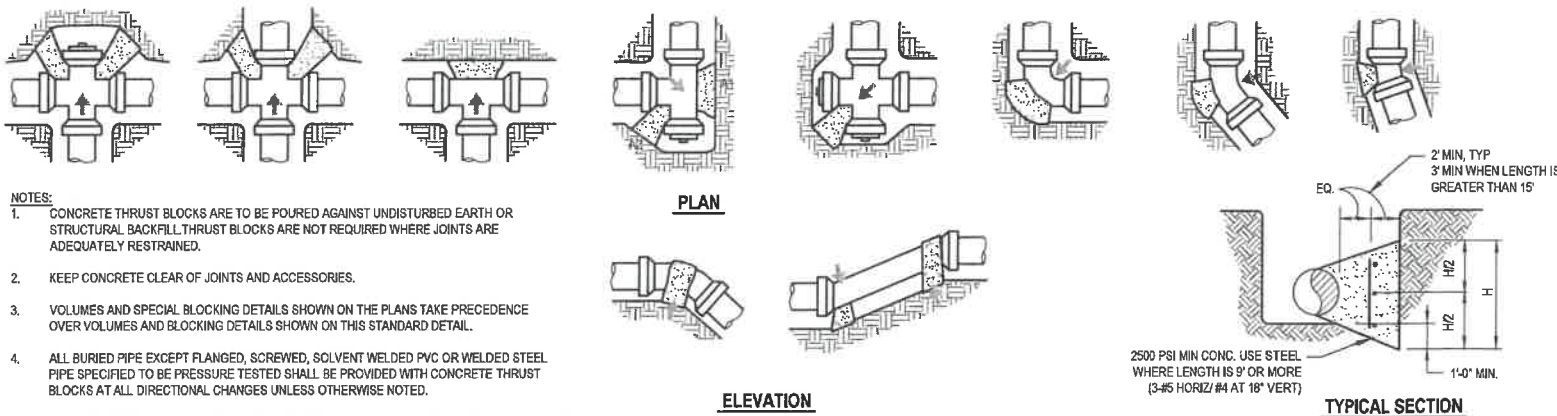
**12\"/>**



**14\"/>**

- NOTES:**
- PIPE PLUGS SHALL BE INSTALLED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
  - SHALL BE INSPECTED BY THE OWNER'S REPRESENTATIVE BEFORE COVERING.

**3 PLUG AND ABANDON EXISTING WATER MAIN**  
C-501 NOT TO SCALE

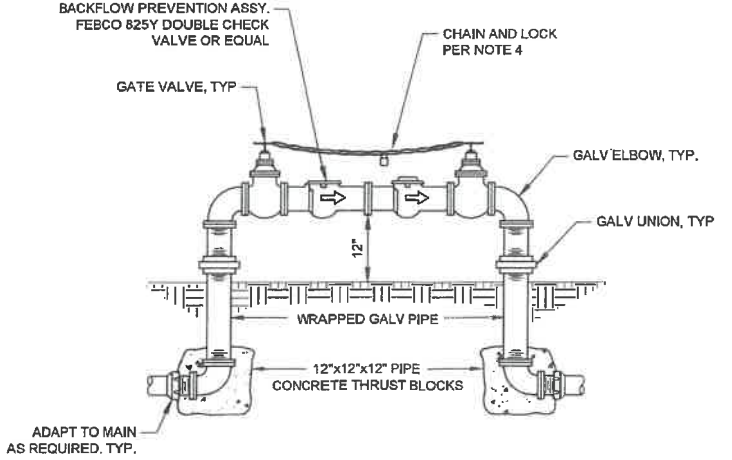


- NOTES:**
- CONCRETE THRUST BLOCKS ARE TO BE POURED AGAINST UNDISTURBED EARTH OR STRUCTURAL BACKFILL. THRUST BLOCKS ARE NOT REQUIRED WHERE JOINTS ARE ADEQUATELY RESTRAINED.
  - KEEP CONCRETE CLEAR OF JOINTS AND ACCESSORIES.
  - VOLUMES AND SPECIAL BLOCKING DETAILS SHOWN ON THE PLANS TAKE PRECEDENCE OVER VOLUMES AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.
  - ALL BURIED PIPE EXCEPT FLANGED, SCREWED, SOLVENT WELDED PVC OR WELDED STEEL PIPE SPECIFIED TO BE PRESSURE TESTED SHALL BE PROVIDED WITH CONCRETE THRUST BLOCKS AT ALL DIRECTIONAL CHANGES UNLESS OTHERWISE NOTED.
  - THRUST BLOCKS SHALL NOT BE LOCATED OR SIZED TO ENCASE ADJACENT PIPES OR FITTINGS.
  - THE SIZE AND WEIGH OF ALL UPLIFT THRUST BLOCKS SHALL BE AS DETERMINED BY ENGINEER.
  - THE BEARING AREAS ARE BASED ON TEST PRESSURE OF 150 PSI AND ALLOWABLE SOIL BEARING STRESS OF 1000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION:  
BEARING AREA = (TEST PRESSURE / 150) x (1000 / SOIL BEARING STRESS) x (TABLE VALUE)
  - THRUST BLOCKS REQUIRED AT ALL CHANGES IN DIRECTION OF PIPING UNLESS NOTED OTHERWISE.
  - CONTRACTOR TO PROVIDE ALL COMPONENTS.
  - ALL PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE TO PREVENT CORROSION AND CONC ADHESION.

**BEARING AREA OF THRUST BLOCK IN SQ. FT.**

PIPE SIZE	TEE, WYE, PLUG OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED				PIPE SIZE	TEE, WYE, PLUG OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED					
			A1	A2	45° BEND	22 1/2° BEND				11 1/4° BEND	A1	A2	45° BEND	22 1/2° BEND	11 1/4° BEND
2, 4	1.5	2	2	1.5	1.5	1	1	18	19	27	27	19	15	8	6
6	3	4.5	4.5	3	2.5	1.5	1	20	24	34	34	24	18	10	8
8	5	7	7	5	4	2	1	22	29	41	41	29	22	12	10
10	8	12	12	8	7	3	2	24	34	46	46	34	26.5	14	12
12	12	17	17	12	10	5	3	32	39	55	55	39	31.5	16	14
14	14	19.5	19.5	14	11	6	4								
16	15	21.5	21.5	15	12	6	4								

**4 TYPICAL THRUST BLOCK DETAILS**  
C-501 NOT TO SCALE

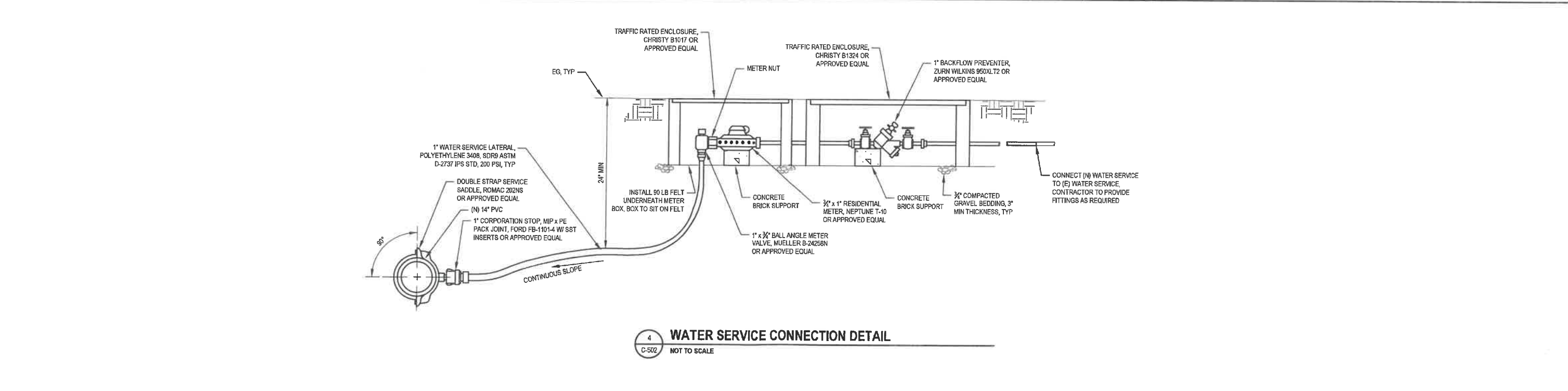
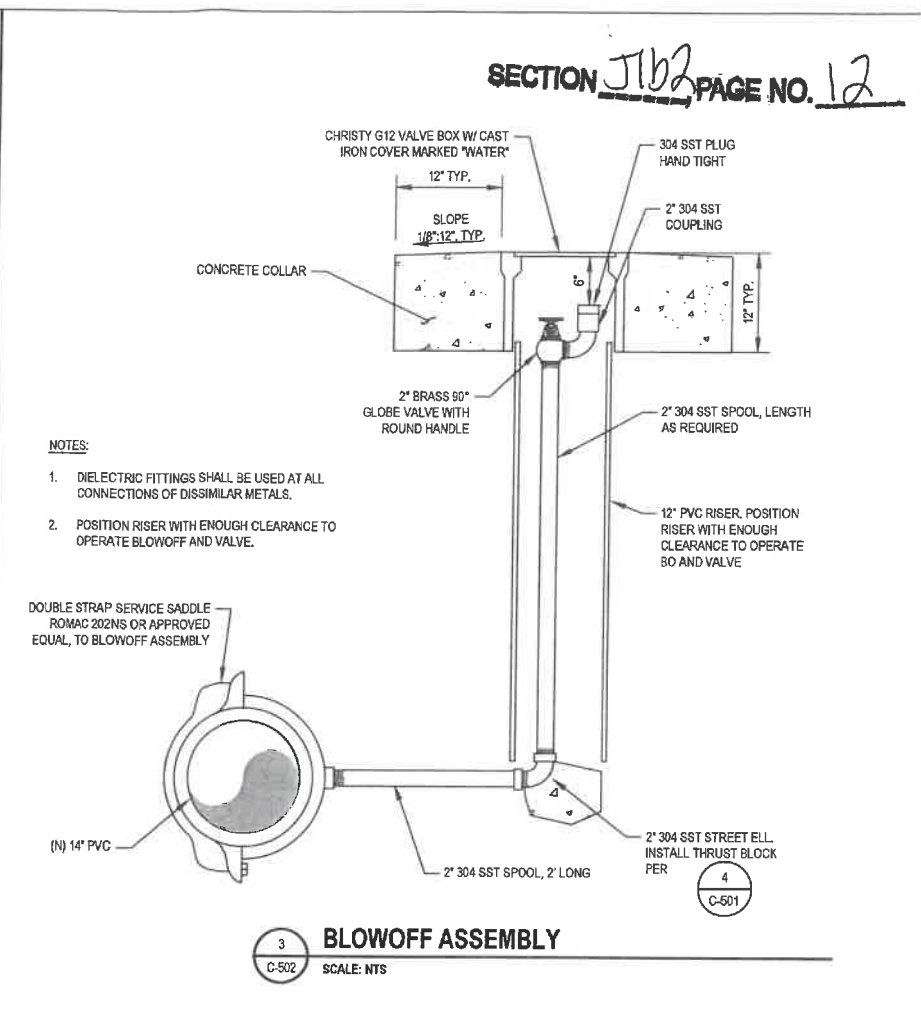
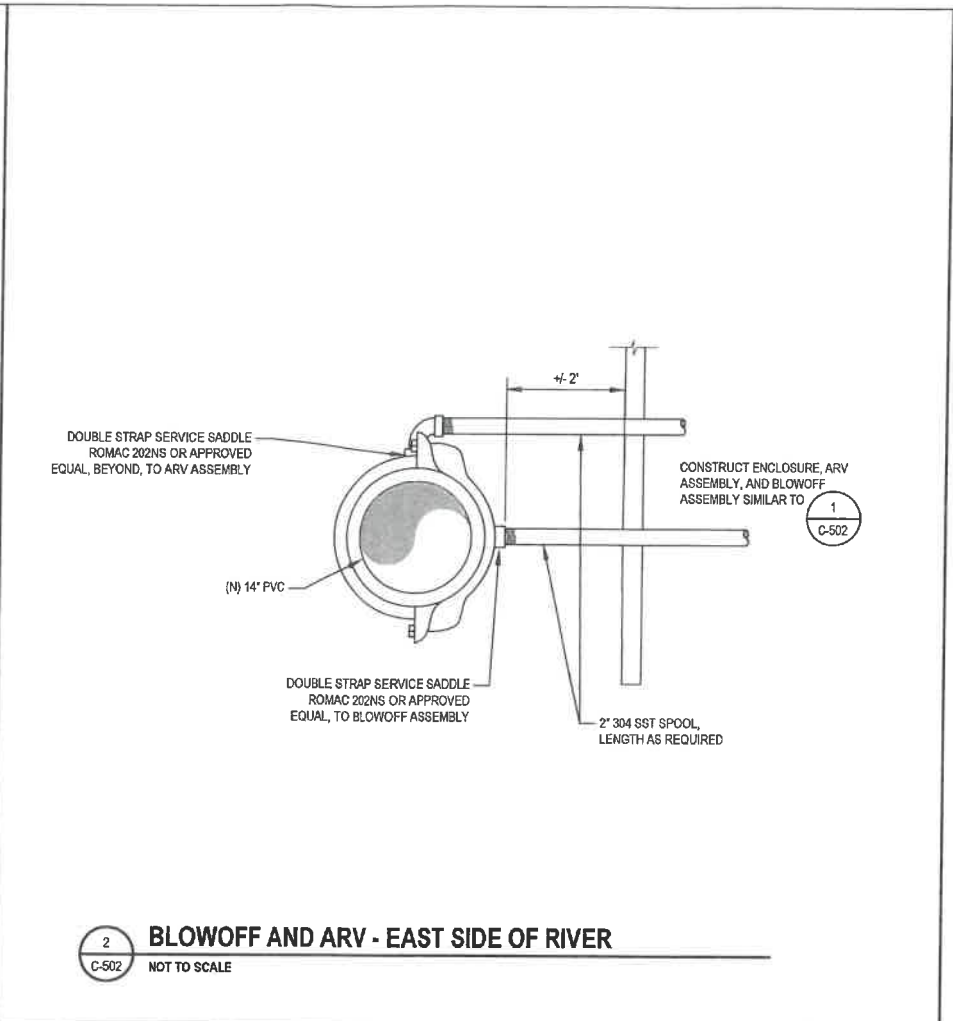
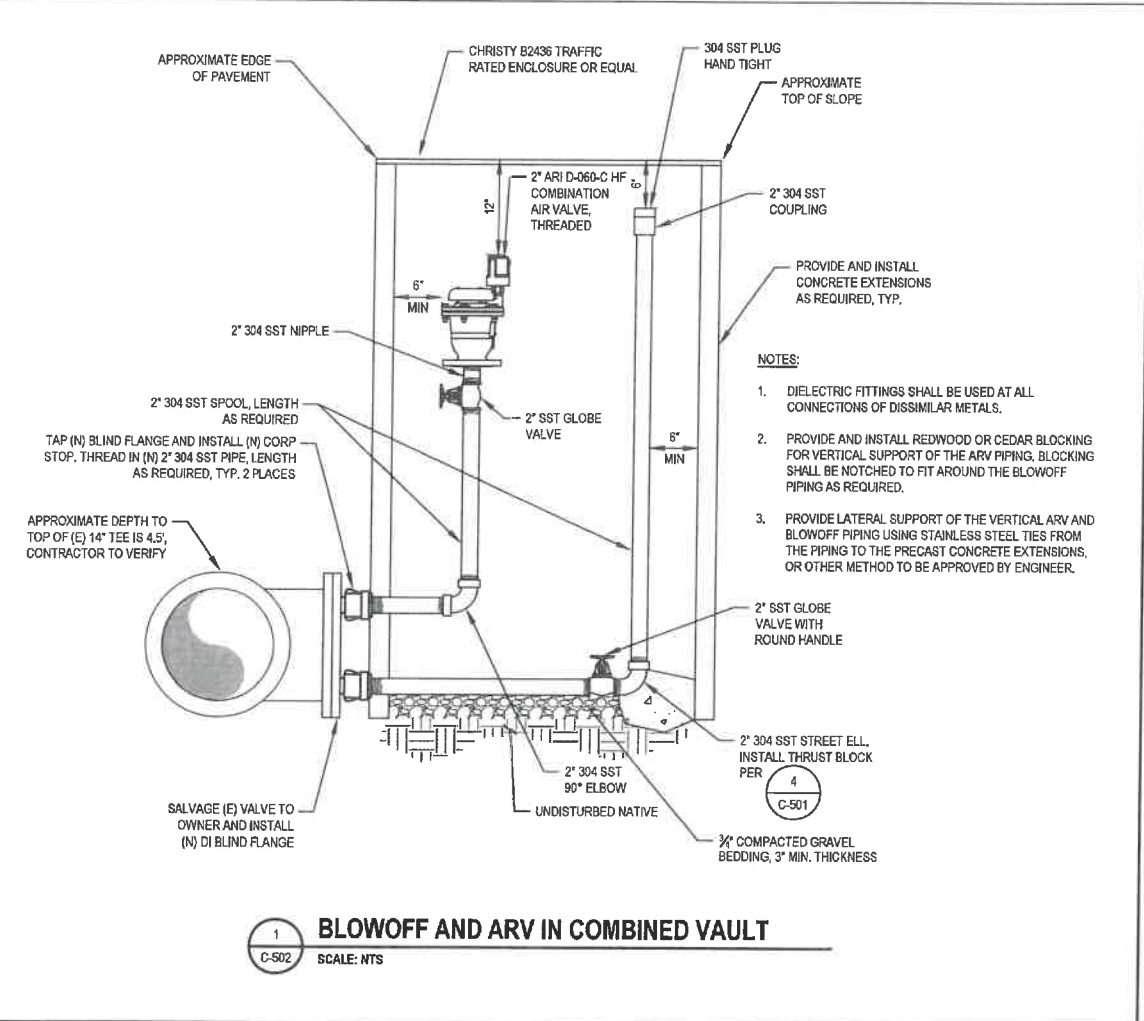


**5 ABOVE-GROUND BACKFLOW PREVENTER ASSEMBLY**  
C-501 SCALE: NTS

- NOTES:**
- INSTALL AS PER LOCAL CODE.
  - CONTRACTOR TO PROVIDE ALL COMPONENTS.
  - SIZE PER PLAN.
  - WHERE VALVES ARE NOT ELECTRONICALLY SUPERVISED, PROVIDE STSTL CHAIN AND NON-CASE HARDENED LOCK, AND LOCK VALVES IN OPEN POSITION. CONTRACTOR TO TAG LOCK KEYS WITH VALVE LOCATION AND PROVIDE KEYS TO OWNER.

	Bar is one inch on original size sheet 		Drawn <b>S. DAVIS</b>	Designer <b>N. STEVENS</b>	Client <b>HUMBOLDT BAY MUNICIPAL WATER DISTRICT</b>
			Drafting Check <b>P. KASPARI</b>	Design Check <b>P. KASPARI</b>	Project <b>MAD RIVER PIPELINE CROSSING</b>
Reuse of Documents This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2018 GHD	Project Manager <b>P. KASPARI</b>	Date <b>1/12/2018</b>	Title <b>CIVIL DETAILS - 1 OF 2</b>	Project No. <b>8411162</b>	Original Size <b>ANSI D</b>
<b>A ISSUE FOR BID</b>	Drawn <b>NS</b>	Approved <b>PK</b>	Date <b>2/9/18</b>	Scale <b>AS NOTED</b>	Sheet No. <b>C-501</b>

Pld Date: 1 February 2018 - 5:10 PM  
 Plotted By: Nathan Stevens  
 Filename: G:\Legacy\Projects\1056\HBMWD\6411162\HBMWD-BLFG OSD PipelineCross-Plan 105-CAD\Phase 4-SS\Sheet\8411162\_10\_CivilDetails.dwg



No.	Issue	Drawn	Approved	Date
A	ISSUE FOR BID	NS	PK	2/9/18



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0 1"

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Drawn	S. DAVIS	Designer	N. STEVENS
Drafting Check	P. KASPARI	Design Check	P. KASPARI
Project Manager	P. KASPARI	Date	1/12/2018
This document shall not be used for construction unless signed and sealed for construction.		Scale	AS NOTED

Client	HUMBOLDT BAY MUNICIPAL WATER DISTRICT		
Project	MAD RIVER PIPELINE CROSSING		
Title	CIVIL DETAILS - 2 OF 2		
Project No.	8411162		
ANSI D	Sheet No.	C-502	
Sheet	11	of 11	

**Agreement and  
Temporary Construction Easement**

This agreement dated \_\_\_\_\_, 2018, between Garth R. Sundberg and Linda R. Sundberg, Trustees of the Garth R. Sundberg and Linda R. Sundberg 2004 Trust, hereinafter referred to as OWNER, and the Humboldt Bay Municipal Water District, hereinafter referred to as the DISTRICT;

The OWNER is the owner in fee of the parcel of land identified as Assessor's Parcel Number 504-131-004, located adjacent to the DISTRICT's water main pipeline that crosses the Mad River and provides water service to the communities of Fieldbrook/Glendale Community Services District and the City of Blue Lake.

The DISTRICT is planning improvements to the Mad River Crossing and intends to replace the existing water main pipeline that is supported by the old North Coast Railroad Authority trestle. The new water main pipeline will be directionally drilled under the river and connected to the existing water main pipeline on both sides of the river.

The DISTRICT would like to utilize the existing access road on the OWNER's parcel to access the site where the directional drill rig will be located, along with portions of the OWNER's parcel as laydown and support areas for the directional drilling operation. It is the intent of the project to locate the drill rig and dig the access pit within the DISTRICT's existing Right-of-way on property owned by the Northcoast Rail Authority which is located adjacent to the westerly edge of the OWNER's parcel. See attached Exhibits A and B for the location of the access route, the laydown and support areas, and the proposed drill rig and entry pit locations, which are incorporated by reference as it set forth in full herein.

DISTRICT's rights pursuant to this easement are non-exclusive, and OWNER retains the right to use the property for any purpose that do not interfere with and are not inconsistent with DISTRICT's rights pursuant to this easement

This easement is a temporary construction easement required for the performance of this work. The easement will be in effect from the start of DISTRICT work approximately March 1, 2018 until the recordation with the Humboldt County Recorder's Office of the Notice of Completion for the project, estimated to be on or before to November 1, 2018, on the terms mutually agreed as follows:

1. The undersigned OWNER warrants that he/she is the OWNER in fee simple of the property affected by this Easement, as described below, and that he/she has the exclusive right to grant this Easement encumbering the approximate area shown on Exhibits A & B for temporary construction purposes by the DISTRICT, their representatives, and the Contractor selected for the performance of the proposed work.



2. Execution and delivery of said Easement made expressly subject to terms and conditions set forth herein.
3. Permission is hereby granted to DISTRICT and its authorized agents and contractors to enter upon OWNER'S real property identified above within that area as designated on Exhibits A & B, attached hereto and made a part hereof, for the purposes herein stated.
4. DISTRICT shall have access for construction and related purposes as determined by the DISTRICT to be necessary to complete the project.
5. DISTRICT shall coordinate with OWNER prior to the start of construction and as DISTRICT deems necessary during construction to coordinate activities.
6. DISTRICT, shall restore the area to be reasonably equivalent to pre-project conditions, and upon completion of project thoroughly cleanup, grade, and install any seeding or other sediment and erosion control measures deemed necessary. DISTRICT's responsibility for seeding and sediment and erosion control measures shall terminate on July 1, 2019.
7. It is agreed and understood by both parties that all work performed in said Easement area, shall be in a manner that reasonably protects all existing improvements, fencing, or landscaping adjacent thereto.
8. If it becomes necessary for the OWNER to move any of the portable equipment, rocks, concrete forms, or other miscellaneous material or items on his property to allow the DISTRICT to perform its work, the OWNER shall move such materials with his own equipment and labor and shall charge the DISTRICT for the movement at standard Caltrans Force Account rates applicable for similar equipment and labor. The OWNER shall provide back-up force account tracking sheets detailing the work along with an itemized invoice.
9. The DISTRICT shall pay OWNER \$20,000 (twenty thousand dollars) for this easement, payable in a single payment prior to commencement of the work.

DISTRICT shall defend, indemnify and hold harmless OWNER from all losses, damages, expenses and liabilities resulting from injury or death of any person or damage to or destruction of any property resulting from acts, errors or omissions by DISTRICT, its employees, agents, and contractors in the performance of this agreement.

OWNER shall defend, indemnify and hold harmless DISTRICT from all losses, damages, expenses and liabilities resulting from injury or death of any person or damage to or destruction of any property resulting from acts, errors or omissions by OWNER, its employees agents, and contractors in the performance of this agreement.

IN WITNESS WHEREOF, the parties hereto upon the date first above written have executed this AGREEMENT in duplicate.

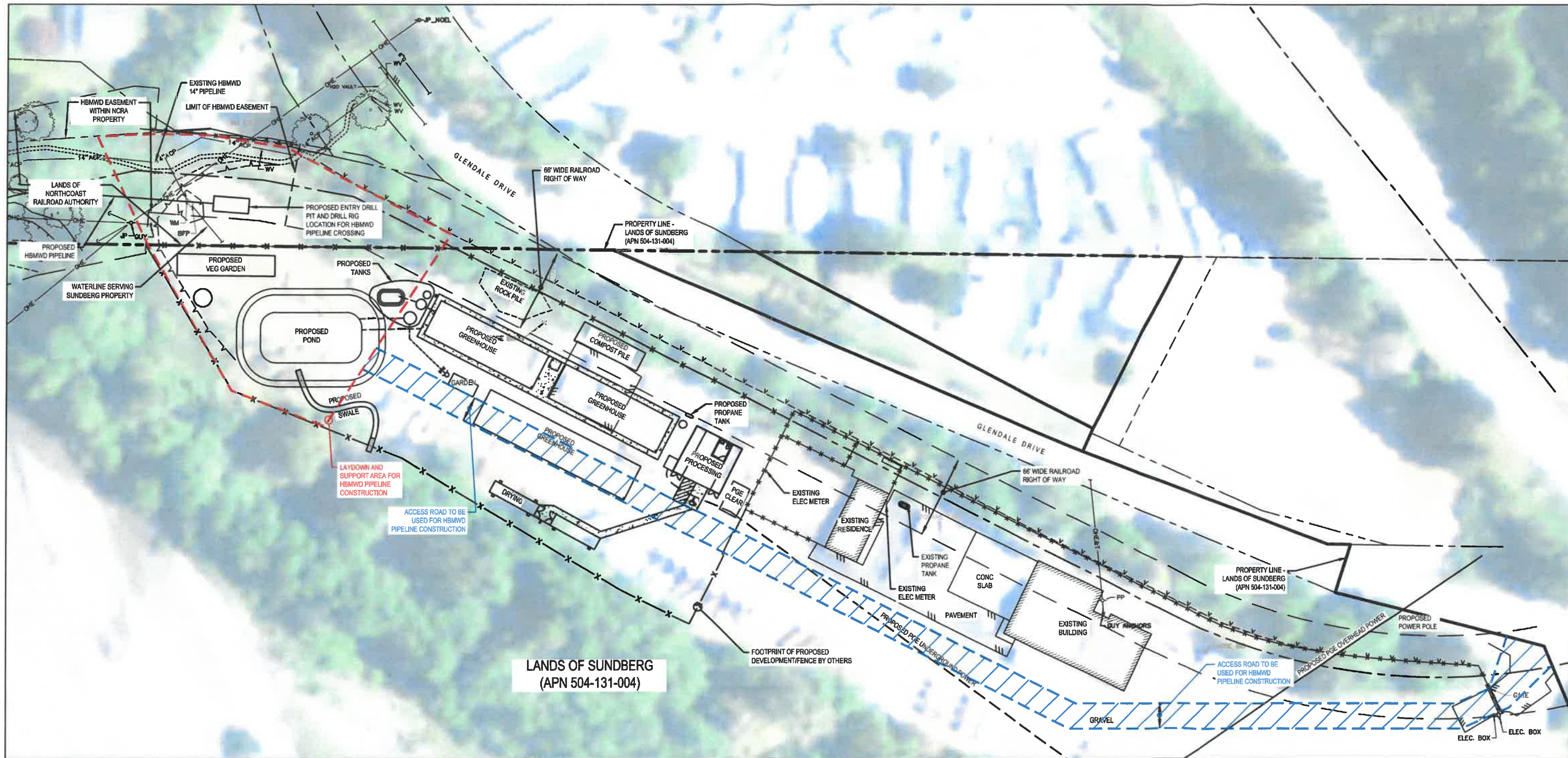
**ACCEPTED**

Humboldt Bay Municipal Water District	Garth R Sundberg and Linda R Sundberg 2004 Trust
By:	By:

\_\_\_\_\_  
John Friedenbach, Date  
General Manager

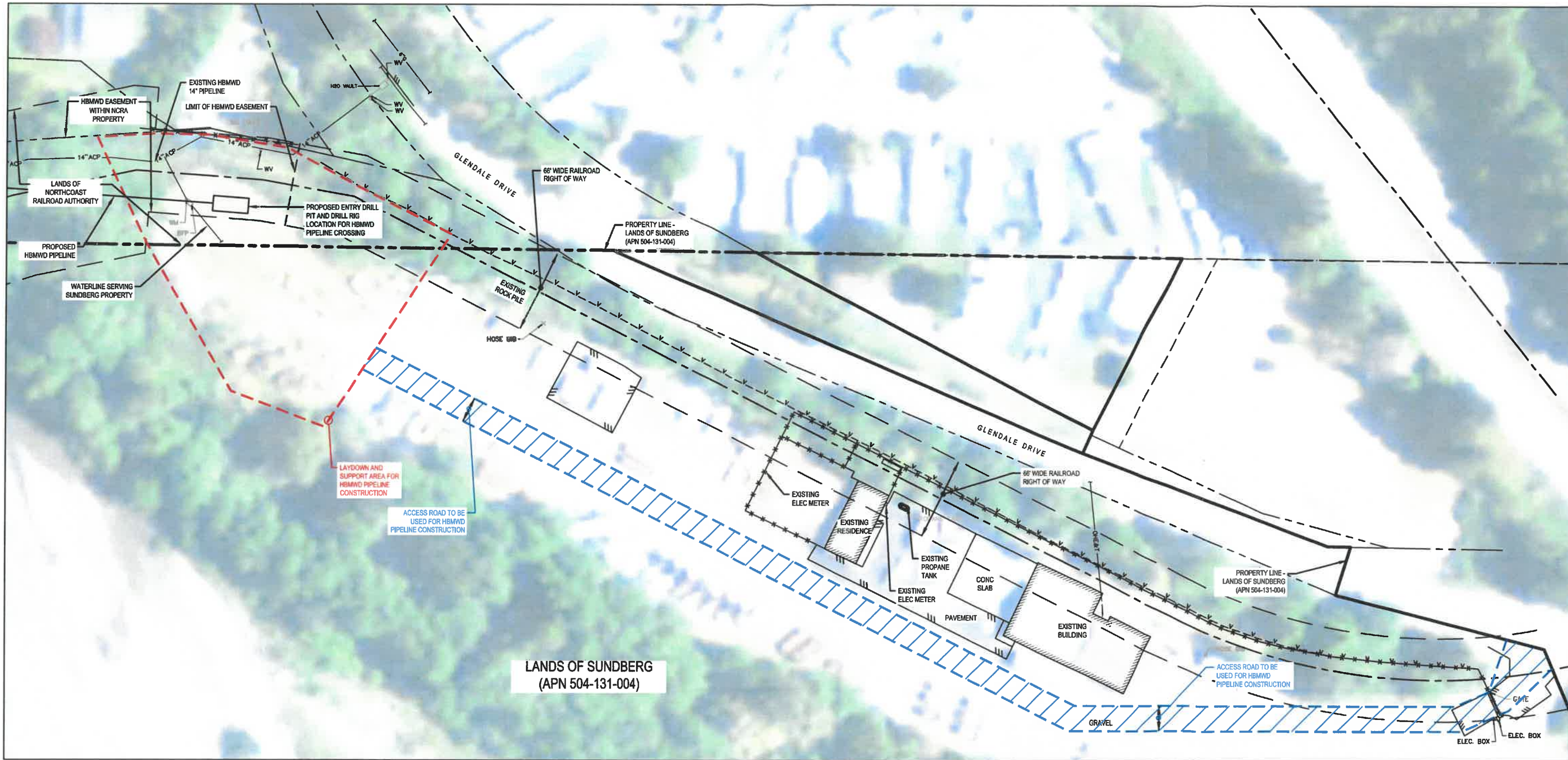
\_\_\_\_\_  
Garth R. Sundberg, Trustee Date

\_\_\_\_\_  
Linda R. Sundberg, Trustee Date



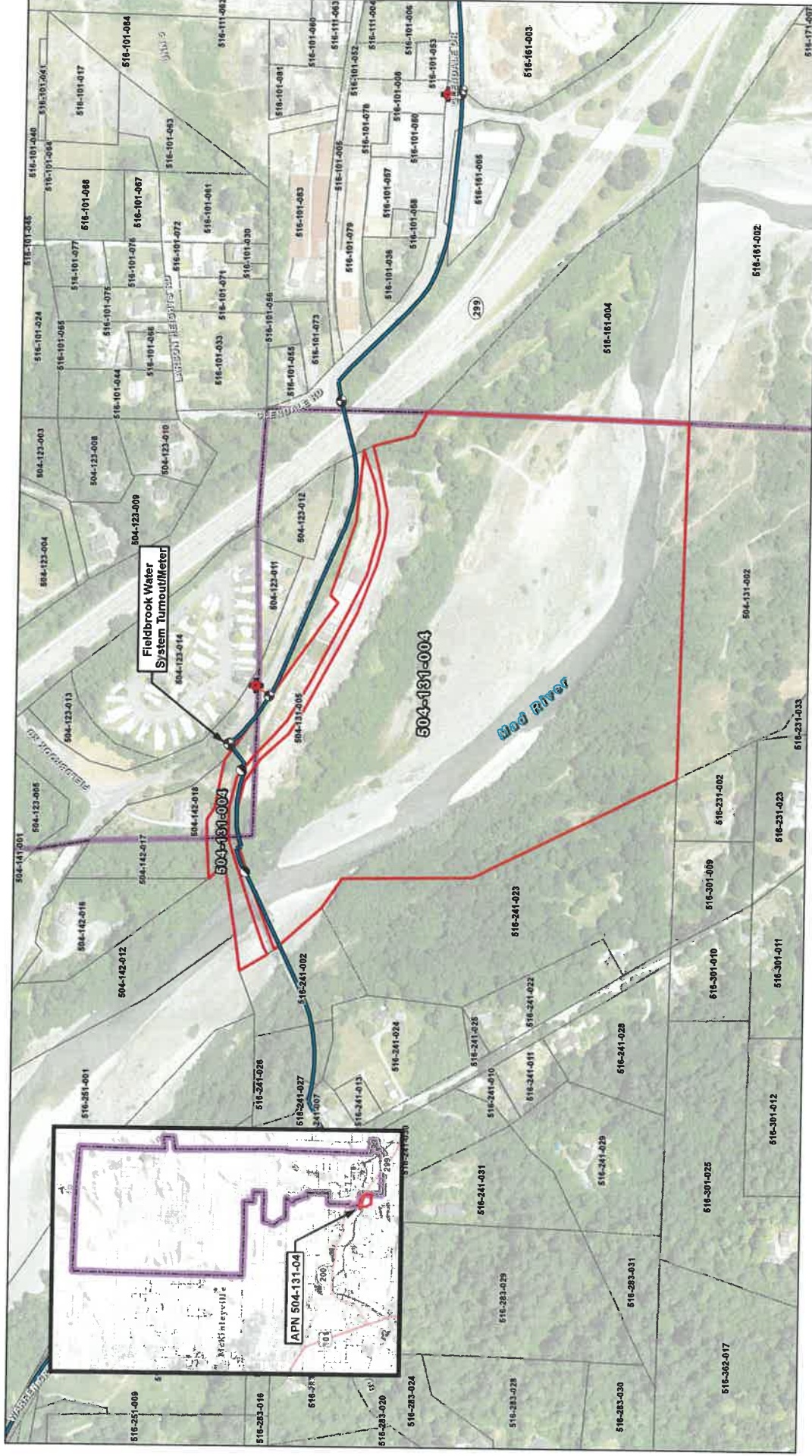
			<b>HUMBOLDT BAY MUNICIPAL WATER DISTRICT</b> <b>MAD RIVER PIPELINE CROSSING</b>	Project No. 8411162 Report No. Date 11/10/2017
			<b>SUNDBERG EASEMENT</b>	<b>EXHIBIT A</b>
			File name: G:\Legacy\Projects\1055 HBMWD\411162 HBMWD-BLFG CSD PipelineCross-Pls 1106-CAD\Phases 4-8\Figures\8411162_Figure_Sundberg_Easement.dwg	





			<b>HUMBOLDT BAY MUNICIPAL WATER DISTRICT</b> <b>MAD RIVER PIPELINE CROSSING</b>	Project No. 8411162 Report No. Date 11/10/2017
			<b>SUNDBERG EASEMENT</b>	<b>EXHIBIT E</b>
			<small>Filename: G:\Legacy\Projects\01055 HBMWD\8411162 HBMWD-BLFG CSD PipelineCross-Phs 1106-CAD\Phases 4-6\Figures\8411162_Figure_Sundberg_Easement.dwg</small>	





Paper Size 11" x 17" (ANSI B)

Map Projection: Lambert Conformal Conic  
 GCS: NAD 1983 StatePlane California FIPS 3007 Feet

APN 504-131-04  
 Fieldbrook/Glendale CSD Boundary  
 Approx. Parcel Boundaries

HBMWD Water System  
 Transmission Main  
 FH Pipelines

Fire Hydrant  
 Gate  
 Buttery

Job Number: 8410197-1Z  
 Revision: A  
 Date: 24 May 2016

Fieldbrook-Glendale CSD  
 APN 504-131-04  
 Site Map

715 Third Street Eureka CA 95501 USA T 707 443 8326 F 707 444 8330 E eureka@ghd.com W www.ghd.com

Figure 1

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**John Friedenbach**

---

**From:** Stephens, Stephanie@CalOES <Stephanie.Stephens@CalOES.ca.gov>  
**Sent:** Thursday, February 01, 2018 3:24 PM  
**To:** Pat.Kaspari@ghd.com  
**Cc:** John Friedenbach  
**Subject:** FW: 4240-54-29 Humboldt Bay Surge Tower Retrofit Phase 2 Award Letter  
**Attachments:** 4240-54-29R Humboldt Bay Surge Tower Retrofit Phase 2 Award Letter signed.pdf

Hi there,

I bring good news! Please see the attached letter from FEMA approving your Phase II. Let me know if you have any questions. Anthony and I are anxiously awaiting the opportunity to get a site visit going soon. We will keep you posted as we receive more details on that. You may now proceed with the deliverables of Phase II in your Surge Tower Retrofit Project (4240-0054).

Thank you,

**Stephanie Stephens**

*Hazard Mitigation Grants Specialist*

Recovery Infrastructure Branch

3650 Schriever Avenue, Mather, CA 95655

[stephanie.stephens@caloes.ca.gov](mailto:stephanie.stephens@caloes.ca.gov) | (916) 767-3047





FEMA

SECTION JIC, PAGE NO. 2

February 1, 2018

Grace Koch  
Governor's Authorized Representative  
California Governor's Office of Emergency Services  
3650 Schriever Avenue  
Mather, CA 95655

Reference: Project Approval, HMGP #4240-54-29R  
Humboldt Bay Municipal Water District, FIPS Code # 023-91000  
Humboldt Bay Surge Tower Retrofit Phase 2  
Supplement #57

Dear Ms. Koch:

We have reviewed and approved the above-referenced Hazard Mitigation Grant Program (HMGP) subapplication for the Humboldt Bay Municipal Water District (Subrecipient). The total eligible cost is \$782,500. As shown in Supplement #57 we obligated a 75 percent Federal share of \$586,575. These funds are now available in Smartlink (see enclosed report) and this approval is based on the following:

1. **Scope of Work (SOW):** The approved activity consists of the demolition and removal of the existing surge tower and its replacement with a standard air/vacuum relief valve and/or a surge valve. Safe demolition and removal of the existing surge tower would completely mitigate the risk of the surge tower failing and damaging the existing industrial and domestic waterlines. The new valves would replace the function of the existing surge tower.
2. **Budget Revisions, and Cost Overruns:** The Grantee and Subgrantee must obtain FEMA's prior written approval for any budget revisions. Cost overruns must be approved by FEMA Region IX before implementation and the subgrant must continue to meet programmatic eligibility requirements, including cost effectiveness and cost share. Additional information can be found in 44 CFR 13.30.
3. **National Environmental Policy Act (NEPA):** In accordance with the Code of Federal Regulations (CFR), Title 44, Part 10, Section 8(d)(2)(xvi), and in compliance with National Environmental Policy Act (NEPA), the project is Categorical Excluded from the need to prepare an Environmental Assessment or Environmental Impact Statement, with conditions. A copy of the finding is enclosed for your use. It is important that you review and comply with these conditions.
4. **Completion Date:** The project schedule in the application identified that all work will be completed in 34 months, however the disaster Period of Performance ends on September 22, 2019. If you require additional time, please request a time extension 90 days prior to September 22, 2019. Federal funds may be de-obligated for work that is not completed within schedule, and for which no extension is approved.

5. This award of funds is subject to the enclosed Standard Hazard Mitigation Grant Program Conditions, as amended February 2005. Federal funds may be de-obligated for work that does not comply with these conditions.

If you have any questions or require additional information regarding this approval, please contact Katie Grasty, Hazard Mitigation Assistance Specialist at (510) 627-7091.

Sincerely,



Jeffrey D. Lusk  
Director  
Mitigation Division  
FEMA, Region IX

Enclosures (4)

1. Supplement #57 Obligation Report
2. Project Management Report
3. Standard HMGP Conditions
4. FEMA Record of Environmental Consideration (REC)

cc: Annde Ewertsen, Cal OES  
Jennifer Hogan, Cal OES  
Monika Saputra, Cal OES  
Robin Shephard, Cal OES

FEDERAL EMERGENCY MANAGEMENT AGENCY  
HAZARD MITIGATION GRANTS PROGRAM  
Obligation Report w/ Signatures

SECTION JIC, PAGE NO. 4

Disaster No	FEMA Project No	Amendment No	State Application ID	Action No	Supplemental No	State	Recipient
4240	29-R	1	54	2	57	CA Statewide	

Sub-Recipient: HUMBOLDT BAY MUNICIPAL WATER DISTRICT Project Title : Humboldt Bay Municipal Water District - Surge Tower Retrofit  
Sub-Recipient FIPS Code: 023-04A9F

Total Amount Previously Allocated	Total Amount Previously Obligated	Total Amount Pending Obligation	Total Amount Available for New Obligation	Project Amount	Recipient Admin Est	Sub-Recipient Admin Est	Total Obligation	IFMIS Date	IFMIS Status	FY
\$719,700	\$719,700	\$0	\$0	\$586,575	\$0	\$0	\$586,575	01/30/2018	Accept	2018

Comments

Date: 01/30/2018 User Id: KMOJICA

Comment Approved

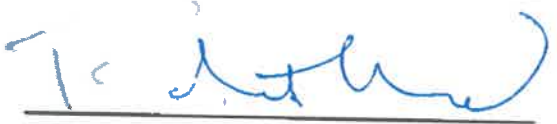
Authorization

Preparer Name: KAREN MOJICA

Preparation Date: 01/30/2018

HMO Authorization Name: KATIE GRASTY

HMO Authorization Date: 01/30/2018



Authorizing Official Signature

HMA BC

Authorizing Official Title

2-1-18

Authorization Date

Authorizing Official Signature

Authorizing Official Title

Authorization Date



FEDERAL EMERGENCY MANAGEMENT AGENCY  
HAZARD MITIGATION GRANT PROGRAM

HMGP-AP-01

Project Management Report

SECTION JIC, PAGE NO. 5

Disaster Number: 4240  
FEMA Project Number: 29-R  
Amendment Number: 0  
App ID: 54  
State: CA  
Recipient: Statewide

Sub-Recipient: HUMBOLDT BAY MUNICIPAL WATER DISTI  
FIPS Code: 023-04A9F

Project Title: HBMWD - Surge Tower Retrofit

Mitigation Project Description

Amendment Status: Approved

Approval Status: Approved

Project Title: HBMWD - Surge Tower Retrofit

Recipient: Statewide

Sub-Recipient: HUMBOLDT BAY MUNICIPAL WATI

Recipient County Name: Humboldt

Sub-Recipient County Name: Humboldt

Recipient County Code: 23

Sub-Recipient County Code: 23

Recipient Place Name: Humboldt (County)

Sub-Recipient Place Name: Humboldt (County)

Recipient Place Code: 0

Sub-Recipient Place Code: 99023

Project Closeout Date: 00/00/0000

Work Schedule Status

Amend #	Description	Time Frame	Due Date	Revised Date	Completion Date
1	Assessment of System to Determine Suitable Vacuum	3 months	00/00/0000	00/00/0000	00/00/0000
0	Assessment of System to Determine Suitable Vacuum	3 months	00/00/0000	00/00/0000	00/00/0000
0	NEPA/CEQA	6 months	00/00/0000	00/00/0000	00/00/0000
1	NEPA/CEQA	6 months	00/00/0000	00/00/0000	00/00/0000
0	Coastal Development Permit	6 months	00/00/0000	00/00/0000	00/00/0000
1	Coastal Development Permit	6 months	00/00/0000	00/00/0000	00/00/0000
1	Complete Plans and Specifications	7 months	00/00/0000	00/00/0000	00/00/0000
0	Complete Plans and Specifications	7 months	00/00/0000	00/00/0000	00/00/0000
1	Advertise for Bids	1 month	00/00/0000	00/00/0000	00/00/0000
0	Advertise for Bids	1 month	00/00/0000	00/00/0000	00/00/0000
1	Issue Notice to Proceed	1 month	00/00/0000	00/00/0000	00/00/0000
0	Issue Notice to Proceed	1 month	00/00/0000	00/00/0000	00/00/0000
1	Order/Fabricate Components/Review Submittals	5 months	00/00/0000	00/00/0000	00/00/0000
0	Order/Fabricate Components/Review Submittals	5 months	00/00/0000	00/00/0000	00/00/0000
0	Construction	7 months	00/00/0000	00/00/0000	00/00/0000
1	Construction	7 months	00/00/0000	00/00/0000	00/00/0000
1	Project Close-Out	3 months	00/00/0000	00/00/0000	00/00/0000
0	Project Close-Out	3 months	00/00/0000	00/00/0000	00/00/0000

Approved Amounts

Total Approved Net Eligible	Federal Share Percent	Total Approved Federal Share Amount	Non-Federal Share Percent	Total Approved Non-Fed Share Amount
\$959,600	75.00000000	\$719,700	25.00000000	\$239,900

Allocations

Allocation Number	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Proj Alloc Amount Fed Share	Recipient Admin Amount	Sub-Recipient Admin Amount	Total Alloc Amount
18	A	11/16/2016	11/15/2016	2017	2615262	4	\$133,125	\$0	\$0	\$133,125

FEDERAL EMERGENCY MANAGEMENT AGENCY  
HAZARD MITIGATION GRANT PROGRAM

Project Management Report

SECTION JIC PAGE NO. 10

Disaster Number	FEMA Project Number	Amendment Number	App ID	State	Recipient
4240	29-R	0	54	CA	Statewide

Sub-Recipient: HUMBOLDT BAY MUNICIPAL WATER DISTI

FIPS Code: 023-04A9F

Project Title : HBMWD - Surge Tower Retrofit

Allocations

Allocation Number	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Proj Alloc Amount Fed Share	Recipient Admin Amount	Sub-Recipient Admin Amount	Total Alloc Amount
38	A	01/29/2018	01/25/2018	2018	2699432	8	\$586,575	\$0	\$0	\$586,575
Total							\$719,700	\$0	\$0	\$719,700

Obligations

Action Nr	IFMIS Status	IFMIS Date	Submission Date	FY	ES Support Req ID	ES Amend Number	Suppl Nr	Project Obligated Amt - Fed Share	Recipient Admin Amount	Sub-Recipient Admin Amount	Total Obligated Amount
1	A	11/17/2016	11/17/2016	2017	2625512	0	26	\$133,125	\$0	\$0	\$133,125
2	A	01/30/2018	01/30/2018	2018	2728611	1	57	\$586,575	\$0	\$0	\$586,575
Total								\$719,700	\$0	\$0	\$719,700

**Standard Hazard Mitigation Grant Program (HMGP) Conditions**  
Prepared by FEMA Region IX, Updated February, 2005

The following standard requirements apply to grantees and subgrantees accepting funds from the Federal Emergency Management Agency (FEMA) HMGP:

1. **Applicable Federal, State and Local Laws and Regulations.** The grantee and subgrantee must comply with all applicable Federal, State and Local laws and regulations, regardless of whether they are specifically identified in this list or other project documents.
2. **Standards for Financial Management Systems.** Grantees and subgrantees must maintain financial management systems to account for and track grant funds, in compliance with the Code of Federal Regulations, Title 44 (44 CFR) Section 13.20.
3. **Allowable Costs.** Grant funds may only be used for allowable costs, in compliance with 44 CFR Section 13.22, and in compliance with the approved grant project scope of work and any agreements among the subgrantee, the grantee, and FEMA.
4. **Subgrantee Indirect Costs.** No indirect costs of a subgrantee are separately eligible for HMGP reimbursement, in compliance with 44 CFR Section 206.439(c)(2). Such costs are covered by the Subgrantee Administrative Cost allowance formula provided by 44 CFR Section 206.439(b)(1)(ii).
5. **Matching or Cost Sharing.** Non-federal matching or cost sharing must be in accordance with 44 CFR Section 13.24, the approved grant project scope of work, and any agreements among the subgrantee, the grantee, and FEMA.
6. **Non-Federal Audit.** The grantee and subgrantee are responsible for obtaining audits in accordance with the Single Audit Act of 1984, in compliance with 44 CFR Section 13.26.
7. **NEPA Reviews for Scope of Work Amendments.** To comply with the National Environmental Policy Act (NEPA), additions or amendments to a HMGP subgrantee statement of work (SOW) shall be reviewed by all state and federal agencies participating in the NEPA process. NEPA compliance for all SOW additions or amendments is essential before the revised SOW can be approved by FEMA or implemented by the HMGP subgrantee. Any construction activities associated with a SOW change, prior to FEMA approval, may be ineligible for reimbursement or match.
8. **Cost Overruns.** Subgrantees should be referred to the state HMGP administrative plan for project cost overrun regulations. If project costs exceed the approved federal share, the subgrantee must contact the Governor's Authorized Representative. The GAR will evaluate requests for cost overruns. Written determination of cost overrun eligibility in accordance with 44 CFR 206.438(b) shall be submitted by the GAR to the FEMA Regional Director.
9. **Real Property (Land).** If real property (land) is acquired under an HMGP grant, the use and disposition of the property shall be in compliance with 44 CFR Section 13.31 and Section 206.434(d).
10. **Equipment.** If equipment is acquired under an HMGP grant, the use and disposition of the equipment shall be in compliance with 44 CFR Section 13.32.
11. **Supplies.** If there is a residual inventory of unused supplies exceeding \$5,000 in total fair market value upon completion of the HMGP grant, and if the supplies are not needed for any other federally sponsored programs

or projects, the grantee or subgrantee shall compensate the awarding agency for its share (44 CFR Section 13.33).

12. **Copyrights.** In accord with 44 CFR Section 13.34, FEMA reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, for Federal Government purposes:
  - (a) The copyright in any work developed under a grant, subgrant, or contract under a grant or subgrant; and
  - (b) Any rights of copyright to which a grantee, subgrantee or a contractor purchases ownership with grant support.
13. **Subawards to debarred and suspended parties.** In accordance with 44 CFR Section 13.35, the grantee and subgrantees must not make any award or permit any award (subgrant or contract) at any tier to any party which is debarred or suspended or is otherwise excluded from or ineligible for participation in Federal assistance programs under Executive Order 12549, "Debarment and Suspension."
14. **Procurement.** Procurement procedures shall be in conformance with 44 CFR Section 13.36.
15. **Monitoring and Reporting Program Performance.** The grantee and subgrantees must submit quarterly progress reports, in accord with 44 CFR Section 13.40 and the State HMGP Administrative Plan.
16. **Retention and Access Requirements for Records.** In accordance with 44 CFR Section 13.42, financial and programmatic records related to expenditure of funds on grant-supported projects shall be maintained at least 3 years following the date the grantee submits its final expenditure report on the project.
17. **Enforcement.** If a grantee or subgrantee materially fails to comply with any term of an award, whether stated in a Federal statute or regulation, an assurance, in a State plan or application, a notice of award, or elsewhere, FEMA may take one or more of the actions outlined in 44 CFR Section 13.43, including termination of the grant.
18. **Termination for Convenience.** Grant awards may be terminated for convenience through the procedures outlined in 44 CFR Section 13.44.
19. **Discovery of Historic Properties and Cultural Resources.** In accordance with 36 CFR Part 800, in the event a potential historic property or cultural resource is discovered during construction activities, the subgrantee must cease work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the discovered property/resource. Construction activities in the area of the discovery shall not resume until FEMA concludes consultation with the State Historic Preservation Officer (SHPO) for treatment of the discovery.
20. **Equipment Rates.** Rates claimed for use of applicant-owned equipment that are in excess of the FEMA-approved rates must be approved under State guidelines issued by the State Comptroller's Office or must be certified by the State to include only those costs attributable to equipment usage less any fixed overhead and/or profit."
21. **Duplication of Funding between PA and HMGP.** It is permissible to use PA and 404 HMGP funds on the same facility/location, but the scopes of work identified under each program must be distinct and the funds accounted for separately. At the time of closeout, FEMA will adjust the funding if necessary to ensure that the subgrantee has been reimbursed for eligible scope from only one funding source.



RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: HMGP 4240-54-29

Title: HBMWD Surge Tower Retrofit

NEPA DETERMINATION

Non Compliant Flag: No  
 EA Draft Date: EA Final Date:  
 EA Public Notice Date: EA Fosl Date: Level: CATEX  
 EIS Notice of Intent Date: EIS ROD Date:

Comments:

This project proposes to remove the current surge tower in pieces to its foundation and replace the tower with a standard vacuum relief valve and surge valve. The surge tower is a 70-foot tall, 10.5-inch diameter steel plate shell tower with an 18-inch diameter overflow pipe that protects the pipe from being damaged in the event of a water surge in the system and has been identified as vulnerable to a seismic or high wind event. The associated project area is located between the communities of Fairhaven and Samoa along the Pacific Ocean coast in Humboldt County, California.  
 - khardege - 01/16/2018 22:12:45 GMT

CATEX CATEGORIES

Catex Category Code	Description	Selected
*n7	(*n7) Federal Assistance for Structure and Facility Upgrades. Federal assistance for the reconstruction, elevation, retrofitting, upgrading to current codes and standards, and improvements of pre-existing facilities in existing developed areas with substantially completed infrastructure, when the immediate project area has already been disturbed, and when those actions do not alter basic functions, do not exceed capacity of other system components, or modify intended land use. This category does not include actions within or affecting streams or stream banks or actions seaward of the limit of moderate wave action (or V zone when the limit of moderate wave action has not been identified).	Yes

EXTRAORDINARY CIRCUMSTANCES

Extraordinary Circumstance Code	Description	Selected ?
	No Extraordinary Circumstances were selected	

ENVIRONMENTAL LAW / EXECUTIVE ORDER

Environmental Law/ Executive Order	Status	Description	Comments
Clean Air Act (CAA)	Completed	Project is located in an attainment area - Review concluded	Humboldt County has no non-attainment areas for any criteria pollutant according to the USEPA ( <a href="http://www.epa.gov/oaqps001/greenbk/ancl.html">http://www.epa.gov/oaqps001/greenbk/ancl.html</a> , updated December 31, 2017). The SOW associated with this PW is exempt from a conformity determination under the General Conformity Rule. - khardege - 01/16/2018 22:38:24 GMT
Coastal Barrier Resources Act (CBRA)	Completed	Project is not on or connected to CBRA Unit or otherwise protected area - Review concluded	

NOTE: All times are GMT using a 24-hour clock.

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: HMGP 4240-54-29

Title: HBMWD Surge Tower Retrofit

Environmental Law/ Executive Order	Status	Description	Comments
Clean Water Act (CWA)	Completed	Project would not affect any water of the U.S. - Review concluded	
Coastal Zone Management Act (CZMA)	Completed	Project is located in a coastal zone area and/or affects the coastal zone	See project conditions for CZMA. - khardege - 01/16/2018 22:38:58 GMT
	Completed	State administering agency requires consistency review - Review concluded	
Executive Order 11988 - Floodplains	Completed	No effect on floodplain/flood levels and project outside floodplain - Review concluded	The project is located in unshaded Zone X (FIRM 0623C0840G, effective 6/21/2017). No further review is required - khardege - 01/16/2018 23:49:39 GMT
Executive Order 11990 - Wetlands	Completed	No effects on wetlands and project outside wetlands - Review concluded	
Executive Order 12898 - Environmental Justice for Low Income and Minority Populations	Completed	Low income or minority population in or near project area	The SOW associated with this PW will result in a beneficial impact to all populations. - khardege - 01/16/2018 23:51:07 GMT
	Completed	No disproportionately high and adverse impact on low income or minority population - Review concluded	
Executive Order 13112 - Invasive Species	Completed	Review concluded	See project conditions for EO13112 - khardege - 01/16/2018 23:51:51 GMT
Endangered Species Act (ESA)	Completed	Listed species and/or designated critical habitat present in areas affected directly or indirectly by the federal action	The activities for this project and location is within a relatively unpopulated area. construction activities are confined to areas which have been previously developed. Additionally, no suitable or critical habitat for any of the federally listed species exists within the project area. The proposed project would not destroy or adversely modify designated or proposed critical habitat and would not affect any other listed or proposed species under the jurisdiction of the USFWS. It is therefore determined that the proposed project would have <u>No Effect</u> on listed species and that formal consultation with the USFWS Service under Section 7 of the Endangered Species Act is not required. See attached No Effect Determination. - khardege - 01/16/2018 22:18:50 GMT
	Completed	No effect to species or designated critical habitat (See comments for justification) - Review concluded	

NOTE: All times are GMT using a 24-hour clock

FEDERAL EMERGENCY MANAGEMENT AGENCY SECTION JIC, PAGE NO. 01 U  
 RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: HMGP 4240-54-29

Title: HBMWD Surge Tower Retrofit

Environmental Law/ Executive Order	Status	Description	Comments
Farmland Protection Policy Act (FPPA)	Completed	Project does not affect designated prime or unique farmland - Review concluded	
Migratory Bird Treaty Act (MBTA)	Completed	Project located within a flyway zone	See project conditions for MBTA - khardege - 01/16/2018 23:56:10 GMT
	Completed	Project has potential to take migratory birds	
	Completed	Contact made with USFWS - Review concluded	
Magnuson-Stevens Fishery Conservation and Management Act (MSA)	Completed	Project not located in or near Essential Fish Habitat - Review concluded	
National Historic Preservation Act (NHPA)	Completed	Applicable executed Programmatic Agreement (enter date in comments).	This Undertaking, replacement of the Humboldt Bay Water Management District's water main/surge tower, was subject of an archaeological and architectural survey of the Area of Potential Effects (APE) by Roscoe and Associates, a qualified contractor for Humboldt Bay Water Management District (HBWMD). The water main/surge tower was installed in 1964-65 to provide water to the Georgia-Pacific Corporation pulp mill in Fairview, California. FEMA reviewed the resulting report, dated July 2017, and agreed with its methodology and conclusions that no archaeological or architectural resources eligible for the National Register of Historic Places (NRHP) would be affected by the Undertaking. Although Roscoe and Associates informally consulted with three Tribal Historic Preservation Officers (THPOs) for the Blue Lake Rancheria, Bear River Band of the Rohnerville Rancheria, and the Wiyot Tribe, FEMA sent new letters to the Chairman and THPOs of nine tribes: Yurok, Big Lagoon Rancheria, Blue Lake Rancheria, Hoopa Valley Tribe, Karuk Tribe, Bear River Band of Rohnerville Rancheria, Round Valley Indian Tribes of Round Valley Reservation, Wiyot Tribe, and Cher-Ae Heights Indian Community of Trinidad Rancheria, and no concerns about the Undertaking were received. FEMA also exchanged emails with the three noted THPOs. By letter dated January 3, 2018, FEMA requested that the State Historic Preservation Officer (SHPO) concur with FEMA's No Historic Properties Affected determination for this Undertaking. By letter dated January 12, 2018, the SHPO concurred with FEMA's determination of No Historic Properties Affected for this Undertaking. - mnowick - 01/16/2018 20:54:33 GMT

NOTE: All times are GMT using a 24-hour clock.

FEDERAL EMERGENCY MANAGEMENT AGENCY

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: HMGP 4240-54-29

Title: HBMWD Surge Tower Retrofit

Environmental Law/ Executive Order	Status	Description	Comments
	Completed	Building or structure 50 years or older or listed on the National Register in the project area and activity not exempt from review	
	Completed	Determination of No Historic Properties Affected (FEMA finding/SHPO/THPO concurrence attached) - Review concluded	
	Completed	Project affects undisturbed ground	
	Completed	Project area has potential for presence of archeological resources	
	Completed	Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence attached) - Review concluded	
Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA)	Completed	Review concluded	See project conditions for RCRA - khardege - 01/17/2018 00:02:03 GMT See project conditions for RCRA - khardege - 01/17/2018 00:02:05 GMT See project conditions for RCRA - khardege - 01/17/2018 00:02:07 GMT
Wild and Scenic Rivers Act (WSR)	Completed	Project is not along and does not affect Wild and Scenic River - Review concluded	

CONDITIONS

Special Conditions required on Implementation of Projects:

Vehicles and equipment must be free of invasive species.

Source of condition: Executive Order 13112 - Invasive Species

Monitoring Required: No

The Applicant is responsible for complying with all other applicable subparts of the CZMA. Failure to do so could jeopardize the receipt of federal funding. Any changes to the scope of work must be resubmitted to FEMA for Consistency review prior to initiation of any work.

Source of condition: Coastal Zone Management Act (CZMA)

Monitoring Required: No

Based on the nature of activities, the SOW associated with this PW does not have the potential to take migratory birds.

Source of condition: Migratory Bird Treaty Act (MBTA)

Monitoring Required: No

NOTE: All times are GMT using a 24-hour clock.



01/17/2018

16:48:57

FEDERAL EMERGENCY MANAGEMENT AGENCY

REC-01

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

SECTION JIC PAGE NO. 13

Project ID: HMGP 4240-54-29

Title: HBMWD Surge Tower Retrofit

All wastes must be collected, stored, transported, and disposed of in accordance with state and federal requirements.

Source of condition: Resource Conservation and Recovery Act, aka Solid Waste Disposal Act (RCRA)      Monitoring Required: No

**Standard Conditions:**

Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

**CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY  
HAZARD MITIGATION GRANT PROGRAM  
NOTICE OF INTEREST  
DR-4344**

Please read the following instructions prior to completing the Notice of Interest (NOI) to participate in the DR-4344 'October 2017 Wildfires' Hazard Mitigation Grant Program (HMGP). The NOI can be found at <http://www.caloes.ca.gov/cal-oes-divisions/recovery/disaster-mitigation-technical-support/404-hazard-mitigation-grant-program>. Accurate and complete answers are required to determine eligibility and expedite review. NOIs must be submitted electronically and each section must be answered in the space provided. Do not send any additional documents, they will not be considered during the NOI eligibility determination process. Please direct any questions regarding completion of the NOI to [HMGP@caloes.ca.gov](mailto:HMGP@caloes.ca.gov).

**Introduction**

Federal funding is provided under the Robert T. Stafford Emergency Assistance and Disaster Relief Act (Stafford Act) through the Federal Emergency Management Agency (FEMA) and the California Governor's Office of Emergency (Cal OES). Cal OES is responsible for the review of HMGP NOIs and applications. Cal OES forwards funding recommendations to FEMA based on these reviews. FEMA has final approval for activity eligibility and funding.

Hazard mitigation activities are aimed at reducing or eliminating future damages. Subgrant applicants must have a FEMA approved Local Hazard Mitigation Plan (LHMP) to submit an application for a project. Project activities must also be shown to be cost-effective using the FEMA-approved software which is available at: <https://www.fema.gov/benefit-cost-analysis>.

FEMA's Hazard Mitigation Assistance (HMA) guidance is available at <https://www.fema.gov/hazard-mitigation-assistance-program-guidance>. This document provides guidance on applicant and activity eligibility as well as other requirements including performance period, funding limits, cost effectiveness, environmental review, and documentation minimums. Please review eligibility requirements before submitting an NOI.

Cal OES will review each NOI to determine if the activity described is eligible under DR-4344 HMGP. Subapplicants submitting an eligible NOI will be notified to submit an HMGP application. Cal OES may hold workshops to provide information and assistance in filling out the subapplication and preparing a benefit/cost analysis using the FEMA-approved software. Only those subapplicants who have received an approved NOI notification will be invited to attend the workshops.

**Notice of Interest Form**

All subgrant applicants are required to submit an NOI. The NOI must be received by Cal OES no later than 11:59 p.m. on January 30, 2018. An approved NOI is required for each subapplication submitted.

The following provides detailed guidance on completing the NOI form:

1. Disaster #: DR-4344 'October 2017 Wildfires'
2. Name of Person Completing NOI: Provide the first and last name of the person completing the NOI.

Patrick Kaspari

3. NOI Instructions have been reviewed and read: By selecting yes, the person completing the NOI form certifies that he/she has read the NOI instruction material.

Yes

4. FIPS #: Provide the Federal Identification Processing System number for the subgrant applicant. If the subgrant applicant does not have or know their FIPS number, contact Cal OES.

HBMWD FIPS # 023-91000

5. DUNS #: Provide the Data Universal Numbering System number for the subgrant applicant. If the subgrant applicant does not have or know their DUNS number, call Dunn & Bradstreet at 1-866-705-5711.

HBMWD DUNS # 047391776

6. Applicant Name: Provide the name of the subgrant applicant applying for grant funds. Subgrant applicant names must be consistent with the FIPS#.

Humboldt Bay Municipal Water District

7. Applicant Address: Provide the mailing address for the subgrant applicant. Include city, county, state and zip code.

PO Box 95, Eureka, Humboldt County, CA, 95502-0095

8. Applicant Type: Select one. Eligible subgrant applicants include state and local governments, and special districts. If your entity does not fall into one of these categories, you are not eligible to apply for DR-4344 funding.

Special District

9. Legislative Districts:

Provide only the number of the legislative districts listed. If the project site is located in a different district than the subgrant applicant address, please provide both.

State Assembly – 2  
State Senate – 2  
US Congressional – 2

10. Authorized Applicant Agent:

The person(s) authorized by the subgrant applicant's governing body to act on behalf of the subgrant applicant to execute an application for the purpose of obtaining federal financial assistance. Provide the name of the person(s) that will serve in this position. Forms used to designate the AA will be provided upon grant approval. The AA will also be required to sign standard assurances to accept grant funds. Provide the first and last name, title, address, phone and fax numbers and e-mail address.

Mr. John Friedenbach  
General Manager  
PO Box 95, Eureka, CA 95502-0095  
Ph (707) 443-5018 Fax (707) 443-5731  
friedenbach@hbmwd.com

11. Project Manager/Working Contact:

The person Cal OES will contact with questions and/or requests for information. Provide the first and last name, title, address, phone and fax numbers and e-mail address.

Ms. Chris Harris  
Business Manager  
PO Box 95, Eureka, CA 95502-0095  
Ph (707) 443-5018 Fax (707) 443-5731  
harris@hbmwd.com

12. Project Manager/Working Contact (Alternative):

The person Cal OES will contact with questions and/or requests for information when the primary contact is not available. Provide the first and last name, title, address, phone and fax numbers and e-mail address.

Mr. Patrick Kaspari  
District Engineer  
718 Third Street, Eureka, CA 95501  
Ph (707) 443-8326 Fax (707) 267-2289  
pat.kaspari@ghd.com

13. Application Type:

Select one. Identify if your application describes a planning or project activity.

Project

14. Hazard Type: Select one. Use Multi-Hazard for planning activities.

Earthquake

15. Activity Type: Select one. Cal OES will only accept NOIs describing eligible activities.

Structural Retrofit

16. Activity Title/Name: Provide a name that clearly reflects the proposed activity. Cal OES recommends choosing a short and concise project title as it will be referenced in all correspondence between the subapplicant and the State. The name selected in the NOI must match the name used if a subapplication is submitted.

HBMWD Reservoirs Seismic Retrofit

17. Population: For planning applications only.

N/A

18. Activity Location: Provide the Latitude and Longitude in degrees to six decimal places defining the activity location. If the activity involves more than one location, provide a Latitude and Longitude at the center of the proposed project area and a general description of the project area.

Tank:	2MG	1MG	Industrial
Lat:	40.907762	40.907317	40.805267
Long:	-124.063656	-124.064400	-124.199127

The project area is split into two general areas. The 2MG & 1MG tanks are at the Essex/Korblex area, less than a mile north/east of Arcata, Humboldt County, CA. The Industrial tank is approximately one mile south/west of Samoa, Humboldt County, CA.

19. Describe the problem to be mitigated: Describe the need for this activity. The problem statement must:  
1. Include a description of the hazard(s) being addressed, i.e. fire, flood, earthquake, etc.  
2. Identify all risks to the facility that the proposed project will mitigate.  
3. Refer to any studies or reports that have been prepared analyzing the risks to the facility being protected.

The problem to be mitigated is the loss of potable water service and associated loss of wastewater and fire services to several communities in Humboldt County. The Humboldt Bay Municipal Water District (HBMWD or District) is a regional wholesale water provider that supplies water to



approximately 88,000 people in the Humboldt Bay area. HBMWD supplies drinking water to seven municipal customers that include the cities of Arcata, Blue Lake, and Eureka, as well as community services districts serving unincorporated areas including Humboldt, Fieldbrook/Glendale, Manila, and McKinleyville CSDs, and the Samoa Peninsula. These municipal customers in turn serve water to approximately 66% of the people in Humboldt County.

HBMWD owns and operates R.W. Matthews Dam, which forms Ruth Lake. The District releases water from Ruth Lake into the Mad River, where it flows for approximately 75 miles until it reaches the District's pumping facilities at Essex, 9 miles from the Pacific Ocean.

HBMWD's domestic water system draws raw water from the aquifer below the Mad River near the District's Essex Control Facility via four collector wells (also called collectors or pump stations). The pump stations pump the water to the District's Turbidity Reduction Facility (TRF) site located on Korblex Hill for treatment, storage, and distribution to customers. On Korblex Hill, there are two reservoirs, a 1 Million Gallon (MG) capacity, welded steel tank constructed in 1967, and a 2MG welded steel tank constructed in 1996, which is used for disinfection contact time in the treatment process along with storage. The District also has another 1MG welded steel tank also constructed in 1967 located on the Samoa Peninsula and used for storage at that end of the system.

The roof rafters in the 1MG reservoir located at Korblex began to experience severe corrosion in the past few years, causing the District to install a new roof on the reservoir in 2017. The rafters for the existing roof had twisted several years ago. New tie-rods were put in at that time to stiffen and strengthen the rafter. However, during a structural inspection of the tank in August 2015, it was discovered that the corrosion of the tank roof had reached a critical level. The September 17, 2015 letter from Brian Crowell, Structural Engineer with GHD, to Ryan Chairaz, HBMWD Maintenance Supervisor, detailing the finding of the August 2015 inspection stated: "The interior of the tank above the water level shows significant areas of rust damage, staining, paint blistering and paint failure. On each roof rafter channel, at the interface between the rafter and the plate roof, between 25% to 75% of the edge of each channel shows evidence of rust and paint scaling. At the bottom flange of the channels between 25% to 50% of the edge of each channel shows evidence of rust and paint scaling. In some locations along the bottom flanges of the rafters the corrosion is severe enough to cause flaking of the base steel on a magnitude that reduces the original design thickness of the steel. At the center of the tank a steel plate ring is located at the top of the center pipe column, providing bearing support for all the roof rafter channels. This plate shows significant paint failure, on the order of 50%." The September 2015 letter stated that the corrosion of the tank roof elements greatly exceeded the level observed and reported after the 2008 structural inspection. The September 2015 letter went on to state: "Continued corrosion will impact the structural integrity of the roof system, and therefore must be halted. One option would be to consult with a painting contractor to evaluate the means and methods of effective paint and corrosion removal, and repainting. Given the current level of corrosion, it is possible that cleaning and repainting is not cost effective and/or may only provide a relatively short-term solution before the return of corrosion. A main concern with just painting is that it is unclear how many of the "hidden" portions of the roof system (such as the area between the roof plating and top flange of channel rafters) could be adequately cleaned and coated sufficiently to prevent continued rusting. Therefore the option of replacing the roof should be considered."

A follow-up structural inspection was conducted on January 14, 2016. This inspection focused on corrosion, and steel thickness measurements were taken at visibly severe corrosion locations around the roof of the tank. The February 2, 2016 letter from Brian Crowell, GHD to Ryan Chairaz,

HBMWD Maintenance Supervisor, reported metal loss on the rafters of up to 50% and stated; "As discussed in the September report, the current corrosion indicates the tank has reached a critical point in its service life and needs to be addressed soon. Continued corrosion will eventually result in a failure of the roof system."

Given these findings, the District ultimately decided to replace the roof of the reservoir. As part of this roof replacement project, the seismic stability of the reservoir was assessed and structural calculations performed by Paso Robles Tank. It was found that the reservoir did not conform to the new 2016 California Building Code (CBC) seismic requirements and its ability to resist seismic forces was 33% below what would be required for new tank construction. Based on our improved understanding of earthquake forces, the 2016 CBC requires much stricter seismic design requirements based on the anticipated seismic forces at the project location. Humboldt County has some of the largest earthquake risk in California, and correspondingly some of the highest design parameters in the State and the United States. Although formal structural calculations have not been performed on the 1MG reservoir located in Samoa, it was constructed with the same design and at the same time as the Korblex reservoir, so the calculations performed on the Korblex 1MG reservoir are directly applicable to the Samoa Reservoir.

The roof rafter cross-braces on the 2MG Korblex reservoir will also need to be upgraded to conform to the new seismic code. The cross braces on the 2MG reservoir are corroding, and the failure of these cross braces greatly affect the seismic stability of this tank. Given the substantial increase in the seismic design parameters in the 2016 CBC update, it is fairly certain the 2MG tank will also not resist a design earthquake.

The failure of any one of these reservoirs would impact delivery of water to the District 88,000 customers. If only one of the Korblex reservoirs failed during an earthquake, and the other survived, the District could reroute flows around the failed reservoir (assuming the existing piping is still viable) and continue to provide water, but with reduced storage capacity. If both Korblex reservoirs failed, the District would be unable to provide water to any of their customers. If the Samoa reservoir failed, the District could bypass the reservoir (assuming the piping and valves were still serviceable); however there would not be sufficient water storage to provide required firefighting flows to the communities and industries on the Samoa Peninsula, likely at a time when they are needed the most.

20. Describe the scope of work:
- The scope of work must include the following:
1. State the mitigation goals and objectives of the project.
  2. Describe the project, to include:
    - a. A statement of the effectiveness or level of protection.
    - b. The proposed conceptual design, the means of implementation and the basic dimensions of the project and project area.
    - c. A description of the properties, communities or populations that would directly benefit from the project.
    - d. Identify if the project location(s) is in a floodplain.
    - e. An explanation of how the proposed project will provide a long term and independent solution to the risk being mitigation.

The mitigation goals and objectives of this project are to seismically retrofit the District's three water reservoirs and bring them up to current code to help to ensure continued delivery of water after a seismic event.

The entire project would be completely outside of the 100-year floodplain.

The communities that would directly benefit from this project would include the cities of Arcata, Blue Lake, and Eureka, as well as Special Service Districts serving unincorporated areas including Humboldt, Fieldbrook/Glendale, Manila, and McKinleyville CSDs and the Samoa Peninsula. If the existing reservoirs failed, these communities would be without water, wastewater, and fire services for several days, and potentially for weeks. This includes a population of over 88,000 people, and approximately 66% of the residents in Humboldt County.

The expected life of the proposed project is 50+ years. The District conducts annual inspections of all their reservoirs. The existing reservoirs are painted at regular intervals, and this process would be continued after the seismic retrofit. Other maintenance/repair requirements on the reservoirs themselves would be extremely low.

In the spring of 2017, the District went out to Bid on the replacement of the roof in their 1MG Domestic reservoir at the Korblex site due to sever corrosion discovered in the 2015/2016 structural inspections performed on the tank. As part of the roof replacement project, the selected contractor, Paso Robles Tank/Brown-Minneapolis Tank, performed a structural analysis of the tank to confirm that the new roof would not increase the seismic vulnerability of the tank. Their analysis showed that the tank was at 133% of its design capacity for a seismic load. Paso Robles Tank also put together a scope and cost to bring the tank up to code. Their recommendations were to cut the bottom of the tank off and separate it from the tank floor. The tank would then be jacked up and a 1-inch thick steel "tub ring" would be installed as the lowest tank section and welded on to the upper tank sections. A 6-foot wide by 4-foot thick perimeter concrete ring foundation would be poured under the perimeter of tank. The thicker steel tub section would then be anchored to the concrete foundation with forty six, 2-inch diameter anchor bolts installed around the perimeter of the tank. It is anticipated that all three reservoirs would be retrofit in a similar fashion. Calculations will be performed on all three tanks to confirm the final design requirements of the retrofits prior to initiating request for construction bids on the tanks.

The roof on the 1MG Korblex reservoir has already been retrofitted with its replacement in 2017. The rafters in the 1MG Samoa reservoir are of a similar design as the Korblex reservoir, however they were previously retrofitted several years ago and seem to be performing adequately. This will be confirmed as part of the final seismic design. The support struts on the 2MG Korblex reservoir however are not performing well, and it is anticipated that they will be upgraded as part of the seismic retrofit project as well. The existing struts consist of flat metal bars that act as cross braces for the rafters. The area between the bars and the rafters experience movement during the expansion and contraction of the roof and the movement wears the coating off, making this area prone to corrosion. As part of the seismic design, it is anticipated that these cross braces will be removed and replaced with round rod placed through holes drilled in the rafters. One end of the rod will be threaded, and a nut will be used to tighten the rod in place. All three reservoirs will also be painted after the retrofit work is completed.

It is anticipated that the seismic retrofit of the three existing reservoirs will enable the District's water system to resist a current design earthquake load and continue to provide drinking water to 88,000 residents of Humboldt County.

21. Performance Period: Indicate the length of time needed to complete the activity in months. The performance period cannot exceed 36 months.

36 months

22. Duplicate Programs: Indicate if this activity is eligible for funding from another federal program such as the NRCS Emergency Watershed Protection Act, FEMA Public Assistance Program, or the US Department of Agriculture/Department of the Interior Healthy Forest Reform Act of 2002.

No

23. Activity Costs: Federal Share: The federal share for HMGP projects cannot exceed 75 percent of the total eligible project cost. For DR-4344 the maximum federal share that can be requested is \$5 million.

Applicant Match: The subgrant applicant must provide a minimum of 25 percent of the total project cost. The subapplicant may over match the required 25 percent. The matching funds must be from a non-federal source and must be in place at the time of application submittal.

Total Activity Cost: The total activity cost must equal the sum of the federal share and the applicant match.

Identify the subgrant applicant's source for the required 25 percent non-federal match.

Federal Share: \$2,625,000  
Applicant Match: \$875,000  
Total Cost: \$3,500,000

Municipal customer water rates will be the source of the Humboldt Bay Municipal Water District's 25% non-federal match.

24. LHMP Approval Date: Identify the date the subgrant applicant's Local Hazard Mitigation Plan (LHMP) was approved by FEMA. LHMP's expire every five years. Subapplicants must have a FEMA-

03/20/2014

approved and adopted LHMP by the time FEMA is ready to obligate funds to any approved project.

**25. Local Hazard Mitigation Plan:**

Provide a narrative that identifies how the proposed activity is consistent with the subapplicant's FEMA approved LHMP. Also include a narrative that quantifies the criticality of the project with respect to the overall population of the community.

The project addresses four out of the six Humboldt County Operational Area Hazard Mitigation (HCOAHM) Plan goals and five objectives. The proposed project meets the goals of the HCOAHM Plan as stated in Chapter 4 of Volume 1, page 4-1 of the plan to protect health and safety, property, the economy, and quality of life. The project also meets the following objectives of the HCOAHM Plan as stated in Chapter 4 of Volume 1, pages 4-1 & 4-2: eliminate or minimize disruption of local government operations (O-1); increase resilience of infrastructure and critical facilities (O-2); reduce hazard-related risks and vulnerability to the populations in Humboldt County (O-3); sustain reliable local emergency operations and facilities during and after a disaster (O-4); and seek to enhance emergency response capabilities within the planning area (O-5). In addition, the proposed project also falls under initiative HBMWD-5-Conduct design and feasibility studies for construction of critical infrastructure, in the District's Hazard Mitigation Action Plan Matrix, in Chapter 30, Volume 2, page 30-5 of the plan.

The population of Humboldt County is approximately 135,000 people, of which 88,000 or almost 66% of the entire county receives its potable water directly or indirectly from Humboldt Bay Municipal Water District. This also directly corresponds to available firefighting and sanitation services. Under current conditions, if the District's existing tanks were to fail during a seismic event, then this entire population would be without potable water for at a minimum several days, and potentially several weeks or longer, while the existing tanks were repaired. The surrounding communities do not have sufficient water storage facilities to last more than a few days, some much less. This single point of failure is very critical to address for all the communities in the entire Humboldt Bay area. In addition, several of the communities that would be affected by the loss of these services are economically disadvantaged communities.

Subgrant applicants receiving notification that their NOI was approved may be invited to attend the workshops. Please direct any questions or comments to [HMGP@caloes.ca.gov](mailto:HMGP@caloes.ca.gov).



**Humboldt Bay Municipal Water District**

To: Board of Directors  
From: John Friedenbach  
Date: February 1, 2018  
Re: **Budget Authorization for FERC Required Spillway Engineering Assessments**

**Discussion**

As previously communicated to the Board, in response to the spillway failure at Oroville last year, FERC and DSOD are requiring increased scrutiny by dam owners throughout California. Two of the additional requirements by FERC yet to be completed by our District are:

1. Engineering Geology Review
2. Focused Spillway Potential Failure Mode Analysis (PFMA)

Staff proposes that the Geology review will be conducted by an experienced geologist engineer from GEI who has experience performing these analyses this past year for multiple dams throughout California and reporting to FERC. GHD staff will provide technical support and review services for this task.

Staff proposes that the focused spillway PFMA will be coordinated by our Chief Dam Safety Consultant, Bill Rettberg, of GEI and will include participation by: GHD, HBMWD staff, DSOD, and FERC. Staff plans to use video conferencing to connect the various participants to minimize travel time and associated costs. GEI will prepare the PFMA report for submittal to FERC. In addition to participating in the PFMA, GHD will review the PFMA report and assist with incorporating both project reports into the District Final Spillway Assessment Work Plan for submittal to FERC. A Spillway Assessment Work Plan Update was submitted to FERC prior to December 31, 2017.

**Action**

Staff requests that the Board authorize additions to the current year's project budget for the spillway geologic assessment and spillway probable failure mode analysis in the amounts of \$7,000 and \$22,000 respectively which includes fees for both GEI and GHD. Staff proposes to fund these projects either through the budget re-allocation process at the end of the fiscal year or if necessary by using the Board Designated reserves of the MSRA, if authorized by the Board.

# Financial

**Humboldt Bay Municipal Water District**

Memo to: Board of Directors

From: Becky Moyle, Accounting & Human Resources Specialist

Date: February 1, 2018

Subject: Financial Report for January 2018

The Financial Report for January 2018 was not completed by the BlueBook publish date. I expect to have the Financial Report completed early next week and will email it to you as soon as it is completed. Please let me know if you would like a paper copy delivered to you.

The Expenses by Vendor Detail report is in the BlueBook.

Humboldt Bay Municipal Water District  
Expenses by Vendor Detail

January 2018

SECTION Ja PAGE NO. 2

01/18

Memo	Amount
101Netlink	
Ruth Data Link/Internet	-170.00
Total 101Netlink	-170.00
Advanced Security Systems	
Upgrade Essex Fire Alarm System	-7,722.63
Essex Quarterly Alarm System Monitoring	-76.50
Ruth Hydro Quarterly Alarm System Monitoring	-76.50
Total Advanced Security Systems	-7,875.63
Altec Industries, Inc	
warning label for Unit 4 Boom	-17.93
Total Altec Industries, Inc	-17.93
Asbury Environmental Services	
dispose of hazardous waste	-525.00
Total Asbury Environmental Services	-525.00
AT & T	
Ruth HQ	
TRF	
Essex office	
Eureka office	
Ruth Hydro	-96.34
Valve Building Samoa	
Ruth HQ	
TRF	-26.85
Essex office	-9.59
Eureka office	-371.49
Ruth Hydro	-6.54
Valve Building Samoa	-203.55
	-96.61
Total AT & T	-810.97
AT&T	
Eureka/Essex Landline	-34.96
Arcata/Essex Landline	-34.96
Samoa/Essex Landline	-234.43
Blue Lake Meter Signal	-60.36
Eureka Office Modem	-134.25
Eureka Office Alarm	-39.69
Samoa Booster Pump	-80.21
Valve Building	-134.25
Eureka Office	-329.60
Essex Office	-831.73
TRF	-130.54
Ruth Dataline	-130.06
Total AT&T	-2,175.04
AT&T Advertising Solutions	
white page listing	-21.00
Total AT&T Advertising Solutions	-21.00
Campton Electric Supply	
Essex lighting	-678.77
Total Capton Electric Supply	-678.77
Carol McKibben	
expense reimbursement for Essex office supplies	-70.60
Total Carol McKibben	-70.60
Caselle, Inc	
Caselle Accounting Software	-28,843.00
Total Caselle, Inc	-28,843.00
City of Eureka	
Eureka office water/sewer	-66.98

Humboldt Bay Municipal Water District  
Expenses by Vendor Detail

January 2018

SECTION Ja PAGE NO. 3

01/18

Memo	Amount
Total City of Eureka	-66.98
Coastal Business Systems Inc. Eureka office copy and fax machine	-908.73
Total Coastal Business Systems Inc.	-908.73
Coastal Tree Service Blue Lake/Fieldbrook-Glendale CSD river crossing	-2,945.00
Total Coastal Tree Service	-2,945.00
Cody Bruffett auto mileage reimbursement - RE-ISSUE check 42899 lost in mail	-60.13
Total Cody Bruffett	-60.13
Corey Borghino auto mileage reimbursement October - December 2017	-110.21
Total Corey Borghino	-110.21
CRWA Annual Member Ship dues 2018	-480.00
Total CRWA	-480.00
Dave Perkins auto mileage reimbursement	-157.29
Total Dave Perkins	-157.29
Dillon Construction Sheriff's Cove debris removal	-2,400.00
Total Dillon Construction	-2,400.00
DTSC Ruth HQ Annual Hazmat Fee Ruth Hydro Annual Hazmat Fee	-284.00 -454.00
Total DTSC	-738.00
Eureka-Humboldt Fire Ext., Co, Inc repair Unit 5 fire extinguisher mount	-14.05
Total Eureka-Humboldt Fire Ext., Co, Inc	-14.05
Eureka Oxygen cylinder rental	-107.30
Total Eureka Oxygen	-107.30
FEDEX return ACWA/JPIA training tapes ship Ruth Lake water sample	-26.06 -54.39
Total FEDEX	-80.45
Fernbridge Tractor & Equipment Company John Deere backhoe repair	-72.38
Total Fernbridge Tractor & Equipment Company	-72.38
FleetPride equipment maintenance pipeline maintenance shop supplies	-3.91 -9.04 -60.86
Total FleetPride	-73.81
Fortuna Iron Corporation new Unit 9 lumber rack metal inventory	-89.16 -34.48
Total Fortuna Iron Corporation	-123.64
Frontier Communications Ruth HQ	-51.05



Humboldt Bay Municipal Water District  
Expenses by Vendor Detail

January 2018

Memo	Amount
Ruth Hydro/Ruth Dataline	-160.50
Ruth HQ	-51.42
Ruth Hydro/Ruth Dataline	-161.78
<b>Total Frontier Communications</b>	<b>-424.75</b>
GEI Consultants, Inc	
Ruth Dam Spillway repair	-369.00
<b>Total GEI Consultants, Inc</b>	<b>-369.00</b>
GHD	
(93438) Blue Lake/Fieldbrook River Crossing	-52,402.00
(93435) 1 MG Reservoir Roof Replacement	-255.50
(93437) Ruth Spillway Repair	-502.50
(93429) Ruth Dam Crest Monument Survey	-1,414.50
(93433) Ruth Left Abutment Slide Survey	-854.25
(93432) Ruth Dam Spillway Wall Survey	-753.75
(93431) Mad River Cross Sections below Ruth Dam	-2,016.00
(93430) FERC - DSSMR Assistance	-50.25
(93436) General Engineering - Essex	-1,745.00
(93436) General Engineering - Eureka	-1,005.00
<b>Total GHD</b>	<b>-60,998.75</b>
Harbor Freight Tools	
shop supplies	-32.51
<b>Total Harbor Freight Tools</b>	<b>-32.51</b>
Hensel Hardware	
hydrant meter maintenance/line locator maintenance	-30.85
pipeline maintenance	-10.84
gas detector maintenance	-35.21
shop supplies	-94.41
<b>Total Hensel Hardware</b>	<b>-171.31</b>
Henwood Associates, Inc	
Consultant Services Agreement	-851.42
<b>Total Henwood Associates, Inc</b>	<b>-851.42</b>
Hopkins Technical Products, Inc	
TRF chemical pump repair	-1,652.37
<b>Total Hopkins Technical Products, Inc</b>	<b>-1,652.37</b>
Humboldt County Planning	
Appeal to Board of Supervisors - Parcel Zoning Change	-2,263.00
<b>Total Humboldt County Planning</b>	<b>-2,263.00</b>
Humboldt Fasteners	
repair estimate fee	-15.00
<b>Total Humboldt Fasteners</b>	<b>-15.00</b>
Humboldt Redwood Company, LLC	
Mt Pierce Lease site	-266.79
<b>Total Humboldt Redwood Company, LLC</b>	<b>-266.79</b>
Hummel Tire & Wheel	
Unit 6 winter tires	-453.17
Unit 6 winter tires	-453.17
<b>Total Hummel Tire &amp; Wheel</b>	<b>-906.34</b>
Jack Hurst Trucking	
Haul Rock to Eureka office	-2,400.00
<b>Total Jack Hurst Trucking</b>	<b>-2,400.00</b>
JTN Energy, LLC	
Consultant Services Agreement	-851.42
<b>Total JTN Energy, LLC</b>	<b>-851.42</b>

Humboldt Bay Municipal Water District  
Expenses by Vendor Detail

January 2018

SECTION IIa PAGE NO. 5

Memo	Amount
Keller America, Inc domestic water reservoir backup level sensor	-492.35
Total Keller America, Inc	-492.35
Ken Davis expense reimbursement for safety shoes	-108.48
Total Ken Davis	-108.48
Kernen Construction Park 4 road maintenance	-264.54
Total Kernen Construction	-264.54
Mario Palmero Essex office supplies	-87.70
Holiday party supplies	-39.53
Eureka office landscaping project	-16.00
Total Mario Palmero	-143.23
Matthews Paints, Inc. pressure washer maintenance	-59.68
shop supplies	-75.39
Total Matthews Paints, Inc.	-135.07
Mendes Supply Company Eureka office maintenance	-86.73
Total Mendes Supply Company	-86.73
Miller Farms Nursery repair equipment	-94.52
Total Miller Farms Nursery	-94.52
Mission Linen maintenance supplies	-91.14
Uniform Rental	-657.58
Total Mission Linen	-748.72
Mitchell, Brisso, Delaney & Vrieze Legal services Essex- December 2017	-31.00
Legal Services Eureka - December 2017	-558.00
Total Mitchell, Brisso, Delaney & Vrieze	-589.00
Napa Auto Parts vehicle maintenance	-98.39
vehicle maintenance	-42.94
shop supplies	-98.36
Total Napa Auto Parts	-239.69
NCBPA Backflow Prevention Training	-2,370.00
Total NCBPA	-2,370.00
NCCCCO Crane Operator Certification - Test Site	-50.00
Total NCCCCO	-50.00
NEAC Annual membership	-40.00
Total NEAC	-40.00
Network Management Services Essential Care Computer Support Service for Eureka office	-368.10
Guard-IT Security Service for Eureka office	-139.99
Recover-IT Backup Solution	-124.99
Domain Management	-3.00
Umbrella Security	-30.00
Essential Care Computer Support Service for Eureka office	-368.10

Humboldt Bay Municipal Water District  
Expenses by Vendor Detail

SECTION 22a PAGE NO. 10

January 2018

1/01/18

Memo	Amount
Guard-IT Security Service for Eureka office	-139.99
Recover-IT Backup Solution	-124.99
Domain Management	-3.00
Umbrella Security	-30.00
<b>Total Network Management Services</b>	<b>-1,332.16</b>
North Coast ASCE	
Seminar on Drones	-45.00
<b>Total North Coast ASCE</b>	<b>-45.00</b>
North Coast Cleaning Services, Inc	
Eureka office building maintenance	-545.00
<b>Total North Coast Cleaning Services, Inc</b>	<b>-545.00</b>
North Coast Laboratories	
lab tests	-665.00
<b>Total North Coast Laboratories</b>	<b>-665.00</b>
Northern California Safety Consortium	
membership fee	-50.00
<b>Total Northern California Safety Consortium</b>	<b>-50.00</b>
Pacific Gas & Electric Co.	
Eureka Office	-474.75
Jackson Ranch Rectifier	-17.29
299 Rectifier	-82.26
West End Rd. Rectifier	-108.98
TRF	-6,654.72
Ruth Valve Control	-24.08
Ruth Hydro	-19.71
Samoa Booster Pump Station	-346.94
Samoa Dial Station	-48.09
Essex Pumping 12/1/2017 to 12/31/2017	-44,793.33
Ruth Bunkhouse	-46.86
<b>Total Pacific Gas &amp; Electric Co.</b>	<b>-52,617.01</b>
Pacific Paper Co.	
Eureka office supplies	-434.21
<b>Total Pacific Paper Co.</b>	<b>-434.21</b>
PasoRoblesTank-Brown-Minneapolis Tank, Inc	
1 MG D/W Reservoir Roof & Painting - Final Payment	-23,878.45
<b>Total PasoRoblesTank-Brown-Minneapolis Tank, Inc</b>	<b>-23,878.45</b>
Peterson Tractor Co.	
CAT 420 repair	-511.58
CAT 420 backhoe repair	-166.27
<b>Total Peterson Tractor Co.</b>	<b>-677.85</b>
Pierson Building Center	
Ruth Hydro backup generator installation	-72.76
<b>Total Pierson Building Center</b>	<b>-72.76</b>
Pioneer Law Group, LLP	
Legal Services	-5,000.00
<b>Total Pioneer Law Group, LLP</b>	<b>-5,000.00</b>
Pitney Bowes	
postage meter lease	-209.54
<b>Total Pitney Bowes</b>	<b>-209.54</b>
Platt Electric Supply	
Essex lighting maintenance	-396.61
Ruth Hydro lighting maintenance	-118.27
<b>Total Platt Electric Supply</b>	<b>-514.88</b>

Humboldt Bay Municipal Water District  
Expenses by Vendor Detail

January 2018

Memo	Amount
Rebecca J. Moyle	
auto mileage reimbursement July - December 2017	-30.28
office supplies	-91.11
Board of Directors meeting	-10.98
ACWA/JPIA Employee Benefits Presentation	-10.00
Eureka office landscaping	-7.00
copies Humboldt County Environmental Health - Planning Commission Appeal	-5.00
<b>Total Rebecca J. Moyle</b>	<b>-154.37</b>
Recology Arcata	
Essex Garbage Service	-383.07
<b>Total Recology Arcata</b>	<b>-383.07</b>
Recology Humboldt County	
Eureka office garbage/recycling service	-85.40
<b>Total Recology Humboldt County</b>	<b>-85.40</b>
Renner Petroleum	
cardlock fuel - pumping & control	-300.93
cardlock fuel - water quality	-300.93
cardlock fuel - maintenance	-300.93
cardlock fuel - customer service	-300.93
maintenance supplies	-21.16
<b>Total Renner Petroleum</b>	<b>-1,224.88</b>
ROMC	
pre-employment physical	-200.00
<b>Total ROMC</b>	<b>-200.00</b>
Roto-Rooter Plumbers	
Eureka office maintenance	-299.00
<b>Total Roto-Rooter Plumbers</b>	<b>-299.00</b>
SCBA Safety Check, Inc	
Spare Bottles for SCBAs	-1,580.00
<b>Total SCBA Safety Check, Inc</b>	<b>-1,580.00</b>
Scrapper's Edge	
copy Ruth lease map	-1.95
copy project plans	-94.39
copy Humboldt County General Plan	-55.49
<b>Total Scrapper's Edge</b>	<b>-151.83</b>
Security Lock & Alarm	
Eureka office lock maintenance	-20.00
<b>Total Security Lock &amp; Alarm</b>	<b>-20.00</b>
Sitestar Nationwide Internet	
Essex Internet	-52.90
<b>Total Sitestar Nationwide Internet</b>	<b>-52.90</b>
Six Rivers Communications	
Unit 1 radio repair	-150.22
Picketts Peak radio repair	-7,617.21
new Unit 9 Radio installation	-882.30
<b>Total Six Rivers Communications</b>	<b>-8,649.73</b>
Solo Sports	
District Hats	-744.31
Safety Apparel	-2,899.12
<b>Total Solo Sports</b>	<b>-3,643.43</b>
Staples	
Essex office supplies	-107.58
Eureka office supplies	-171.99

Humboldt Bay Municipal Water District  
Expenses by Vendor Detail

January 2018

SECTION JJA PAGE NO. 8

01/18

Memo	Amount
Eureka office supplies	-85.66
Total Staples	-365.23
Streamline	
Website maintenance membership fee	-450.00
Website maintenance membership fee	-450.00
Total Streamline	-900.00
Sudden Link	
TRF Internet	-105.38
Eureka office internet	-204.95
Fieldbrook-Glendale CSD internet	-271.02
Essex Internet	-124.95
Total Sudden Link	-706.30
SWRCB	
Annual Permit Fee - Essex	-1,500.00
Annual Permit Fee - Ruth	-1,500.00
Water System Fees	-10,347.92
Total SWRCB	-13,347.92
T.P. Tire Service, Inc	
Unit 1 flat repair	-20.00
Total T.P. Tire Service, Inc	-20.00
TechnoFlo Systems	
HCSD meter replacement	-4,170.48
Total TechnoFlo Systems	-4,170.48
Tehama Tire Service	
vehicle maintenance	-72.00
Total Tehama Tire Service	-72.00
Thatcher Company, Inc	
TRF chemical supplies	-4,669.28
TRF chemical supplies	-4,437.92
replenish chlorine	-2,102.96
Total Thatcher Company, Inc	-11,210.16
The Mill Yard	
Eureka office lighting maintenance	-16.57
vehicle maintenance	-2.68
Park restroom maintenance	-88.27
computer maintenance	-25.91
shop supplies	-124.73
pipeline maintenance	-63.89
Total The Mill Yard	-322.05
Thrifty Supply	
Lead free meter service fittings	-6,786.46
Total Thrifty Supply	-6,786.46
Trinity County General Services	
Pickett Peak site lease	-250.00
Total Trinity County General Services	-250.00
Trinity County Solid Waste	
Ruth HQ dump fees	-27.25
Ruth Hydro dump fees	-27.25
Total Trinity County Solid Waste	-54.50
U.S. Bank Corporate Payment System	
Ruth HQ Fuel Tank safety signs	-87.18
Essex hazardous waste labels	-30.12
Ruth Hydro diesel fuel signs	-29.50
Water Treatment Plant Operation Course - D. Corral	-157.53



Humboldt Bay Municipal Water District  
Expenses by Vendor Detail

January 2018

SECTION J2a, PAGE NO. 9

01/18

Memo	Amount
Essex office supplies	-215.63
Essex computer supplies	-26.68
Essex computer backp battery	-204.72
Essex office supplies	-54.16
ACWA Conference	-187.10
print copies of CIP	-4.07
ACWA Conference	-866.17
Eureka office supplies	-32.03
Eureka office flag	-40.06
new employee jacket	-53.11
TRF backup system battery	-108.49
Control System Software update/training	-256.52
lab supplies	-18.54
TRF filter cleaning	-17.77
Fieldbrook-Glendale CSD disinfection supplies	-21.50
replenish emergency preparedness kits at Essex	-80.24
Essex office supplies	-23.19
Eureka office building maintenance	-339.00
Eureka office supplies	-32.71
Pump for Ruth HQ water system	172.16
<b>Total U.S. Bank Corporate Payment System</b>	<b>-2,713.86</b>
<b>USA Blue Book</b>	
Replace Customer Service metal detector	-1,097.66
chlorine leak detection supplies	-49.88
<b>Total USA Blue Book</b>	<b>-1,147.54</b>
<b>USTI, Inc</b>	
Humboldt Bay Retail eBill charge	-3.44
Fieldbrook-Glendale CSD eBill charge	-7.60
eBill/ePay maintenance renewal	-302.50
<b>Total USTI, Inc</b>	<b>-313.54</b>
<b>Verizon Wireless</b>	
General Manager	-37.35
Customer Service	-43.25
Operations 2	-0.59
Electrician	-0.22
Unit 6	-22.75
Unit 6	-22.75
Assistant Water Operations Supervisor	-37.27
Opererations 1	-0.22
<b>Total Verizon Wireless</b>	<b>-164.40</b>
<b>West Coast Plumbing</b>	
Ruth HQ water system maintenance	-470.18
<b>Total West Coast Plumbing</b>	<b>-470.18</b>
<b>Wienhoff &amp; Associates Inc</b>	
Add employee to Annual Consortium membership	-70.00
<b>Total Wienhoff &amp; Associates Inc</b>	<b>-70.00</b>
<b>William B. Newell</b>	
auto mileage reimbursement	-98.98
<b>Total William B. Newell</b>	<b>-98.98</b>
<b>Wonder Bros. Auto Body</b>	
Unit 11 repair	-1,126.32
<b>Total Wonder Bros. Auto Body</b>	<b>-1,126.32</b>
<b>TOTAL</b>	<b>-272,887.29</b>

To: Board of Directors  
From: Chris Harris  
Date: February 8, 2018  
Re: Investment Policy, Resolution 2018-02, and PARS Agreement

**Review**

During the Board Meeting on January 11, 2018, Board approved establishing an irrevocable trust fund, to be administered by Public Agency Retirement Services (PARS). This trust is for the purpose of restricting and dedicating District funds to pre-fund the CalPERS Unfunded Pension Liability.

In order to establish and implement this trust fund, several additional steps are required to be completed.

- The current *Investment Policy* does not allow the District to utilize any investment accounts other than the County Investment Fund or Local Agency Investment Funds (LAIF). To resolve this, the Investment Policy must be revised, adding the option to invest in an irrevocable, tax-exempt IRC Section 115 Trust Account for the purpose of pre-funding the CalPERS Unfunded Pension Liability.
- Public Agency Retirement Services (PARS) requires a Board Resolution naming a Plan Administrator who will be authorized to execute the PARS legal and administrative documents on behalf of the District.
- Once the Plan Administrator is selected, the *Agreement for Administrative Services* between HBMWD and PARS must be completed and signed. A draft agreement has been included for the Board's review. The District will receive a signature-ready version once PARS has received a copy of the adopted Resolution 2018-02.

**Additional**

During the January 11, 2018 Board Meeting, the Board requested additional information regarding the various levels of risk and return for investments in the trust fund. Staff has contacted Andrew Brown, CFA of High Mark Capital Management requesting a presentation to the Board regarding various investment strategies. Mr. Brown is based in San Francisco and has initially suggested a conference call to review risk and investment returns. Staff will schedule this for the March Board meeting, once all the appropriate documentation has been completed and submitted.

As a reminder, the District does not incur any fees until there are assets within the trust account.

**Recommendations**

SECTION J2b PAGE NO. 2

- A) Staff recommends approval of the revised Statement of Investment Policy.
- B) Staff recommends approval of Resolution No. 2018-02, *Adoption of the Public Agencies Post-Employment Benefits Trust*, which includes naming the General Manager as the Plan Administrator.

**Attached**

- 1. Revised Statement of Investment Policy
- 2. Resolution 2018-02, *Approving the Adoption of the Public Agencies Post-Employment Benefits Trust*
- 3. Agreement for Administrative Services (Draft)
- 4. Adoption Agreement for the Post-Employment Section 115 Trust
- 5. Public Agencies Pension Trust Master Plan Document
- 6. Public Agencies Pension Trust Agreement
- 7. Investment Strategy Selection & Disclosure Form (Draft)
- 8. Internal Revenue Service letter reviewing facts of, and including verbiage of, IRC Section 115

SECTION J2b PAGE NO. 1  
**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**  
**Statement of Investment Policy**

The Secretary/Treasurer of the Humboldt Bay Municipal Water District hereby submits the following statements of the investment policy of the District.

**I) Introduction**

The authority governing investments for municipal governments is set forth in California Government Code, Sections 53601 through 53686, as amended through January 1, 2016.

The purpose of this policy is to establish investment guidelines for the District consistent with the Government Code and with prudent investment practices.

**II) Investment Objectives**

District funds, not required for immediate use, shall be prudently invested. In order of priority, the District's investment objectives are as follows:

- a) Safety of Principal – The preservation of principal is the primary objective. Investment transactions shall seek to ensure that capital losses are minimized.
- b) Liquidity – As a second objective, the investment funds should remain sufficiently flexible and available to enable the District to meet all operating requirements.
- c) Rate of Return – The third objective is to achieve a reasonable rate of return consistent with current economic cycles, risk limitations and the investment objectives above.

**III) Investment Funds**

The Humboldt Bay Municipal Water District has elected to utilize investment opportunities provided by California Government Code Sections 16429.1 and 53684, and Internal Revenue Code Section 115.

The District shall first invest all excess funds not required for immediate use with the Treasurer of the County of Humboldt or the State of California Local Agency Investment Fund.

The District reserves the option to designate and invest funds into an irrevocable, tax-exempt IRC Section 115 Trust. These funds shall be for the purpose of pre-funding the CalPERS Unfunded Pension Liability, and shall be managed by Public Agencies Retirement Services (PARS).

The terms and conditions of such investment options are set forth in District Resolution Numbers: 434, 435, and 2018-02 and hereby incorporated herein (attached hereto as reference).

Approved by Board of Directors: February 08, 2018

\_\_\_\_\_  
Sheri Woo, President  
Humboldt Bay Municipal Water District

RESOLUTION No. 434

RESOLUTION OF HBMWD BOARD OF DIRECTORS AUTHORIZING INVESTMENT OF DISTRICT FUNDS WITH TREASURER OF COUNTY OF HUMBOLDT

WHEREAS, pursuant to California Government Code Section 53684 the Treasurer of a county in the State of California is authorized to receive monies from and make investments on behalf of other duly established government entities within his county; and,

WHEREAS, the Board of Directors of the Humboldt Bay Municipal Water District does hereby find that the utilization of services of the Treasurer of the County of Humboldt for the purpose of investment of District funds may from time to time be in the best interests of the Humboldt Bay Municipal Water District.

NOW THEREFORE BE IT RESOLVED, that the Board of Directors of the Humboldt Bay Municipal Water District does hereby authorize the placement of District funds with the Treasurer of the County of Humboldt for the purpose of investment pursuant to Government Code Section 53684.

BE IT FURTHER RESOLVED, that the following officers of the Humboldt Bay Municipal Water District, or their successors in office, are authorized to order the deposit or withdrawal of monies with the County Treasurer:

Walter J. Warren District Treasurer

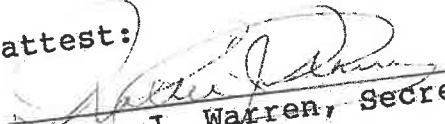
Arthur Bolli General Manager/Assistant Treasurer



PASSED, APPROVED, AND ADOPTED this 8th day of October 1987  
by the following votes:

Ayes: Hecathorn, Warren, Larsen, Nilsen, and McCarthy  
Nays: None  
Absent: None

  
Lloyd L. Hecathorn, President

attest:  
  
Walter J. Warren, Secretary  
Board of Directors

RESOLUTION NO. 435

RESOLUTION AUTHORIZING INVESTMENT OF HUMBOLDT BAY  
MUNICIPAL WATER DISTRICT MONIES IN LOCAL AGENCY  
INVESTMENT FUND

WHEREAS, pursuant to Chapter 730 of the Statutes of 1976 Section 16429.1 was added to the California Government Code to create a Local Agency Investment Fund in the State Treasury for the deposit of money of a local agency for purposes of investment by the State Treasurer; and

WHEREAS, the Board of Directors of Humboldt Bay Municipal Water District does hereby find that the deposit and withdrawal of money in the Local Agency Investment Fund in accordance with the provisions of Section 16429.1 of the Government Code for the purposes of investment as stated therein is in the best interests of the Humboldt Bay Municipal Water District, 828 7th Street, Eureka, California 95501.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of Humboldt Bay Municipal Water District does hereby authorize the deposit and withdrawal of Humboldt Bay Municipal Water District monies in the Local Agency Investment Fund in the State Treasury in accordance with the provisions of Section 16429.1 of the Government Code for the purpose of investment as stated therein.

BE IT FURTHER RESOLVED that the following Humboldt Bay Municipal Water District officers or their successors in office shall be authorized to order the deposit or withdrawal of monies in the Local Agency Investment Fund:

Walter J. Warren, Secretary/Treasurer

Arthur Bolli, General Manager

PASSED, APPROVED, and ADOPTED this 8th day of October 1987  
by the following votes:


Ayes: Hecathorn, Larsen, Warren, Nilsen, McCarthy

Nayes:

Absent:

  
Lloyd L. Hecathorn, President

attest:

  
Walter J. Warren, Secretary  
Board of Directors

**Resolution No. 2018-02**

**Resolution of the Humboldt Bay Municipal Water District Board of Directors**

**Approving the Adoption of the Public Agencies Post-Employment Benefits Trust  
Administered By Public Agency Retirement Services (PARS)**

**WHEREAS**, Humboldt Bay Municipal Water District (District) has determined a proactive approach to managing the CalPERS Unfunded Pension Liability ("Liability") is in the best interest of the District; and

**WHEREAS**, the District has determined that one method to manage the Liability is to restrict funds for the purpose of pre-funding this Liability and deposit these funds within an irrevocable trust; and

**WHEREAS**, the "Statement of Investment Policy" has been modified to permit such activity; and

**WHEREAS**, Public Agency Retirement Services (PARS) has made available the PARS Public Agencies Post-Employment Benefits Trust ("Program") for the purpose of pre-funding pension obligations and/or OPEB obligations; and

**WHEREAS**, the Program is an irrevocable, tax-exempt trust performing an essential governmental function within the meaning of Section 115 of the Internal Revenue Code, as amended, and the Regulations issued there under, and is a tax-exempt trust under the relevant statutory provisions of the State of California; and

**WHEREAS**, the District is eligible to participate in the Program; and

**WHEREAS**, the District's adoption and operation of the Program has no effect on any current or former employee's entitlement to post-employment benefits; and

**WHEREAS**, the terms and conditions of post-employment benefit entitlement, if any, are governed by contracts and agreements separate from and independent of the Program; and

**WHEREAS**, the District's funding of the Program does not, and is not intended to, create any new vested right to any benefit nor strengthen any existing vested right; and

**WHEREAS**, the District reserves the right to make contributions, if any, to the Program.

**NOW THEREFORE, BE IT RESOLVED:**

1. The Board of Directors hereby adopts the PARS Public Agencies Post-Employment Benefits Trust, effective February 8, 2018; and
2. The Board of Directors hereby appoints the General Manager, or his/her successor or his/her designee as the District's Plan Administrator for the Program; and
3. The District's Plan Administrator is hereby authorized to execute the PARS legal and administrative documents on behalf of the District and to take whatever additional actions are necessary to maintain the District's participation in the Program and to maintain

compliance of any relevant regulation issued or as may be issued; therefore, authorizing him/her to take whatever additional actions are required to administer the District's Program.

Passed, approved and adopted this 8<sup>th</sup> day of February, 2018 by the following votes:

Ayes:  
Nays:  
Absent:

Attest:

\_\_\_\_\_  
Sheri Woo, President

\_\_\_\_\_  
J. Bruce Rupp, Secretary/Treasurer



AGREEMENT FOR ADMINISTRATIVE SERVICES

This agreement ("Agreement") is made this \_\_\_\_ day of \_\_\_\_\_, 2018, between Phase II Systems, a corporation organized and existing under the laws of the State of California, doing business as Public Agency Retirement Services and PARS (hereinafter "PARS") and the Humboldt Bay Municipal Water District ("Agency").

WHEREAS, the Agency has adopted the PARS Public Agencies Post-Employment Benefits Trust for the purpose of pre-funding pension obligations and/or OPEB obligations ("Plan"), and is desirous of retaining PARS as Trust Administrator to the Trust, to provide administrative services.

NOW THEREFORE, the parties agree:

1. **Services.** PARS will provide the services pertaining to the Plan as described in the exhibit attached hereto as "Exhibit 1A" ("Services") in a timely manner, subject to the further provisions of this Agreement.
2. **Fees for Services.** PARS will be compensated for performance of the Services as described in the exhibit attached hereto as "Exhibit 1B".
3. **Payment Terms.** Payment for the Services will be remitted directly from Plan assets unless the Agency chooses to make payment directly to PARS. In the event that the Agency chooses to make payment directly to PARS, it shall be the responsibility of the Agency to remit payment directly to PARS based upon an invoice prepared by PARS and delivered to the Agency. If payment is not received by PARS within thirty (30) days of the invoice delivery date, the balance due shall bear interest at the rate of 1.5% per month. If payment is not received from the Agency within sixty (60) days of the invoice delivery date, payment plus accrued interest will be remitted directly from Plan assets, unless PARS has previously received written communication disputing the subject invoice that is signed by a duly authorized representative of the Agency.
4. **Fees for Services Beyond Scope.** Fees for services beyond those specified in this Agreement will be billed to the Agency at the rates indicated in the PARS' standard fee schedule in effect at the time the services are provided and shall be payable as described in Section 3 of this Agreement. Before any such services are performed, PARS will provide the Agency with a detailed description of the services, terms, and applicable rates for such services. Such services, terms, and applicable rates shall be agreed upon in writing and executed by both parties.
5. **Information Furnished to PARS.** PARS will provide the Services contingent upon the Agency's providing PARS the information specified in the exhibit attached hereto as "Exhibit 1C" ("Data"). It shall be the responsibility of the Agency to certify the accuracy, content and completeness of the Data so that PARS may rely on such information without further audit. It shall further be the responsibility of the Agency to deliver the Data to PARS in such a manner that allows for a reasonable amount of time for the Services to be performed. Unless specified in Exhibit 1A, PARS shall be under no duty to question Data received from the Agency, to compute contributions made to the

Plan, to determine or inquire whether contributions are adequate to meet and discharge liabilities under the Plan, or to determine or inquire whether contributions made to the Plan are in compliance with the Plan or applicable law. In addition, PARS shall not be liable for non performance of Services to the extent such non performance is caused by or results from erroneous and/or late delivery of Data from the Agency. In the event that the Agency fails to provide Data in a complete, accurate and timely manner and pursuant to the specifications in Exhibit 1C, PARS reserves the right, notwithstanding the further provisions of this Agreement, to terminate this Agreement upon no less than ninety (90) days written notice to the Agency.

6. **Records.** Throughout the duration of this Agreement, and for a period of five (5) years after termination of this Agreement, PARS shall provide duly authorized representatives of Agency access to all records and material relating to calculation of PARS' fees under this Agreement. Such access shall include the right to inspect, audit and reproduce such records and material and to verify reports furnished in compliance with the provisions of this Agreement. All information so obtained shall be accorded confidential treatment as provided under applicable law.
7. **Confidentiality.** Without the Agency's consent, PARS shall not disclose any information relating to the Plan except to duly authorized officials of the Agency, subject to applicable law, and to parties retained by PARS to perform specific services within this Agreement. The Agency shall not disclose any information relating to the Plan to individuals not employed by the Agency without the prior written consent of PARS, except as such disclosures may be required by applicable law.
8. **Independent Contractor.** PARS is and at all times hereunder shall be an independent contractor. As such, neither the Agency nor any of its officers, employees or agents shall have the power to control the conduct of PARS, its officers, employees or agents, except as specifically set forth and provided for herein. PARS shall pay all wages, salaries and other amounts due its employees in connection with this Agreement and shall be responsible for all reports and obligations respecting them, such as social security, income tax withholding, unemployment compensation, workers' compensation and similar matters.
9. **Indemnification.** PARS and Agency hereby indemnify each other and hold the other harmless, including their respective officers, directors, employees, agents and attorneys, from any claim, loss, demand, liability, or expense, including reasonable attorneys' fees and costs, incurred by the other as a consequence of, to the extent, PARS' or Agency's, as the case may be, negligent acts, errors or omissions with respect to the performance of their respective duties hereunder.
10. **Compliance with Applicable Law.** The Agency shall observe and comply with federal, state and local laws in effect when this Agreement is executed, or which may come into effect during the term of this Agreement, regarding the administration of the Plan. PARS shall observe and comply with federal, state and local laws in effect when this Agreement is executed, or which may come into effect during the term of this Agreement, regarding Plan administrative services provided under this Agreement.

11. **Applicable Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of California. In the event any party institutes legal proceedings to enforce or interpret this Agreement, venue and jurisdiction shall be in any state court of competent jurisdiction.
12. **Force Majeure.** When a party's nonperformance hereunder was beyond the control and not due to the fault of the party not performing, a party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by such cause, including but not limited to: any incidence of fire, flood, acts of God, acts of terrorism or war, commandeering of material, products, plants or facilities by the federal, state or local government, or a material act or omission by the other party.
13. **Ownership of Reports and Documents.** The originals of all letters, documents, reports, and data produced for the purposes of this Agreement shall be delivered to, and become the property of the Agency. Copies may be made for PARS but shall not be furnished to others without written authorization from Agency.
14. **Designees.** The Plan Administrator of the Agency, or their designee, shall have the authority to act for and exercise any of the rights of the Agency as set forth in this Agreement, subsequent to and in accordance with the written authority granted by the Governing Body of the Agency, a copy of which writing shall be delivered to PARS. Any officer of PARS, or his or her designees, shall have the authority to act for and exercise any of the rights of PARS as set forth in this Agreement.
15. **Notices.** All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of the notices in person or by depositing the notices in the U.S. mail, registered or certified mail, return receipt requested, postage prepaid and addressed as follows:
  - (A) To PARS: PARS; 4350 Von Karman Avenue, Suite 100, Newport Beach, CA 92660; Attention: President
  - (B) To Agency: Humboldt Bay Municipal Water District; 828 Seventh Street, Eureka CA, 95501; Attention: General ManagerNotices shall be deemed given on the date received by the addressee.
16. **Term of Agreement.** This Agreement shall remain in effect for the period beginning February 8, 2018 and ending February 7, 2021 ("Term"). This Agreement may be terminated at any time by giving thirty (30) days written notice to the other party of the intent to terminate. Absent a thirty (30) day written notice to the other party of the intent to terminate, this Agreement will continue unchanged for successive twelve month periods following the Term.
17. **Amendment.** This Agreement may not be amended orally, but only by a written instrument executed by the parties hereto.
18. **Entire Agreement.** This Agreement, including exhibits, contains the entire understanding of the parties with respect to the subject matter set forth in this Agreement.

In the event a conflict arises between the parties with respect to any term, condition or provision of this Agreement, the remaining terms, conditions and provisions shall remain in full force and legal effect. No waiver of any term or condition of this Agreement by any party shall be construed by the other as a continuing waiver of such term or condition.

- 19. **Attorneys Fees.** In the event any action is taken by a party hereto to enforce the terms of this Agreement the prevailing party herein shall be entitled to receive its reasonable attorney's fees.
- 20. **Counterparts.** This Agreement may be executed in any number of counterparts, and in that event, each counterpart shall be deemed a complete original and be enforceable without reference to any other counterpart.
- 21. **Headings.** Headings in this Agreement are for convenience only and shall not be used to interpret or construe its provisions.
- 22. **Effective Date.** This Agreement shall be effective on the date first above written, and also shall be the date the Agreement is executed.

**AGENCY:**

BY: John Friedenbach  
TITLE: General Manager  
DATE: \_\_\_\_\_

**PARS:**

BY: Tod Hammeras  
TITLE: Chief Financial Officer  
DATE: \_\_\_\_\_

EXHIBIT 1A  
SERVICES

PARS will provide the following services for the Humboldt Bay Municipal Water District Public Agencies Post-Employment Benefits Trust:

1. Plan Installation Services:
  - (A) Meeting with appropriate Agency personnel to discuss plan provisions, implementation timelines, actuarial valuation process, funding strategies, benefit communication strategies, data reporting, and submission requirements for contributions/reimbursements/distributions;
  - (B) Providing the necessary analysis and advisory services to finalize these elements of the Plan;
  - (C) Providing the documentation needed to establish the Plan to be reviewed and approved by Agency legal counsel. Resulting final Plan documentation must be approved by the Agency prior to the commencement of PARS Plan Administration Services outlined in Exhibit 1A, paragraph 2 below.
2. Plan Administration Services:
  - (A) Monitoring the receipt of Plan contributions made by the Agency to the trustee of the PARS Public Agencies Post-Employment Benefits Trust ("Trustee"), based upon information received from the Agency and the Trustee;
  - (B) Performing periodic accounting of Plan assets, reimbursements/distributions, and investment activity, based upon information received from the Agency and/or Trustee;
  - (C) Coordinating the processing of distribution payments pursuant to authorized direction by the Agency, and the provisions of the Plan, and, to the extent possible, based upon Agency-provided Data;
  - (D) Coordinating actions with the Trustee as directed by the Plan Administrator within the scope this Agreement;
  - (E) Preparing and submitting a monthly report of Plan activity to the Agency, unless directed by the Agency otherwise;
  - (F) Preparing and submitting an annual report of Plan activity to the Agency;
  - (G) Facilitating actuarial valuation updates and funding modifications for compliance with GASB 45/75, if prefunding OPEB obligations;
  - (H) Coordinating periodic audits of the Trust;
  - (I) Monitoring Plan and Trust compliance with federal and state laws.
3. PARS is not licensed to provide and does not offer tax, accounting, legal, investment or actuarial advice.



EXHIBIT 1B  
FEES FOR SERVICES

PARS will be compensated for performance of Services, as described in Exhibit 1A based upon the following schedule:

An annual asset fee shall be paid from Plan assets based on the following schedule:

<u>For Plan Assets from:</u>			<u>Annual Rate:</u>
\$0	to	\$10,000,000	0.25%
\$10,000,001	to	\$15,000,000	0.20%
\$15,000,001	to	\$50,000,000	0.15%
\$50,000,001	and	above	0.10%

Annual rates are prorated and paid monthly. The annual asset fee shall be calculated by the following formula [Annual rate divided by 12 (months of the year) multiplied by the Plan asset balance at the end of the month]. Trustee and Investment Management Fees are not included.

EXHIBIT 1C  
DATA REQUIREMENTS

PARS will provide the Services under this Agreement contingent upon receiving the following information:

1. Executed Legal Documents:
  - (A) Certified Resolution
  - (B) Adoption Agreement to the Public Agencies Post-Employment Benefits Trust
  - (C) Trustee Investment Forms
  
2. Contribution – completed Contribution Transmittal Form signed by the Plan Administrator (or authorized Designee) which contains the following information:
  - (A) Agency name
  - (B) Contribution amount
  - (C) Contribution date
  - (D) Contribution method (Check, ACH, Wire)
  
3. Distribution – completed Payment Reimbursement/Distribution Form signed by the Plan Administrator (or authorized Designee) which contains the following information:
  - (A) Agency name
  - (B) Payment reimbursement/distribution amount
  - (C) Applicable statement date
  - (D) Copy of applicable premium, claim, statement, warrant, and/or administrative expense evidencing payment
  - (E) Signed certification of reimbursement/distribution from the Plan Administrator (or authorized Designee)
  
4. Other information pertinent to the Services as reasonably requested by PARS and Actuarial Provider.

**ADOPTION AGREEMENT  
for the  
POST-EMPLOYMENT SECTION 115 TRUST**

A.1.1. Trust agreement with U.S. Bank National Association (the "Bank") (the "Trust Agreement"):

Post-Employment Section 115 Trust. Public Agencies Post-Employment Benefits—Trust Agreement, effective November 5, 2014

A.1.2. OPEB Plan: Public Agencies Post-Employment Health Care Plan

The plan document for the OPEB Plan is the Public Agencies Post-Employment Health Care Plan—Master Plan Document, effective as of November 5, 2014 (the "Plan Document").

A.1.3. Pension Plan:

\_\_\_\_\_  
\_\_\_\_\_

A.1.4. Pension Plan's effective date:

\_\_\_\_\_

(Check if applicable) Additional Pension Plans (and their respective effective dates) are listed on an exhibit attached hereto.

A.2.1. Employer:

Name: Humboldt Bay Municipal Water District

U.S. mail address: 828 Seventh Street, Eureka, CA 95501

Phone number: (707) 443-5018

EIN: \_\_\_\_\_

Fiscal year end: June 30

A.2.2. Plan Administrator:

Position at Employer: General Manager

Incumbent: John Friedenbach

U.S. mail address: 828 Seventh Street, Eureka, CA 95501

Phone number: (707) 443-5018

Email address: friedenbach@hbmwd.com

A.3.1 **Adoption.** The Employer hereby:

A.3.1.1. Adopts the Trust Agreement as part of the (*Check one or both of the following boxes.*):

- OPEB Plan
- Pension Plan

(each such plan separately, the “Plan”) and agrees to be bound by the Trust Agreement’s terms, effective as of the Employer’s signature date below and subject to the investment approach selected below.

A.3.1.2. *The following provisions apply if and only if the **OPEB Plan** box above is checked:* (i) Adopts the Plan Document and agrees to be bound by the Plan Document’s terms, effective as of the Employer’s signature date below and (ii) acknowledges that the determination of Eligible Employees and Eligible Beneficiaries is finally and conclusively made by the Employer according to the Employer’s applicable policies and collective bargaining agreements and without reference to the Trust Agreement.

A.3.1.3. Ratifies, affirms, and approves Employer’s appointment of Phase II Systems as Trust Administrator and represents and warrants that attached hereto is a fully-executed original of Employer’s Agreement for Administrative Services with Phase II Systems, d/b/a Public Agency Retirement Services (PARS).

A.3.1.4. Agrees that capitalized terms used herein but not defined herein shall have the same meaning attributed to them as in the Trust Agreement or Plan Document, as the case may be.

A.4.1. The Employer hereby represents and warrants that:

A.4.1.1. **Authorizing Law.** Employer has reviewed with its legal counsel and has determined that Employer is authorized to establish and maintain the Plan and to establish a financial-institution trust (separate and apart from the state) for the Plan, including the authority to adopt the Trust Agreement.

A.4.1.2. **Authorizing Resolution.** Attached hereto is a certified copy of a resolution of the Employer’s governing body authorizing the adoption of the Trust Agreement as part of the Plan and authorizing the appointment of the Plan Administrator designated by position of employment at the Employer to act on the Employer’s behalf in all matters relating to the trust.

A.4.1.3. **Tax Status.** The Plan is a “governmental plan” as defined in Section 414(d) of the Internal Revenue Code of 1986, as amended; is a “Section 401(a)(24) governmental plan” as defined in Revenue Ruling 2011-1; and is not subject to Federal income taxation. The Plan’s governing document expressly provides that it is irrevocably impossible for any part of the corpus or income of the Plan to be used for, or diverted to, purposes other than for the exclusive benefit of the Plan participants and their beneficiaries. The Pension Plan is a qualified plan under Code Section 401(a). (In addition, the Employer hereby acknowledges that the Plan is prohibited from assigning any part of its equity or interest in the trust.)

**A.4.2. Investment Approach.**

4.2.1. *The following provisions apply if and only if the **OPEB Plan** box above is checked:*  
**OPEB Account.** OPEB Account assets are invested in the discretion of (check one and only one of the following boxes):

Discretionary investment approach:

- The Bank, subject to **Exhibit A (Investment Strategy Selection and Disclosure Form)** hereto.

Directed investment approach:

- The Plan Administrator.
- The following registered investment adviser, bank (other than the Bank), or insurance company (a "Third-Party Manager"): \_\_\_\_\_ . The Employer hereby represents and warrants that attached hereto is an executed copy of the agreement with the above appointed Third Party Manager.

4.2.2. *The following provisions apply if and only if the **Pension Plan** box above is checked:*  
**Pension Account.** Pension Account assets are invested in the discretion of (check one and only one of the following boxes):

Discretionary investment approach:

- The Bank, subject to **Exhibit A (Investment Strategy Selection and Disclosure Form)** hereto.

Directed investment approach:

- The Plan Administrator.
- The following registered investment adviser, bank (other than the Bank), or insurance company (a "Third-Party Manager"): \_\_\_\_\_ . The Employer hereby represents and warrants that attached hereto is an executed copy of the agreement with the above appointed Third Party Manager.

*[signature page follows]*



**HUMBOLDT BAY MUNICIPAL WATER DISTRICT**

By: \_\_\_\_\_  
John Friedenbach

Its: General Manager

Date: \_\_\_\_\_

*Accepted by:*

**PHASE II SYSTEMS, DBA PUBLIC AGENCY  
RETIREMENT SERVICES (PARS)**

By: \_\_\_\_\_  
Daniel Johnson

Its: President

Date: \_\_\_\_\_

**U.S. BANK NATIONAL ASSOCIATION**

By: \_\_\_\_\_  
Susan M. Hughes

Its: Vice President and Relationship Manager

Date: \_\_\_\_\_

**PUBLIC AGENCIES  
POST-EMPLOYMENT HEALTH CARE PLAN**

**MASTER PLAN DOCUMENT**

**(Effective as of November 5, 2014)**

## INTRODUCTION

The Employer specified in the Adoption Agreement has adopted this qualified governmental post-employment health care plan ("OPEB Plan") for the benefit of its Eligible Employees. The plan document for the OPEB Plan consists of this Master Plan Document plus the Adoption Agreement. Assets of the OPEB Plan are held under a trust (the "Trust") evidenced by a trust agreement (the "Trust Agreement"). Each Employer's separate portion of the Trust dedicated to funding the Employer's OPEB Obligation and defraying the reasonable expenses associated with the same is referred to as the Employer's "OPEB Account." Capitalized terms that are not defined herein shall have the meaning attributed to such terms in the Trust Agreement.

The Trust is established with the intention that it qualify as a tax-exempt trust performing an essential governmental function within the meaning of Section 115 of the Code and any regulations issued thereunder and as a tax-exempt trust under the provisions of the relevant state's statutory provisions of each Employer. It is intended that contributions to the Employer's OPEB Account shall qualify as "plan assets" within the meaning of GASB Statement No. 45 (Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions). At any time prior to the satisfaction of all liabilities with respect to Eligible Employees under an Employer's OPEB Account, the OPEB Account assets shall not be used for, or diverted to, any purpose other than funding the Employer's OPEB Obligation and defraying the reasonable expenses associated with the same.

**ARTICLE I**

**PLAN AND TRUST INFORMATION**

**1.1 Plan Name.**

The name of the OPEB Plan adopted by the Employer is the Public Agencies Post-Employment Health Care Plan.

**1.2 Effective Date.**

The OPEB Plan is effective as of the date set forth in Section A.3.1.2 of the Adoption Agreement. If this OPEB Plan is a restatement of an existing plan, that date is also the effective date of the restatement.

**1.3 Plan Year.**

The plan year for the OPEB Plan shall be the consecutive twelve-month period beginning on January 1 and ending on December 31.

**ARTICLE II**

**EMPLOYER INFORMATION**

**2.1 Employer.**

The name and address of the Employer sponsoring this OPEB Plan (the "Employer") are as set forth in Section A.2.1 of the Adoption Agreement. The Adoption Agreement can only be used by a governmental agency that is a state, a political subdivision of a state, or an entity the income of which is excludible from gross income under Section 115 of the Code to establish a plan.

**ARTICLE III**

**ELIGIBLE EMPLOYEES**

**3.1 Eligible Persons**

Each employee of the Employer who is or becomes eligible for post-employment health care and welfare benefits as specified in such Employer's applicable policies and/or applicable collective bargaining agreements is an Eligible Employee under this OPEB Plan. In addition, any person who, due to his or her relationship with the Eligible Employee, is entitled to post-employment health care and welfare benefits as specified in the Employer's applicable policies and/or collective bargaining agreement, is an Eligible Beneficiary under this OPEB Plan.

**3.2 Termination of Eligible Status**

An Eligible Employee or Eligible Beneficiary shall cease to be an Eligible Employee or Eligible Beneficiary as specified in the Employer's applicable policies and/or applicable collective bargaining agreements.

**ARTICLE IV**

**CONTRIBUTIONS**

**4.1 Amount of Member Agency Contributions**

Eligible Employees and Eligible Beneficiaries are not permitted to make contributions to the Trust, provided however, that nothing herein shall be deemed to (i) prevent the Employer from imposing a charge (including, without limitation, a payroll deduction) for coverage under the OPEB Plan, or (ii) prevent the Employer from depositing the proceeds of any such charge to the Trust (provided that such deposit shall be considered an Employer contribution and shall not be segregated within Employer's OPEB Account from any other Employer contributions). Each Employer shall from time-to-time contribute to its OPEB Account an amount determined by such Employer in its sole discretion. Such amount may, but need not, equal such Employer's "annual required contribution" ("ARC") as determined in accordance with GASB 45.

**4.2 Administrative Expenses**

The Employer may make contributions to its OPEB Account sufficient to defray all or part of the expenses of administering the OPEB Plan or may pay such expenses directly.

**4.3 Allocation of Administrative Expenses**

If the Employer chooses not to directly pay the expenses of administering this OPEB Plan, such expenses shall be charged against the OPEB Account for such Employer.

**4.4 Reversions**

The Employer shall have the right to a return of contributions from this OPEB Plan only if the conditions for such return set forth in the Trust Agreement are satisfied.



**ARTICLE V**

**DISTRIBUTION OF BENEFITS**

**5.1 Payment of Distribution**

Distribution shall only be made to the insurers, third party administrators, service providers, or other entities providing benefits or services under the OPEB Plan, or to Eligible Employees and Eligible Beneficiaries for reimbursement of OPEB Plan premiums (or other payments for OPEB Plan benefits) paid by the Eligible Employee or Eligible Beneficiary, or to the Employer for the reimbursement of OPEB Plan benefits and expenses paid by the Employer. The Plan Administrator or its Delegatee shall provide instructions to the Trustee regarding how distributions and reimbursements are to be made.

**ARTICLE VI**

**FUNDING AND INVESTMENT**

**6.1 Funding and Investment**

The assets of the OPEB Plan shall be held in the OPEB Account of each Employer. In Section A.4.2.1 of the Adoption Agreement, each Employer shall elect between a discretionary or directed investment approach. If the Employer elects a discretionary investment approach, the Employer shall further elect between the various investment strategies offered in the investment strategy selection and disclosure form. If the Employer elects a directed investment approach, the Employer, in accordance with the Trust Agreement, shall have absolute discretion over the investment of the assets of its OPEB Account.

**6.2 Type and Nature of Plan and Trust**

Neither the faith and credit nor the taxing power of each Employer is pledged to the distribution of benefits hereunder. Except for contributions, earnings and other amounts held in the Trust, no amounts are pledged to the distribution of benefits hereunder. Distributions of benefits are neither general nor special obligations of the Employer, but are payable solely from contributions, as more fully described herein. No employee of any Employer or any other person may compel the exercise of the taxing power by the Employer. Distributions of benefits are not a debt of the Employer within the meaning of any constitutional or statutory limitation or restriction. Distributions are not a legal or equitable pledge, charge, lien or encumbrance, upon any of the Employer's property, or upon any of its income, receipts or revenues.

## ARTICLE VII

## ADMINISTRATION, AMENDMENT AND TERMINATION OF PLAN

**7.1 Designation of Plan Administrator**

In Section A.2.2 of the Adoption Agreement, the Employer shall provide the name of the Plan Administrator that has been duly authorized and designated by the governing body of the Employer to act on its behalf in all matters pertaining to the OPEB Plan and the Trust pursuant to Section 3.4 of the Trust Agreement. If no name is provided, the Employer is the Plan Administrator. In addition to a Plan Administrator the Employer may designate a Delegatee to perform those activities relating to the OPEB Plan as specified in the written appointment of such Delegatee certified to the Trust Administrator. Except where the context requires otherwise, the term "Employer" as used in this Article shall mean the Plan Administrator or Delegatee where responsibility for administration of the OPEB Plan has been given to such parties.

**7.2 Rules and Regulations**

The Employer has full discretionary authority to supervise and control the operation of this OPEB Plan in accordance with its terms and may make rules and regulations for the administration of this OPEB Plan that are not inconsistent with the terms and provisions hereof. The Employer shall determine any questions arising in connection with the interpretation, application or administration of the OPEB Plan (including any question of fact relating to age, employment, compensation or eligibility of Eligible Employees or Eligible Beneficiaries) and its decisions or actions in respect thereof shall be conclusive and binding upon all persons and parties.

The Employer shall have all powers necessary to accomplish its purposes, including, but not by way of limitation, the following:

- (a) To determine all questions relating to an Eligible Employee's or Eligible Beneficiary's eligibility;
- (b) To construe and interpret the terms and provisions of the OPEB Plan;
- (c) To compute, certify to, and direct the Trustee with regard to the amount and kind of benefits payable to health care providers;
- (d) To authorize all disbursements from its OPEB Account;
- (e) To maintain all records that may be necessary for the administration of the OPEB Plan other than those maintained by the Trustee; and
- (f) To appoint a Plan Administrator or, any other agent, and to delegate to them or to the Trustee such powers and duties in connection with the administration of the OPEB Plan as it may from time to time prescribe.

Expenses and fees incurred in connection with the administration of the OPEB Plan and the Trust shall be paid from the Trust assets to the fullest extent permitted by law, unless the Employer determines otherwise. The Employer may elect to make contributions to its OPEB Account sufficient to defray the expenses of administering the OPEB Plan or may pay such expenses directly.

**7.3 Amendment and Termination**

The Employer shall have the right to amend, modify or terminate the OPEB Plan at any time. If an Employer terminates the OPEB Plan, the Assets held in its OPEB Account shall be distributed by the Trustee as provided in Section 7.3 of the Trust Agreement.

**ARTICLE VIII**

**MISCELLANEOUS**

**8.1 Nonalienation**

An Eligible Employee or Eligible Beneficiary does not have any interest in the OPEB Plan or the Assets held in the Trust. Accordingly, the Trust shall not in any way be liable to attachment, garnishment, assignment or other process, or be seized, taken, appropriated or applied by any legal or equitable process, to pay any debt or liability of an Eligible Employee, Eligible Beneficiary or any other party.

**8.2 Investment**

All contributions, interest earned, and any assets of the OPEB Plan shall at all times be invested and managed in accordance with the Trust Agreement and the requirements of applicable law.

**8.3 Parties to the Plan**

Eligible Employees, Eligible Beneficiaries and unions of each Employer are not parties to this OPEB Plan. The OPEB Plan is only a funding source for such Employer's post-employment health care and welfare benefits and does not increase the rights of any Eligible Employee, Eligible Beneficiary or union.

**8.4 Confidential Medical Information**

Each Employer and its health care providers or other service providers shall not share confidential medical information regarding employees of the Employer with the OPEB Plan, the Trustee, or the Trust Administrator.

**PUBLIC AGENCIES  
POST-EMPLOYMENT BENEFITS  
TRUST AGREEMENT**

**(Effective November 5, 2014)**

## ARTICLE I

## DEFINITIONS

- 1.1 "Adoption Agreement" shall have the meaning given to such term in Section 2.3.
- 1.2 "Agency Account" shall have the meaning given to such term in Section 2.4.
- 1.3 "Agreement for Administrative Services" shall mean the agreement executed between the Employer and the Trust Administrator which authorizes the Trust Administrator to perform specific duties of administering the Agency Account of the Employer.
- 1.4 "Assets" shall have the meaning given to such term in Section 2.5.
- 1.5 "Code" shall mean the Internal Revenue Code of 1986 as amended from time to time.
- 1.6 "Delegatee" shall mean an individual or entity, appointed by the Plan Administrator or Employer to act in such matters as are specified in the appointment.
- 1.7 "Effective Date" shall mean the date first written above, the date the Trust was established, and with respect to each Employer, the Effective Date shall be the date on which the Employer executes the Adoption Agreement.
- 1.8 "Eligible Beneficiary" shall mean any person who, due to his or her relationship to an Eligible Employee, is entitled to post-employment benefits pursuant to the Employer's Pension Plan or OPEB Plan, including but not limited to the Eligible Employee's current or former spouse or domestic partner, child, dependent, or survivor.
- 1.9 "Eligible Employee" shall mean any employee of an Employer who is entitled to post-employment benefits pursuant to the Employer's Pension Plan or OPEB Plan. Unless the context otherwise requires, the term "Eligible Employee" as used herein shall include any Eligible Beneficiaries.
- 1.10 "Employer" shall mean a public agency that executes the Adoption Agreement, thereby adopting the provisions of this Trust Agreement, provided that such agency is a state, a political subdivision of a state, or an entity the income of which is excludible from gross income under Section 115 of the Code.
- 1.11 "GASB" shall mean the Governmental Accounting Standards Board.
- 1.12 "Omnibus Account" shall mean an account, established for record keeping purposes only, to aggregate the balances of the Assets credited to the Agency Accounts. The Trust Administrator shall maintain and reconcile, at the Agency Account level (and subaccount level), the investments of the Agency Accounts



and will provide reports to the Plan Administrator with respect to such investments. The Trustee will maintain a record of the aggregate balance (principal and earnings) for all Agency Accounts. The Trust Administrator will in the ordinary course of business maintain a record of the name, address, taxpayer identification number, account number and amount of funds, including earnings, of each Employer. On periodic valuation dates (no less frequently than monthly) to be established by the Trust Administrator, the Trustee and Trust Administrator will reconcile the aggregate balance information maintained by the Trustee with the Agency Account level records maintained by the Trust Administrator pursuant to this Trust Agreement.

- 1.13 **“OPEB”** shall mean “other post-employment benefits,” such as medical, dental, vision, life insurance, long-term care and other similar benefits provided to retirees, other than pension benefits.
- 1.14 **“OPEB Obligation”** shall mean an Employer’s obligation to provide OPEB to its Eligible Employees in accordance with the Employer’s OPEB Plan.
- 1.15 **“OPEB Plan”** shall mean the Public Agencies Post-Employment Health Care Plan, as adopted by the Employer under the Adoption Agreement.
- 1.16 **“Pension Obligation”** shall mean an Employer’s obligation to contribute to the Pension Plan’s Qualified Trust and shall not, for example, mean an Employer’s Obligation to provide retirement benefits under the Pension Plan to the Employer’s Eligible Employees.
- 1.17 **“Pension Plan”** shall mean an Employer’s defined-benefit pension plan or plans, each of which is (i) qualified under Section 401(a) of the Code, (ii) sponsored by the Employer in order to provide retirement benefits to its Eligible Employees, and (iii) partly or wholly funded by the Employer’s contributions to a Qualified Trust.
- 1.18 **“Plan Administrator”** shall mean the individual designated by position of employment at the Employer to act on its behalf in all matters relating to the Employer’s participation in the Trust.
- 1.19 **“Qualified Trust”** shall mean a trust which (i) is separate and apart from the Trust, (ii) constitutes a qualified trust under Code Section 401(a), and (iii) funds retirement benefits provided under an Employer’s Pension Plan to the Employer’s Eligible Employees.
- 1.20 **“Trust”** shall mean the Public Agencies Post-Employment Benefits trust arrangement.
- 1.21 **“Trust Administrator”** shall mean Public Agency Retirement Services or any successor trust administrator appointed by the Employers as provided herein. The Trust Administrator shall serve as trust administrator to the Trust established

pursuant to this Trust Agreement until such Trust Administrator resigns or is removed as provided in Article III.

- 1.22 "Trust Agreement" shall mean this Public Agencies Post-Employment Benefits trust document adopted by each Employer upon execution of an Adoption Agreement, as amended from time to time.
- 1.23 "Trustee" shall mean U.S. Bank National Association, or any successor trustee appointed by the Employers as provided herein. The Trustee shall serve as trustee of the Trust established pursuant to the provisions of this Trust Agreement until such Trustee resigns or is removed as provided in Article III.

## ARTICLE II

### THE TRUST

#### 2.1 Multiple Employer Trust

The Trust is a multiple employer trust arrangement established to provide economies of scale and efficiency of administration to public agencies that adopt it to hold the assets used to fund the agency's OPEB Obligation or Pension Obligation or both. The Trust is divided into Agency Accounts to hold the Assets of each Employer as described in Section 2.4.

#### 2.2 Purpose

The Trust is established with the intention that it qualify as a tax-exempt trust performing an essential governmental function within the meaning of Section 115 of the Code and any regulations issued thereunder and as a tax-exempt trust under the provisions of the relevant state's statutory provisions of each Employer. This Trust Agreement shall be construed and the Trust shall be administered in a manner consistent with such intention. The fundamental purpose of the Trust is to fund the Employer's OPEB Obligation or Pension Obligation or both. It is intended that adopting Employers retain an interest in the underlying securities held in the Trust on their behalf, rather than in the Trust itself.

The Employer hereby represents and warrants that the assets held hereunder (including the Assets) are not assets of any qualified plan under Code Section 401(a), regardless of the character of such assets once distributed. The Employer hereby acknowledges that the Trust does not constitute a qualified trust under Code Section 401(a).

#### 2.3 Employers

Any public agency may, by action of its governing body in writing accepted by the Trustee, adopt the provisions of the Trust Agreement. Executing an adoption instrument for the Trust ("Adoption Agreement"), in the form attached hereto as Exhibit "A" (or such other form as may be approved by the Trustee), shall

constitute such adoption, unless the Trustee requires additional evidence of adoption. In order for such adoption to be effective, the public agency must also execute an Agreement for Administrative Services with Public Agency Retirement Services, the Trust Administrator, pursuant to Section 3.6 of this Trust Agreement. Such adopting Employer shall then become an Employer of the Trust.

Each such Employer shall, at a minimum, furnish the Trust Administrator with the following documents to support its adoption of the Trust:

- (a) a certified copy of the resolution(s) of the governing body of the Employer authorizing the adoption of the Trust Agreement and the appointment of the Plan Administrator for such Employer;
- (b) an original of the Adoption Agreement executed by the Plan Administrator or other duly authorized Employer employee;
- (c) an original of the Agreement for Administrative Services with Public Agency Retirement Services executed by the Plan Administrator or other duly authorized Employer employee and Public Agency Retirement Services;
- (d) an address notice; and
- (e) such other documents as the Trustee may reasonably request.
- (f) Any action taken by the Plan Administrator for an Employer shall be deemed to have been taken by such Employer. Any notice given to or delivered by the Plan Administrator for an Employer shall be deemed to have been given to or delivered by such Employer.

#### 2.4 Agency Accounts

- (a) Upon an Employer's adopting the Trust Agreement, as provided in Section 2.3, a separate "**Agency Account**" shall be established under the Trust for that Employer, and all Assets of the Trust attributable to that Employer shall be held in that Employer's Agency Account.
- (b) An Employer's Agency Account comprises three subaccounts: a "**Pension Account**", an "**OPEB Account**", and a "**Suspense Account**". The Assets of the Trust that are held in the Employer's Pension Account will be available only to fund the Employer's Pension Obligation and defray the reasonable expenses associated with the same. The Assets of the Trust that are held in the Employer's OPEB Account will be available only to fund the Employer's OPEB Obligation and defray the reasonable expenses associated with the same.
- (c) The Assets of the Trust that are held in an Employer's Agency Account shall not be available to pay any obligations incurred by any other Employer as provided in Section 2.8.

(d) All contributions and transfers received by the Trust on behalf of the Employer will be held in the Employer's Agency Account and will be allocated to the subaccounts under the Agency Account as follows:

(1) If the Employer maintains a Pension Account or OPEB Account (and not both a Pension Account and an OPEB Account), all contributions and transfers received by the Trust on the Employer's behalf will be allocated to that subaccount.

(2) If the Employer maintains both a Pension Account and an OPEB Account, contributions and transfers received by the Trust on the Employer's behalf will be allocated to either the Pension Account or OPEB Account, as directed by the Plan Administrator. To the extent the Plan Administrator does not provide such direction, the Employer hereby directs the Trustee to allocate such contributions and transfers to the Suspense Account and to use the assets of the Suspense Account to purchase a position in the sweep vehicle identified on an exhibit hereto or, if none is identified, to hold such assets un-invested. The Plan Administrator may at any time direct the reallocation of cash from the Suspense Account to either the Pension Account or the OPEB Account.

(3) Once allocated to the Pension Account or the OPEB Account, amounts under the Trust may not subsequently be transferred to the other subaccount.

## **2.5 Assets of Agency Account**

The assets held in an Agency Account shall consist of all contributions and transfers received by the Trust on behalf of the Employer, together with the income and earnings from such contributions and transfers, and any increments accruing to the Agency Account, net of any investment losses, benefits, expenses or other costs ("Assets"). All contributions or transfers shall be received by the Trustee in cash or in other property acceptable to the Trustee. The Trustee shall manage and administer the Assets held in Agency Accounts without distinction between principal and income. The Trustee and the Trust Administrator shall have no duty to compute any amount to be transferred or paid to the Agency Account by the Employer, and the Trustee and the Trust Administrator shall not be responsible for the collection of any contributions or transfers to the Agency Account.

## **2.6 Aggregate Balance for Investment and Administration**

The balances of the Assets of more than one Agency Account may be aggregated by the Trustee in one or more Omnibus Accounts for investment and administrative purposes, to provide economies of scale and efficiency of administration to the Agency Accounts. The responsibility for Agency Account level accounting (including subaccount-level accounting within each Agency Account) within this Omnibus Account(s) shall be that of the Trust Administrator.

**2.7 Trustee Accounting**

The Trustee shall be responsible only for maintaining records and maintaining accounts for the aggregate assets of the Trust. The responsibility for accounting and subaccounting for each Agency Account, based upon the Omnibus Account(s), shall be that of the Trust Administrator.

**2.8 No Diversion of Assets**

The Assets in each Employer's Agency Account shall be held in trust for the exclusive purpose of funding the Employer's OPEB Obligation or Pension Obligation or both and defraying the reasonable expenses associated with the same. The Assets in each Agency Account shall not be used for or diverted to, any other purpose, including, but not limited to, the satisfaction of any other Employer's Pension Obligation or OPEB Obligation.

**2.9 Type and Nature of Trust**

Neither the full faith and credit nor the taxing power of each Employer is pledged to the distribution of amounts hereunder. Except for contributions and other amounts hereunder, no other amounts are pledged to the distribution of benefits hereunder. Distributions of benefits are neither general nor special obligations of any Employer, but are payable solely from the Assets held in such Employer's Agency Account, as more fully described herein. No employee of any Employer or beneficiary may compel the exercise of the taxing power by any Employer.

Distributions of Assets from any Agency Account are not debts of any Employer within the meaning of any constitutional or statutory limitation or restriction. Such distributions are not legal or equitable pledges, charges, liens or encumbrances, upon any of an Employer's property, or upon any of its income, receipts, or revenues, except amounts in the accounts which are, under the terms of each Plan and the Trust set aside for distributions. Neither the members of the governing body of any Employer nor its officers, employees, agents or volunteers are liable hereunder.

**2.10 Loss of Tax-Exempt Status as to Any Employer**

If any Employer participating in the Trust receives notice from the Internal Revenue Service that the Trust as to such Employer fails to satisfy the requirements of Section 115 of the Code, or if any Employer consents to the Internal Revenue Service's determination that the Trust fails to meet such requirements, Assets having a value equal to the funds then held in such Employer's Agency Account shall be segregated and placed in a separate trust by the Trustee for the exclusive benefit of such Employer's Eligible Employees within a reasonable time after the Trust Administrator notifies the Trustee of the Internal Revenue Service's determination. Each Employer participating in the Trust agrees to immediately notify the Trust Administrator upon receiving such



notice or giving such consent. The separate trust provided for in this Section 2.10 shall thereafter be considered as a separate trust containing all of the provisions of this Trust Agreement until terminated as provided in this Trust Agreement.

### ARTICLE III

#### ADMINISTRATIVE MATTERS

##### 3.1 Appointment of Trustee

The Employers may, with the approval of two-thirds (2/3) or more of the Employers then participating in the Trust, act to appoint a bank, trust company, retirement board, insurer, committee or such other entity as permitted by law, to serve as the trustee of this Trust. Such action must be in writing. Upon the written acceptance of such entity it shall become the Trustee of the Trust. If the Trustee is removed or resigns pursuant to Section 3.2, the Employers shall appoint a successor Trustee in accordance with the voting requirements set forth in this Section 3.1.

##### 3.2 Resignation or Removal of Trustee

The Employers may act to remove the Trustee, provided that such action must satisfy the voting requirements set forth in Section 3.1 and notice of such action must be promptly delivered to the Trust Administrator, the Trustee and each Plan Administrator. The Trustee may also resign at any time by giving at least ninety (90) days prior written notice to the Trust Administrator and to the Plan Administrator of each Employer that has adopted the Trust Agreement and not terminated its participation in the Trust; provided, however, that the Trustee may resign immediately upon the earlier of the approval date or the effective date of any amendment of the Trust Agreement by the Employers that would change or modify the duties, powers or liabilities of the Trustee hereunder without the Trustee's consent. The Trustee shall, upon the appointment and acceptance of a successor trustee, transfer and deliver the Assets and all records relating to the Trust to the successor, after reserving such reasonable amount as it shall deem necessary to provide for its fees and expenses and any sums chargeable against the Trust for which it may be liable. The Trustee shall do all acts necessary to vest title of record in the successor trustee.

##### 3.3 Withdrawal of Employer

An Employer may elect to withdraw from the Trust by giving at least thirty (30) days prior written notice to the Trustee and the Trust Administrator. If an Employer so elects to withdraw, Assets having a value equal to the funds held in such Employer's Agency Account shall be segregated by the Trustee and, as soon as practicable, shall be transferred to one or more trusts maintained by the Employer, provided that (i) for Assets transferred from the OPEB Account, any such trust shall satisfy the requirements of Section 115 of the Code, (ii) for Assets

transferred from the Pension Account, any such trust shall satisfy the requirements of either Section 115 or 401(a) of the Code, and (iii) all assets held by any such trust and previously held in the Employer's Pension Account or OPEB Account shall qualify as "plan assets" within the meaning of GASB Statement No. 68 (Accounting and Financial Reporting for Pensions—An Amendment of GASB Statement No. 27) or GASB Statement No. 45 (Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions), respectively, in each case as reasonably determined by the Employer and certified in writing by the Employer to the Trust Administrator. The Employer shall appoint a trustee for such Employer's separate trust and, upon the trustee's acceptance of that appointment, the trustee will be vested with title to the transferred Assets.

#### **3.4 The Plan Administrator**

The governing body of each Employer shall have plenary authority for the administration and investment of such Employer's Agency Account pursuant to any applicable state laws and applicable federal laws and regulations. Each Employer shall by resolution designate a Plan Administrator. Unless otherwise specified in the instrument the Plan Administrator shall be deemed to have authority to act on behalf of the Employer in all matters pertaining to the Employer's participation in the Trust and in regard to the Agency Account of the Employer. Such appointment of a Plan Administrator shall be effective upon receipt and acknowledgment by the Trustee and the Trust Administrator and shall be effective until the Trustee and the Trust Administrator are furnished with a resolution of the Employer that the appointment has been modified or terminated.

#### **3.5 Failure to Appoint Plan Administrator**

If a Plan Administrator is not appointed, or such appointment lapses, the Employer shall be deemed to be the Plan Administrator. As used in this document the term "Plan Administrator" shall be deemed to mean "Employer" when a Plan Administrator has not been appointed for such Employer.

#### **3.6 Delegatee**

The Plan Administrator, acting on behalf of the Employer, may delegate certain authority, powers and duties to a Delegatee to act in those matters specified in the delegation. Any such delegation must be in a writing that names and identifies the Delegatee, states the effective date of the delegation, specifies the authority and duties delegated, is executed by the Plan Administrator, is acknowledged in writing by the Delegatee, and is certified as required in Section 3.7 to the Trust Administrator. Such delegation shall be effective until the Trustee and the Trust Administrator are directed in writing by the Plan Administrator that the delegation has been rescinded or modified.

**3.7 Certification to Trustee**

The governing body of each Employer, or other duly authorized official, shall certify in writing to the Trustee and the Trust Administrator the names and specimen signatures of the Plan Administrator and Delegatee, if any, and all others authorized to act on behalf of the Employer whose names and specimen signatures shall be kept accurate by the Employer acting through a duly authorized officer or governing body of the Employer. The Trustee and the Trust Administrator shall have no liability if they act upon the direction of a Plan Administrator or Delegatee that has been duly authorized, as provided in Section 3.6, if that Plan Administrator or Delegatee is no longer authorized to act, unless the Employer has informed the Trustee and the Trust Administrator of such change.

**3.8 Directions to Trustee**

All directions to the Trustee from the Plan Administrator or Delegatee must be in writing and must be signed by the Plan Administrator or Delegatee, as the case may be. For all purposes of this Trust Agreement, direction shall include any certification, notice, authorization, application or instruction of the Plan Administrator, Delegatee or Trustee appropriately communicated. The above notwithstanding, direction may be implied if the Plan Administrator or Delegatee has knowledge of the Trustee's intentions and fails to file written objection.

The Trustee shall have the power and duty to comply promptly with all proper directions of the Plan Administrator or Delegatee, appointed in accordance with the provisions of this Trust Agreement. In the case of any direction deemed by the Trustee to be unclear or ambiguous the Trustee may seek written instructions from the Plan Administrator, the Employer or the Delegatee on such matter and await their written instructions without incurring any liability. If at any time the Plan Administrator or the Delegatee should fail to give directions to the Trustee, the Trustee may act in the manner that in its discretion seems advisable under the circumstances for carrying out the purposes of the Trust and/or the applicable Agency Account which may include not taking any action. The Trustee may request directions or clarification of directions received and may delay acting until clarification is received. In the absence of timely direction or clarification, or if the Trustee considers any direction to be a violation of the Trust Agreement or any applicable law, the Trustee shall in its sole discretion take appropriate action, or refuse to act upon a direction.

**3.9 Appointment of Trust Administrator**

The Employers may, with the approval of two-thirds (2/3) or more of the Employers then participating in the Trust, act to appoint a bank, trust company, retirement board, insurer, committee or such other entity as permitted by law, to serve as Trust Administrator of the Trust. Such action must be in writing. Upon the written acceptance of such entity it shall become the Trust Administrator of

the Trust. If the Trust Administrator is removed or resigns pursuant to Section 3.13, the Employers shall appoint a successor Trust Administrator in accordance with the voting requirements set forth in this Section 3.9.

### 3.10 Trust Administrator

The Trust Administrator's duties involve the performance of the following services pursuant to the provisions of this Trust Agreement and the Agreement for Administrative Services:

- (a) Performing periodic accounting of each Agency Account (including subaccount-level accounting within each Agency Account) and reconciling such Agency Account balances with the Trust/Omnibus Account;
- (b) Directing the Trustee to make distributions from the appropriate subaccount under an Agency Account in accordance with Section 5.9.
- (c) Allocating contributions, earnings and expenses to each Agency Account and the underlying subaccounts;
- (d) Directing the Trustee to pay the fees of the Trust Administrator and to do such other acts as shall be appropriate to carry out the intent of the Trust;
- (e) Such other services as the Employer and the Trust Administrator may agree in the Agreement for Administrative Services pursuant to Section 2.3.

The Trust Administrator shall be entitled to rely on, and shall be under no duty to question, any direction and/or data received from the Plan Administrator, or other duly authorized entity, in order to perform its authorized duties under this Trust Agreement. The Trust Administrator shall not have any duty to compute contributions made to the Trust, determine or inquire whether contributions made to the Trust by the Plan Administrator or other duly authorized entity are adequate to meet an Employer's Pension Obligation or OPEB Obligation as may be determined under any applicable GASB pronouncement; or determine or inquire whether contributions made to the Trust are in compliance with the Employer's OPEB Plan or Pension Plan. The Trust Administrator shall not be liable for nonperformance of duties if such nonperformance is directly caused by erroneous, and/or late delivery of, directions or data from the Plan Administrator, or other duly authorized entity.

### 3.11 Additional Trust Administrator Services

The Plan Administrator may at any time retain the Trust Administrator as its agent to perform any act, keep any records or accounts and make any computations which are required of the Employer or the Plan Administrator by this Trust Agreement or by the Employer's policies and/or applicable collective bargaining agreements. The Trust Administrator shall be separately compensated

for such service and such services shall not be deemed to be contrary to the Trust Agreement.

**3.12 Trust Administrator's Compensation**

As may be agreed upon from time to time by the Employer and Trust Administrator, the Trust Administrator will be paid reasonable compensation for services rendered or reimbursed for expenses properly and actually incurred in the performance of duties with respect to such Employer's Agency Account and to the Trust.

**3.13 Resignation or Removal of Trust Administrator**

The Employers may act to remove the Trust Administrator, provided that such action must satisfy the voting requirements set forth in Section 3.9 and notice of such action must be promptly delivered to the Trust Administrator, the Trustee and each Plan Administrator. The Trust Administrator may also resign at any time by giving at least one hundred and twenty (120) days prior written notice to the Trustee and to the Plan Administrator of each Employer that has adopted the Trust Agreement and not terminated its participation in the Trust; provided, however, that the Trust Administrator may resign immediately upon the earlier of the approval date or the effective date of any amendment of the Trust Agreement by the Employers that would change or modify the duties, powers or liabilities of the Trust Administrator hereunder without the Trust Administrator's consent. The Trust Administrator shall, upon the appointment and acceptance of a successor trust administrator, transfer all records relating to the Trust to the successor.

**ARTICLE IV**

**THE TRUSTEE**

**4.1 Powers and Duties of the Trustee**

Except as otherwise provided in Article V and subject to Article VI, the Trustee shall have full power and authority with respect to property held in the Trust to do all such acts, take all proceedings, and exercise all such rights and privileges, whether specifically referred to or not in this document, as could be done, taken or exercised by the absolute owner, including, without limitation, the following:

(a) To invest and reinvest the Assets or any part hereof in any one or more kind, type, class, item or parcel of property, real, personal or mixed, tangible or intangible; or in any one or more kind, type, class, item or issue of investment or security; or in any one or more kind, type, class or item of obligation, secured or unsecured; or in any combination of them (including those issued by the Trustee of any of its affiliates, to the extent permitted by applicable law), and to retain the property for the period of time that the Trustee deems appropriate;



- (b) To acquire and sell options to buy securities ("call" options) and to acquire and sell options to sell securities ("put" options);
- (c) To buy, sell, assign, transfer, acquire, loan, lease (for any purpose, including mineral leases), exchange and in any other manner to acquire, manage, deal with and dispose of all or any part of the Trust property, for cash or credit and upon any reasonable terms and conditions;
- (d) To make deposits, with any bank or savings and loan institution, including any such facility of the Trustee or an affiliate thereof provided that the deposit bears a reasonable rate of interest;
- (e) To invest and reinvest the Assets, or any part thereof in any one or more collective investment trust funds, including common and group trust funds that consist exclusively of assets of exempt pension and profit sharing trusts and individual retirement accounts qualified and tax exempt under the Code, that are maintained by the Trustee or an affiliate thereof. The declaration of trust or plan of operations for any such common or collective fund is hereby incorporated herein and adopted into this Trust Agreement by this reference. The combining of money and other assets of the Trust with money and other assets of other non-qualified trusts in such fund or funds is specifically authorized. Notwithstanding anything to the contrary in this Trust Agreement, the Trustee shall have full investment responsibility over Assets of the Trust invested in such commingled funds. If the plan and trust for any reason lose their tax exempt status, and the Assets have been commingled with assets of other tax exempt trusts in Trustee's collective investment funds, the Trustee shall within 30 days of notice of such loss of tax exempt status, liquidate the Trust's units of the collective investment fund(s) and invest the proceeds in a money market fund pending investment or other instructions from the Plan Administrator. The Trustee shall not be liable for any loss or gain or taxes, if any, resulting from said liquidation;
- (f) To place uninvested cash and cash awaiting distribution in one or more mutual funds and/or commingled investment funds maintained by or made available by the Trustee or any of its affiliates, and to receive compensation from the sponsor of such fund(s) for services rendered, separate and apart from any Trustee's fees hereunder. The Trustee or its affiliate may also be compensated for providing investment advisory services to any mutual fund or commingled investment funds;
- (g) To borrow money for the purposes of the Trust from any source with or without giving security; to pay interest; to issue promissory notes and to secure the repayment thereof by pledging all or any part of the Assets;
- (h) To take all of the following actions: to vote proxies of any stocks, bonds or other securities; to give general or special proxies or powers of attorney with or

without power of substitution; to exercise any conversion privileges, subscription rights or other options, and to make any payments incidental thereto; to consent to or otherwise participate in corporate reorganizations or other changes affecting corporate securities and to delegate discretionary powers and to pay any assessments or charges in connection therewith; and generally to exercise any of the powers of an owner with respect to stocks, bonds, securities or other property held in the Trust;

(i) To make, execute, acknowledge and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(j) To raze or move existing buildings; to make ordinary or extraordinary repairs, alterations or additions in and to buildings; to construct buildings and other structures and to install fixtures and equipment therein;

(k) To pay or cause to be paid from the Trust any and all real or personal property taxes, income taxes or other taxes or assessments of any or all kinds levied or assessed upon or with respect to the Trust;

(l) To exercise all the further rights, powers, options and privileges granted, provided for, or vested in trustees generally under applicable federal or state laws, as amended from time to time, it being intended that, except as herein otherwise provided, the powers conferred upon the Trustee herein shall not be construed as being in limitation of any authority conferred by law, but shall be construed as consistent or in addition thereto.

#### 4.2 Additional Trustee Powers

In addition to the other powers enumerated above, the Trustee in any and all events is authorized and empowered:

(a) To invest funds pending required directions in any type of interest-bearing account, including, without limitation, time certificates of deposit or interest-bearing accounts issued by the Trustee, or any mutual fund or short term investment fund ("**Fund**"), whether sponsored or advised by the Trustee or any affiliate thereof; the Trustee or its affiliates may be compensated for providing such investment advice and providing other service to such Fund, in addition to any Trustee's fees received pursuant to this Trust Agreement;

(b) To cause all or any part of the Trust to be held in the name of the Trustee (which in such instance need not disclose its fiduciary capacity) or, as permitted by law, in the name of any nominee, and to acquire for the Trust any investment in bearer form, but the books and records of the Trust shall at all times show that all such investments are a part of the Trust and the Trustee shall hold evidences of title to all such investments;

- (c) To serve as custodian with respect to the Trust Assets;
- (d) To employ such custodians, agents and counsel as may be reasonably necessary in managing and protecting the Assets and to pay them reasonable compensation from the Trust; to employ any broker-dealer or other agent, including any broker-dealer or other agent affiliated with the Trustee, and pay to such broker-dealer or other agent, at the expense of the Trust, its standard commissions or compensation; to settle, compromise or abandon all claims and demands in favor of or against the Trust; and to charge any premium on bonds purchased at par value to the principal of the Trust without amortization from the Trust, regardless of any law relating thereto;
- (e) In addition to the powers listed herein, to do all other acts necessary or desirable for the proper administration of the Trust, as though the absolute owner thereof;
- (f) To prosecute, compromise and defend lawsuits, but without obligation to do so, all at the risk and expense of the Trust; and to tender its defense to the Employer in any legal proceeding where the interests of the Trustee and the Employer are not adverse;
- (g) To exercise and perform any and all of the other powers and duties specified in this Trust Agreement or the Plan;
- (h) To permit such inspections of documents at the principal office of the Trustee as are required by law, subpoena or demand by a United States agency;
- (i) To comply with all requirements imposed by applicable provisions of law;
- (j) To seek written instructions from the Plan Administrator or other fiduciary on any matter and await their written instructions without incurring any liability. If at any time the Plan Administrator or the fiduciary should fail to give directions to the Trustee, the Trustee may act in the manner that in its discretion seems advisable under the circumstances for carrying out the purposes of the Trust;
- (k) To compensate such executive, consultant, actuarial, accounting, investment, appraisal, administrative, clerical, secretarial, medical, custodial, depository and legal firms, personnel and other employees or assistants as are engaged by the Plan Administrator in connection with funding the Employer's OPEB Obligation or Pension Obligation or both and to pay from the Trust the necessary expenses of such firms, personnel and assistants, to the extent not paid by the Plan Administrator;

(l) To act upon proper written directions of the Plan Administrator or Delegatee, including directions given by photostatic transmissions using facsimile signature, and such other forms of directions as the parties shall agree;

(m) To pay from the Trust the expenses reasonably incurred in the administration of the Trust;

(n) To maintain insurance for such purposes, in such amounts and with such companies as the Plan Administrator shall elect, including insurance to cover liability or losses occurring by reason of the acts or omissions of fiduciaries but only if such insurance permits recourse by the insurer against the fiduciary in the case of a breach of a fiduciary obligation by such fiduciary.

## ARTICLE V

### INVESTMENTS

#### 5.1 Discretionary Versus Directed Investment

For the Pension Account and the OPEB Account under the Agency Account, the Employer shall elect either a discretionary or directed investment approach. The Employer may elect the same or different investment approaches for those two subaccounts. The Employer hereby elects a directed approach for the Suspense Account. If the Employer elects a discretionary investment approach for a subaccount, the Employer shall further elect between the various investment strategies offered and the Trustee, in accordance with Article IV, shall have absolute discretion over the investment of the Assets held in such subaccount under the Employer's Agency Account. If the Employer elects a directed investment approach for a subaccount, the Trustee shall direct the investment of the Assets of such subaccount under the Employer's Agency Account in accordance with the direction provided by such Employer.

#### 5.2 Trustee Fees

As may be agreed upon, in writing, between the Plan Administrator and Trustee, the Trustee will be paid reasonable compensation for services rendered or reimbursed for expenses properly and actually incurred in the performance of duties with respect to the applicable Agency Account or the Trust.

#### 5.3 Contributions

Eligible Employees are not permitted to make contributions to the Trust. The Plan Administrator shall, on behalf of the Employer, make all contributions to the Trustee. Such contributions shall be in cash unless the Trustee agrees to accept a contribution that is not in cash. All contributions shall be paid to the Trustee for investment and reinvestment pursuant to the terms of this Trust Agreement. The Trustee shall not have any duty to determine or inquire whether any contributions

to the Trust made to the Trustee by any Plan Administrator are in compliance with the Employer's Pension Plan or OPEB Plan; nor shall the Trustee have any duty or authority to compute any amount to be paid to the Trustee by any Plan Administrator; nor shall the Trustee be responsible for the collection or adequacy of the contributions to meet an Employer's Pension Obligation or OPEB Obligation. The contributions received by the Trustee from each Employer shall be held and administered pursuant to the terms hereof without distinction between income and principal.

#### 5.4 Records

(a) The Trustee shall maintain accurate records and detailed accounts of all investments, receipts, disbursements and other transactions hereunder at the Trust level. Such records shall be available at all reasonable times for inspection by the Trust Administrator. The Trustee shall, at the direction of the Trust Administrator, submit such valuations, reports or other information as the Trust Administrator may reasonably require.

(b) The Assets of the Trust shall be valued at their fair market value on the date of valuation, as determined by the Trustee based upon such sources of information as it may deem reliable; provided, however, that the Plan Administrator shall instruct the Trustee as to valuation of assets which are not readily determinable on an established market. The Trustee may rely conclusively on such valuations provided by the Plan Administrator and shall be indemnified and held harmless by the Employer with respect to such reliance. If the Plan Administrator fails to provide such values, the Trustee may take whatever action it deems reasonable, including employment of attorneys, appraisers or other professionals, the expense of which will be an expense of administration of the Trust. Transactions in the account involving such hard to value assets may be postponed until appropriate valuations have been received and Trustee shall have no liability therefore.

#### 5.5 Statements

(a) Periodically as specified, and within sixty days after December 31, or the end of the Trust's fiscal year if different, Trustee shall render to the Trust Administrator as directed, a written account showing in reasonable summary the investments, receipts, disbursements and other transactions engaged in by the Trustee during the preceding fiscal year or period with respect to the Trust. Such account shall set forth the assets and liabilities of the Trust valued as of the end of the accounting period.

(b) The Trust Administrator may approve such statements either by written notice or by failure to express objections to such statements by written notice delivered to the Trustee within 90 days from the date the statement is delivered to the Trust Administrator. Upon approval, the Trustee shall be released and discharged as to all matters and items set forth in such statement as if such



account had been settled and allowed by a decree from a court of competent jurisdiction.

#### **5.6 Wire Transfers**

The Trustee shall follow the Plan Administrator's, Delegatee's, or Trust Administrator's wire transfer instructions in compliance with the written security procedures provided by the party providing the wire transfers. The Trustee shall perform a telephonic verification to the Plan Administrator, Trust Administrator, or Delegatee, or such other security procedure as selected by the party providing wire transfer directions, prior to wiring funds or following facsimile directions as Trustee may require. The Plan Administrator assumes the risk of delay of transfer if Trustee is unable to reach the Plan Administrator, or in the event of delay as a result of attempts to comply with any other security procedure selected by the directing party.

#### **5.7 Exclusive Benefit**

The Assets of an Employer's Agency Account shall be held in trust for the exclusive purpose of funding the Employer's OPEB Obligation or Pension Obligation or both and defraying the reasonable expenses associated with the same and shall not be used for or diverted to any other purpose. No party shall have authority to use or divert the Assets of an Agency Account of an Employer for the satisfaction of any other Employer's Pension Obligation or OPEB Obligation or any other Employer's expenses.

#### **5.8 Delegation of Duties**

The Plan Administrator, Delegatee, or Trust Administrator, may at any time retain the Trustee as its agent to perform any act, keep any records or accounts and make any computations that are required of the Plan Administrator, Delegatee or Trust Administrator by this Trust Agreement or by the Plan. The Trustee may be compensated for such retention and such retention shall not be deemed to be contrary to this Trust Agreement.

#### **5.9 Distributions**

(a) The Trustee shall, from time to time, upon the written direction of the Plan Administrator or Delegatee, make distributions from the Assets of the Trust under the OPEB Account to the insurers, third party administrators, service providers or other entities providing benefits or services under the OPEB Plan, or to Eligible Employees and Eligible Beneficiaries for reimbursement of OPEB Plan premiums (or other payments for OPEB Plan benefits) paid by the Eligible Employee or Eligible Beneficiary, or to the Employer for reimbursement of OPEB Plan benefits and expenses paid by the Employer, in such manner in such form(s), in such amounts and for such purposes as may be specified in such directions.

(b) In addition, the Trustee shall, from time to time, upon the written direction of the Plan Administrator or Delegatee, make distributions from the Assets of the Trust under the Pension Account directly to (i) the Qualified Trust as employer contributions, (ii) any insurers, third party administrators, service providers or other entities providing services in connection with determining the Employer's Pension Obligation, or (iii) the Employer as reimbursement for the Employer's payment of amounts described in this Section 5.9(b)(i) and (ii).

(c) In no event shall the Trustee have any responsibility respecting the application of distributions from the Assets of the Trust, or for determining or inquiring into whether such distributions are in accordance with the Employer's OPEB Plan, Pension Plan, policies, or applicable collective bargaining agreements.

## ARTICLE VI

### FIDUCIARY RESPONSIBILITIES

#### 6.1 More Than One Fiduciary Capacity

Any one or more of the fiduciaries with respect to the Trust Agreement or the Trust may, to the extent required thereby or as directed by the Plan Administrator pursuant to this Trust Agreement, serve in more than one fiduciary capacity with respect to the Trust Agreement and the Trust.

#### 6.2 Fiduciary Discharge of Duties

Except as otherwise provided by applicable law, each fiduciary shall discharge such fiduciary's duties with respect to the Trust Agreement and the Trust:

(a) solely in the interest of the Eligible Employees and for the exclusive purpose of funding the Employer's OPEB Obligation or Pension Obligation or both and defraying the reasonable expenses associated with the same; and

(b) with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character and with like aims.

#### 6.3 Limitations on Fiduciary Responsibility

To the extent allowed by the laws of the state of each Employer:

No fiduciary shall be liable with respect to a breach of fiduciary duty by any other fiduciary if such breach was committed before such party became a fiduciary or after such party ceased to be a fiduciary.

No fiduciary shall be liable for a breach by another fiduciary except as provided by law.

No fiduciary shall be liable for carrying out a proper direction from another fiduciary, including refraining from taking an action in the absence of a proper direction from the other fiduciary possessing the authority and responsibility to make such a direction, which direction the fiduciary in good faith believes to be authorized and appropriate.

**6.4 Indemnification of Trustee by Employer**

The Trustee shall not be liable for, and Employer shall (to the extent allowed by the laws of the state of each Employer) indemnify, defend (as set out in Section 6.8 of this Trust Agreement), and hold the Trustee (including its officers, agents, employees and attorneys) and other Employers harmless from and against any claims, demands, loss, costs, expense or liability imposed on the indemnified party, including reasonable attorneys' fees and costs incurred by the indemnified party, arising as a result of Employer's active or passive negligent act or omission or willful misconduct in the execution or performance of its duties under this Trust Agreement.

**6.5 Indemnification of Employer by Trustee**

The Employer shall not be liable for, and Trustee shall (to the extent allowed by the laws of the state of each Employer) indemnify, defend (as set out in Section 6.8 of this Trust Agreement), and hold the Employer (including its officers, agents, employees and attorneys) and other Employers harmless from and against any claims, demands, loss, costs, expense or liability imposed on the indemnified party, including reasonable attorneys' fees and costs incurred by the indemnified party, arising as a result of Trustee's active or passive negligent act or omission or willful misconduct in the execution or performance of its duties under this Trust Agreement.

**6.6 Indemnification of Trustee by Trust Administrator**

The Trustee shall not be liable for, and Trust Administrator shall (to the extent allowed by the laws of the state of each Employer) indemnify and hold the Trustee (including its officers, agents, employees and attorneys) harmless from and against any claims, demands, loss, costs, expense or liability imposed on the indemnified party, including reasonable attorneys' fees and costs incurred by the indemnified party, arising as a result of Trust Administrator's active or passive negligent act or omission or willful misconduct in the execution or performance of its duties under this Trust Agreement.

**6.7 Indemnification of Trust Administrator by Trustee**

The Trust Administrator shall not be liable for, and Trustee shall (to the extent allowed by the laws of the state of each Employer) indemnify and hold the Trust

Administrator (including its officers, agents, employees and attorneys) harmless from and against any claims, demands, loss, costs, expense or liability imposed on the indemnified party, including reasonable attorneys' fees and costs incurred by the indemnified party, arising as a result of Trustee's active or passive negligent act or omission or willful misconduct in the execution or performance of its duties under this Trust Agreement.

#### **6.8 Indemnification Procedures**

Promptly after receipt by an indemnified party of notice or receipt of a claim or the commencement of any action for which indemnification may be sought, the indemnified party will notify the indemnifying party in writing of the receipt or commencement thereof. When the indemnifying party has agreed to provide a defense as set out above that party shall assume the defense of such action (including the employment of counsel, who shall be counsel reasonably satisfactory to such indemnitee) and the payment of expenses, insofar as such action shall relate to any alleged liability in respect of which indemnity may be sought against the indemnifying party. Any indemnified party shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall not be at the expense of the indemnifying party unless (i) the employment of such counsel has been specifically authorized by the indemnifying party or (ii) the named parties to any such action (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interest between them. The indemnifying party shall not be liable to indemnify any person for any settlement of any such action effected without the indemnifying party's consent. The indemnification procedures of this Trust Agreement shall survive the termination of the Trust, any Employer's participation in the Trust and/or this Trust Agreement.

#### **6.9 No Joint and Several Liability**

This document is not intended to and does not create any joint powers agreement or any joint and several liability. No Employer shall be responsible for any contributions, costs or distributions of any other Employer.

### **ARTICLE VII**

#### **AMENDMENT, TERMINATION AND MERGER**

#### **7.1 No Contractual Obligation**

An Employer's participation in the Trust does not create, and is not intended to create, any contractual obligation to Eligible Employees. Therefore, no Employer is contractually obligated to Eligible Employees solely due to its participation in

the Trust to continue providing benefits under its Pension Plan or OPEB Plan or to make contributions to the Trust.

**7.2 Amendment of Trust**

(a) The Trust Agreement may be amended only by the approval of two-thirds (2/3) or more of the Employers then participating in the Trust. Any such amendment by the Employers shall be set forth in an instrument in writing and shall be delivered to the Trustee, the Trust Administrator and all Plan Administrators not less than one hundred and eighty (180) days before the effective date of such amendment; provided, however, that any party may waive in writing such 180-day requirement with respect to any amendment (and such waiver shall not constitute a waiver with respect to any other amendment); and provided, further, that a waiver in writing of such 180-day requirement by two-thirds (2/3) or more of the Plan Administrators of the Employers participating in the Trust as of the date the amendment is adopted shall constitute a waiver of such 180-day requirement by all of the Employers then participating in the Trust. In addition, the Trust Administrator or the Trustee shall have the right to amend this Trust Agreement from time to time (without the requirement of a vote of Employers) solely for the purpose of keeping the Trust Agreement in compliance with the Code and applicable state law. Any such amendment by the Trust Administrator or the Trustee shall be set forth in an instrument in writing and shall be delivered to the Trustee, the Trust Administrator and all Plan Administrators promptly as each is made.

(b) Any amendment of the Trust Agreement may be current, retroactive or prospective, provided, however, that no amendment shall:

(1) Cause the Assets of any Agency Account to be used for or diverted to purposes other than for the exclusive purpose of funding the Employer's OPEB Obligation or Pension Obligation or both and defraying the reasonable expenses associated with the same.

(2) Permit the Assets of any Agency Account to be used for the benefit of any other Employer.

**7.3 Termination of Employer's Obligation to Provide Pension Benefits or OPEB**

A termination of the Employer's obligation to provide benefits under the Employer's Pension Plan or OPEB Plan for which the Employer's Agency Account was established shall not, in itself, effect a termination of the Agency Account. Upon a termination of the Employer's obligation to provide benefits under its Pension Plan or OPEB Plan, the Assets of the Employer's Pension Account or OPEB Account, as applicable, will be distributed by the Trustee when directed by the Plan Administrator in accordance with this Section 7.3. From and after the date of such termination and until final distribution of all Assets under the Employer's Agency Account, the Trustee shall continue to have all the powers



provided herein as are necessary or expedient for the orderly liquidation and distribution of such Assets, and the Agency Account shall continue until the Assets have been completely distributed. Any Assets remaining in the Pension Account or OPEB Account will be used first to satisfy any remaining Pension Obligation or OPEB Obligation, respectively, pursuant to the Employer's Pension Plan or OPEB Plan (to the extent that such distribution constitutes the exercise of an "essential governmental function" within the meaning of Section 115 of the Code) and to satisfy any of such Employer's obligations under this Trust Agreement. Any Assets remaining in the Employer's Pension Account or OPEB Account (as applicable) after giving effect to the preceding sentence will be paid to the Employer to the extent permitted by law and consistent with the requirements of Section 115 of the Code.

#### **7.4 Fund Recovery Based on Mistake of Fact**

Except as hereinafter provided or in accordance with Section 7.3, the Assets of the Trust shall never inure to the benefit of the Employer. The Assets shall be held for the exclusive purpose of funding the Employer's OPEB Obligation or Pension Obligation or both and defraying the reasonable expenses associated with the same. However, in the case of a contribution which is made by an Employer because of a mistake of fact, that portion of the contribution relating to the mistake of fact (exclusive of any earnings or losses attributable thereto) may be returned to the Employer, provided such return occurs within two (2) years after discovery by the Employer of the mistake. If any repayment is payable to the Employer, then, as a condition to such repayment, and only if requested by Trustee, the Employer shall execute, acknowledge and deliver to the Trustee its written undertaking, in a form satisfactory to the Trustee, to indemnify, defend and hold the Trustee harmless from all claims, actions, demands or liabilities arising in connection with such repayment.

#### **7.5 Termination of Trust**

(a) The Trust and this Trust Agreement may be terminated by the unanimous agreement of all Employers, which action must be in writing and delivered to the Trustee and Trust Administrator. Upon termination of the Trust under this Section 7.5(a), the Assets of each Employer's Pension Account or OPEB Account, as applicable, will be distributed by the Trustee when directed by the Plan Administrator in accordance with this Section 7.5(a). From and after the date of such termination and until final distribution of all Assets under each Employer's Agency Account, the Trustee shall continue to have all the powers provided herein as are necessary or expedient for the orderly liquidation and distribution of such Assets, and the Agency Account shall continue until the Assets have been completely distributed. Any Assets remaining in the Pension Account or OPEB Account will be used first to satisfy any remaining Pension Obligation or OPEB Obligation, respectively, pursuant to the Employer's Pension Plan and OPEB Plan (to the extent that such distribution constitutes the exercise of an "essential governmental function" within the meaning of Section 115 of the Code) and to

satisfy any of such Employer's obligations under this Trust Agreement. Any Assets remaining in the Employer's Pension Account or OPEB Account (as applicable) after giving effect to the preceding sentence will be paid to the Employer to the extent permitted by law and consistent with the requirements of Section 115 of the Code.

(b) Contributions to the Trust are conditioned on initial qualification of the Trust under Section 115 of the Code. If the Trust receives an adverse determination with respect to its initial qualification, then the Trust and this Trust Agreement will automatically terminate without any action by any Employer or other parties. After such termination, the Assets of each Employer's Pension Account or OPEB Account, as applicable, will be returned by the Trustee to the Employer as directed by the Plan Administrator in accordance with this Section 7.5(b) to the extent permitted by law and consistent with the requirements of Section 115 of the Code. This Section 7.5(b) will cease to apply upon the Trust's receipt of a favorable determination with respect to its initial qualification.

(c) The Trust and this Trust Agreement may be terminated only as described in this Section 7.5. In no case will the assets of the Trust be distributed on termination to an entity that is not a state, a political subdivision of a state or an entity the income of which is excluded from gross income under Section 115 of the Code.

## ARTICLE VIII

### MISCELLANEOUS PROVISIONS

#### 8.1 Nonalienation

Eligible Employees do not have an interest in the Trust. Accordingly, the Trust shall not in any way be liable to attachment, garnishment, assignment or other process, or be seized, taken, appropriated or applied by any legal or equitable process, to pay any debt or liability of an Eligible Employee or any other party. Trust Assets shall not be subject to the claims of any Employer or the claims of its creditors.

#### 8.2 Saving Clause

In the event any provision of this Trust Agreement is held illegal or invalid for any reason, said illegality or invalidity shall not affect the remaining parts of the Trust Agreement, but this instrument shall be construed and enforced as if said provision had never been included.

#### 8.3 Applicable Law

This Trust Agreement and the Trust shall be construed, administered and governed under the Code and the law of the State of California. To the extent any

of the provisions of this Trust Agreement are inconsistent with the Code or applicable state law, the provisions of the Code or state law shall control. In the event, however, that any provision is susceptible to more than one interpretation, such interpretation shall be given thereto as is consistent with the Trust Agreement being a tax-exempt trust within the meaning of the Code.

#### **8.4 Joinder of Parties**

In any action or other judicial proceedings affecting this Trust Agreement, it shall be necessary to join as parties only the Trustee, the Plan Administrator or Delegatee. No participant or other persons having an interest in the Trust or any Agency Account shall be entitled to any notice or service of process unless otherwise required by law. Any judgment entered in such a proceeding or action shall be binding on all persons claiming under this Trust Agreement; provided, however, that nothing in this Trust Agreement shall be construed as to deprive a participant of such participant's right to seek adjudication of such participant's rights under applicable law.

#### **8.5 Employment of Counsel**

The Trustee may consult with legal counsel (who may be counsel for the Trustee, the Trust Administrator or any Employer) with respect to the interpretation of this Agreement or the Trustee's duties hereunder or with respect to any legal proceedings or any questions of law and shall be entitled to take action or not to take action in good faith reliance on the advice of such counsel and charge the Trust and, as applicable, one or more Agency Accounts.

#### **8.6 Gender and Number**

Words used in the masculine, feminine or neuter gender shall each be deemed to refer to the other whenever the context so requires; and words used in the singular or plural number shall each be deemed to refer to the other whenever the context so requires.

#### **8.7 Headings**

Headings used in this Trust Agreement are inserted for convenience of reference only and any conflict between such headings and the text shall be resolved in favor of the text.


#### **8.8 Counterparts**

This Trust Agreement may be executed in an original and any number of counterparts by the Plan Administrator (executing an Adoption Agreement), the Trust Administrator and the Trustee, each of which shall be deemed to be an original of the one and the same instrument.

IN WITNESS WHEREOF, the Plan Administrator (by executing the Adoption Agreement), the Trustee and the Trust Administrator have executed this Trust Agreement by their duly authorized agents on the Effective Date.


**U.S. BANK NATIONAL ASSOCIATION**

**"Trustee"**

By:   
Signature  
Susan M. Hughes  
Typed or printed name  
Its: Vice President & Relationship Manager

**PUBLIC AGENCY  
RETIREMENT SERVICES**

**"Trust Administrator"**

By:   
Signature  
Daniel Johnson  
Typed or printed name  
Its: President

# Investment Strategy Selection and Disclosure Form

## PARS Pension / OPEB Trust Program

- This document is entered into by client and U.S. Bank National Association ("U.S. Bank"), as trustee.
- Employer: Humboldt Bay Municipal Water District
- Plan/Trust Name: Public Agencies Post-Employment Benefits Trust
- To: HighMark Capital Management, Inc. and U.S. Bank:

U.S. Bank has been or is hereby appointed Investment Manager of the above-referenced Plan/Trust. Please invest the assets of the above-referenced Plan/Trust for which you have been appointed Investment Manager in the (select one of the strategies listed below for each Plan funded by the Trust):

DIVERSIFIED PORTFOLIOS

<input type="checkbox"/>	OPEB Account	<input type="checkbox"/>	Pension Account	Primary Goal	Strategic Range
<input type="checkbox"/>	Liquidity Management (US Treasury)	<input type="checkbox"/>	Liquidity Management (US Treasury)	Provide current income with liquidity and stability of principal through investments in short-term U.S. Treasury obligations.	Money Market Fund
<input type="checkbox"/>	Liquidity Management (Prime Obligation)	<input type="checkbox"/>	Liquidity Management (Prime Obligation)	Generate current income with liquidity.	Money Market Fund
<input type="checkbox"/>	Conservative HighMark PLUS	<input type="checkbox"/>	Conservative HighMark PLUS	Provide a consistent level of inflation-protected income over the long-term.	Equity: 5-20% Fixed Income: 60-95% Cash: 0-20%
<input type="checkbox"/>	Conservative Index PLUS	<input type="checkbox"/>	Conservative Index PLUS		
<input type="checkbox"/>	Moderately Conservative HighMark PLUS	<input type="checkbox"/>	Moderately Conservative HighMark PLUS	Provide current income with capital appreciation as a secondary objective.	Equity: 20-40% Fixed Income: 50-80% Cash: 0-20%
<input type="checkbox"/>	Moderately Conservative Index PLUS	<input type="checkbox"/>	Moderately Conservative Index PLUS		
<input type="checkbox"/>	Moderate HighMark PLUS	<input type="checkbox"/>	Moderate HighMark PLUS	Provide current income and moderate capital appreciation.	Equity: 40-60% Fixed Income: 40-60% Cash: 0-20%
<input type="checkbox"/>	Moderate Index PLUS	<input type="checkbox"/>	Moderate Index PLUS		
<input type="checkbox"/>	Balanced HighMark PLUS	<input type="checkbox"/>	Balanced HighMark PLUS	Provide growth of principal and income.	Equity: 50-70% Fixed Income: 30-50% Cash: 0-20%
<input type="checkbox"/>	Balanced Index PLUS	<input type="checkbox"/>	Balanced Index PLUS		
<input type="checkbox"/>	Capital Appreciation HighMark PLUS	<input type="checkbox"/>	Capital Appreciation HighMark PLUS	Primary goal is growth of principal.	Equity: 65-85% Fixed Income: 10-30% Cash: 0-20%
<input type="checkbox"/>	Capital Appreciation Index PLUS	<input type="checkbox"/>	Capital Appreciation Index PLUS		
<input type="checkbox"/>	Custom	<input type="checkbox"/>	Custom	Specify:	

Note: HighMark PLUS portfolios are diversified portfolios of actively managed mutual funds. Index PLUS portfolios are diversified portfolios of Index-based mutual funds or exchange-traded funds.

Acknowledged and Approved	
Signature of Authorized Signer	General Manager
<u>John Friedenbach</u>	Title
Print Name of Authorized Signer	Date





## Discretionary Trustee Fee Schedule

### PARS Pension / OPEB Trust Program

This document is entered into by client and U.S. Bank National Association ("U.S. Bank"), as trustee.

#### Discretionary Trustee Fees

Discretionary Trustee Fees are based on the Investment Strategy you select. Following is a list of the Discretionary Trustee Fees applicable to each Investment Strategy:

- **Liquidity – First American U.S. Treasury Money Market** – Fund level fees only (see prospectus)
- **Liquidity – First American Prime Obligation Fund Class Z** – Fund level fees only (see prospectus)
- **Diversified Portfolios (Conservative, Moderately Conservative, Moderate, Balanced, Capital Appreciation)**

Per Annum Charges\*

.35% on the first	\$5,000,000
.25% on the next	\$5,000,000
.20% on the next	\$5,000,000
.15% on the next	\$35,000,000
.10% on all over	\$50,000,000

\*Waived for plan assets invested in First American and Nationwide/HighMark funds where HighMark Capital Management is the sub-adviser of the fund.

#### Other Fees

First American Mutual Funds (see prospectus)

#### Payment of Fees

- Market values used for fee calculations on fee invoices may differ slightly from market values on client statements due to posting of accruals, late pricing of securities and/or other timing issues.
- Fees are calculated and charged to the account monthly. If account cannot be charged after 30 days, fees not paid will be subject to a late charge of 1% per month on the unpaid balance.
- Changes to this Fee Schedule may be made at any time by U.S. Bank upon a sixty (60) days notice.

#### Acknowledged and Approved

Public Agencies Post-Employment Benefits Trust Name of Plan/Trust	Humboldt Bay Municipal Water District Name of Employer
John Friedenbach Name of Authorized Signer for Employer	General Manager Title
Signature of Authorized Signer for Employer	Date

U.S. Bank and its representatives do not provide tax or legal advice. Each client's tax and financial situation is unique. Clients should consult their tax and/or legal advisor for advice and information concerning their particular situation.

## Notices • Disclosures • Acknowledgment

### U.S. Bank

#### Important Information

- To help the government fight the funding of terrorism and money laundering activities, federal law requires all financial institutions to obtain, verify and record information that identifies each person who opens an account.  
What this means for you: When you open an account, we will ask for your name, address, tax identification number, and other information that will allow us to identify you. We may also ask for identifying documents.
- Trustee may from time to time hold uninvested cash awaiting disbursement without paying interest thereon, and as a result may receive indirect compensation on such funds.

#### First American Funds Related Disclosures

- For a prospectus containing more complete information on First American Funds, including investment policies, risks, fees, and expenses, please contact your investment professional, call First American Funds Investor Services at (800) 677-FUND (3863), or visit firstamericanfunds.com. Please read the prospectus carefully before you invest or send money.
- U.S. Bank and other U.S. Bancorp affiliates receive compensation for services rendered to the First American Funds as disclosed in the funds' prospectuses. U.S. Bancorp Asset Management, Inc., a registered investment advisor and subsidiary of U.S. Bank, services as the investment advisor to the First American Funds. The First American Funds are distributed by Quasar Distributors, LLC, a U.S. Bancorp affiliate.

#### First American Funds Acknowledgment

- **Employer:** Humboldt Bay Municipal Water District
- **Plan/Trust Name:** Public Agencies Post-Employment Benefits Trust
- **The undersigned (the "Customer") hereby acknowledges that:**
  1. The Customer is independent of U.S. Bank National Association ("USBNA"), U.S. Bancorp Asset Management, Inc. ("USBAM"), U.S. Bancorp Fund Services, LLC ("USBFS"), Quasar Distributors, LLC ("Quasar"), and all other affiliates of U.S. Bancorp (collectively, "U.S. Bank") and has authority to approve the fee schedule provided for the account named above (the "Account").
  2. The Customer has read and understands the adoption agreement and trust agreement with USBNA with respect to the Account, including the Discretionary Trustee Fee Schedule (the "Account-level Fees"). Within the adoption agreement, the Customer elected a discretionary investment approach for Account assets. The customer approves the Account-level Fees.
  3. USBAM is the investment advisor to the open-end investment companies registered under the Investment Company Act of 1940 (the "40 Act") in the First American Funds, Inc. family (each, a "Fund"). U.S. Bank may enter into agreements with Funds or with Funds' service providers (including investment advisers, administrators, transfer agents, or distributors) whereby U.S. Bank provides services to the Funds, including, as applicable, services provided by USBAM (investment advisory, shareholder services), by USBNA (custody, securities-lending), by USBFS (accounting, administrator, transfer agency), and by Quasar (distribution, principal underwriting) and receives fees for these services. The fees are received from the Fund, are based on investment in a Fund, may vary by Fund and by class of shares issued by the Fund, are charged against the Fund's assets, and reduce the Fund's average daily balance and investment yields (collectively, the "Fund-level Fees").
  4. The Customer has received, read, and understands the prospectus for each Fund, including the sections thereof regarding fees, expenses, and compensation. The customer approves the Fund-level Fees.
  5. From time to time, a Fund's service provider may voluntarily waive a portion of the fee it is entitled to receive for serving the Fund. If a waiver is in effect, then the Customer's approval of Fund-level Fees includes approval up to the Fund's total annual operating expenses before waivers; if the service provider terminates the waiver as provided in the Fund's prospectus, then the approval persists.
  6. USBNA will not vote proxies with respect to Fund shares held in the Account but will instead forward such proxies to the Plan Administrator (as defined in the aforementioned trust agreement).
  7. Shares of registered investment companies are not deposits or obligations of, or guaranteed by, any bank, including any bank affiliated with U.S. Bancorp. Nor does the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency insure such products. An investment in such products involves investment risks, including the possible loss of principal, due to fluctuations in each product's net asset value.

#### Customer Acknowledgment

John Friedenbach General Manager  
Print Name of Authorized Signer for Employer Title

\_\_\_\_\_  
Signature of Authorized Signer for Employer Date

**Authorized Signature Form**  
**U.S. Bank**

Employer: Humboldt Bay Municipal Water District

Plan/Trust Name: Public Agencies Post-Employment Benefits Trust

**Authorized Signers**

In accordance with the provisions of the above referenced account, the following people are authorized on behalf of the Employer to direct U.S. Bank, N.A. to take action with regard to this account and hereby authorize and direct U.S. Bank, N.A. to act on directives signed by:

1. **Print Full Legal Name:** John Friedenbach  
First Name Middle Name Last Name

**Print Title:** General Manager

**Signature:** \_\_\_\_\_

2. **Print Full Legal Name:** \_\_\_\_\_  
First Name Middle Name Last Name

**Print Title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

3. **Print Full Legal Name:** \_\_\_\_\_  
First Name Middle Name Last Name

**Print Title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

4. **Print Full Legal Name:** \_\_\_\_\_  
First Name Middle Name Last Name

**Print Title:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Authorized by:**

I hereby acknowledge and represent that I am authorized on behalf of the Employer to provide this authorized signature form to U.S. Bank, N.A. This form shall remain in effect until it is changed or revoked in writing by the Employer. Any change or revocation of this form shall be effective upon U.S. Bank's receipt of such written notice.

John Friedenbach General Manager  
Print Name of Authorized Signer for Employer Title

\_\_\_\_\_  
Signature of Authorized Signer for Employer Date Signed



## Internal Revenue Service

Department of the Treasury  
Washington, DC 20224

Index Number: 115.00-00

Third Party Communication: None  
Date of Communication: Not ApplicableU.S. Bank National Association  
c/o Susan Hughes, Vice President  
3121 Michelson Drive (Suite 300)  
Irvine, CA 92612Person To Contact:  
Robin J. Ehrenberg, ID No. 1000219292Telephone Number:  
(202) 317-5800Refer Reply To:  
CC:TEGE:EOEG:EO3

PLR-146796-14

Date: June 5, 2015

## Legend

Trust = Public Agencies Post-Employment Benefits Trust

Trust Agreement = Public Agencies Post-Employment Benefits Trust Agreement

Trustee = U.S. Bank National Association

Dear Ms. Hughes:

This letter responds to a letter from your authorized representative dated December 22, 2014, requesting rulings that (1) the Trust's income is excludable from gross income under section 115 of the Internal Revenue Code (IRC) and (2) the Trust is not required to file annual federal income tax returns under IRC section 6012(a)(4). The Trust represents the facts as follows:

## FACTS

The Trust is a multiple employer trust established to enable public-agency employers to fund post-retirement employee benefits. Each participating employer must be a public agency that is a state, political subdivision of a state, or an entity the income of which is excludable from gross income under IRC section 115. The employer's governing body must authorize in writing the adoption of the Trust and the employer must execute the adoption agreement, which approves the Trust's administrator and provides that the agency adopts and agrees to be bound by the Trust Agreement. In the adoption agreement, the employer elects to fund obligations to provide benefits under a post-employment health care plan and contribute to a defined-benefit pension plan maintained by the employer that is qualified under IRC section 401(a). The employer may elect to fund either or both obligations.

The Trust Agreement provides that assets are held by the Trust for the exclusive purpose of funding participating employers' benefit obligations and defraying the reasonable expenses of the Trust. The Trust's assets may not be used for any other purpose. Each employer's contributions to the Trust, together with any allocable investment earnings and losses, are held in a separate account for that employer. Assets allocated to satisfy an employer's health and welfare benefit obligation or the employer's pension obligation may only be used for purposes of satisfying that particular obligation. The assets held in an employer's account are not available to pay any obligations incurred by any other employer.

The employers appoint the Trustee and the Trust's administrator and may remove the Trustee or the administrator by a two-thirds vote of all employers. The employers may amend the Trust Agreement with the approval of two-thirds of all employers then participating in the Trust. The employers may terminate the Trust by unanimous agreement of all employers.

Upon termination of the Trust, any assets remaining in an employer's account, after satisfaction of benefit and the Trust's obligations are returned to the employer to the extent permitted by law and consistent with the requirements of IRC section 115.

## LAW AND ANALYSIS

### Issue 1 - IRC section 115(1)

IRC section 115(1) provides that gross income does not include income derived from any public utility or the exercise of any essential governmental function and accruing to a state or any political subdivision thereof.

Rev. Rul. 77-261, 1977-2 C.B. 45, holds that income generated by an investment fund that is established by a state to hold revenues in excess of the amounts needed to meet current expenses is excludable from gross income under IRC section 115(1), because such investment constitutes an essential governmental function. The ruling explains that the statutory exclusion is intended to extend not to the income of a state or municipality resulting from its own participation in activities, but rather to the income of an entity engaged in the operation of a public utility or the performance of some governmental function that accrues to either a state or political subdivision of a state. The ruling points out that it may be assumed that Congress did not desire in any way to restrict a state's participation in enterprises that might be useful in carrying out projects that are desirable from the standpoint of a state government and that are within the ambit of a sovereign to conduct.



Rev. Rul. 90-74, 1990-2 C.B. 34, holds that the income of an organization formed, funded, and operated by political subdivisions to pool various risks (e.g., casualty, public liability, workers' compensation, and employees' health) is excludable from gross income under IRC section 115(1), because the organization is performing an essential governmental function. The revenue ruling states that the income of such an organization is excludable from gross income so long as private interests do not participate in the organization or benefit more than incidentally from the organization. The benefit to the employees of the insurance coverage obtained by the member political subdivisions was deemed incidental to the public benefit.

Through the Trust, participating public agency employers fund health and welfare and pension obligations for retired employees. Each of the Trust's participating employers is required to be a state, political subdivision of a state or an entity the income of which is excludable from gross income under IRC section 115. Providing health, welfare and pension benefits to current and former employees constitutes the performance of an essential government function within the meaning of IRC section 115(1). See Rev. Rul. 90-74 and Rev. Rul. 77-261.

The Trust's income accrues to its participating employers, all of which are political subdivisions of a state or entities the income of which is excludable from gross income under IRC section 115. No private interests will participate in, or benefit from, the operation of Trust, other than as providers of goods or services. The benefit to employees is incidental to the public benefit. See Rev. Rul. 90-74.

In no event, including dissolution, will the Trust's assets be distributed or revert to any entity that is not a state, a political subdivision of a state, or entity the income of which is excludable from its gross income by application of IRC section 115(1).

Issue 2- IRC section 6012(a)(4)

Section 301.7701-1(b) of the Procedure and Administration Regulations (Regulations) provides that the classification of organizations that are recognized as separate entities is determined under sections 301.7701-2, 301.7701-3, and 301.7701-4, unless a provision of the IRC provides for special treatment of that organization.

Section 301.7701-4(a) of the Regulations provides that, in general, an arrangement will be treated as if it can be shown that the purpose of the arrangement is to vest in trustees responsibility for the protection and conservation of property for beneficiaries who cannot share in the discharge of this responsibility and, therefore, are not associates in a joint enterprise for the conduct of business for profit.

The Trust enables public-agency employers to set aside funds to be used to satisfy each employer's separate pension and health and welfare benefit obligations. The

Trustee is charged with the responsibility of the protection and conservation of the Trust property for the benefit of the beneficiaries of the Trust. The beneficiaries of the Trust cannot share in the discharge of the Trustee's responsibility for the protection and conservation of property and, therefore, are not associates in a joint enterprise for the conduct of business for profit. IRC section 6012(a)(4) provides that every trust having for the taxable year any taxable income or having gross income of \$600 or more, regardless of the amount of taxable income, shall make returns with respect to income taxes under Subtitle A.

Based solely on the facts and representations submitted by the Trust, we conclude that:

1. Because the income of the Trust derives from the exercise of an essential governmental function and will accrue to a state or a political subdivision thereof, the Trust's income is excludable from gross income under IRC section 115(1).
2. The Trust is classified as a trust within the meaning of IRC section 7701(a) and section 301.7701-4(a) of the Regulations. Because Trust's income is excludable from gross income under IRC section 115, the Trust is not required by IRC section 6012(a)(4) to file an annual income tax return.

Except as expressly provided herein, no opinion is expressed or implied concerning the tax consequences of any aspect of any transaction or item discussed or referenced in this letter. This ruling concerns only the federal tax treatment of the Trust's income and may not be cited or relied upon by any taxpayer, including the Trust, employers participating in the Trust, and any recipients of benefits paid under the terms of the Trust, as to any matter relating to the taxation of accident or health contributions or benefits.

This ruling is directed only to the taxpayer who requested it. IRC section 6110(k)(3) provides that it may not be used or cited as precedent.

In accordance with the Power of Attorney on file with this office, a copy of this letter is being sent to your authorized representative.

A copy of this letter must be attached to any income tax return to which it is relevant. Alternatively, taxpayers filing their returns electronically may satisfy this requirement by attaching a statement to their return that provides the date and control number of the letter ruling.

PLR-146796-14

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The rulings contained in this letter are based upon information and representations submitted by the taxpayer and accompanied by a penalty of perjury statement executed by an appropriate party. While this office has not verified any of the material submitted in support of the request for rulings, it is subject to verification on examination.

Sincerely,



Kenneth M. Griffin  
Branch Chief, Exempt Organizations Branch 3  
(Tax Exempt and Government Entities)

cc: Marcus Wu  
Pillsbury Winthrop Shaw Pittman LLP  
12255 El Camino Real, Suite 300  
San Diego, CA 92130-4088

Paul Marmolejo  
Director, Office of Federal, State and Local Governments  
SE:T:GE:FSL

# Operations

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Memo to: HBMWD Board of Directors  
From: Dale Davidsen, Superintendent  
Date: January 30, 2018  
Subject: Essex/Ruth January 2018 Operational Report

### Upper Mad River, Ruth Lake, and Hydro Plant

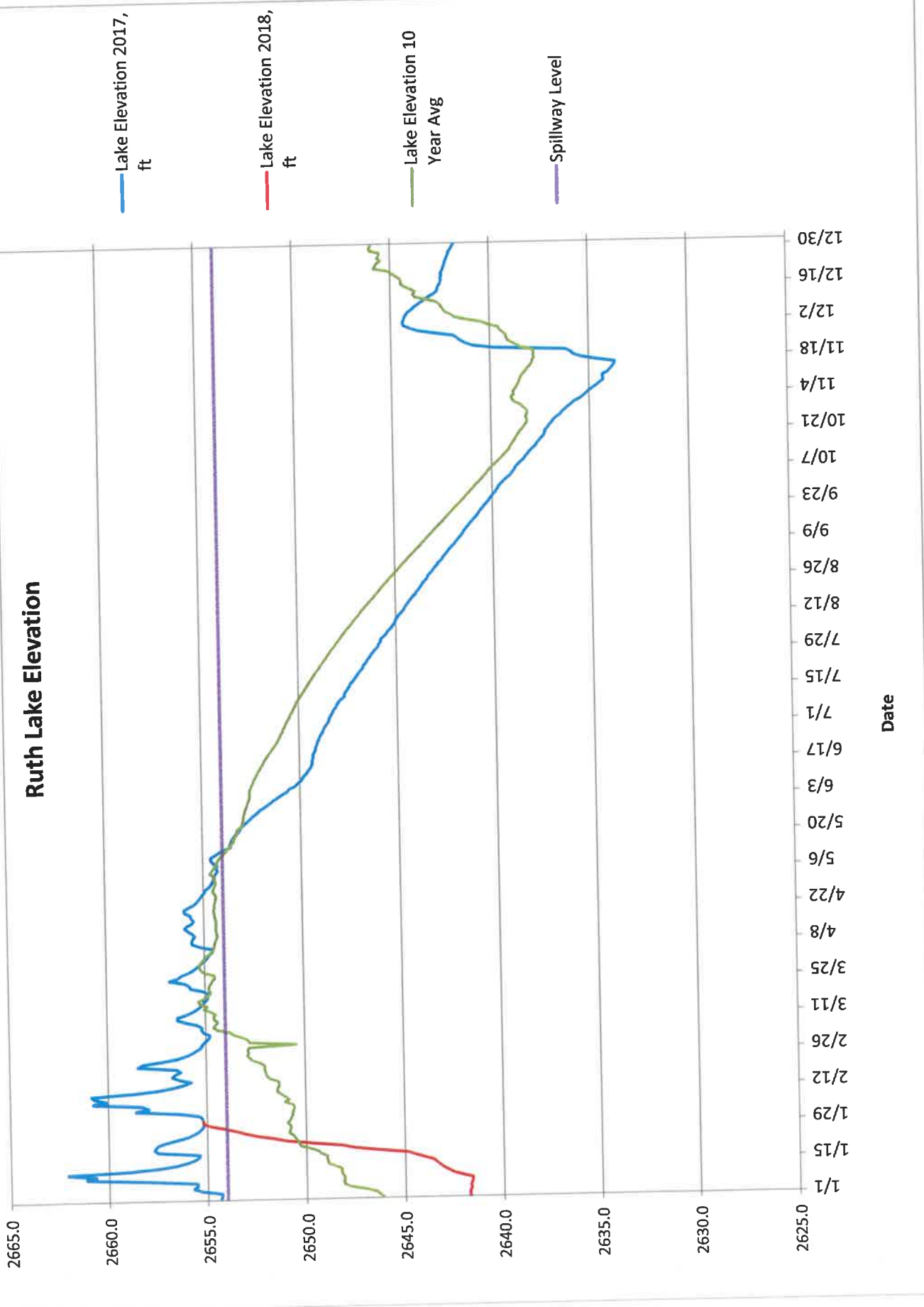
1. The flow at Mad River above Ruth Reservoir (Zenita Bridge) was 8cfs on January 1<sup>st</sup>. It reached a high of 844cfs on January 22<sup>nd</sup>.
2. The conditions at Ruth Lake for the month of January were as follows:
  - a. The lake level on January 30<sup>th</sup> was 2655.16 feet which is:
    1. 13.27 feet Higher than December 31<sup>st</sup>, 2017
    2. Exactly the same elevation as January 30<sup>th</sup>, 2017
    3. 4.11 feet Higher than the ten year average
    4. 1.16 feet Above the spillway
3. There was 10.22 inches of recorded rainfall for January 2018 at Ruth Headquarters.
4. Ruth hydro power production was 391,200 kWh up to January 30<sup>th</sup> with 3 shutdowns and 13,673 kWh lost power.
5. The high discharge flow from the lake for the month was 628.4 cfs on January 30<sup>th</sup> and the low release flow from the lake was 40.5 cfs on January 1<sup>st</sup>.

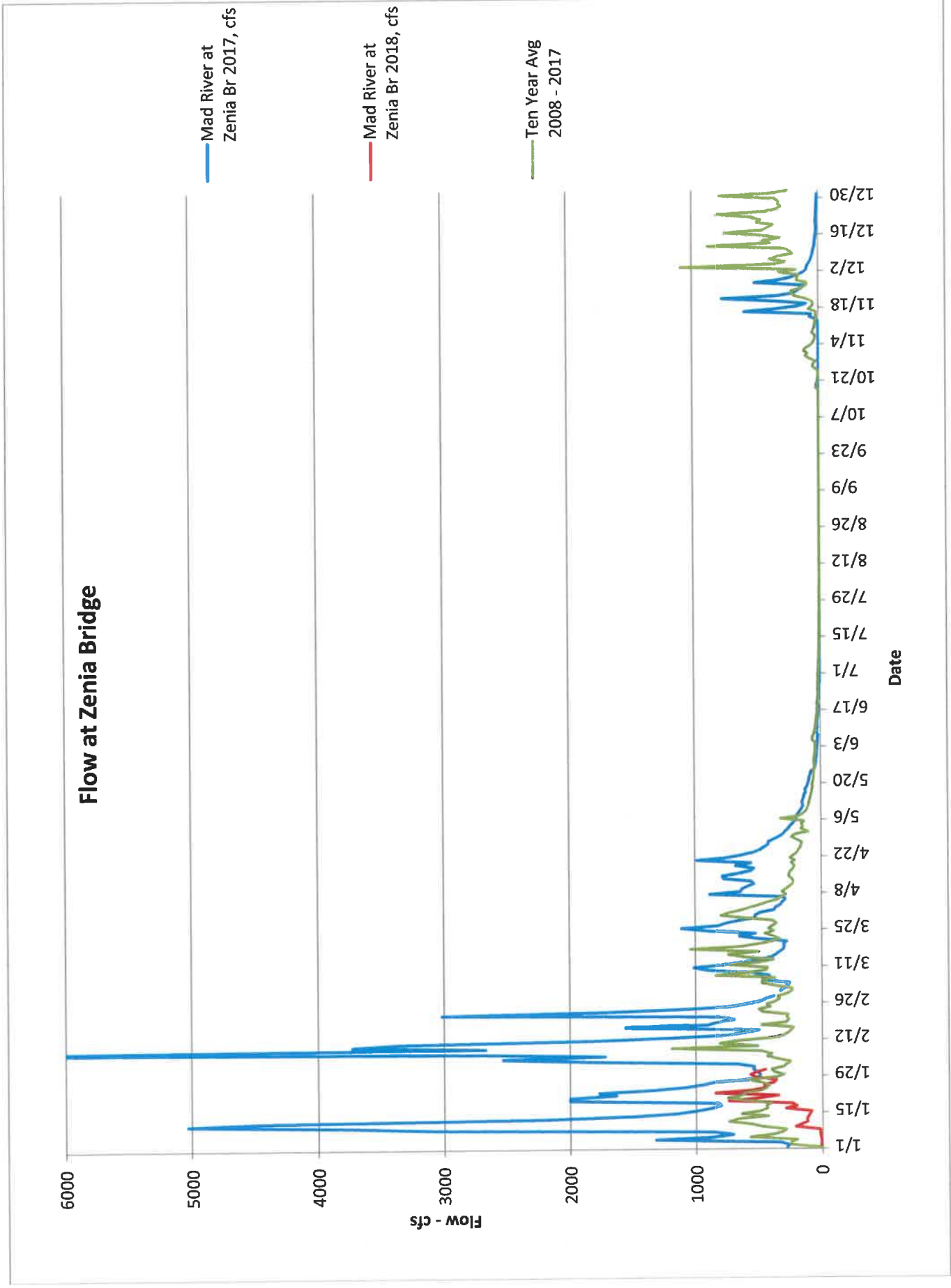
### Lower Mad River, Winzler Control, and TRF

6. The river at Winzler Control Center reached a high recorded flow of 5660 cfs and a level of 25.8 feet on January 25<sup>th</sup>. The low river flow was on January 4<sup>th</sup> with a flow of 194 cfs and a level of 21.7 feet.
7. The domestic water conditions were as follows:
  - a. The monthly turbidity average was 0.08 NTU, which meets Public Health Secondary Standards.
  - b. We pumped 241.29 million gallons at an average of 7.67 MGD.
  - c. The maximum metered daily municipal customer use was 7.07 MGD on January 22<sup>nd</sup>.
8. The Turbidity Reduction Facility ran 30 days so far in January. The conditions were as follows:
  - a. Average monthly source water turbidity was 0.35 NTU.
  - b. Average monthly filtered water turbidity was 0.08 NTU.
  - c. We did 53 backwashes on the TRF filters in the month of January.

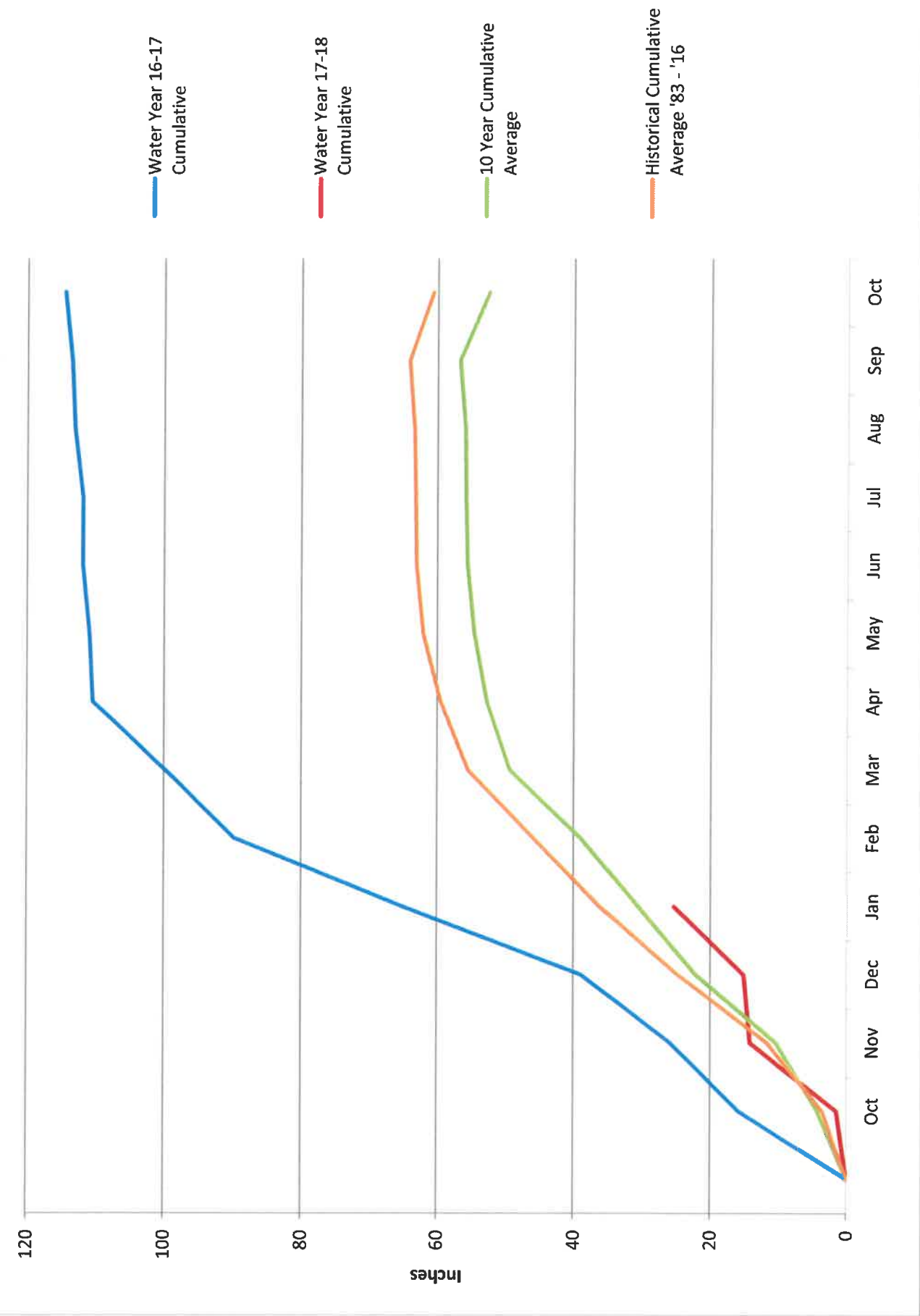


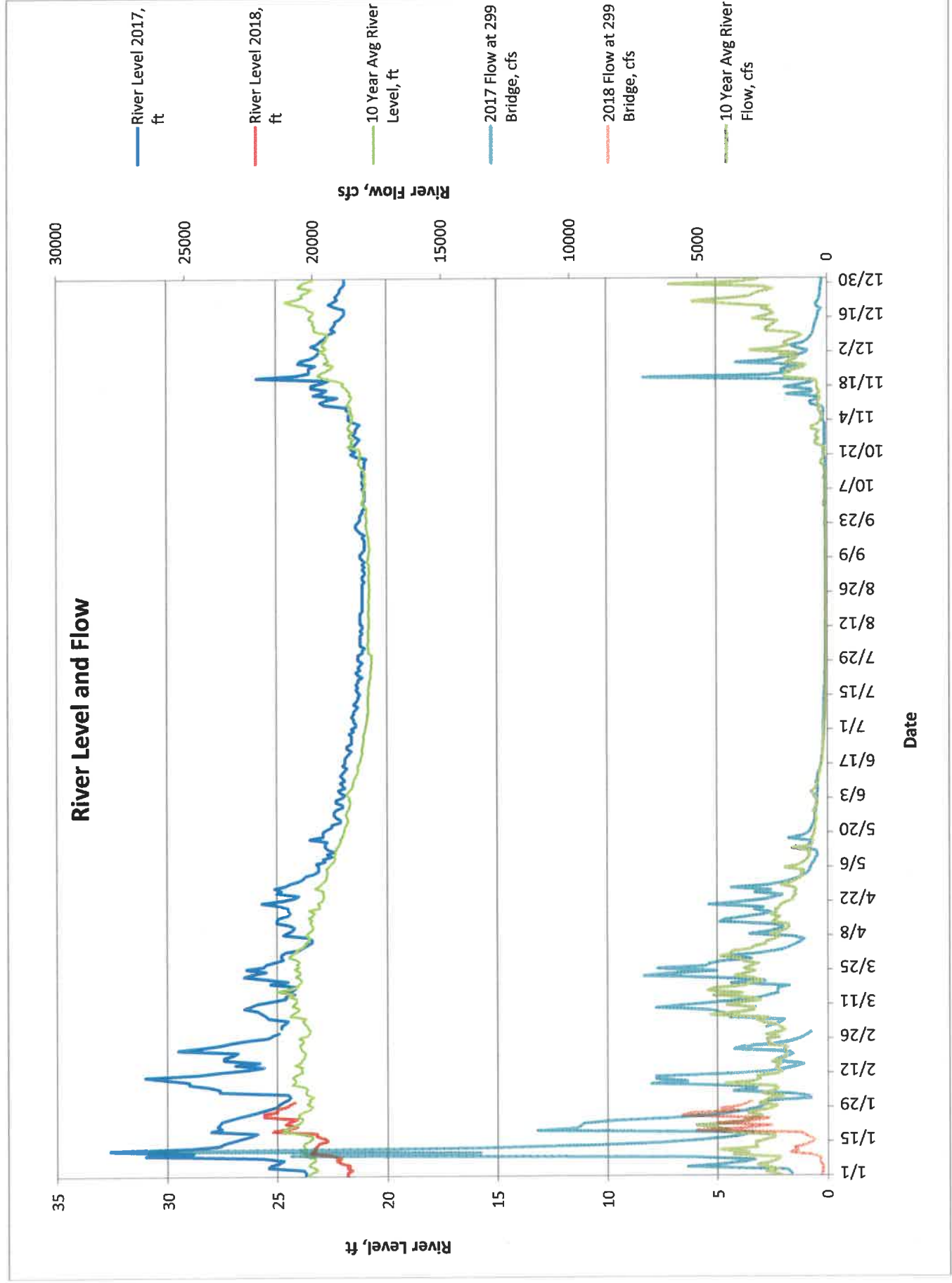
9. January 3<sup>rd</sup> – DOT required 90 Day truck inspections.
10. January 8<sup>th</sup> – I went to Ruth to take samples of algae in three locations and sent them to a state certified lab for analysis. These sample results initially showed very high akinetes and required further analysis. These further tests showed no toxin genes, but will require monitoring in the future.
11. January 9<sup>th</sup>
  - a. Ryan, Chris and I attended a webinar on the Oroville Dam failure findings. This was an educational webinar and stressed the importance of proper inspections and maintenance of the dam.
  - b. Mario and Larry attended a webinar on required lead testing at schools. – Mario and Larry are working with the two schools we serve directly and getting a sample plan together.
12. January 24<sup>th</sup>
  - a. Safety meeting –
    - i. WIIPP
    - ii. AQMD permit requirements
    - iii. Understanding the EAP call list flow charts,
    - iv. General emergency response expectations.
    - v. Handed out and went over new employee handbooks.
    - vi. We held a drawing for the Safety Incentive Award – Brian Newell was the winner.
  - b. SB 198 Employee / Management safety meeting.
13. January 26<sup>th</sup> – Mario, Ryan and I attended a lunchtime presentation on drone use put on by ASCE and SHN at GHD.
14. Current Projects
  - a. Supervisors and I are working on the 18/19 budget development process.
  - b. Fire Alarm System upgrade - Complete
  - c. Relay testing was completed at Essex and Ruth from January 8<sup>th</sup> through January 12<sup>th</sup>.
  - d. SCADA upgrade – Training and minor work is continuing on the SCADA upgrade. For the most part the project is winding down and a few very minor issues are getting fixed as they come up. Most training has been done and the last of the training is scheduled for February. I would expect the final billing in February.
  - e. BL/FB river crossing project – Working as need with engineers on project details and with neighboring property owners.
  - f. Pipeline inspection - Annual inspection of all A/R and blowoff vaults
  - g. Collector 1 pump ordered
  - h. Collector 2 Transformer - will discuss where we are with replacement.



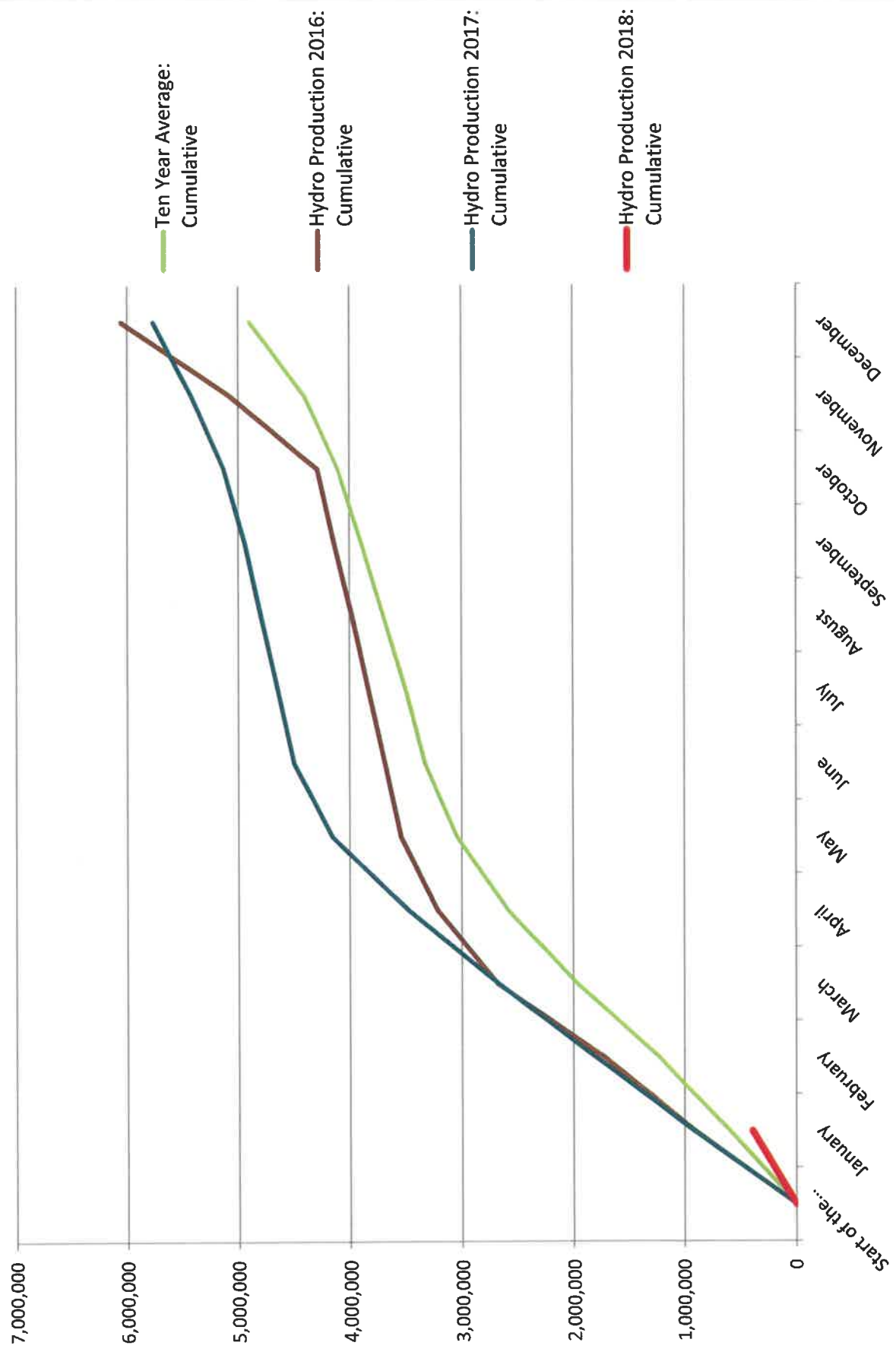


Ruth Rainfall - Water Year 2016-2017





Ruth Hydro Production: kW per Month





Memo to: HBMWD Board of Directors

From: Dale Davidsen, Superintendent

Date: January 30, 2018

We would like to Surplus the following equipment:

- a. 1994 Ford – F350 – Replaced - Will be sold “as is” for parts only, due to cost of repairs needed.
- b. 6” Barnes Pump – Replaced – Will need to be sold out of state.
- c. Shop Parts washer - Replaced

# Management

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**Humboldt Area Chapter of CSDA****December 4, 2017****Minutes**

1. **Welcome:** The meeting was called to order by Greg Orsini, CSDA Board Member for Northern Network at 3:00 pm at the Westhaven Volunteer FD (446 6th Ave., Westhaven)
2. **Introductions (Group) and Refreshments:** In attendance were:
  - Valen Castellano-Big Lagoon CSD
  - Susan O’Gorman- Willow Creek CSD
  - John Friedenbach-HBMWD
  - Greg Orsini-McKinleyville CSD
  - Jill Duffy-Humboldt Water Management Authority
  - Richard Swisher-Westhaven CSD
  - Steven Edmiston-RCEA
  - Brian Wilson-NCUAQMD
  - Heather Bitner-NCUAQMD
  - Dane Wadle-CSDA
3. **Recap of the last Organizational Meeting: Review Minutes**
4. **Check in, items of interest from attendees**
5. **Chapter Formation**

- **Election of officers**-approved unanimously as follows:

Position	Appointment	District	Motion made by:
<b>President</b>	Greg Orsini	MCS D	Jill Duffy
<b>V.P.</b>	Steve Edmiston	RCEA	Greg Orsini
<b>Secretary</b>	Heather Bitner	NCUAQMD	Jill Duffy
<b>Treasurer</b>	Susan O’Gorman	WCCSD	Jill Duffy
<b>Past President</b>	-	-	-

- **Review and Accept Affiliation Agreement:** A motion made by John Friedenbach and duly seconded by Jill Duffy to approve the Chapter Affiliation Agreement with CSDA; passed unanimously with the addition of the business address to be the MCS D offices (per chapter by-laws to follow the address of the Board President)
- **Update and discussion on Chapter Resolution-** no additional comments

- **Insurance Documentation**-This is required of each member and a reminder to email the certificate of insurance, Resolution of participation in the Humboldt Area Chapter and a certificate of liability coverage to Greg. A request was made of Dane to help SDRMA know to send certificates of insurance for CSDA's part.
- **Submit Required Informtion to CSDA for Board Approval**
  - i. **By-Laws**
  - ii. **Affiliation Agreement**
  - iii. **Insurance Certificates**
  - iv. **List of Chapter Members**- to be forwarded by Friday, Dec. 22, 2017 to be forwarded to CSDA BOD meeting for March.
- **Setting of Dues**: A motion made by John Friedenbach and duly seconded by Jill Duffy to set the annual Humboldt Area CSDA Chapter dues at \$50/fiscal year was unanimously approved. A potential for a tiered solution to dues issues to recruit smaller districts will be addressed further.

**6. Wrap – Up/Questions/Next Meeting Place and Time**- Next meeting is Monday, February 5, 2018 at the AQMD offices (707 L St, Eureka) from 3-5 pm.

- August 6 at Azalea Hall in McKinleyville is Sexual Harassment Prevention training with a chapter meeting to follow.

**7. Adjourn – 4:55 p.m.**

**Attest:** \_\_\_\_\_

**Heather Bitner, Secretary**



**North Coast Resource Partnership (NCRP)**

**Policy Review Panel (PRP) & Technical Peer Review Committee (TPRC) Meeting**

**AGENDA**

**January 19, 2018; 10 am – 3:20 pm**

**Location: Ukiah Valley Conference Center, 200 South School Street, Ukiah**

I	10:00		<b>Welcome, Introductions and Flag Salute</b>
II	10:10		<b>Opening Tribal Prayer and Welcome</b> Erica Carson, Tribal Secretary of Redwood Valley Rancheria
III	10:20	DECISION	<b>Review and Approve Agenda</b>
IV	10:25		<b>PUBLIC COMMENT for items not on the agenda</b>
			<b>NORTH COAST RESILIENCY STRATEGIES: WATERSHEDS, COMMUNITIES &amp; FIRE</b> Panel Chair: NCRP PRP Chair, Trinity County Supervisor Judy Morris
			<b>FIRE RESILIENCY PRESENTATIONS:</b>
			<b>Strategic Growth Council Assessment Findings and Sonoma County's Watershed Collaborative</b> Karen Gaffney, West Coast Watershed
V	10:30	INFORMATIONAL & DISCUSSION	<b>Traditional Uses of Fire to Achieve Socially and Ecologically Beneficial Results</b> NCRP PRP Vice-Chair Leaf Hillman, Director of Natural Resources, Karuk Tribe NCRP Executive Committee Member Brandi Brown Tribal Council, Redwood Valley Little River Band of Pomo
			<b>Humboldt County Wildfire Planning and Action</b> Cybelle Immitt, Senior Planner, Natural Resources Planning, Humboldt County Staff support to the Humboldt County Fire Safe Council
VI	12:15	INFORMATIONAL & DISCUSSION	<b>California Economic Summit: Sonoma County, October 2018</b> NCRP Executive Committee Member, Sonoma County Supervisor James Gore
VII	12:20	INFORMATIONAL & DISCUSSION	<b>Russian River Watershed Pilot</b> Mike Thompson, Sonoma County Water Agency
	12:30		<b>WORKING LUNCH (PROVIDED)</b>

VIII	1:15	INFORMATIONAL	<b>Local Project Presentation: Ukiah Valley-Redwood Valley Water Supply Reliability Intertie and Well Development Project</b> Jarod Thiele, Public Works Department, City of Ukiah
IX	1:30	INFORMATIONAL & DISCUSSION	<b>Proposition 1 IRWM Round 1 Implementation Funding Solicitation</b> Carmel Brown, Chief, California Department of Water Resources Financial Assistance Branch
X	1:50	DECISION	<b>Proposition 1 Round 1 Implementation Funding Solicitation Ad Hoc Committee Formation</b> NCRP PRP Chair, Trinity County Supervisor Judy Morris
			<b>PUBLIC COMMENT</b>
XI	1:55	INFORMATIONAL & DISCUSSION	<b>NCRP Disadvantaged Community and Tribal Outreach &amp; Involvement</b> Katherine Gledhill, West Coast Watershed Sherrri Norris, Executive Director, California Indian Environmental Alliance
XII	2:15	DECISION	<b>NCRP Disadvantaged Community Technical Assistance Selection Process</b> Proposition 1 Ad Hoc Committee Member Emily Luscombe, Environmental Director, Coyote Valley Band of Pomo
			<b>PUBLIC COMMENT</b>
XIII	2:30	INFORMATIONAL & DISCUSSION	<b>Future of the IRWM Program</b> Ann DuBay, Community & Governmental Affairs Manager Sonoma County Water Agency
XIV	2:50	DECISION	<b>Alliance of Regional Collaboratives for Climate Adaptation Membership</b> West Coast Watershed
			<b>PUBLIC COMMENT</b>
XV	2:55	INFORMATIONAL	<b>UPDATES</b>
i.			<b>Legislative News</b> Ann DuBay, Community & Governmental Affairs Manager Sonoma County Water Agency
ii.			<b>Regional Administrator &amp; Project Implementation Update</b> Hank Seemann, Deputy Director, Public Works Department, Humboldt County
iii.			<b>Executive Committee, PRP direction and staff action</b> (see meeting materials)
XVI	3:10		<b>PUBLIC COMMENT</b>
XVII	3:15		<b>NCRP 2018 Meeting Dates</b> NCRP PRP Chair, Trinity County Supervisor Judy Morris <ul style="list-style-type: none"> <li>• April 20 – Yreka Area</li> <li>• July 27 – Eureka Area (changed date)</li> <li>• October 19 – Weaverville Area</li> </ul>
XIV	3:20		<b>ADJOURN</b>



**Policy Review Panel Members**

Chair: Supervisor Judy Morris, Trinity County

Vice-Chair: Leaf Hillman, Director of Natural Resources, Karuk Tribe, Northern District

Alternate: Buzz Ward, Pit River Tribe, Northern District

Edwin Smith, Tribal Council, Bear River Band of the Rohnerville Rancheria, Central District

Alternate: Central District: Amanda Lee, Bear River Band of the Rohnerville Rancheria, Central District

Supervisor Gerry Hemmingsen, Del Norte County

Supervisor Chris Howard, Del Norte County

Alternate: Supervisor Bob Berkowitz, Del Norte County

Supervisor Ryan Sundberg, Humboldt County

Supervisor Mike Wilson, Humboldt County

Alternate Humboldt County: vacancy

Supervisor Carre Brown, Mendocino County

Supervisor John McCowen, Mendocino County

Alternate: Supervisor Dan Gjerde, Mendocino County

Supervisor Geri Byrne, Modoc County

Alternate, Modoc County: vacancy

Supervisor Ray Haupt, Siskiyou County

Supervisor Brandon Criss, Siskiyou County

Alternate: Supervisor Lisa L. Nixon, Siskiyou County

Supervisor James Gore, Sonoma County

Supervisor Lynda Hopkins, Sonoma County

Alternate: Dale Roberts, TPRC member, Sonoma County

Brandi Brown, Redwood Valley Little River Band of Pomo, Southern District

Alternate: Martina Morgan, Tribal Council Vice-Chair, Kashia Band of Pomo, Southern District

Supervisor John Fenley, Trinity County

**Executive Committee**

Chair: Supervisor Judy Morris, Trinity County

Vice-Chair: Leaf Hillman, Director of Natural Resources, Karuk Tribe, Northern District

Brandi Brown, Redwood Valley Little River Band of Pomo, Southern District

Supervisor James Gore, Sonoma County

**Technical Peer Review Committee Members**

Co-Chair: Sandra Perez, Program Manager, Five Counties Salmonid Conservation Program, Trinity County

Co-Chair: Dale Roberts, Engineer, Sonoma County Water Agency, Sonoma County

Javier Silva, Environmental Director, Sherwood Valley Rancheria, Central District

Alternate, Central District: vacancy

Jim Barnts, Director of Public Works, Del Norte County

TPRC member and alternate, Del Norte County: vacancy

Hank Seemann, Deputy Director, Environmental Services, Public Works Department, Humboldt County

John Friedenbach, General Manager, Humboldt Bay Municipal Water District

Alternate, Humboldt County: vacancy

Deborah Stanger Edelman, Project Manager, Mendocino Resource Conservation District, Mendocino County

Sean White, Director of Water and Sewer, City of Ukiah, Mendocino County

Alternate, Mendocino County: vacancy

Sean Curtis, Modoc County Natural Resources, Modoc County

Toz Soto, Senior Fisheries Biologist, Karuk Tribe, Northern District

Alternate: Marissa Fierro, Environmental Director, Pit River Tribe, Northern District

TPRC members (2) and alternate, Siskiyou County: vacancy

Wayne Haydon, Certified Engineering Geologist, Sonoma County

Alternate, Sonoma County: vacancy

Nathan Rich, Kashia Band of Pomo, Southern District

Alternate: Emily Luscombe, Environmental Director, Coyote Valley Band of Pomo, Southern District

Wes Scribner, General Manager, Weaverville Community Services District, Trinity County

Alternate: Mark Lancaster, Director, Five Counties Salmonid Conservation Program, Trinity County

**Funding Ad Hoc Committee**

Supervisor Judy Morris, Trinity County

Supervisor James Gore, Sonoma County

Javier Silva, Sherwood Valley Rancheria

Marissa Fierro, Environmental Coordinator, Pit River Tribe, Northern District

**SGC Ad Hoc Committee**

Toz Soto, Karuk Tribe, Northern District

**Proposition 1 Ad Hoc Committee**

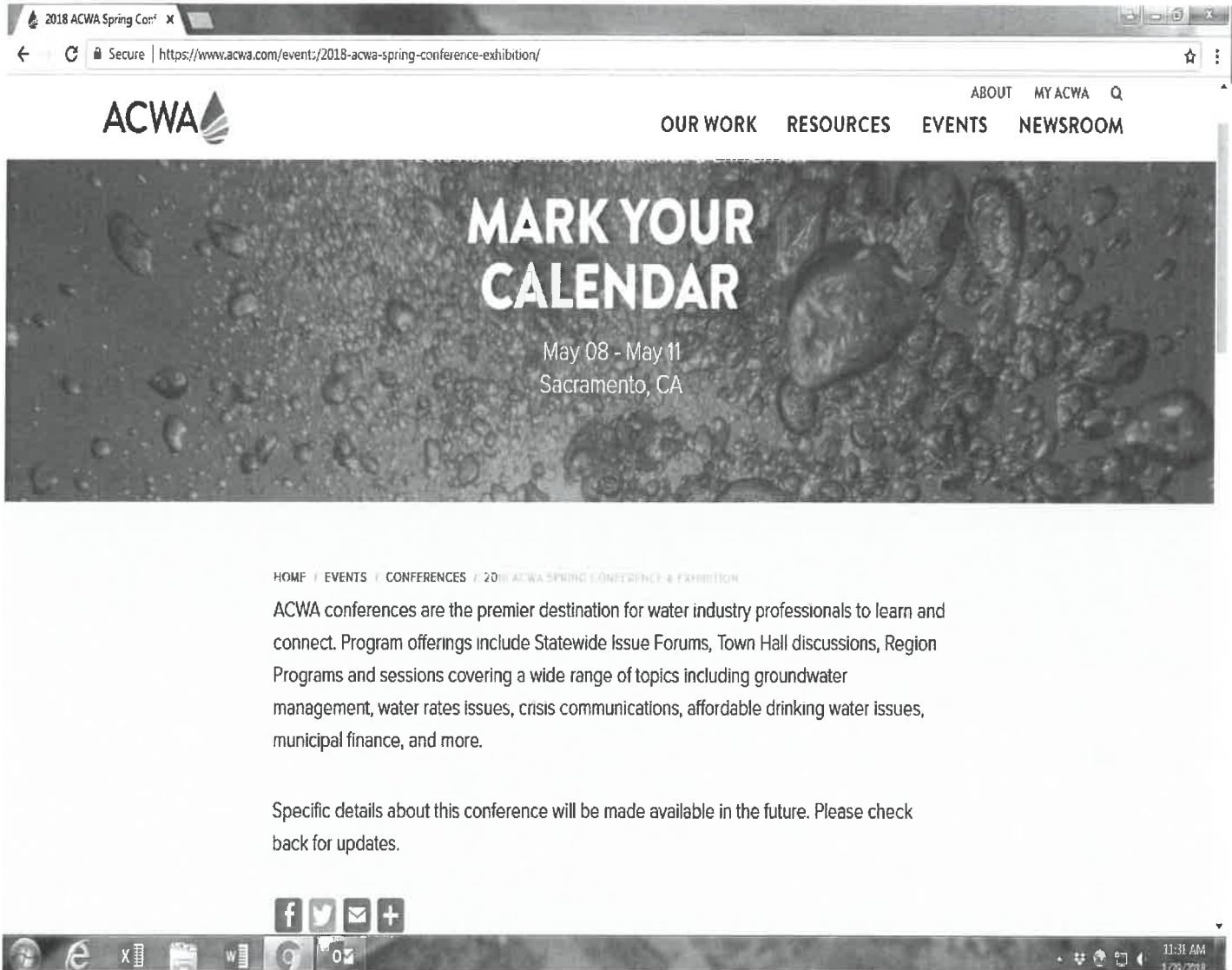
Supervisor Judy Morris, Trinity County

Emily Luscombe, Coyote Valley Band of Pomo

**Tribal Proposition 1 Ad Hoc Committee**

NCRP Tribal PRP and TPRC representatives

ACWA



May 7-11, 2018

7th = JP1A

**Resolution 2018-01**

**A Resolution of the Board of Directors of the Humboldt Bay Municipal Water District Placing in Nomination J. Bruce Rupp as a Board Member of the Association of California Water Agencies Region 1 Board**

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF HUMBOLDT BAY MUNICIPAL WATER DISTRICT AS FOLLOWS:

**WHEREAS**, The Board of Directors of the Humboldt Bay Municipal Water District (HBMWD) does encourage and support the participation of its members in the affairs of the Association of California Water Agencies (ACWA); and

**WHEREAS**, J. Bruce Rupp currently serves as the Vice Chair of the ACWA Finance Committee; and

**WHEREAS**, J. Bruce Rupp has indicated a desire to serve as a Board Member for ACWA Region 1.

**NOW, THEREFORE, BE IT RESOLVED**, that the Board of Directors of Humboldt Bay Municipal Water District places its full and unreserved support in the nomination of J. Bruce Rupp for Board Member of ACWA Region 1.

**BE IT FURTHER RESOLVED**, that the Board of Directors of HBMWD does hereby determine that the expenses attendant with the service of J. Bruce Rupp in ACWA Region 1 shall be borne by the HBMWD.

**PASSED and ADOPTED at a Regular Meeting of the Board of Directors** of the Humboldt Bay Municipal Water District this 8<sup>th</sup> day of February 2018, by the following roll call vote:

AYES:

NOES:

ABSENT:

Attest:

\_\_\_\_\_  
Sheri Woo, Board President

\_\_\_\_\_  
J. Bruce Rupp, Secretary/Treasurer



# REGION BOARD CANDIDATE NOMINATION FORM

Name of Candidate: J. Bruce Rupp  
 Agency: Humboldt Bay Municipal Water District Title: Board Secretary/Treasurer  
 Agency Phone: 707-443-5018 Direct Phone: 707-445-9336  
 E-mail: rupp@hbmwd.com ACWA Region: 1 County: Humboldt  
 Address: 828 7th Street, Eureka, CA95501

**Agency Function(s):** (check all that apply)

- |   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Wholesale | <input type="checkbox"/> Sewage Treatment       | <input type="checkbox"/> Flood Control                          |
| <input type="checkbox"/> Urban Water Supply   | <input type="checkbox"/> Retailer               | <input type="checkbox"/> Groundwater Management / Replenishment |
| <input type="checkbox"/> Ag Water Supply      | <input type="checkbox"/> Wastewater Reclamation | <input type="checkbox"/> Other: _____                           |

**Describe your ACWA-related activities that help qualify you for this office:**

I have been actively involved in ACWA and the JPIA for many years and regularly participate in the bi-annual meetings.  
I currently serve on the ACWA/JPIA Employee Benefits Committee, the Executive Committee, and am Vice-Chair of the ACWA Finance Committee.

**In the space provided, please write or attach a brief, half-page bio summarizing the experience and qualifications that make you a viable candidate for ACWA Region leadership. Please include the number of years you have served in your current agency position, the number of years you have been involved in water issues and in what capacity you have been involved in the water community.**

I have served on the HBMWD Board for 22 years with two terms as President. Currently I am the Board Secretary/Treasurer and have been since 2013. One of my greatest attributes is being open minded while evaluating all options and sides of an issue. I am adept at process identification and implementation. My resume is attached.

*I acknowledge that the role of a region board member is to actively participate on the Region Board during my term, including attending region board and membership meetings, participating on region conference calls, participating in ACWA's Outreach Program, as well as other ACWA functions to set an example of commitment to the region and the association.*

*I hereby submit my name for consideration by the Nominating Committee.  
 (Please attach a copy of your agency's resolution of support/sponsorship for your candidacy.)*

\_\_\_\_\_  
 Signature Title Date

Submit completed form to Ana Javid at anaj@acwa.com.

Submit





Click [here](#) to view it in your browser.

# ACWA ADVISORY

STATE LEGISLATION | SAFE DRINKING WATER  
JAN. 12, 2018

## Governor's Proposed 2018-'19 Budget Signals the Development of a Budget Trailer Bill Related to SB 623

In 2017, SB 623 (Monning), aimed at funding drinking water solutions for disadvantaged communities by establishing California's first tax on drinking water, was made a two-year bill. On Jan. 10, Gov. Jerry Brown released his proposed 2018-'19 budget, which includes indications that the administration may pursue a budget trailer bill to accomplish the goals of SB 623.

ACWA members should be prepared to take action as the situation unfolds.

### Background

After extensive advocacy by ACWA and its members in 2017, SB 623 was not enacted into law, instead becoming a two-year bill. The measure is intended to fill gaps in funding for disadvantaged communities that do not have access to safe drinking water. ACWA agrees with that intent but opposes the tax on drinking water proposed in the bill because it is not the right approach to solving this social issue for the state. ACWA is advancing a more appropriate funding solution – a package of funds that is comprised of federal safe drinking water funds, general obligation bond funds, assessments related to nitrates in groundwater that are proposed in the bill and funding from the State General Fund.

### Status of SB 623

The bill is currently at the Assembly Rules Committee. This committee could refer the bill to one or more policy committees, or move the bill directly to the Assembly floor. ACWA expects that the bill would be amended to clean it up before any vote on it, but at this point such amendments would not delete the proposed tax on drinking water.

### Latest Development Regarding Budget and Potential Budget Trailer Bill

In the summary of the proposed budget, the Administration stated that it "... is proposing statutory language, consistent with the policy framework of SB 623 (...)." This language is not available yet, but the California Department of Finance responded to ACWA's question regarding timing on the availability of the safe drinking water language during a conference call, stating that all of the budget trailer bills would be posted by Feb. 1. All signs are that the administration plans on having a budget

trailer bill in this area.

At a minimum, there will likely be a budget trailer bill to move forward on the steps noted in the budget summary: 1) development and implementation of fee collection systems; 2) development of an assessment to estimate the level of funding needed; and 3) development of a map of high-risk aquifers used as drinking water sources. The budget trailer bill could also cover the proposed funding mechanisms, or that could be left to SB 623. It is very possible that part of the proposal will be in a budget trailer bill, and part of the proposal will be in SB 623. Obviously, the Legislature may have its own views on whether the proposed tax and other funding mechanisms, and other aspects of SB 623, should be heard by policy committees or be considered in the budget process in a budget trailer bill.

### ACWA Action on SB 623

This bill is a top priority for ACWA. Since SB 623 became a two-year bill, ACWA has continued to lobby against the proposed tax on drinking water. We are leading the oppose-unless-amended coalition on the bill. On Jan. 2, ACWA began running digital advertisements in the Capitol Morning Report and on the Rough&Tumble California Policy and Politics website to oppose the drinking water tax.

ACWA members need to remain alert and should expect further updates. This may include a call to action similar to the campaign during the summer of 2017, when ACWA members played an integral role in sharing key opposition messages on social media, through local op-eds, letters to the editor and outreach to legislators.

#### CONTACT Cindy Tuck

ACWA Deputy Executive Director for Government Relations  
(916) 441-4545



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- Wastewater Industry Products & Services



The California Department of Water Resources' first snow survey of 2018 showed a weak snowpack, but heavy rains later in January helped balance the water picture and reservoir levels are in good shape. Water agencies are prepared for any outcome. "ACWA member agencies have developed contingency plans to cover a wide range of alternative outcomes. This year is looking dry so far, but we have to be ready for most anything — and we are ready," said ACWA Executive Director Timothy Quinn.

## Karla Nemeth Appointed DWR Director

Gov. Jerry Brown has named Karla Nemeth director of the California Department of Water Resources, replacing Grant Davis. Davis is returning to the Sonoma County Water Agency to serve as its general manager, the position he held before his appointment as DWR director in August 2017, to focus on fire recovery efforts in Sonoma County.

Nemeth has served as the governor's deputy secretary and senior advisor for water policy at the California Natural Resources Agency (CNRA) since 2014. Previously she was Bay Delta Conservation Plan project manager from 2009 to 2014.

"Karla Nemeth is an excellent choice to lead DWR during these challenging times. Karla comes to DWR as a long-time member of California's water community with experience in local water management and with the State of California," said ACWA Executive Director Timothy Quinn. "Her experience and perspective will play a vital role as the department moves forward with its mission. As it has with her predecessors, ACWA looks forward to working with Karla to advance comprehensive solutions for California water."

The CNRA followed the governor's appointment with a statement that its executive team has been restructured to further bolster dam and flood safety, emphasize climate resilience and incorporate lessons learned from recent impacts of extreme weather on the state's water system.

*DWR Continued on page 5*

## Drinking Water Tax Proposal: Gov. Brown's Budget Signals Budget Trailer Bill to Advance SB 623-Like Framework

After extensive advocacy by ACWA and its members last year, SB 623 by Sen. Bill Monning, (D-Carmel) was not enacted into law, instead becoming a two-year bill. Now, the bill that proposes a tax on drinking water to fill gaps in funding for disadvantaged communities without access to safe drinking water has re-emerged in the release of Gov. Jerry Brown's proposed 2018-'19 budget.

In its summary of the budget, the Brown Administration stated that it is proposing "statutory language,

consistent with the policy framework of SB 623" as a way to fund work to provide safe drinking water to disadvantaged communities.

While ACWA strongly agrees with the intent to fill the funding gap in this area, it opposes a tax on drinking water because it is not the right solution to addressing this issue. Through its oppose-unless-amended position on SB 623, ACWA is advancing a more appropriate funding solution — a package of

*DRINKING WATER Continued on page 8*



## Thank You ACWA 2017 Sponsors!

Thank you sponsors! Because of your generosity, ACWA's membership wins by being able to attend high-quality, educational and timely events at

reasonable prices. The information ACWA members take home from these events is specific to their needs, which ultimately enables high-quality water to

be delivered to California's cities, farms and businesses. And this is good for all Californians! ♡

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Eastern Municipal Water District	Stantec	Irvine Ranch Water District	Yuba County Water Agency
Metropolitan Water District of Southern California		Mesa Water District	
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#### DRINKING WATER *Continued from page 1*

funds that is comprised of federal safe drinking water funds, general obligation bond funds, assessments related to nitrates in groundwater that are also proposed in the bill and funding from the State General Fund.

While the "statutory language" referenced in the proposed budget is not yet available, all signs indicate that the Administration plans on having a budget trailer bill in this area. According to the state Department of Finance in responding to an ACWA inquiry, all budget trailer bills will be posted by Feb.

1. It remains to be seen if the budget trailer bill will be the only vehicle to move a policy framework consistent with SB 623, or whether the proponents will try to advance an amended version of SB 623 or a different vehicle in combination with the budget trailer bill.

SB 623 is currently at the Assembly Rules Committee. This Committee could refer the bill to one or more policy committees or move the bill to the Assembly floor.

SB 623 and any related budget trailer

are a top priority for ACWA. ACWA has continued lobbying against the proposed tax on drinking water since the Legislature adjourned in September.

ACWA will keep its members updated on SB 623 and any related budget trailer bill through the Outreach Program, alerts, advisories, eNews, the ACWA website and social media, with the expectation that ACWA membership will likely need to mobilize on the scale of last summer's successful push against the SB 623's proposed tax on drinking water. ♡

RCEA, RREDC



# Redwood Coast Energy Authority

SECTION 14 PAGE NO. 1

633 3<sup>rd</sup> Street, Eureka, CA 95501  
Phone: (707) 269-1700 Toll-Free (800) 931-RCEA Fax: (707) 269-1777  
E-mail: [info@redwoodenergy.org](mailto:info@redwoodenergy.org) Web: [www.redwoodenergy.org](http://www.redwoodenergy.org)

## REGULAR MEETING AGENDA

**Humboldt Bay Municipal Water District Office**  
**828 7<sup>th</sup> Street, Eureka, CA 95501**

**January 22, 2018**  
**Monday, 3:15 p.m.**

RCEA will accommodate those with special needs. Arrangements for people with disabilities who attend RCEA meetings can be made in advance by contacting Lori Taketa or front office staff at RCEA, 633 3<sup>rd</sup> Street, Eureka, or by calling 269-1700, or by e-mail at [Ltaketa@redwoodenergy.org](mailto:Ltaketa@redwoodenergy.org), by noon the day of the meeting.

**OPEN SESSION** Call to Order

### **1. REPORTS FROM MEMBER ENTITIES**

### **2. ORAL COMMUNICATIONS**

This time is provided for people to address the Board or submit written communications on matters not on the agenda. At the conclusion of all oral and written communications, the Board may respond to statements. Any request that requires Board action will be set by the Board for a future agenda or referred to staff.

### **3. CONSENT CALENDAR**

All matters on the Consent Calendar are considered to be routine by the Board and are enacted on one motion. There is no separate discussion of any of these items. If discussion is required, that item is removed from the Consent Calendar and considered separately. At the end of the reading of the Consent Calendar, Board members or members of the public can request that an item be removed for separate discussion.

- 3.1** Approve Minutes of December 18, 2017, Regular Board Meeting.
- 3.2** Approve Warrants.
- 3.3** Accept Financial Reports.
- 3.4** Approve 2018 Board Meeting Calendar.
- 3.5** Adopt Resolution No. 2018-1 of the Redwood Coast Energy Authority Approving Membership in the Humboldt Area Chapter of the California Special Districts Association.

### **4. REMOVED FROM CONSENT CALENDAR ITEMS**

Items removed from the Consent Calendar will be heard under this section.

### **5. OLD BUSINESS**

- 5.1** Power Purchase Agreement with DG Fairhaven, LLC

Approve 12-month Power Purchase Agreement with DG Fairhaven, LLC and authorize the Executive Director to execute the agreement and any other associated documents as necessary.



## 6. NEW BUSINESS

### 6.1 Election of Officers

Select RCEA Board Chair and Vice Chair and authorize them as signers on RCEA bank accounts.

### 6.2 Offshore Wind Energy

Appoint RCEA Board members to an Offshore Wind Energy Subcommittee.

Approve issuing a Request for Qualifications for Offshore Wind Energy Development Partners after final review and approval by RCEA Legal Counsel and the RCEA Offshore Wind Energy Board Subcommittee.

Approve RFQ-response evaluation team members.

### 6.3 Community Advisory Committee Appointments

Nominate and appoint Community Advisory Committee (CAC) members to fill the vacant seats.

Authorize staff to announce and post the CAC application to fill the four at-large vacancies.

Appoint at least one RCEA Board member as a CAC liaison that will attend CAC meetings.

## COMMUNITY CHOICE ENERGY (CCE) BUSINESS (Confirm CCE Quorum)

Items under this section of the agenda relate to CCE-specific business matters that fall under RCEA's CCE voting provisions, with only CCE-participating jurisdictions voting on these matters with weighted voting as established in the RCEA joint powers agreement.

## 7. OLD CCE BUSINESS

7.1. Energy Risk Management Plan Quarterly Report (no action, information only)

## 8. NEW CCE BUSINESS

8.1 Rate Setting for 2018 (no action, information only)

## END OF COMMUNITY CHOICE ENERGY (CCE) BUSINESS

## 9. STAFF REPORTS

### 9.1 Executive Director

- Work with the Governor's Office of Planning and Research on regional and state-level renewable energy planning.

**9.2 Director of Operations**

- Grant submission for California Energy Commission GFO-17-604.

**DISCLOSURE OF ITEMS TO BE DISCUSSED IN CLOSED SESSION**

The Redwood Coast Energy Authority Board of Directors will meet in closed session to consider the items listed under agenda item number 11, "Closed Session."

**10. PUBLIC COMMENT REGARDING THE CLOSED SESSION ITEM(S)**

**11. CLOSED SESSION**

With respect to every item of business to be discussed in closed session pursuant to Government Code Section 54957(b)(1):

- 11.1. Public Employee Performance Evaluation
  - 11.1.1. Executive Director

**12. RECONVENE TO OPEN SESSION**

**13. REPORT FROM CLOSED SESSION**

**14. ADJOURNMENT**

**NEXT REGULAR MEETING**

**Pending adoption of the 2018 Board Meeting Schedule**

Monday, February 26, 2018, 3:15 p.m.

Note: this is the 4<sup>th</sup> Monday of the month due to the Presidents Day Holiday

Humboldt Bay Municipal Water District Office

828 7<sup>th</sup> Street, Eureka, CA 95501



Redwood Region Economic Development Commission  
Prosperity Center 520 E Street, Eureka, California 95501  
Phone 707.445.9651 Fax 707.445.9652 www.rredc.com

**REDWOOD REGION ECONOMIC DEVELOPMENT COMMISSION**  
**Regular meeting of the Board of Directors**  
At the Prosperity Center 520 E Street, Eureka  
**January 22, 2018 at 6:30 pm**  
**AGENDA**

- I. **Call to Order & Flag Salute**
- II. **Approval of Agenda and Minutes**
  - A. Approval of Agenda for January 22, 2018
  - B. Approval of Minutes of the Board of Directors Meeting November 27, 2017  
(December 25, 2017 Board of Directors Meeting was cancelled due to lack of quorum)
- III. **Public Input for non-agenda items**
- IV. **New Business**
  - A. Acceptance of audit for FY 2016-2017
  - B. Election of Board Officers and Executive Committee Members
  - C. Resolution regarding SDRMA Workers' Compensation for Governing Body member and/or Volunteer Coverage
- V. **Consent Calendar**
  - A. Acceptance of Agency-wide Financial Reports: November 30, 2017 & December 31, 2017
- VI. **Reports – No Action Required**
  - A. Loan Portfolio Reports: November 2017 & December 2017
  - B. Executive Director's Report
  - C. Report on Air Services Agreement with United Airlines
- VII. **Old Business**

None
- VIII. **Member Reports**
- IX. **Agenda/Program Requests for future Board of Directors Meetings**
- X. **Adjourn**

*The Redwood Region Economic Development Commission will, on request, make agendas available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Individuals who need this agenda in an alternative format or who need a disability-related modification or accommodation in order to participate in the meeting should contact the Board Secretary at (707) 445-9651. Notification 48 hours prior to the meeting will enable the Commission to make reasonable arrangements for accommodations.*