

HUMBOLDT BAY MUNICIPAL WATER DISTRICT

Request for Qualifications (RFQ)

Reservoirs Seismic Retrofit Project (3 Tanks) Samoa Peninsula and Korblex, California

Bid Period Assistance and Construction Management

A. <u>Invitation</u>

You are invited to submit a Statement of Qualifications (SOQ) in accordance with the outline below to be considered for selection by the Humboldt Bay Municipal Water District (District) to perform bid period assistance and construction management services for the District's Reservoirs Seismic Retrofit Project.

The deadline to submit an SOQ is provided in Table 1 in Section F of this RFQ.

B. <u>Project Overview</u>

The project consists of a seismic retrofit of the District's three reservoirs. On Korblex Hill, there are two potable domestic water (DW) reservoirs, a 1 Million Gallon (MG) capacity, welded steel tank constructed in 1967, and a 2 MG welded steel tank constructed in 1996, which is used for disinfection contact time in the treatment process and storage. The District also has another 1 MG welded steel tank also constructed in 1967 located on the Samoa Peninsula and used for storage at that end of the District's non-potable Industrial Water (IW) system.

The District replaced the roof of the 1 MG domestic reservoir in 2017. As part of this roof replacement project, the seismic stability of the reservoir was assessed, and structural calculations were performed. It was found that the reservoir did not conform to the then-current 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 current 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. It was subsequently determined that the 1 MG Samoa IW reservoir, which was constructed with the same design and at the same time as the Korblex DW reservoir, and the 2 MG DW reservoir also require seismic retrofits.

The project is currently in the design phase. The construction work for the two project sites (Korblex and Samoa) is being broken up into two separate construction bid packages, and it is expected that construction will occur simultaneously at each site. The District's intent is to execute one agreement with a single consultant firm or team to provide the services as described in Section E for each construction project. GHD Inc. (GHD) has prepared 60% design documents (plans and specifications) for the project and is in the process of preparing final bid packages. The 60% design plans for the Korblex and Samoa sites have been included as Attachment 1 and Attachment 2, respectively.

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A summary of the major design components is as follows:

- 1 MG Korblex tank
 - Install additional anchorage to lower shell ring and new concrete ring foundation with helical anchors that will integrate with existing foundation.
 - Install new flexible piping connections to accommodate potential differential settlement at necessary points of connection.
 - Spot coating as necessary.
- 2 MG Korblex tank
 - Install new roof and intermediate column supports designed to resist seismic sloshing wave.
 - Install new perimeter concrete ring wall connected to existing perimeter ring foundation and with anchorage connecting existing steel wall to new concrete ring.
 - Install new flexible piping connections to accommodate potential differential settlement at necessary points of connection.
 - Coating of the entire tank and roof.
- 1 MG Samoa tank
 - Install new roof and center column designed to resist seismic sloshing wave.
 - Install additional anchorage to lower shell ring. Install new concrete ring foundation with helical anchors that will integrate with existing foundation.
 - Install new flexible piping connections to accommodate potential differential settlement at necessary points of connection.
 - Coating of the entire tank and roof.

Note that the above bullet list is a summary of the major construction components, and it is not a comprehensive list of all the design components of the project. Furthermore, the major construction components are still subject to change and the 60% design documents are in the process of being developed into final design documents. While it is believed at this time that major design components will not be changed and will instead be refined to complete the design and allow for a competitive bid, design changes may occur, and the selected consultant will ultimately be responsible for performing construction management services in accordance with the final bid packages that are to be completed by GHD. Table 2 in Section G gives an estimated date for when final bid packages will be ready to advertise for construction bids.

C. <u>Funding Sources</u>

The project is being funded in part by a Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant being administered by the California Governor's Office of Emergency Services (Cal OES). Project activities must adhere to the requirements of both federal and state agencies related to the Hazard Mitigation Grant Program, National Environmental Policy Act (NEPA), and the California Environmental Quality Act (CEQA).

D. <u>Selection Process</u>

The District will establish a Selection Committee to review the SOQ submittals received. The Selection Committee will request a scope of work and fee proposal from the most qualified firm/team that is subject to negotiation of a fair and reasonable price. If negotiations are not successful, the District will terminate negotiations with the selected consultant and will begin to negotiate with other qualified consultants in the order

of their respective SOQ ranking (from highest to lowest) until an agreement is reached. The final proposal will be brought to the District's Board of Directors for potential approval.

E. <u>Work to be Completed</u>

The District is seeking a consultant firm or team to provide construction bid period assistance and construction management services for the seismic retrofit of the District's three welded steel reservoirs. One reservoir is located on the Samoa Peninsula, and the other two are located at the District's Korblex facility near Arcata, California. A single consultant firm or team will be selected encompassing all the required services. The services that are required include the following:

1. Bid period assistance

- 1.1 Assist the District with distributing and advertising the Plans and Specifications completed by GHD for a competitive sealed bid process for project construction.
- 1.2 Respond to contractor questions during the bid phase in the form of formal addenda. Consult the Engineer of Record for technical questions that are related to the intent of the project design.
- 1.3 Review and evaluate construction bids for compliance with project specifications. Confirm that the low-cost bidder is responsible and responsive per CA state law, meets the project bond requirements, holds a valid contractor license, is registered with the California Department of Industrial Relations, and is not ineligible for participation in federal assistance programs.
- 1.4 Following review of contractor bids, recommend award to District staff and Board of Directors.

2. Construction management and inspection services

- 2.1 Provide construction inspection services to monitor contractor compliance with the plans and specifications. This will include but not be limited to special inspections for structural work, welding, and coating. It will also include daily inspections, reports, photo documentation, and other standard construction inspection tasks. Compaction testing and concrete sampling and testing will be the responsibility of the contractor, not the consultant.
- 2.2 Consult and coordinate with the District throughout construction. Continually provide the District with ongoing construction documentation.
- 2.3 Consult and coordinate with the District and Engineer of Record when issues arise that are related to the intent of the project design.
- 2.4 Develop agendas and minutes for and coordinate and conduct project construction meetings.
- 2.5 Receive, log, and respond to Contractor's submittals. Engage the District as necessary and include District staff on correspondence. Consult the Engineer of Record for technical submittals that are related to the intent of the project design. Selected consultant will respond to all administrative submittals and those related to standard materials of construction, for example, concrete, aggregates, etc.
- 2.6 Receive, log, and respond to Contractor's Requests for Information (RFIs). Engage the District as necessary and include District staff on correspondence. Coordinate with the Engineer of Record for technical RFIs that are related to the intent of the project design.
- 2.7 Receive, log, review, and assist the District with processing legitimate change orders. Coordinate with the Engineer of Record for change orders that are related to the intent of the project design.
- 2.8 Receive, log, review, and assist the District with processing pay requests.
- 2.9 Confirm that the contractor provides as-built drawing markups and review for adequacy.
- 2.10 Provide one clean, complete, set of as-built drawing markups for each construction project that incorporate redlines from the contractor, construction manager, and owner and rectify any conflicts

prior to delivering to the Engineer of Record. Final as-built drawings will be prepared by the Engineer of Record using this information.

- 2.11 Prepare contract closeout documents and prepare the Notice of Completion.
- 2.12 Provide the District with a compiled package of all construction management documentation to be used for District records and for grant closeout purposes.

GHD is the Engineer of Record for the project. As such, GHD will perform engineering services during bidding and construction to address questions and issues related to the intent of the design. The District is contracted separately with GHD, and GHD is precluded from responding to this RFQ. GHD's services during bidding and construction will be limited to the following:

- 1. Attending and participating in the pre-bid meeting that will be organized and coordinated by the consultant selected out of this RFQ process.
- 2. Providing responses to technical written questions received from the contractors during the bid period that are regarding the intent of the design.
- 3. Attending and participating in the contractor preconstruction meeting that will be organized and coordinated by the consultant selected out of this RFQ process.
- 4. Reviewing submittals, requests for information (RFIs), and change orders that have bearing on the intent of the design and being consulted on any issues regarding answering design questions or modifying the design.
 - a. This includes addressing changes that come up during construction that require design interpretation or changes, including issues such as differing site conditions.
- 5. Performing periodic site inspections to address potential changes and to confirm that construction is meeting the intent of the design.
- 6. Reviewing markups provided by consultant and preparing project record drawings.

The selected consultant will be responsible for coordinating with and engaging GHD when necessary, with prior written approval from the District.

F. Consultant Selection Schedule

The following schedule has been established for the consultant selection process. The District reserves the right to modify this schedule as required.

Issue Table 1 Consultant selection schedule RFQ	January 4, 2024 -
Deadline to submit questions	January 26, 2024 (5:00 pm PST)
Deadline for addenda to be issued	February 1, 2024
Deadline to submit SOQ	February 8, 2024 (3:00 pm PST) No response received
Issue second RFQ Selection	February 16
Deadline to submit SOQ	March 14, 2024 (3:00 pm PST)
Selection committee review	March 15 to 19, 2024
Notify apparent most qualified consultant	March 19, 2024
Selected consultant submits scope of work and fee	March 27, 2024
District Board approves contract	March 28, 2024
Execute consultant contract	March 29, 2024

G. <u>Project Schedule</u>

The following is an estimated schedule for the project:

Table 2 Estimated project schedule

Advertise for construction bids	March 2024
Receive and evaluate construction bids	April 2024
Award project to contractor	May 2024
Construction	May 2024 through October 2024
Project closeout	October 2024 through December 2024

This estimated project schedule is subject to change and may be modified by the District if required.

H. <u>SOQ Requirements</u>

H.1 SOQ Contents

Firms or teams who are interested in providing the consultant services described above are to submit a Statement of Qualifications. The SOQ shall include the following:

- 1. Table of Contents
- 2. Cover Letter

Provide a cover letter, maximum length of 1 page, indicating the Consultant's interest and summary of qualifications. Include Consultant's name, office location, and years in operation. Include name and contact information for the officer authorized to represent the firm for any correspondence and negotiations.

3. Project Understanding and Approach

Summarize the Consultant's understanding of the services to be performed and specific challenges that are related to the delivery of the anticipated Scope of Services. The Approach section should include the following:

- How the Consultant will address the identified project challenges.
- Project management plan highlighting communication plan, schedule management, and how the consultant will integrate the District and Engineer of Record into the construction management process.
- Quality assurance and quality control approach and procedures.
- 4. Experience and Qualifications of Firm

Provide a project organization chart showing each team member who would be assigned to the project. Identify prime and subconsultants. Identify key team members who Consultant feels would be critical to the success of the project and describe how each will contribute to the project. Provide examples of project assignments in which they have played a similar role.

Describe qualifications of Consultant's firm and specific experience within the last 5 years providing similar services to those anticipated for this project. Include information related to Consultant's firm with state and federal grant funded projects. Provide descriptions (size, type, year, amount, and location) of three similar projects complete with contact information (name, title, phone number, and e-mail address) for each reference project provided. Cross reference key team members to the listed projects.

- 5. Provide information regarding present workload and staff availability.
- 6. List any potential conflicts of interest and a strategy for negating them.

H.2 Page Limit

SOQs shall be limited to a total of 12 pages which shall be numbered in consecutive order. The page limit excludes the SOQ cover page, table of contents, cover letter, section dividers, and resumes. SOQs shall be submitted on 8½ by 11 pages only with each double-sided sheet counted as two pages.

H.3 SOQ Submittal Requirements

Applicants who are interested in providing the services for this project are required to submit a Statement of Qualifications no later than the time and date noted in Table 1 in Section F. All SOQs and materials submitted in response to this RFQ will become the property of the District and will not be returned. The District is not responsible for any costs incurred in the preparation of a response to this RFQ. Please submit the SOQ to:

John Friedenbach, General Manager Humboldt Bay Municipal Water District 828 7th Street Eureka, CA 95501-1114

SOQs received after the deadline, regardless of postmark, will be rejected.

Applicants shall submit five bound copies of their SOQ, one unbound copy, and one electronic pdf copy on a CD or flash drive. All submission materials shall be included in a sealed envelope labeled with the following:

- Submitting firm's name and address
- "Statement of Qualifications for Bid Assistance and Construction Management Services for HBMWD Reservoirs Seismic Retrofit Project"

H.4 Questions and Addenda

Questions regarding this RFQ must be submitted in writing, by e-mail only, to John Friedenbach, General Manager, at <u>friedenbach@hbmwd.com</u> by the deadline shown in Table 1 in Section F. Questions will be responded to in writing. Written summaries of all questions and answers will be distributed to each consultant. Addenda will be issued, if necessary, and posted to the District's website.

Site visits are available upon request. Requests shall be in writing via email and directed to John Friedenbach, General Manager, at <u>friedenbach@hbmwd.com</u> and Dale Davidsen, Superintendent, at <u>supt@hbmwd.com</u>.

I. <u>Selection Criteria</u>

The District's Selection Committee will evaluate all submitted SOQs in accordance with the criteria stated below. The District reserves the right to request interviews of the top ranked firms. Should interviews be required, those consultants participating in the interview process will have their SOQs rescored after the interview process, and final rankings will be based on those scores.

The Selection Committee will decide which applicant will be invited to submit a scope and fee proposal. Evaluation and selection criteria will include the following:

- 1. Consultant's understanding of the project and conceptual approach 20 points
- 2. Consultant firm or team's qualifications and experience on similar projects, including transmission-level water infrastructure and construction / modifications to steel reservoirs 25 points
- 3. Qualifications and experience of the project manager and key personnel 20 points

- 4. Consultant's experience with grant-funded projects 10 points
- 5. Consultant Team's present workload and staff availability 5 points
- 6. References for prime and key sub consultants 15 points
- 7. Consultant Team's ability to negate any identified conflicts of interest 5 points

J. <u>Attachments</u>

Attachment 1: Korblex Reservoirs Seismic Retrofit Project – 60% Design Drawings Attachment 2: Samoa Reservoir Seismic Retrofit Project – 60% Design Drawings

Attachments

Attachment 1

Korblex Reservoirs Seismic Retrofit Project – 60% Design Drawings



APPROVALS

PLANS AND SPECIFICATIONS APPROVED BY THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT, COUNTY OF HUMBOLDT, STATE OF CALIFORNIA THIS DAY OF 2021

GENERAL MANAGER

JOHN FRIEDENBACH BOARD OF DIRECTORS SIGNED

- SHERI WOO NEAL LATT J. BRUCE RUPP MICHELLE FULLER DAVID LINDBERG
- PRESIDENT VICE PRESIDENT SECRETARY-TREASURER ASSISTANT SECRETARY-TREASURER DIRECTOR

ENGINEER: GHD Inc.

STEVE MCHANEY

SIGNED

SHEET INDEX

SHEET NO.	DRAWING	DESCRIPTION
1	G-001	COVER SHEET AND SHEET INDEX
2	G-002	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
3	C-101	1 MG DOMESTIC EXISTING SITE CONDITIONS AND IMPROVEMENTS
4	C-102	2 MG DOMESTIC EXISTING SITE CONDITIONS AND IMPROVEMENTS
5	C-103	2 MG DOMESTIC ROOF REPLACEMENT & PAINTING PLAN
6	C-501	1 MG DOMESTIC TANK SHELL ELEVATION
7	C-502	2 MG DOMESTIC TANK SHELL ELEVATION
8	C-503	SEISMIC CIVIL DETAILS
9	C-504	CIVIL DETAILS
10	S-001	STRUCTURAL GENERAL NOTES
11	S-002	SPECIAL INSPECTIONS
12	S-101	1 MG DOMESTIC TANK FOUNDATION PLAN
13	S-102	2 MG DOMESTIC TANK FOUNDATION PLAN
14	S-103	2 MG DOMESTIC TANK ROOF PLAN
15	S-501	TANK ROOF DETAILS
16	S-502	TYPICAL CONCRETE DETAILS 60% DESIGN

ent HUMBOLDT BAY MUNICIPAL WATER

COVER SHEET AND SHEET INDEX

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Date 07-23-2021

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GENERAL SITE NOTES	GRADING NOTES	ABBREVIATIONS		PLAN SYMBOLS	
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 ALL EXISTING LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE HAND RAKED SMOOTH AND RETURNED TO ORIGINAL EXISTING CONDITIONS. 	6. CONTRACTOR SHALL COORDINATE USA UTILITY LOCATE 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTIO CONTRACTOR SHALL COORDINATE THE UTILITY LOCATE WITH THE OWNER FOR ALL UTILITY WORK. CONTRACTOR TO NOTE THAT CAMPUS OWNED UTILITIES WILL NOT BE MARKED VIA A USA LOCATE. CONTRACTOR TO EMPLOY THEIR OW	ER EDGE ROAD EU/ELEV ELEVATION ELEC ELECTRIC, OR ELECTRICAL	SCHED SCHEDULE SD STORM DRAIN SDMH STORM DRAIN MANHOLE SDCB STORM DRAIN CATCH BASIN	× 95.94 SPOT ELEVATION	LECTROLIER
ALL DISTURBED AREAS SHALL BE RAKED SMOOTH AND HYDROSEEDED FOLLOWING CONSTRUCTION.	UTILITY LOCATING TECHNIQUES ALONG ALL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPUS OWNE UTILITIES AFFECTED BY CONTRACTORS WORK. INFORM OWNER IMMEDIATELY IF LOCATE INDICATES THAT EXISTING UTILITIES ARE DIFFERENT THAN SHOWN ON DRAWINGS.	ENGR ENGINEER EVC END VERTICAL CURVE EW EACH WAY	SHT SHEET SIM SIMILAR SO SOUTH		Y
5. WHEN CONSTRUCTION OCCURS WITHIN DRIP LINE ON EXISTING TREES, CONTRACTOR IS TO PILE THE SOIL ON THE SIDE AWAY FROM THE TREE. WHEN THIS IS NOT POSSIBLE, PLACE SOIL ON PLYWOOD. A TARP, OR THICK BED OF MULCH. THIS IS TO HELP PREVENT CUTTING INTO THE SOIL SURFACE WHEN THE BACKHOE OR TRACTOR BLADE REFILLS THE TREMCH	 CONTRACTOR IS RESPONSIBLE FOR POTHOLING ALONG THE ALIGNMENTS OF ALL NEW UTILITIES TO IDENTIFY POTENTIAL UTILITY CONFLICTS, SOILS CONDITIONS, AND TIE-IN POINTS. CONTRACTOR RESPONSIBLE FOR MAKING ADJUSTMENTS IN ALIGNMENTS TO ACCOMMODATE ACTUAL FIELD CONDITIONS. 	FDC FIRE DEPARTMENT CONNECTION FIN FINISH FF FINISH FLOOR FG FINISH GRADE	SS SANITARY SEWER SSMH SANITARY SEWER MANHOLE SSTL STAINLESS STEEL STA STATION	GENERAL SHEET SYMBOLS	
REFILL OPEN TRENCHES QUICKLY WITHIN 4 HOURS OF EXCAVATION WHEN THEY OCCUR WITHIN THE DRIP LINE OF EXISTING TREES. IF THIS IS NOT POSSIBLE AND WEATHER IS HOT, DRY, OR WINDY, CONTRACTOR MUST KEEP ROOT	 CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES, FEATURES, AND STRUCTURES LOCATED ON THE SITE LOCATE, PROTECT, AND AVOID DISRUPTION OF ALL ABOVE AND BELOW GRADE UTILITIES DURING CONSTRUCTION. 	FH FIRE HYDRANT FL FLOW LINE FLR FLOOR	STD STANDARD STL STEEL		
ENDS MOIST BY COVERING THEM WITH WET BURLAP. IF TEMPERATURE IS 80°F OR GREATER. THE BURLAP MUST BE INSPECTED EVERY HOUR AND RE-WET A NECESSARY TO MAINTAIN A CONSTANT COOL MOIST CONDITION. IF TEMPERATURE IS BELOW 80°, THE BURLAP MUST BE INSPECTED EVERY FOUR HOURS AND RE-WET AS NECESSARY TO MAINTAIN A CONSTANT COOL MOIST CONDITION. SMALL ROOTS CAN DRY OUT AND DIN 10-15 MINUTES. LARGER ROOTS CAN SUCCIMB IN AN HOUR OR LESS UNDER UNFAVORABLE WEATHER CONDITIONS.	 ALL BURIED LINES TO HAVE 36 INCHES MINIMUM COVER, UNLESS NOTED OTHERWISE. CONTRACTOR TO VERIFY CONNECTIVITY OF UTILITY NETWORK PRIOR TO REPLACEMENT, ABANDONMENT, OR DEMOLITION OF EXISTING UTILITY. CONTRACTOR TO CONFIRM CONNECTIVITY OF NEW UTILITY PRIOR TO COMPLETIN WORK. 	FO FIBER OF IIC FP FIRE PROTECTION FS FINISHED SURFACE FT FOOT, OR FEET FTG FOOTING	TC TOP OF CORE T, OR TEL TELEPHONE THK THICK TG TOP OF GRATE TO TOP OF GRATE		
 MATERIALS, EQUIPMENT, TEMPORARY BUILDINGS, FUELS, PAINTS AND OTHER CONSTRUCTION ITEMS ARE NOT TO BE PLACED WITHIN THE DRIP LINE OF EXISTING TREES. 	11. THRUST BLOCKING REQUIRED ON ALL PRESSURE LINES BENDS AND FITTINGS. SEE STANDARD THRUST BLOCKING DETAIL RESTRAINED FITTINGS MAY BE USED AS AN ALTERNATIVE WHEN INSTALLED ON FITTINGS AND LINES PER	G GAS LINE GAL GALLON GALV GALVANIZED	TRF TURBIDITY REDUCTION FACILITY TS TOP OF SLAB TW TOP OF WALL		OF OTION
8. 5. GRADING SHOULD NOT CREATE DRAINAGE PROBLEMS FOR TREES BY CHANNELING WATER INTO THEM, OR CREATING SUNKEN AREAS.	MANUFACTURER REQUIREMENTS TO ACHIEVE PROPER RESTRAINT OF THE OVERALL PIPING SYSTEM. 12. ALL EXISTING UTILITIES AND TIE-IN POINTS SHOULD BE CONSIDERED ACTIVE UTILITIES UNLESS OTHERWISE INDICATE	GR GRADE GRD GROUND GV GATE VALVE	TYP TYPICAL UBC UNIFORM BUILDING CODE	DETAIL NUMBER 1 DETAIL INDICATOR	LETTER SECTION INDICATOR
GEOTECHNICAL NOTES	13. CONFIRM FIRE HYDRANT TYPE, NOZZLE SIZES, AND THREAD CONFIGURATIONS WITH FIRE DEPARTMENT PRIOR TO CONSTRUCTION.	HB HOSE BIBB HCSB HUMBOLDT COMMUNITY SERVICES	UNO UNLESS NOTED OTHERWISE UP UTILITY POLE	C-105 L SHEET NUMBER ON WHICH	EET NUMBER ON WHICH
 CONTRACTOR SHALL DESIGN THE PROJECT TO BE COMPLIANT WITH THE FOLLOWING GEOTECHNICAL REPORTS: GEOTECHNICAL INVESTIGATION REPORT HBMWD RESERVOIRS SEISMIC RETROFIT PROJECT THREE WATER TANKS FROM CRAWFORD & ASSOCIATES, INC. DATED JULY 2021. 	14. CONFIRM ALL UTILITY VALVE VAULTS, VALVES, METERS, BACKFLOW PREVENTION ASSEMBLIES, AND OTHER UTILITY APPURTENANCES WITH THE OWNER.	HDD HORIZONTAL DIRECTIONAL DRILLING HDPE HIGH-DENSITY POLYETHYLENE HORZ HORIZONTAL HPG HIGH PRESSURE GAS	VERT VERTICAL W/ WITH W WATER	DETAIL APPEARS SEC	CTION APPEARS
SURFACE RESTORATION NOTES		HPNS HIGH PRESSURE NATURAL GAS HPS HIGH PRESSURE SODIUM HWY HIGHWAY	WD WIDE WSP WELDED STEEL PIPE		
 IN ADDITION TO UTILITY AND VEGETATION RESTORATION, CONTRACTOR TO RESTORE SIDEWALKS, CURBS, PAVING, SLABS, STRIPING, SIGNAGE, AND OTHER SURFACE FEATURES TO PRE-PROJECT CONDITIONS. 	CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND IMPLEMENTING THE PROJECT SWPPP PER THE CORRENT NPDES GENERAL PERMIT REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MONITORING AND REPORTING. THE OWNER SHALL REGISTER THE	IE INVERT ELEVATION INV INVERT IP IRON PIPE	XING CROSSING YD YARD		
 NOT ALL SURFACE RESTORATION REQUIREMENTS SHOWN. CONTRACTOR TO ASSESS PRIOR TO BIDDING AND INCLUDE THE COST OF RESTORATION IN THE BID ITEMS AFFECTING SURFACE FEATURES. 	PROJECT VIA SMARTS AND ESTABLISH ACCESS FOR THE QUALIFIED STORMWATER PRACTITIONER (QSP). 3. THE EROSION CONTROL MEASURES SHOWN HERE ARE THE MINIMUM RECOMMENDED. THE CONTRACTOR SHALL VIENTIAL TO PRODUCE THE RECOVER THE MINIMUM RECOMMENDED FOR CASE ARE	IRR IRRIGATION JCT JUNCTION	& AND @ AT ° DEGREE		
ITEMS TO BE PROVIDED BY THE CONTRACTOR	ADRENE TO THE QUOLOGY SPECIFIC PLAY OF BWF'S (BEST MARAGEMENT PRACTICES) FOR THE PROJECT STEE APPROPRIATE TO THE PHASE OF CONSTRUCTION AND THE TIME OF YEAR. A. BACK UP EROSION CONTROL MATERIALS SHALL BE STOCKPILED ON THE SITE TO ALLOW FOR TIMELY REPAIR AND	JP JUNCTION POLE (UTILITY) L LENGTH LAT LATERAL	UAMETER FEET INCHES # NUMBER		
NOT UNLESS SPECIFICALLY NOTED OTHERWISE, CONTRACTOR SHALL FURNISH AND INSTALL ALL NEW ITEMS. UNI ESS SPECIFICALLY NOTED OTHERWISE THE TERM "PROVIDE" SHALL MEAN CONTRACTOR TO FURNISH AND INSTALL	MAINTENANCE OF ALL BMP'S.	LF LINEAR FEET	± PLUS OR MINUS		60% DESIGN
					I NOTES, SYMBOLS AND
	Bar is one inch on original size sheet	GHD Inc. 718 Third Street	DISTRICT	ABBREV	IATIONS
		Eureka California 95501 USA T 1 707 443 8326 F 1 707 444 8330		/OIRS SEISMIC	
No. Issue Checked Approved Date Author SXM Drafting Check SXM Project Manager NS		Conditions of Use This document and the ideas and designs inconvorated herain, as an instrument of nor	ressional service, is the property of Project No.	Date Coole	Sheat Mo. Sheat
Designer BLC Design Check SXM Project Director SXM		GHD. This document may only be used by GHD's client (and any other person w document) for the purpose for which it was prepared and must not be used by any other	ho GHD has agreed can use this person or for any other purpose. 112188559	07-23-2021 AS SHOWN	G-02 2 of

Plot Date: 30 July 2021 - 11:21 AM Path and Filename: \\ghdnet\ghd\US\Eureka\Projects\561\11218859idigital_design\acad 2020\Sheets\Korblex\11218859-GHD-0001-DWG-GN-0001.dwg Plotted By: Michelle Davidson





	SHEET GENERAL NOTES
	CONTRACTOR TO VERIFY PIPE AND VALVE SIZES, TYPE, AND CONFIGURATION AND PROVIDE ALL TRANSITION FITTINGS AS REQUIRED. REPAIR ALL PAVING SIMILAR TO 1 C-504 SHEET KEYMOTES
*	
	 (N) BURIED RUBBER EXPANSION JOINT ASSEMBLY (1) THIS IS ADDITIVE BID WORK. DEMO EXISTING PIPING, FITTINGS, AND INSULATION ALONG BASE OF TANK AND REPLACE BURIED ALONG BASE OF (N) STRUCTURAL MODIFICATIONS RELOCATE 11/2' WHARF HYDRANT OUTSIDE OF (N) STRUCTURAL MODIFICATIONS. COORDINATE (N) LOCATION WITH OWNER.
WELD (N) 8" TALL ABOVE ISJON JOINT	• • • • • • • • • • • • • • • • • • •
T BAY MUNICIPAL WAT RESERVOIRS SEISMIC	ER THE 2 MG DOMESTIC EXISTING SITE CONDITIONS AND IMPROVEMENTS
Date 07-23-2021	Scale Sheet No. Sheet AS SHOWN C-102 4 of 16



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ISSUE

Author MD

Designer SXM

	SHEET GENERAL NOTES
1.	CONTOURS SHOWN ON THIS DRAWING ARE NOT THE PRODUCT OF SURVEY AND ARE APPROXIMATE.
2.	THE INTERIOR OF THE (E) 2-MG TANK AND NEW ROOF SHALL BE PREPPED AND PAINTED PER SPECIFICATION SECTION 09 91 00. TANK PREPARATION AND COATING. REQUIRED TOUCH-UP PAINT LOCATIONS ON THE EXTERIOR OF THE TANK SHALL ALSO BE PREPPED AND PAINTED PER THE ABOVE REFERENCED SPECIFICATION.
3.	WHERE ITEMS ARE TO BE REMOVED FROM THE OUTSIDE OF THE TANK, THE CONTRACTOR SHALL GRIND DOWN AND PAINT OVER ALL (E) BOLT PENETRATIONS, BRACKETS, ETC. IT SHALL BE ASSUMED THAT THESE AND ANY OTHER LOCATIONS REQUIRING PAINTING SHALL BE PREPPED AND PAINTED PER SPECIFICATION SECTION 09 91 00.
4.	ALL AREAS OF TANK TO BE COVERED IN CONCRETE SHALL BE PREPPED AND COATED IN ACCORDANCE WITH SPECIFICATION 09 91 00.
5.	ALL NEW METAL COMPONENTS SHALL BE PREPPED AND COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09 91 00.
6.	CONTRACTOR SHALL COORDINATE WITH OWNER FOR TRANSFER OF UTILITY CONNECTIONS INSIDE ENCLOSURES THAT ARE TO BE REPLACED.
7.	CONTRACTOR MAY REMOVE FENCING AS NEEDED FOR THE PERFORMANCE OF THE WORK, BUT IS RESPONSIBLE FOR THE REPLACEMENT OF THE FENCE TO RETURN IT TO EXISTING CONDITION, AND FOR THE REPLACEMENT OF THE/PRORARY FENCING DURING THE PERFORMANCE OF THE WORK TO PREVENT PUBLIC ACCESS TO THE SITE.
8.	THE CONTRACTOR SHALL REMOVE THE CATHODIC PROTECTION ANODES PRIOR TO THE PERFORMANCE OF THE WORK AND SHALL REPLACE THEM UPON COMPLETION.
9.	THE OWNER SHALL DRAIN AND PERFORM INITIAL "MUCK OUT" OF THE TANK PRIOR TO THE PERFORMANCE OF THE WORK.
10.	CONTRACTOR WILL PERFORM ALL ELECTRICAL WORK REQUIRED FOR REPLACEMENT OF ELECTRICAL COMPONENTS.
11.	CONTRACTOR SHALL PROVIDE SUBMITTAL/SHOP DRAWINGS PRIOR TO FABRICATION AND/OR ORDERING OF ENCLOSURES, EQUIPMENT, PARTS, ETC.



DRAFT 60% DESIGN

HUMBOLDT BAY MUNICIPAL WATER

KORBLEX RESERVOIRS SEISMIC

04-01-2021

AS SHOWN

^{™®} 2 MG DOMESTIC ROOF REPLACEMENT & PAINTING PLAN

ANSI D

C-103





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SHEET GENERAL NOTES

- WHERE ITEMS ARE TO BE REMOVED FROM THE OUTSIDE OF THE TANK, THE CONTRACTOR SHALL GRIND DOWN AND PAINT OVER ALL (E) BOLT PENETRATIONS, BRACKETS, ETC. AND WELD 1/4" STEEL PLATES OVER OPENINGS. IT SHALL BE ASSUMED THAT THESE AND ANY OTHER LOCATIONS REQUIRING PAINTING SHALL BE PREPPED AND PAINTED PER SPECIFICATION SECTION 09 91 00.
- ALL NEW METAL COMPONENTS SHALL BE PREPPED AND COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09 91 00. 2.
- CONTRACTOR SHALL PROVIDE SUBMITTAL/SHOP DRAWINGS PRIOR TO FABRICATION 3. AND/OR ORDERING OF ENCLOSURES, EQUIPMENT, PARTS, ETC.
- FOR ALL HATCHES, COVERS AND FITTINGS REMOVED DURING PROJECT, REPLACE 4. GASKETS AND BOLTS, NUTS, AND WASHERS.
- ALL HARDWARE TO BE HOT DIPPED GALVANIZED UNLESS NOTED OTHERWISE. 5.
- WELD STEEL PLATES TO THE INTERIOR AND EXTERIOR OF THE TANK WHERE STEEL PLATES ARE REQUIRED USING 3/8" FILLET WELD ALL AROUND. 6.
- ALL PIPING AND EQUIPMENT THAT WILL BE EXTENDED OR EXTRUDED BY THE WORK SHALL BE SLEEVED PER THE SPECIFICATIONS. 7.



60% DESIGN

* 1 MG DOMESTIC TANK SHELL ELEVATION

Size ANSI D

of 1

07-23-2021

AS SHOWN

C-5



WHERE ITEMS ARE TO BE REMOVED FROM THE OUTSIDE OF THE TANK, THE CONTRACTOR SHALL GRIND DOWN AND PAINT OVER ALL (E) BOLT PENETRATIONS, BRACKETS, ETC, AND WELD 1/4" STEEL PLATES OVER OPENINGS, IT SHALL BE ASSUMED THAT THESE AND ANY OTHER LOCATIONS

ALL NEW METAL COMPONENTS SHALL BE PREPPED AND COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09 91 00.

CONTRACTOR SHALL PROVIDE SUBMITTAL/SHOP DRAWINGS PRIOR TO FABRICATION AND/OR ORDERING OF ENCLOSURES, EQUIPMENT, PARTS, ETC.

FOR ALL HATCHES, COVERS AND FITTINGS REMOVED DURING PROJECT, REPLACE GASKETS AND BOLTS, NUTS, AND WASHERS.

WELD STEEL PLATES TO THE INTERIOR AND EXTERIOR OF THE TANK WHERE STEEL PLATES ARE REQUIRED USING 3/8" FILLET WELD ALL AROUND.

60% DESIGN

Size ANSI D

C-5



60% DESIGN

BAY MUNICIPAL WATER	Title SEISMIC CIVIL DETAILS	Size ANSI D
RESERVOIRS SEISMIC		
Date Scale 07-23-2021 AS SHOWN	Sheet No. C-503	Sheet 8 of 16



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45° BEND	22 1/2° BEND	11 1/4° BEND	PIPE	TEE, WYE, PLUG OR	90° BEND PLUGGED	TI PLUC	EE GED	45° BEND	22 1/2° BEND	11 1/4° BEND
52115	DEND	DEND	JIZL	CAP	CROSS	A1	A2	5		DEND
1.5	1	1	18	19	27	27	19	15	8	6
2.5	1.5	1	20	24	34	34	24	18	10	8
4	2	1	22	29	41	41	29	22	12	10
7	3	2	24	34	48	48	34	26.5	14	12
10	5	3	32	39	55	55	39	31.5	16	14
12	6	4								

60% DESIGN

BAY MUNICIPAL V	WATER	Title CIVIL DETAILS		Size ANSI D
ESERVOIRS SEISI	NIC			
Date 07-23-2021	Scale AS SHOWN		Sheet No. C-504	Sheet 9 of 16

SHEET GENERAL NOTES	STEEL	CONCRETE
1. CONTRACTOR TO COORDINATE ALL STRUCTURAL DOCUMENTS WITH ALL OTHER DISCIPLINES AND REPORT ANY	DETAIL, FABRICATE, AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL OPADTO/UCTO/UPDC/UCTO/UPDC/UPDC/UPDC/UPDC/UPDC/UPDC/UPDC/UPDC	1. ALL CONCRETE SHALL BE NORMAL WEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.
DISCREPANCIES TO THE OWNER PRIOR TO THE START OF ANY FABRICATION OR CONSTRUCTION.	CONSTRUCTION SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (LATEST EDITION AND SUPPLEMENTS).	2. CONCRETE REINFORCING COVER SHALL BE AS FOLLOWS:
 CONTRACTOR TO COORDINATE ALL NEW WORK WITH EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE OWNER PRIOR TO CONSTRUCTION 	ANCHOR BOLTS: ASTM F1554 GRADE 55.	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO
	ALL STEEL BARS & PLATES SHALL BE ASTM A36 UNLESS OTHERWISE NOTED.	EARTH
3. DO NOT SCALE DRAWINGS.	 ALL STEEL SHAPES SHALL BE ASTM A992 GRADE 50 UNLESS OTHERWISE NOTED. 	
4. DESIGN CRITERIA: 2019 CALIFORNIA BUILDING CODE (2019 CBC)	5. ALL TUBES SHALL BE ASTM A500 GRADE B.	3. ALL CONCRETE DIMENSIONS SHOWS AND ANY EMBEDDED ITEMS AND DETERMINE PRIOR TO FABRICATION OF ANY REINFORCING DETAILS AND ANY EMBEDDED ITEMS AND DETERMINE PRIOR TO FABRICATION OF ANY
AWWA D100-11 ACI 318-14	6. ALL PIPES TO BE ASTM A53 GRADE B.	REINFORCING, PLACEMENT REQUIREMENTS AND CLEARANCES.
CAL / OSHA	7. ALL THREADED RODS: ASTM F1554 GRADE 55.	4. EPOXY ANCHORS SHALL BE ONE OF THE FOLLOWING, UNO:
5. LOADS: ROOF LIVE LOADS: 20 PSF (REDUCTIONS TAKEN AS ALLOWED BY BUILDING CODE)	 BOLTED CONNECTIONS. UNLESS NOTED OTHERWISE: 1-INCH DIAMETER A325-N BOLTS. 	HILTI HIT-HY 200 (ICC-ES REPORT ESR-3187)
MAINTENANCE PLATFORM: 60 PSF	9 INSTALL HIGH STRENGTH BOLTS IN ACCORDANCE WITH SECTION 8 OF THE "SPECIFICATIONS FOR STRUCTURAL JOINTS	HILT HIT-RE 500 (ICC-ES REPORT ESR-2322)
WIND LOADS:	USING ASTM A325 OR A490 BOLTS", LATEST EDITION.	SIMPSON SET-3G (ICC-ES REPORT ESR-4057)
BASIC WIND SPEED: V = 115 MPH	10. PROVIDE BEVELED WASHERS ON ALL CONNECTION TO SLOPING FLANGES OF W SECTIONS AND CHANNELS WHERE	
RISK CATEGORY: IV (ESSENTIAL FACILITY) EXPOSURE CATEGORY: C INTERNAL DEPSYLIPE COEFECIENT: 10.19	SLOPE EXCEEDS 1.2 11. ANCHOR RODS SHALL BE THREADED ANCHOR RODS WITH NUT. THE EMBEDDED NUT SHALL BE TACK WELDED TO THE ANCHOR ROD TO PREVENT ROTATION DURING TIGHTENING	
SEISMIC LOADS (KORBLEX): SEISMIC IDADS (KORBLEX):	12. BOLT HOLES IN STEEL SHALL BE "STANDARD" (1/16-INCH LARGER IN DIAMETER THAN THE NOMINAL BOLT SIZE), UNLESS	
MAPPED SPECTRAL RESPONSE ACCELERATIONS: S ₈ = 2.61 g	OTHERWISE NOTED. 13. WELDING ELECTRODES (FILLER METAL): E70XX (70 KSI), WITH EXACT FILLER METAL SELECTED BY THE FABRICATOR.	
S ₁ = 1.07 g SPECTRAL RESPONSE COEFFICIENTS:	 WELD LENGTHS CALLED FOR ON THE PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE LENGTH OF WELD IS NOT SHOWN IT SHALL BE THE FULL LENGTH OF THE JOINT. 	
SDS = 2.09 g SD1 = 1.22 g SD1 = 1.22 g	 COMPLETE PENETRATION WELDS SHALL BE MADE WITH PROPER BACKING WHEREVER POSSIBLE. FULL PENETRATION WELDS MADE WITHOUT PROPER BACKING SHALL HAVE THE ROOT COLLEGE REFORE WELDING IS STATED FROM THE 	
Selsmic design category: E	OTHER SIDE EXCEPT AS PROVIDED IN AWS D1.1.	ALL CUNCRE 1E REINFORCING SHALL BE AS IM A615, FY = 60 KSI., UNLESS NO 1ED 01HERWISE. REINFORCING SHALL EXTEND CONTINUOUS FOR THE DIMENSION SHOWN.
 REFERENCE TO CODES, RULES, REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST PRINTED FINITION OF EACH IN FEFERIT AT THE DATE OF SUBMISSION OF PID 	 ALL BUTT AND GROOVE WELDS SHALL BE FULL PENETRATION, UNLESS NOTED OTHERWISE. 	3. NO WELDING OF ANY REINFORCING IS PERMITTED, UNLESS SPECIFICALLY STATED ON THE PLANS. REINFORCEMENT
UNLESS THE DOCUMENT DATE IS SHOWN.	 ALL SPLICING OF MEMBERS SHALL BE AS SHOWN ON THE DRAWINGS. ANY SPLICING OF THE STEEL MEMBERS PROPOSED BY THE STEEL FABRICATOR SHALL BE SHOWN ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER 	TO BE WELDED TO MEET THE REQUIREMENTS OF ASTM A706.
7. THESE DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT	PRIOR TO FABRICATION.	4. LOCATE ALL REINFORCING AS SHOWN ON DRAWINGS AND FASTEN SECURELY.
SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE.	18. ALL STEEL FABRICATION SHALL BE PERFORMED BY A FABRICATOR APPROVED BY THE OWNER.	5. LAP SPLICES AND DEVELOPMENT LENGTHS PER DETAIL ON DRAWING S-501.
8 THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND FOR CHECKING DIMENSIONS	19. ALL ANCHOR BOLTS SHALL BE EMBEDDED AS SHOWN ON THE DRAWINGS.	6. REINFORCEMENT SHALL BE PLACED SO AS NOT TO COME IN CONTRACT WITH METALLIC CONCRETE PENETRATIONS.
NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.	20 MINIM IN PLATE THICKNESS: 3/8 INCH UNLESS OTHERWISE NOTED MINIMUM WELD-1/4* UNLESS OTHERWISE NOTED	7. ALL REINFORCING TO TERMINATE WITH STANDARD HOOKS AS SHOWN ON PLANS. ALL STIRRUPS AND TIES TO BE CLOSED WITH 138° REMOS
9. PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES INCLUDE,		
BUT MAY NOT BE LIMITED TO, BRACING AND SHORING FOR LOADS DURING CONSTRUCTION. RETAIN A REGISTERED CIVIL ENGINEER WHOM IS FROPERLY QUALIFIED TO DESIGN BRACING, SHORING, ETC. VISITS TO THE SITE BY THE OWNER'S REPRESENTATIVE WILL NOT INCLUDE OBSERVATION OF THE ABOVE NOTED ITEMS.	 ALL STEEL FABRICATION AND DETAILS TO COMPLY WITH MOST STRINGENT OF: AISC CODE, AWS CODE, AND THE 2019 OBC. 	OTHERWISE.
10. INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY PEOPOT CONDITIONS THAT COVER ICT WITH THE CONTRACT DOCUMENTS TO	 ALL WELDING TO BE BY AWS CERTIFIED WELDERS AND SHALL CONFORM TO ALL 2019 CBC AND AWS REQUIREMENTS. ALL WELDERS SHALL BE PRE-QUALIFIED BY THE PROJECT WELDING INSPECTOR FOR THE WELD TYPES AND POSITIONS USED IN THE PROCEDURES THEY WILL BE PERFORMING. 	
THE OWNER'S REPRESENTATIVE. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION		
FROM THE OWNER'S REPRESENTATIVE.	23. UNLESS NOTED OTHERWISE, ALL STEEL EXPOSED TO WEATHER SHALL BE NOT DIP GALVANIZED, UNLESS IT IS PART OF THE PAINTED TANK ASSEMBLY.	
 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING A SAFE PLACE TO WORK AND MEETING THE REQUIREMENTS OF ALL APPLICABLE JURISDICTIONS. EXECUTE WORK TO ENSURE THE SAFETY OF PERSONS AND ADJACENT PROPERTY AGAINST DAMAGE BY FALLING DEBRIS AND OTHER HAZAROS IN CONNECTION WITH THIS WORK. 		
 UNLESS NOTED OTHERWISE, REFER TO DRAWINGS OTHER THAN STRUCTURAL FOR FINISHES, SLOPES, DEPRESSIONS, OPENINGS, CURBS, STAIRS, RAMPS, TRENCHES, EQUIPMENT AND LOCATIONS AND EXTENT OF SUCH CONDITIONS. 	HELICAL ANCHORS	DEFERRED SUBMITTALS
13. CONTRACTOR TO COORDINATE ALL NEW WORK WITH EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO	1. CONTRACTOR SHALL SUBMIT HELICAL ANCHOR SHOP DRAWINGS INCLUDING MANUFACTURER DATA, CURRENT VALID ENGINEERING TEST REPORTS, AND SITE SPECIEUS CADADUTY CALID III A TIONS STANDED AND SIGNED BY A CALIEDRING LIGHNER	1. DEFERRED SUBMITTALS ARE BY THE CONTRACTOR. DETAILS SHOWN IN THESE SECTIONS ARE FOR BIDDING BURDOSES ONLY AND NOT ECO CONSTRUCTION
THE ENGINEER PRIOR TO CONSTRUCTION.	PROFESSIONAL ENGINEER. SITE SPECIFIC ANCHOR CALCULATIONS SHALL BE BASED UP ON THE PROJECT GEOTECHNICAL REPORT.	2 DEFERRED SUBMITTALS INCLUDE:
14. DETAILS OR CONDITIONS NOT FULLY DEVELOPED ON STRUCTURAL DOCUMENTS ARE SIMILAR TO DEVELOPED DETAILS.	 FOR BIDDING PURPOSES, ANCHOR SCHEMATIC DESIGN IS BASED UPON HUBBELL POWER SYSTEMS INC. CHANCE ANCHORS PER ESR-274. 	2 MG KORBLEX TANK ROOF REPLACEMENT 1 MG KORBLEX TANK HELICAL ANCHORS
10. SEE SPECIFICATIONS FOR AUDITIONAL REQUIREMENTS.	3. ANCHOR DESIGN SHALL PROVIDE FOR A MINIMUM 50 YEAR DESIGN LIFE WITH CORROSION ALLOWANCE BASED UPON THE SITE	3. CONTRACTOR SHALL SUBMIT STEEL TANK ROOF PLANS AND CALCULATIONS TO THE OWNER FOR APPROVAL AND DEBMIT DRIOR TO ANY CONSTRUCTION DLANS AND CALCULATIONS MIST BE PREPARED SEALED AND SIGNED BY A
16. ALL PLANS TO BE COORDINATED WITH GENERAL NOTES AND TYPICAL DETAILS AS APPLICABLE.	SPECIFIC SOIL CORROSIVITY ANALYSIS REPORT.	CALIFORNIA LICENSED ENGINEER. CALCULATIONS SHALL INCLUDE ANALYSIS OF NEW ROOF WITH SEISMIC SLOSHING WAVE CONSIDERATION
17. ALL LADDERS, RAILINGS, PLATFORMS, AND SAFETY ELEMENTS SHALL BE PROVIDED IN CONFORMANCE WITH CAL / OSHA	4. MINIMUM ANCHOR CAPACITY AND EMBEDMENT PARAMETERS ARE AS FOLLOWS:	
STANDARDS.	a. 1MIG KORBLEX TANK, 33 KIP TENSION CAPACITY WITH ANCHORS AT 4'40' OIC AROUND PERIMETER. FINAL EMBEDMENT LENGTH BY ANCHOR DESIGNER, APPROXIMATED AT 20 FEET FOR BID PURPOSES.	CONTRACTOR STEEL FAIN ROUP SUBMIT LA PACKAGE WILL BE SUBJECT TO OWNER REVIEW AND COMMENT. CONTRACTOR WILL BE RESPONSIBLE FOR ADDRESSING OWNER REVIEW COMMENTS AND RESUBMITTING THE TANK DODE CUMMENTAL AD REFERENCE DESCRIPTION DESCRIPTION TO REVIEW TO ADDRESSING THE TANK
		ROUP SUBMITTAL AS NECESSART. UMINER RESERVES RIGHT TO REQUEST DESIGN MUDIFICATIONS BASED ON SERVICEABILITY / MAINTENANCE REQUIREMENTS, ETC.
FUUNDATIONS	SPECIAL INSPECTIONS	
1. FOUNDATION DESIGN WILL BE BASED ON CRITERIA AND RECOMMENDATIONS PRESENTED IN THE GEOTECHINCAL	1. SPECIAL INSPECTION IN ACCORDANCE WITH 2019 CALIFORNIA BUILDING CODE CHAPTER 17 IS REQUIRED ON THE	
INVESTIGATION REPORT: HBMWD RESERVOIRS SEISMIC RETROFIT PROJECT, THREE WATER TANKS, KORBLEX AND SAMOA, CALIFORNIA, PREPARED BY PREPARED BY CRAWFORD & ASSOCIATES, INC. DATED JULY 2021.	FOLLOWING PORTIONS OF THE WORK: STRUCTURAL STEEL	
2. ALLOWABLE BEARING PRESSURE FOR TANK FOUNDATIONS IS 3,000 PSF WITH A 1/3 INCREASE FOR SEISMIC, FOR BOTH	CONCRETE HELICAL ANCHORS	
I ANK SITES.	2. (REFER TO THE STATEMENT OF SPECIAL INSPECTIONS FOR MORE SPECIFIC REQUIREMENTS)	
		60% DESIGN
I		
	Bar is one inch on	
	original size sneet 0 1"	
		T 1 707 443 8326 F 1 707 444 8330
No. Issue Checked Approved Date		Conditions of Use RETROFIT
Author S. GOULD Drafting Check S. MCHANEY Project Manager NS		This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this 112/18/850 07.23.2021 AC CULCULU
Designer S. GOULD Design Check B. CROWELL Project Director SXM ato Date: 30. July 2021 - 11:28 AM Potteri Rv Michellin Davidson Path and Filename: Undertail/INFLinekal/Project/65/311/3188/03.violation	designiacad 2020/Sheets/Kothlev/11218859-GHD-0001-DWG-ST-0001.dwn	document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.
- store by sec 1.20 mm - Honed by michaile bandson - Edit and Hiename: lignonetignoluSiEurekai/Hojects/551/11218859/digital_	งงาสุกรรรษ ของกลางสารายของสาราย 2000 การาชา กรรรรษที่ 1 การาชา 1.545	

	STATEMENT OF SPI	ECIAL INSPECTIONS
STATEMENT OF SPECIAL INSPECTIONS	QUALIFICATIONS OF INSPECTORS AND TESTING TECHNICIANS	TABLE 1705.2 - STE
THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED IN ACCORDANCE WITH THE SPECIAL INSP AND STRUCTURAL TESTING REQUIREMENTS OF THE RUILDING CODE SECTIONS 1704 AND 1705	ECTION THE QUALIFICATIONS OF ALL PERSONNEL PERFORMING SPECIAL INSPECTION AND TESTING ACTIVITIES ARE SUBJECT TO THE	ITEM 1: MATERIAL VERIFICATION OF HIGH-STRENGTH AGENCY # (QUALIF.): BOLTS, NUTS, AND WASHERS. AWS/AISC-SSI, ICC-SWSI
THIS STATEMENT OF SPECIAL INSPECTIONS ENCOMPASS THE FOLLOWING DISCIPLINES:	APPROVAL OF OWNER. THE CREDENTIALS OF ALL INSPECTORS AND TESTING TECHNICIANS SHALL BE PROVIDED IF REQUESTED. KEY FOR MINIMUM QUALIFICATIONS OF INSPECTION AGENTS:	A IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS REFERENCE SIDS.: SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS, AISC 360, SECTION A3.3 AND APPLICABLE
STRUCTURAL SPECIAL INSPECTIONS PER 1704	WHEN THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE DEEMS IT APPROPRIATE THAT THE INDIVIDUAL PERFORMING A STIPULATED TEST OR INSPECTION HAVE A SPECIFIC CERTIFICATION OR LICENSE AS INDICATED BELOW, SUCH DESIGNATION SHALL APPEAR BELOW THE AGENCY NUMBER ON THE SCHEDULE.	B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.
THE SCHEDULE OF SPECIAL INSPECTIONS SUMMARIZES THE SPECIAL INSPECTIONS AND TESTS REC SPECIAL INSPECTORS WILL REFER TO THE APPROVED PLANS AND SPECIFICATIONS FOR DETAILED S INSPECTION REQUIREMENTS. ANY ADDITIONAL TESTS AND INSPECTIONS REQUIRED BY THE APPROV PLANS AND SPECIFICATIONS WILL ALSO BE PERFORMED.	UIRED. PECIAL PED ED ET EVANIMATED PEGE ET EVANIMATED ET EVANIMATED ET EVANIMATED ET ET EVANIMATED ET EVANIMATED ET EVANIMATED ET EVANIMATED ET EVANIMATED EVANIMA	ITEM 2: INSPECTION OF HIGH-STRENGTH BOLTING: AGENCY
THE SPECIAL INSPECTIONS IDENTIFIED ARE IN ADDITION TO THOSE REQUIRED BY OTHER SECTIONS BUILDING CODE.	DF THE AMERICAN CONCRETE INSTITUTE (ACI) CERTIFICATION	
THE SPECIAL INSPECTION COORDINATOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND SHALL FI INSPECTION REPORTS TO THE OWNER AND THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIE CHARGE. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPAN SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE REGISTERED DESIGN PROFESSION RESPONSIBLE CHARGE. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTO INS OR HER RESPONSIBILITIES.	ACI-CFTT CONCRETE FIELD TESTING TECHNICIAN - GRADE 1 ACI-CFTT CONCRETE FIELD TESTING TECHNICIAN - GRADE 1 ACI-CTT CONCRETE FOR ONSPECTOR ACI-CTT STRENGTH TESTING TECHNICIAN - GRADE 182 ACI-STT STRENGTH TESTING TECHNICIAN -	B. PRELENSIONED AND SUP=URITICAL JOINTS USING TURN-OF-NUT MATCHMARKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION. AISC 360 I⊠ PERIODIC CONTINUOUS C. PRETENSIONED AND SUP=CRITICAL JOINTS USING TURN-OF-NUT WITHOUT MATCHMARKING OR CALIBRATED WRENCH METHODS OF INSTALLATION.
INTERIM REPORTS SHALL BE SUBMITTED TO THE OWNER AND THE REGISTERED DESIGN PROFESSIO DESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 1704 1.2	VAL IN INTERNATIONAL CODE COUNCIL (ICC) CERTIFICATION	ITEM 3: MATERIAL VERIFICATION OF STRUCTURAL STEEL AGENCY # (QUALIF.): PE/SE
A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS, TESTING AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHA SUBMITTED PRIOR TO PROJECT COMPLETION. THE FINAL REPORT WILL DOCUMENT THE REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF DISCREPANCIES NOTED IN INSPECTIONS.	LCC-SWIS STRUCTURAL MASUNITY SPECIAL INSPECTOR ICC-SWIS STRUCTURAL STEL AND WELDING SPECIAL INSPECTOR ICC-SFIS SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR ICC-PCSI PRESTRESSEE CONCRETE SPECIAL INSPECTOR ICC-RCSI REINFORCED CONCRETE SPECIAL INSPECTOR	SCOPE: A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360 REFERENCE SIDS. AISC 360, SECTION A3.3 AND APPLICABLE ASTM MATERIAL STANDARDS
JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY CONTRACTOR.	AMERICAN SOCIETY OF NONDESTRUCTIVE TESTING (ASNT) OF THE	B. FOR OTHER STEEL, IDENTIFICATION ON MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN APPROVED CONSTRUCTION DOCUMENTS.
THE CONTRACTOR IS REQUIRED TO COORDINATE ALL INSPECTIONS. THE CONTRACTOR SHALL NOT OWNER'S REPRESENTATIVE AND THE SPECIAL INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO ANY SPECIAL INSPECTIONS THAT ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY THE OWNER'S DEPDESENTATIVE AND THE SPECIAL INSPECTOR A MINIMUM OF CALIFORD PROPERTY OF CONTRACTOR SPECIAL INSPECTIONS THAT ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY THE OWNER'S	TABLE 1705.6 - SOILS	Image: Continuous Continuous C. Manufacturer's certified test reports Image: Continuous Continuous
POURED.	ITEM 1: VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE AGENCY # (QUALIF.): PE/GE	TEM 4: MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK AGENCY # (QUALIF.): AWS-CWI, ASNT
ALL SPECIAL INSPECTORS AND QUALIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER-OF-RECOF THE OWNER FOR REVIEW.		A MANUFACTURER'S CERTIFIED TEST REPORTS
SPECIALLY INSPECTED WORK THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE OV IS SUBJECT TO REMOVAL OR EXPOSURE.	NER AND HAVE REACHED PROPER MATERIAL TO FIND THE DEFINIT AGENCY # (CORD.), FE/GE	ITEM 5: MATERIAL VERIFICATION OF WELD FILLER MATERIALS AGENCY # (QUALIF.): AWS-CWI, ASNT
CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLES OTHERWISE SPECIFIED. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WOR SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED, IT IS THE AGENT'S RESPONSIBILITY TO EMPLIC SUEPTIONE NUMBER OF INSPECTATION FOR THE THAT ALL THE WORK IS INSPECTED IN ACCORDAN	ITEM 3: PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS. AGENCY ⋕ (QUALIF.): PE/GE YY A XI CONTINUOUS	SCOPE: A IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS. AISC 360, SECTION A3.5 AND APPLICABLE AWS A5 DOCUMENTS
WITH THE PROVISIONS OF THE BUILDING CODE.	THEM 4: VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. ☑ PERIODIC □ CONTINUOUS
		ITEM 6: INSPECTION OF WELDING AGENCY # (QUALIF.): AWS-CWI, ASNT
	SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	A STRUCTURAL STEEL AND COLD-FORMED STEEL DECK
EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OR FABRICATION OF A SYSTEM OR COMPONENT DESIGNATED ABOVE AS PART OF THE MAIN WIND FORCE OR MAIN SEISMIC FORCE RESI SYSTEMS ABOVE MUST SUBMIT A STATEMENT OF RESPONSIBILITY PER SECTION 1706.	STING	COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS □ PERIODIC ⊠ CONTINUOUS MULTIPASS FILLET WELDS □ PERIODIC ▼ CONTINUOUS
SCHEDULE OF INSPECTION AND TESTING AGENCIES		3. SINGLE-PASS FILLET WELDS > %; REFERENCE STDS.
THIS STATEMENT OF SPECIAL INSPECTIONS / QUALITY ASSURANCE PLAN INCLUDES THE FOLLOWING BUILDING SYSTEMS:		4. PLUG AND SLOT WELDS
SOILS AND FOUNDATIONS UWOOD CONSTRUCTION GAST-IN-PLACE CONCRETE MECHANICAL & ELECTRICAL SYSTEMS PRECAST CONCRETE ARCHITECTURAL SYSTEMS MASONRY LEVEL 1 STEPL		5. SINGLE-PASS FILLET WELDS < %.*.
		6. FLOOR AND ROOF DECK WELDS. REFERENCE STUS.
SPECIAL INSPECTION AGENCIES PIRM AND CONTACT INFO. SPECIAL INSPECTION COORDINATOR TBD		B. REINFORCING STEEL:
2. CONCRETE INSPECTOR TBD		1. VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706
3. STEEL INSPECTOR TBD		2. REINFORCING STEEL RESISTING FLEXURAL AND AXIAL
4. SOILS INSPECTOR TBD		FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL
5. CONCRETE TESTING AGENCY TBD		WALLS OF CONCRETE AND SHEAR REINFORCEMENT. AWS DI.4 PERIODIC X CONTINUOUS ACI 318 SECTION 4.2.2
	Bar is one inch on nrininal size sheet	
	0 11 11 11	GHD 718 Third Street Eureka California 95501 USA
		T 1 707 443 8326 F 1 707 444 8330
No. Issue Checked Approved Date Author S. GOULD Drafting Check S. MCHANEY Project Manager NS		Conditions of Use This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of Prnjant No.
Designer S. GOULD Design Check B. CROWELL Project Director SXM		GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose. 11218859

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Designer S. GOULD

Plotted By: Michelle Davidson

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ITEM 7: INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE	AGENCY # (QUALIF.): AWS-CWI, ASNT
A. DETAILS SUCH AS BRACING AND STIFFENING. ⊠ PERIODIC □ CONTINUOUS	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. ☑ PERIODIC □ CONTINUOUS	
C. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. ⊠ PERIODIC □ CONTINUOUS	
TABLE 1705.3 - CONCRETE CO	
TEM 1: INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT. SQL PERIODIC C CONTINUOUS	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS: ACI 318: CH. 20, 25.2 25.3, 26.6.1-26.6.3
ITEM 2: REINFORCING BAR WELDING:	AGENCY # (QUALIF.): ACI-CWI
SCOPE: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706:	
	REFERENCE STDS.:
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM ⅔6"; AND. ⊠ PERIODIC □ CONTINUOUS	Amos D1.4 ACI 318: 26.6.4
C. INSPECT ALL WELDS. □ PERIODIC ⊠ CONTINUOUS	
ITEM 3: INSPECT ANCHORS CAST IN CONCRETE:	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS: ACI 318 17.8.2
ITEM 4: INSPECT TEST ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI
SCOPE: A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	REFERENCE STDS.: ACI 318: 17.8.2.4
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	REFERENCE STDS.: ACI 318: 17.8.2
	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI ACI 318 CH. 19, 26.4.3, 26.4.4
ITEM 6: PRIOR TO CONCRETE PLACEMENT, FABRICATED SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	AGENCY # (QUALIF.): ACI-CFTT, ACI-STT REFERENCE STDS.: ASTM C172 ASTM C31
	ACI 318: 26.4, 26.12
PROPER APPLICATION TECHNIQUES.	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS.: ACI 318: 26.5, ACI 506: 3.4
ITEM 8: VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES. ☑ PERIODIC □ CONTINUOUS	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS.: ACI 318: 26.5.3-26.5.5
ITEM 9: INSPECT PRESTRESSED CONCRETE FOR:	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS.: ACI 318: 26.10.2
A. APPLICATION OF PRESTRESSING FORCES; AND.	
□ PERIODIC ⊠ CONTINUOUS B. GROUTING OF BONDED PRESSTRESSING TENDONS. □ PERIODIC ▼ CONTINUOUS	
ITEM 10: INSPECT ERECTION OF PRECAST CONCRETE MEMBERS. ☑ PERIODIC □ CONTINUOUS	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS.: ACI 318: 26.9.2
ITEM 11: VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS WHEN BEAMS AND STRUCTURAL SLABS.	AGENCY # (QUALIF.): ACI-CFTT, ACI-STT REFERENCE STDS.: ACI 318: 26.10.2, 26.11.2
TEM 11: INSPECT FORMWORK FOR SHAPE LOCATION AND	
DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	REFERENCE STDS.: ACI 318: 26.11.2(B)

AY MUNICIPAL WATER

Title SPECIAL INSPECTIONS

60% DESIGN Size ANSI D

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Date 07-23-2021

Scale AS SHOWN





SHEET GENERAL NOTES

1. CONTRACTOR TO PROVIDE ALL COMPONENTS TO CONSTRUCT / INSTALL NEW WORK.









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Attachment 2

Samoa Reservoir Seismic Retrofit Project – 60% Design Drawings



APPROVALS

SIGNED

PLANS AND SPECIFICATIONS APPROVED BY THE BOARD OF DIRECTORS OF THE HUMBOLDT BAY MUNICIPAL WATER DISTRICT, COUNTY OF HUMBOLDT, STATE OF CALIFORNIA THIS DAY OF 2021

GENERAL MANAGER JOHN FRIEDENBACH

BOARD OF DIRECTORS

SHERI WOO NEAL LATT J. BRUCE RUPP MICHELLE FULLER DAVID LINDBERG

PRESIDENT VICE PRESIDENT SECRETARY-TREASURER ASSISTANT SECRETARY-TREASURER DIRECTOR

ENGINEER: GHD Inc.

STEVE MCHANEY

SIGNED

SHEET INDEX

SHEET NO.	DRAWING	DESCRIPTION
1	G-001	COVER SHEET AND SHEET INDEX
2	G-002	GENERAL NOTES, SYMBOLS AND ABBREVIATIONS
#	C-101	1 MG INDUSTRIAL EXISTING SITE CONDITIONS AND IMPROVEMENTS
#	C-102	1 MG INDUSTRIAL ROOF REPLACEMENT AND SITE PLAN
#	C-501	1 MG INDUSTRIAL TANK SHELL ELEVATION
#	C-502	SEISMIC CIVIL DETAILS 1
#	C-503	SEISMIC CIVIL DETAILS 2
6	C-504	CIVIL DETAILS
8	S-001	STRUCTURAL GENERAL NOTES
9	S-002	SPECIAL INSPECTIONS
10	S-101	1 MG INDUSTRIAL TANK FOUNDATION PLAN
12	S-102	1 MG INDUSTRIAL ROOF PLAN
13	S-501	TANK ROOF DETAILS
14	S-502	TYPICAL CONCRETE DETAILS

60% DESIGN

HUMBOLDT BAY MUNICIPAL WATER [™] COVER SHEET AND SHEET INDEX Size ANSI E ^t SAMOA RESERVOIR SEISMIC Date 07-23-2021 G-(AS SHOWN

 CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE. CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND BECOMING FAMILIAR WITH THE SITE CONDITIONS PRIOR TO BIDDING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE ALL SURVEY MONUMENTS, FENCES, ROADS, CORNER PIPES, OR OTHER SITE DEVELOPMENTS DISTURBED DURING THE PROCESS OF CONSTRUCTION AT THE CONTRACTOR'S OWN EXPENSE. IF A MONUMENT HAS THE POTENTIAL OF BEING DISTURBED, A CORNER RECORD SHALL BE FILED WITH THE COUNTY SURVEYOR (PER SECTION 873.2 OF THE PUBLIC LAND SURVEYORS ACT) AS REQUIRED BY THE SUBDIVISION MAP ACT TO PRESERVE THE LOCATION OF SAID MONUMENT. CONTRACTOR'S SHALL SE FILED WITH THE COUNTY SURVEYOR (PER SECTION 873.2 OF THE PUBLIC LAND SURVEYORS ACT) AS REQUIRED BY THE SUBDIVISION MAP ACT TO PRESERVE THE LOCATION OF SAID MONUMENT. CONTRACTOR'S HALL, AT HIS/HER EXPENSE, HIRE A CIVIL ENGINEER OR LAND SURVEYOR TO PERFORM THE WORK. CONTRACTOR SHALL PROVIDE ADEQUATE DUST AND EROSION AND SEDIMENT CONTROL AND KEEP MUD AND DEBRIS OFF ROADS AT ALL TIMES. CONTRACTOR SHALL DED SUBJENT STAGING AREAS AND ANY OTHER AREAS AS DEPICTED ON THESE DOCUMENTS FOR STAGING CONSTRUCTION FOR UPMENT 	 SURVEY OF EXISTING CONDITIONS PREPARED BY LACO ASSOCIATES. SEE SURVEY NOTES. THE CONTRACTOR RESPONSIBLE FOR FIELD VERIFICATION OF ALL SURVEY DATA. CONTRACTOR IS RESPONSIBLE FOR ESTABLIS OF-WAY LINES, SLOPE EASEMENTS, AND ALL HORIZONTAL AND VERTICAL CONTROL PRIOR TO CONSTRUCTIO CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND SHALL ARRANGE FOR STAKING WITH A LIC SURVEYOR. STAKING WILL BE REVIEWED BY OWNER FOR CONFIRMATION TO DESIGN PRIOR TO CONSTRUCTION 	R IS A B HING RIGHT- AB N. AC AGG	ANCHOR BOLT AGGREFATE BASE	LS	LIFT STATION			
1. TII STHE CONTRACTOR'S RESPONSIBILITY TO REPLACE ALL SURVEY MONUMENTS, FENCES, ROADS, CORNER PIPES, OR OTHER SITE DEVELOPMENTS DISTURBED DURING THE PROCESS OF CONSTRUCTION AT THE CONTRACTOR'S OWN EXPENSE. IF A MONUMENT HAS THE POTENTIAL OF BEING DISTURBED, A CORNER RECORD SHALL BE FILED WITH THE COUNTY SURVEYOR (PER SECTION 873.2 OF THE PUBLIC LAND SURVEYORS ACT) AS REQUIRED BY THE SUBDIVISION MAP ACT TO PRESERVE THE LOCATION OF SAID MONUMENT. CONTRACTOR SHALL, AT HIS/NER EXPENSE, HIRE A CIVIL ENGINEER OR LAND SURVEYOR TO PERFORM THE WORK. 3. CONTRACTOR SHALL PROVIDE ADEQUATE DUST AND EROSION AND SEDIMENT CONTROL AND KEEP MUD AND DEBRIS OFF ROADS AT ALL TIMES. 4. CONTRACTOR SHALL USE DESIGNATED STAGING AREAS AND ANY OTHER AREAS AS DEPICTED ON THESE DOCUMENTS FOR STAGING CONSTRUCTION FOR UPMENT	 CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKING AND SHALL ARRANGE FOR STAKING WITH A LIC SURVEYOR. STAKING WILL BE REVIEWED BY OWNER FOR CONFIRMATION TO DESIGN PRIOR TO CONSTRUCT 		AGGREGATE	LI	LEFT	NOTE: CONTEAXCITSTEINGINEER FOR ABI NOT LISTED.	BREVIATIONS EXIST	ING
MAP ACT TO PRESERVE THE LOCATION OF SAID MONUMENT. CONTRACTOR SHALL, AT HISHER EXPENSE, HIRE A CIVIL ENGINEER OR LAND SURVEYOR TO PERFORM THE WORK. 3. CONTRACTOR SHALL PROVIDE ADEQUATE DUST AND EROSION AND SEDIMENT CONTROL AND KEEP MUD AND DEBRIS OFF ROADS AT ALL TIMES. 4. CONTRACTOR SHALL USE DESIGNATED STAGING AREAS AND ANY OTHER AREAS AS DEPICTED ON THESE DOCUMENTS FOR STAGING CONSTRUCTION FOULIPMENT	ALL GRADES BETWEEN SPOT ELEVATIONS SHALL HAVE UNIFORM SLOPE UNLESS OTHERWISE INDICATED. MA	CENSED ARV ON. AVE AWW	AIR VACUUM RELEASE VALVE AVENUE VA AMERICAN WATER WORKS ASSOCIATION	M MAX MFR MG	METER MAXIMUM MANUFACTURER MILLION GALLON	EDGE OF AC PA OVERHEAD WR		GAS METER GAS VALVE
OFF ROADS AT ALL TIMES. 4. CONTRACTOR SHALL USE DESIGNATED STAGING AREAS AND ANY OTHER AREAS AS DEPICTED ON THESE DOCUMENTS FOR STAGING CONSTRUCTION FOULPMENT	POSITIVE DRAINAGE AWAY FROM ALL BUILDING WALLS AND DOORS. 4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION. ADEQUATE SHORING BRACI AND SUBDADTS SHALL BE LISED TO DROWINE DRADED TEMPORARY INTECRITY DURING ALL PLASES OF CONS	ING, TIES, BF	BORING BEGIN CURVE BLIND FLANGE BUTTERFLY VALVE	MH MIN MPG MISC	MANHOLE MINIMUM MEDIUM PRESSURE GAS MISCELLANEOUS	OVERHEAD ELE OVERHEAD TEL OVERHEAD TEL	ECTRIC WIRES	WATER METER
FOR STAGING CONSTRUCTION FOURPMENT	 All EXISTING LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWOR OPERATIONS SHALL BE HAND RAKED SMOOTH AND RETURBED TO ORIGINAL EXISTING CONDITIONS. 	K BM BLDC	BACK FLOW PREVENTER BENCH MARK BUILDING	N (N)	NORTH NEW	UNDERGROUND	D ELECTRIC LINE	WATER VAULT HOSE BIBB
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ALL CONSTRUCTION. ADEQUATE BRACING, FALL PROTECTION, AND SUPPORTS SHALL BE USED TO PROVIDE PROPER TEMPORARY INTEGRITY AND WORKER PROTECTION DRIVEN DRIVER TO DRIVEN DR	 ALL DITCHES, SWALES, GUTTERS, ETC. SHOULD BE CONSIDERED ACTIVE STORM CONVEYANCES UNLESS OT INDICATED. CONTRACTOR IS RESPONSIBLE FOR ADDRESSING STORM WATER DRAINAGE AND DEWATERING AREAS DURING CONSTRUCTION. 	THERWISE BO OF WORK BOT BVC	D BOULEVARD BLOW OFF BOTTOM BEGIN VERTICAL CURVE	NIC NO NPT NTS	NOT IN CONTRACT NUMBER NATIONAL PIPE THREAD NOT TO SCALE	ELECTRIC LINE SL STREET LIGHT	CONDUIT	-OH FIRE HYDRANT WATER TAPPING SADDLE
 UPON COMPLETION OF THE CONSTRUCTION PROJECT, THE CONTRACTOR SHALL LEAVE THE PROJECT AREA FREE OF DEBRIS AND UNUSED MATERIAL ALL DAMAGE CAUSED BY THE CONTRACTOR SHALL BE RESTORED TO AN "AS GOOD OR 	 DURING WET WEATHER PERIODS, CONTRACTOR IS RESPONSIBLE FOR SEQUENCING CONSTRUCTION IN A M/ MINIMIZE IMPACT ON OPEN EARTHWORK AND COMPACTION OPERATIONS. 	ANNER TO C CB CBC	CONDUIT CATCH BASIN CALIFORNIA BUILDING CODE	OC OPNG	ON CENTERS OPENING	G GAS LINE	ER LINE OSSC	SANITARY SEWER MANHOLE O SANITARY SEWER CLEANOUT
BETTER* CONDITION. 1. IT IS EXPECTED THAT THE ACTUAL LOCATION OF EXISTING UTILITIES MAY VARY FROM THAT SHOWN ON THE PLANS. CONTRACTOR SHALL POTHOLE AND LOCATE ALL EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY UNDERGROUND	 COMPLETELY COVER ANY SOIL STOCKPILES WITH 6 MIL BLACK PLASTIC AND PROVIDE RESTRAINTS TO HOLD PLACE. MONITOR PLASTIC COVER AS PART OF CONTINUOUS EROSION CONTROL PLAN. PLACE SILT FENCE C AROUND STOCKPILE. 	DPLASTIC IN CCR OMPLETELY CI CL CLR	CALIFORNIA CODE OF REGULATIONS CAST IRON CENTERLINE CLEAR, CLEARANCE	PC PCC PE PI	POINT OF CURVATURE PORTLAND CONCRETE CEMENT POLYETHYLENE POINT OF INTERSECTION	SSFM-SANITARY SEW	ER FORCE MAIN .S	SEWER VENT
SERVICE ALERT PRIOR TO WORK COMMENCING FOR ANY EXCAVATION OR POTHOLING.	STAGING	CLS CO CMI	CONCRETE LINED STEEL PIPE CLEAN OUT CEMENT MORTAR LINED STEEL	PL PL PLCS	PROPERTY LINE PLATE PLACES	T TELEPHONE LIN	IE CE	CATCH BASIN
 CONTRACTOR IS RESPONSIBLE FOR CONFINITION THAT NEW PEATORES THE INTO EXISTING STILE DEVELOPMENT, PAVEMENT JOINTS MARTCH CORRECTLY, AND THAT GENERAL DESIGN ELEVATIONS FOR NEW CONSTRUCTION PROVDE PROPER PAVEMENT AND DRAINAGE SLOPES FROM EXISTING THE IN POINTS. REPORT DISCREPANCIES TO OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION. 	1. CONTRACTOR MAY STAGE ON EXISTING PAVED AREAS. COORDINATE STAGING LOCATION WITH OWNER.	CML CMP CMU CON CON	CONCRETE MASONRY UNIT CONCRETE MASONRY UNIT C CONCRETE CONTINUOUS	PLWD POC PP PRV	PLYWOOD POINT OF CONNECTION POWER POLE PRESSURE REDUCING VALVE		CATIONS C	CURB INLET
HAZARDOUS MATERIAL NOTES	UTILITY NOTES	CON COR CU	TD CONTINUED CORNER CUBIC	PSI PT PT	POUNDS PER SQUARE INCH POINT POINT OF TANGENCY	TV TELEVISION LIN	E SDCO	STORM DRAIN CLEANOUT ELECTRIC VAULT COVER
 SEE LIMITED HAZARDOUS MATERIALS SURVEY REPORT, KORBLEX AND SAMOA RESERVOIR SEISMIC RETROFIT PROJECT, HUMBOLDT BAY MUNICIPAL WATER DISTRICT, 30 JUNE 2021 BY GHD. 	 LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM RECORD DRAWINGS AND INTERPOLA PHYSICAL EVIDENCE ON THE SITE AND ARE SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR. 	ATION OF d DIA,	CHECK VALVE PENNY (NAIL SIZE) Ø DIAMETER	PT PTFE PVC	PRESSURE I REATED POLYTETRAFLUOROETHYLENE POLVINYL CHLORIDE PLASTIC PIPE	— wa — _ WATER LINE TO	ABANDONED	ELECTRIC PULLBOX
2 CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFORMANCE WITH ALL STATE AND FEDERAL REGULATIONS WITH RESPECT TO HAZARDOUS MATERIALS HANDLING AND DISPOSAL AND FOR PROTECTION OF WORKERS AND OWNERS AND OWNER'S REPRESENTATIVE PERSONNEL ON SITE.	CONTRACTOR SHALL COORDINATE CONSTRUCTION SEQUENCING AND SHUT DOWNS WITH DISTRICT STAFF. LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE PLOTTED FROM RECORD DRAWINGS AND INTERPOLA PHYSICAL EVIDENCE ON THE SITE AND ADE SITE OF TO EEL DIVED/ECOND BY THE CONTRACTOR SEC GEM	ATION OF DF	DETAIL DIP DUCTILE IRON PIPE DOUGLAS FIR DRIVE	r RC RCP RD	RADIUS RELATIVE COMPACTION REINFORCED CONCRETE PIPE ROAD	W WATER LINE TO		HIGH VOLTAGE ELECTRIC TELEPHONE MANHOLE
3. ANY ASBESTOS CEMENT PIPE ENCOUNTERED DURING CONSTRUCTION TO BE PROPERLY HANDLED AND DISPOSED BY THE CONTRACTOR.	SITE NOTES 1 AND 7. SEE UTILITY LOCATING AND MAPPING SPECIFICATIONS. 4. ALL LOCATIONS FOR WORK SHALL BE CHECKED AND COORDINATED WITH EXISTING CONDITIONS IN THE FIELD	D BEFORE (E)	DOMESTIC WATER LINE DRAWING	RDWD REQ'D REQ'T RPP	REDWOOD REQUIRED REQUIREMENT REDUCED PRESSURE PRINCIPAL	89 CONTOUR ELEN	ATION LINE مر	POWER POLE GUY WIRE & ANCHOR
VEGETATION PROTECTION AND RESTORATION NOTES	BEGINNING CONSTRUCTION UNDER THIS SECTION OR ANY OTHER SECTION. 5. THE WORKING DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY OFFSET, BEND OR EI	LBOW EA	EAST, OR EASTING EACH	RT R/W	RIGHT RIGHT OF WAY		<u>ب</u> (2)	
 NO CUTTING OF ANY PART OF TREES, INCLUDING ROOTS, SHALL BE DONE WITHOUT SECURING APPROVAL FROM OWNER. 	REQUIRED FOR INSTALLATION IN THE SPACE PROVIDED. THEY DO NOT SHOW EVERY DIMENSION, COMPONEN OR FITTING REQUIRED TO COMPLETE THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMP WORKING SYSTEM.	IT PIECE, EC LETE AND EP EQ	END CURVE EACH FACE EDGE PAVEMENT EQUAL	S SAT SCH, OR	SLOPE SATURATED	MONUMENT LIN	⊑£	JOINT POLE STREET LIGHT
ALL EXISTING LANDSCAPED AND UNPAVED AREAS WHICH ARE DISTURBED BY CONSTRUCTION OR EARTHWORK OPERATIONS SHALL BE HAND RAKED SMOOTH AND RETURNED TO ORIGINAL EXISTING CONDITIONS. LANDSCAPING THAT IS REMOVED TO FACILITATE CONSTRUCTION SHALL BE REPLACED IN KIND.	6. CONTRACTOR SHALL COORDINATE USA UTILITY LOCATE 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONST CONTRACTOR SHALL COORDINATE THE UTILITY LOCATE WITH THE OWNER FOR ALL UTILITY WORK. CONTRACT NOTE THAT CAMPUS OWNED UTILITIES WILL NOT BE MARKED VIA 4 USA LOCATE. CONTRACTOR TO BUPLOY TI UTILITY LOCATING TECHNIQUES ALONG ALL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITY EACHTOR BY CONTRACTORS WORK WILL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITY EACHTOR BY CONTRACTORS WORK WILL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITY EACHTOR BY CONTRACTORS WORK WILL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITY EACHTORS BY CONTRACTORS WORK WILL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITY EACHTORS WILL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITY EACHTORS WILL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITY EACHTORS WILL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITY EACHTORS WILL PROPOSED ROUTES OF NEW UTILITYS AND TO MARK ALL CAMPU UTILITY EACHTORS WILL PROPOSED ROUTES OF NEW UTILITYS AND TO MARK ALL CAMPU UTILITY EACHTORS WILL PROPOSED ROUTES OF NEW UTILITIES AND TO MARK ALL CAMPU UTILITYS AND THE AND TO MARK ALL CAMPU UTILITYS AND THE AND TH	RUCTION. ER EXTOR TO EL/EI HEIR OWN ENG IS OWNED ENG STUNC EVC	EDGE ROAD LEV ELEVATION ELECTRIC, OR ELECTRICAL R ENGINEER END VERTICAL CURVE	SCHED SD SDMH SDCB SHT	SCHEDULE STORM DRAIN STORM DRAIN MANHOLE STORM DRAIN CATCH BASIN SHEET	x 95.94 SPOT ELEVATIO	n k 🌣	ELECTROLIER SIGN (AS NOTED)
4. ALL DISTURBED AREAS SHALL BE RAKED SMOOTH AND HYDROSEEDED FOLLOWING CONSTRUCTION.	UTILITIES AFFECTED OF CONTRACTORS INFORM UTILET IN LOGATE INDICATES THAT EX UTILITIES ARE DIFFERENT THAN SHOWN ON DRAWINGS.	EW	EACH WAY	SIM SO SS	SIMILAR SOUTH SANITARY SEWER			
 WHEN CONSTRUCTION OCCURS WITHIN DRIVE ON EASTING TREES, CONTRACTOR IS TO FILE THE SOLE ON THE STOE AWAY FROM THE TREE. WHEN THIS IS NOT POSSIBLE, PLACE SOLE ON PLYWOOD. A TARP, OR THICK BED OF MULCH. THIS IS TO HELP PREVENT CUTTING INTO THE SOIL SURFACE WHEN THE BACKHOE OR TRACTOR BLADE REFILLS THE TRENCH. 	 CONTRACTOR IS RESPONSIBLE FOR POTHOLING ALONG THE ALIGNMENTS OF ALL NEW UTILITIES TO DENTIFIN POTENTIAL UTILITY CONFLICTS, SOILS CONDITIONS, AND TIE-IN POINTS. CONTRACTOR RESPONSIBLE FOR MAI ADJUSTMENTS IN ALIGNMENTS TO ACCOMMODATE ACTUAL FIELD CONDITIONS. 	KING FIN FF FG	FINISH FINISH FLOOR FINISH GRADE FIPE HYDRANT	SSMH SSTL STA STD	SANITARY SEWER MANHOLE STAINLESS STEEL STATION STANDARD	GENERAL SHEET S	YMBOLS	
6. REFILL OPEN TRENCHES QUICKLY WITHIN 4 HOURS OF EXCAVATION WHEN THEY OCCUR WITHIN THE DRIP LINE OF EXISTING TREES. IF THIS IS NOT POSSIBLE AND WEATHER IS HOT, DRY, OR WINDY, CONTRACTOR MUST KEEP ROOT ENDS MOIST BY COVERING THEM WITH WET BURLAP. IF TEMPERATURE IS 80°F OR GREATER, THE BURLAP MUST BE INSPECTED EVERY HOUR AND RE-WET A NECESSARY TO MAINTAIN A CONSTANT COOL MOIST CONDITION. IF TEMPERATURE IS BELOW 80°, THE BURLAP MUST BE INSPECTED EVERY FOUR HOURS AND RE-WET AS NECESSARY TO MAINTAIN A CONSTANT COOL MOIST CONDITION. SMALL ROOTS CAN DRY OUT AND DIE IN 10-15 MINUTES. LARGER ROOTS CAN SUCCUMB IN AN HOUR OR LESS UNDER UNFAVORABLE WEATHER CONDITIONS.	 CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UITTIES, FEATURES, AND STRUCTORS LOCATED ON T LOCATE, PROTECT, AND AVOID DISRUPTION OF ALL ABOVE AND BELOW GRADE UITTIES DURING CONSTRUC ALL BURIED LINES TO HAVE 36 INCHES MINIMUM COVER, UNLESS NOTED OTHERWISE. CONTRACTOR TO VERIFY CONNECTIVITY OF UITLITY NETWORK PRIOR TO REPLACEMENT, ABANDONMENT, OF DEMOLITION OF EXISTING UITLITY. CONTRACTOR TO CONFIRM CONNECTIVITY OF NEW UITLITY PRIOR TO COM WORK. 	IHE SITE. FL STION. FL FO FO FO R R IPLETING FT FTG	FLOW LINE FLOOR FIBER OPTIC FIRE PROTECTION FINISHED SURFACE FOOT, OR FEET FOOTING	STL TC T, OR TEL THK TG TP	STEEL TOP OF CURB TELEPHONE THICK TOP OF GRATE TEST PIT	1 KEYNOTE 1 VALVE NUMBER RUBBER EXPANSION JOINT	ASSEMBLY	
MATERIALS, EQUIPMENT, TEMPORARY BUILDINGS, FUELS, PAINTS AND OTHER CONSTRUCTION ITEMS ARE NOT TO BE PLACED WITHIN THE DRIP LINE OF EXISTING TREES. S GRADING SHOULD NOT CREATE DRAINAGE PROBLEMS FOR TREES BY CHANNELING WATER INTO THEM OR CREATING	11. THRUST BLOCKING REQUIRED ON ALL PRESSURE LINES BENDS AND FITTINGS. SEE STANDARD THRUST BLOCI DETAIL. RESTRAINED FITTINGS MAY BE USED AS AN ALTERNATIVE WHEN INSTALLED ON FITTINGS AND LINES I MANUFACTURER REQUIREMENTS TO ACHIEVE PROPER RESTRAINT OF THE OVERALL PIPING SYSTEM.	KING G PER GAL GAL GR	GAS LINE GALLON / GALVANIZED GRADE	TRF TS TW TYP	TURBIDITY REDUCTION FACILITY TOP OF SLAB TOP OF WALL TYPICAL	👝 DETAIL	SECTION	
SUNKEN AREAS.	12. ALL EXISTING UTILITIES AND TIE-IN POINTS SHOULD BE CONSIDERED ACTIVE UTILITIES UNLESS OTHERWISE IN 13. CONFIRM FIRE HYDRANT TYPE, NOZZLE SIZES, AND THREAD CONFIGURATIONS WITH FIRE DEPARTMENT PRIO	NDICATED. GRD GV R TO	GROUND GATE VALVE	UBC UNO	UNIFORM BUILDING CODE UNLESS NOTED OTHERWISE	DETAIL INDICATOR	A SECTI	ON INDICATOR
GEOTECHNICAL NOTES	CONSTRUCTION. 14. CONFIRM ALL UTILITY VALVE VAULTS, VALVES, METERS, BACKFLOW PREVENTION ASSEMBLIES, AND OTHER U	TILITY DIST	HOSE BIBB B HUMBOLDT COMMUNITY SERVICES RICT	V	VOLT(S)	SHEET NUMBER ON WHICH DETAIL APPEARS	SHEET NUMBER ON WHI SECTION APPEARS	СН
 CONTRACTOR SHALL DESIGN THE PROJECT TO BE COMPLIANT WITH THE FOLLOWING GEOTECHNICAL REPORTS: 1.1. GEOTECHNICAL INVESTIGATION REPORT HBMWD RESERVOIRS SEISMIC RETROFIT PROJECT THREE WATER TANKS FROM CRAWFORD & ASSOCIATES, INC. DATED JULY 2021. 		HDD HDPI HOR HPG	HORIZONTAL DIRECTIONAL DRILLING E HIGH-DENSITY POLYETHYLENE Z HORIZONTAL HIGH PRESSURE GAS	VERT W/ W	VERTICAL WITH WATER			
SURFACE RESTORATION NOTES	CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND IMPLEMENTING THE PROJECT SWPPP PER THE C	URRENT HPN: HPS HWY	S HIGH PRESSURE NATURAL GAS HIGH PRESSURE SODIUM HIGHWAY	WD WSP XING	WIDE WELDED STEEL PIPE CROSSING			
 IN ADDITION TO UTILITY AND VEGETATION RESTORATION, CONTRACTOR TO RESTORE SIDEWALKS, CURBS, PAVING, SLABS, STRIPING, SIGNAGE, AND OTHER SURFACE FEATURES TO PRE-PROJECT CONDITIONS. 	NPDES GENERAL PERMIT REQUIREMENTS. 2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MONITORING AND REPORTING. THE OWNER SHALL REGISTER PROJECT VIA SMARTS AND ESTABLISH ACCESS FOR THE QUALIFIED STORMWATER PRACTITIONER (QSP).	THE IP	INVERT ELEVATION INVERT IRON PIPE IRRIGATION	YD &	YARD			
 NOT ALL SURFACE RESTORATION REQUIREMENTS SHOWN. CONTRACTOR TO ASSESS PRIOR TO BIDDING AND INCLUDE THE COST OF RESTORATION IN THE BID ITEMS AFFECTING SURFACE FEATURES. 	 THE EROSION CONTROL MEASURES SHOWN HERE ARE THE MINIMUM RECOMMENDED. THE CONTRACTOR SHA ADHERE TO THE QSDIQSP SPECIFIC PLAN OF BMPS (BEST MANAGEMENT PRACTICES) FOR THE PROJECT SIT 	ILL JCT IE JP	JUNCTION JUNCTION POLE (UTILITY)	@ ø	AT DEGREE DIAMETER			
ITEMS TO BE PROVIDED BY THE CONTRACTOR	APPROPRIATE TO THE PHASE OF CONSTRUCTION AND THE TIME OF YEAR. 4. BACK UP EROSION CONTROL MATERIALS SHALL BE STOCKPILED ON THE SITE TO ALLOW FOR TIMELY REPAIR A MAINTENANCE OF ALL RMP'S	AND LAT		 #	FEET INCHES NUMBER PLUIS OR MINUS			
 NOT UNLESS SPECIFICALLY NOTED OTHERWISE, CONTRACTOR SHALL FURNISH AND INSTALL ALL NEW ITEMS. UNLESS SPECIFICALLY NOTED OTHERWISE THE TERM "PROVIDE" SHALL MEAN CONTRACTOR TO FURNISH AND INSTALL. 		L"	LINEAR FEET	Ŧ	FLUS OK MINUS			60% DESIGN
		· · ·		115230 1			e GENERAL NOTES. S	SYMBOLS AND
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Ī	S	HEET GENERAL NOTES
AT CHIS	S 1. CC PF 2. RH 3. CC	TARACTOR TO VERIFY PIPE AND VALVE SIZES, TYPE, AND CONFIGURATION AND ROVIDE ALL TRANSITION FITTINGS AS REQUIRED EPAIR ALL PAVING SIMILAR TO (1) (-504) ONTRACTOR MAY STAGE ON (E) PAVED AREAS.
	1. RI 2. (N 3. RI 4. (E 5. RI	THEF RETIVIES
F BAY MUNICIPAL WATE SERVOIR SEISMIC	R	60% DESIGN
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(E) 6" DRAIN (E) CHAIN LINK FENCE	E, TYP		AT OUS	A7"OM-5-
(E) ACCESS GATE	DEMOLISH AND PROPERLY DI TANK ROOF, BEAMS, AND ALL POI TANK ROOF, BEAMS, AND ALL POI TANK TO PERFORM TI CONSTRUCTION. (E) ROOF E PROPERTY OF THE CONTR DEMOLITION. REPLACE WITH STRUCTU	1-MG INDUSTRIAL TANK		2"CMLS 42"CMLS
No. Issue Checked Approved Date Author MD Drafting Check SG Project Manager NS Designer SXM Design Check MD Project Director SXM	Baris one inch on original size sheet 0		Good Good <t< th=""><th>Client HUMBOLD DISTRICT Project SAMOA RE RETROFIT Project Na. 11218859</th></t<>	Client HUMBOLD DISTRICT Project SAMOA RE RETROFIT Project Na. 11218859

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Date 07-23-2021

Scal AS SHOWN Title 1 MG INDUSTRIAL ROOF **REPLACEMENT AND SITE PLAN**

SHEET GENERAL NOTES

91 00.

THE INTERIOR OF THE (E) 1-MG TANK AND NEW ROOF SHALL BE PREPPED AND PAINTED PER SPECIFICATION SECTION 09 91 00 - TANK PREPARATION AND COATING REQUIRED TOUCH-UP PAINT LOCATIONS ON THE EXTERIOR OF THE TANK SHALL ALSO BE PREPPED AND PAINTED PER THE ABOVE REFERENCED SPECIFICATION.

WHERE ITEMS ARE TO BE REMOVED FROM THE OUTSIDE OF THE TANK, THE CONTRACTOR SHALL GRIND DOWN AND PAINT OVER ALL (E) BOLT PENETRATIONS, BRACKETS, ETC. IT SHALL BE ASSUMED THAT THESE AND ANY OTHER LOCATIONS REQUIRING PAINTING SHALL BE PREPPED AND PAINTED PER SPECIFICATION SECTION 09

THE OWNER SHALL DRAIN AND PERFORM INITIAL "MUCK OUT" OF THE TANK PRIOR TO THE PERFORMANCE OF THE WORK.

Size ANSI D

60% DESIGN

of 14



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	SHEET GENERAL NOTES
1.	WHERE ITEMS ARE TO BE REMOVED FROM THE OUTSIDE OF THE TANK, THE CONTRACTOR SHALL GRIND DOWN AND PAINT OVER ALL (E) BOLT PENETRATIONS, BRACKETS, ETC. AND WELD 14" STEEL PLATES OVER OPENINGS. IT SHALL BE ASSUMED THAT THESE AND ANY OTHER LOCATIONS REQUIRING PAINTING SHALL BE PREPPED AND PAINTED PER SPECIFICATION SECTION 09 91 00.
2.	ALL NEW METAL COMPONENTS SHALL BE PREPPED AND COATED IN ACCORDANCE WITH SPECIFICATION SECTION 09 91 00.
3.	CONTRACTOR SHALL PROVIDE SUBMITTAL/SHOP DRAWINGS PRIOR TO FABRICATION AND/OR ORDERING OF ENCLOSURES, EQUIPMENT, PARTS, ETC.
4.	FOR ALL HATCHES, COVERS AND FITTINGS REMOVED DURING PROJECT, REPLACE GASKETS AND BOLTS, NUTS, AND WASHERS.
5.	ALL HARDWARE TO BE HOT DIPPED GALVANIZED UNLESS NOTED OTHERWISE.
6.	WELD STEEL PLATES TO THE INTERIOR AND EXTERIOR OF THE TANK WHERE STEEL PLATES ARE REQUIRED USING 3/8" FILLET WELD ALL AROUND.

60% DESIGN

** 1 MG INDUSTRIAL TANK SHELL Size ANSI D ELEVATION C-50 of **1**4





	(E) 15" STEEL PIPE	
T EXISTING CONDITIONS AND	MODIFICATIONS	
	60% DESI	GN
BAY MUNICIPAL WATER	Title SEISMIC CIVIL DETAILS 2	Size ANSI D
SERVOIR SEISMIC		
Date Scale	Sheet No.	Sheet

PIPE DIA "D"	MINIMUM "A"	MAXIMUM "A"
< 4"	3"	6"
4" TO 6"	6"	12"
6" TO 15"	8"	14"
16" TO 21"	10"	16"
24" TO 30"	12"	18"
33" TO 42"	15"	21"
48" & LARGER	18"	24"

WIDER TRENCHES MAY REQUIRE HIGHER STRENGTH PIPE AND/OR SPECIAL BEDDING.

2. DIFFERING TRENCH WIDTHS REQUIRE PRIOR APPROVAL OF ENGINEER.

NOTES:

3. IN MAKING EXCAVATIONS FOR THIS PROJECT, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PROVIDING & INSTALLING ADEQUATE SHEETING, SHORING & BRACING AS MAY BE NECESSARY AS A PRECAUTION AGAINST SLIDES OR CAVE-INS, AND TO PROTECT ALL (E) IMPROVEMENTS OF ANY KIND, EITHER ON PUBLIC OR PRIVATE PROPERTY, FULLY FROM DAMAGE.

4. SATISFACTORY NATIVE BACKFILL MATERIAL USED AS UTILITY TRENCH BACKFILL BELOW UNPAVED AREAS SHALL BE APPROVED BY THE ENGINEER PRIOR TO USE.

5. 2-SACK SLURRY BACKFILL MAY BE USED IN TRENCH WHEN MINIMUM PIPE COVER NOT POSSIBLE. WHEN APPROVED BY OWNER'S REPRESENTATIVE.

6. CLASS 2 AGGREGATE BASE SHALL BE COMPACTED TO 95% RELATIVE COMPACTION.

7. DETECTABLE WARNING TAPE SHALL BE BRIGHT COLORED, CONTINUOUSLY PRINTED, MINIMUM 6" WIDE BY 4 MIL. THICK, MANUFACTURED FOR DIRECT BURIAL.

8. DETECTABLE WARNING TAPE NOT REQUIRED FOR IRRIGATION LINES.

9. GRAVEL ROADS SHALL USE PAVED AREA TRENCH SECTION BUT WITH AGGREGATE BASE TO SURFACE, UNLESS NOTED OTHERWISE

PLAN

TEE PLUGGED

A2

1.5

5

8

12

17 12

21.5 15

NOTES: CONCRETE THRUST BLOCKS ARE TO BE POURED AGAINST UNDISTURBED EARTH OR STRUCTURAL BACKFILL.THRUST BLOCKS ARE NOT REQUIRED WHERE JOINTS ARE ADEQUATELY RESTRAINED

2. KEEP CONCRETE CLEAR OF JOINTS AND ACCESSORIES.

- VOLUMES AND SPECIAL BLOCKING DETAILS SHOWN ON THE PLANS TAKE PRECEDENCE 3. OVER VOLUMES AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL
- ALL BURIED PIPE EXCEPT FLANGED. SCREWED. SOLVENT WELDED PVC OR WELDED STEEL 4. 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 5.
- THE SIZE AND WEIGH OF ALL UPLIFT THRUST BLOCKS SHALL BE AS DETERMINED BY 6. ENGINEER.

THE BEARING AREAS ARE BASED ON TEST PRESSURE OF 150 PSI AND ALLOWABLE SOIL 7. 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 8. OTHERWISE.

CONTRACTOR TO PROVIDE ALL COMPONENTS. 9.

ALL PIPE AND FITTINGS SHALL BE WRAPPED IN POLYETHYLENE TO PREVENT CORROSION AND CONC ADHESION. 10.

PIPE SIZE

8

10

12

16

TEE, WYE, PLUG OR

CAP

1.5

3

5

8

12

15

90° BEND

PLUGGED

CROSS

2

4.5

7

12

17

21.5

DISTRICT RETROFIT

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BEARING AREA OF THRUST BLOCK IN SQ. FT.

45° BEND	22 1/2° 11 1/4° BEND BEND		22 1/2° 11 1/4 BEND BEND		PIPE SIZE	TEE, WYE, PLUG OR	90° BEND	T PLU	EE GGED	45° BEND	22 1/2° BEND	11 1/4° BEND
52115	0210	DEND	ULL	CAP	CROSS	A1	A2	5210	02110	52.10		
1.5	1	1	18	19	27	27	19	15	8	6		
2.5	1.5	1	20	24	34	34	24	18	10	8		
4	2	1	22	29	41	41	29	22	12	10		
7	3	2	24	34	48	48	34	26.5	14	12		
10	5	3	32	39	55	55	39	31.5	16	14		
12	6	4										

Client HUMBOLDT BAY MUNICIPAL WATER

^t SAMOA RESERVOIR SEISMIC

07-23-2021

AS SHOWN

60% DESIGN

SHEET GENERAL NOTES	STEEL	CONCRETE	
1. CONTRACTOR TO COORDINATE ALL STRUCTURAL DOCUMENTS WITH ALL OTHER DISCIPLINES AND REPORT ANY	1. DETAIL FABRICATE, AND ERECT STRUCTURAL STEEL IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL	1. ALL CONCRETE SHALL BE NORMAL WEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI AT 28 DAYS.	
DISCREPANCIES TO THE OWNER PRIOR TO THE START OF ANY FABRICATION OR CONSTRUCTION.	CONSTRUCTION SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (LATEST EDITION AND SUPPLEMENTS).	2. CONCRETE REINFORCING COVER SHALL BE AS FOLLOWS:	
 CONTRACTOR TO COORDINATE ALL NEW WORK WITH EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO THE OWNER PRIOR TO CONSTRUCTION. 	2. ANCHOR BOLTS: ASTM F1554 GRADE 55.	CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO	
3. DO NOT SCALE DRAWINGS.	ALL STEEL BARS & PLATES SHALL BE ASTM 430 UNLESS UTTERWISE NUTED.	EARTH	
4. DESIGN CRITERIA: 2019 CALIFORNIA BUILDING CODE (2019 CBC)	5. ALL TUBES SHALL BE ASTM A500 GRADE B.	 ALL CONCRETE DIMENSIONS SHOWN ARE MINIMUM DIMENSIONS. CONTRACTOR TO REVIEW FORMING, REINFORCING DETAILS AND ANY EMBEDDED ITEMS AND DETERMINE PRIOR TO FARRICATION OF ANY 	
AWWA D100-11 ACI 318-14	6. ALL PIPES TO BE ASTM A53 GRADE B.	REINFORCING, PLACEMENT REQUIREMENTS AND CLEARANCES.	
CAL/OSHA	7. ALL THREADED RODS: ASTM F1554 GRADE 55.	4. EPOXY ANCHORS SHALL BE ONE OF THE FOLLOWING, UNO:	
5. LOADS: ROOF LIVE LOADS: 20 PSF (REDUCTIONS TAKEN AS ALLOWED BY BUILDING CODE)	8. BOLTED CONNECTIONS, UNLESS NOTED OTHERWISE: 1-INCH DIAMETER A325-N BOLTS.	HILTI HIT-HY 200 (ICC-ES REPORT ESR-3187)	
MAINTENANCE PLATFORM: 60 PSF WIND LOADS:	9. INSTALL HIGH STRENGTH BOLTS IN ACCORDANCE WITH SECTION 8 OF THE "SPECIFICATIONS FOR STRUCTURAL JOINTS		
MAIN FORCE RESISTING SYSTEM:	10. PROVIDE BEVELED WASHERS ON ALL CONNECTION TO SLOPING FLANGES OF W SECTIONS AND CHANNELS WHERE		
RISK CATEGORY: IV (ESSENTIAL FACILITY)	SLOPE EXCEEDS 1:20.		
EXPOSURE CATEGORY: C INTERNAL PRESSURE COEFFICIENT: ±0.18	 ANCHOR RODS SHALL BE THREADED ANCHOR RODS WITH NUT. THE EMBEDDED NUT SHALL BE TACK WELDED TO THE ANCHOR ROD TO PREVENT ROTATION DURING TIGHTENING. 		
SEISMIC LOADS (SAMOA): SEISMIC IMPORTANCE FACTOR: I∈ = 1.50	12. BOLT HOLES IN STEEL SHALL BE "STANDARD" (1/16-INCH LARGER IN DIAMETER THAN THE NOMINAL BOLT SIZE), UNLESS OTHERWISE MOTED		
MAPPED SPECTRAL RESPONSE ACCELERATIONS: So = N/A	 WELDING ELECTRODES (FILLER METAL): E70XX (70 KSI), WITH EXACT FILLER METAL SELECTED BY THE FABRICATOR 		
	14. WELD LENGTHS CALLED FOR ON THE PLANS ARE THE NET EFFECTIVE LENGTH REQUIRED. WHERE LENGTH OF WELD		4
SPECTRAL RESPONSE COEFFICIENTS: SDS = 1.21 g	IS NOT SHOWN IT SHALL BE THE FULL LENGTH OF THE JOINT.	REINFORCING	
SDI = 1.87 g SOIL SITE CLASS: F	 COMPLETE PENETRATION WELDS SHALL BE MADE WITH PROPER BACKING WHEREVER POSSIBLE. FULL PENETRATION WELDS MADE WITHOUT PROPER BACKING SHALL HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF MANY DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF CONTROL OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF THE DATA HAVE THE ROOT GOUGED BEFORE WELDING IS STARTED FROM THE OUT OF OUT OF THE DATA HAVE THE DATA	1. ALL CONCRETE REINFORCING SHALL BE ASTM A615, Fy = 60 KSI., UNLESS NOTED OTHERWISE.	
SEISMIC DESIGN CATEGORY: E		2. REINFORCING SHALL EXTEND CONTINUOUS FOR THE DIMENSION SHOWN.	
 REFERENCE TO CODES, RULES, REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST PRINTED EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID INSTRUMENTED IN THE INSTRUMENT OF INSTRUMENTS OF INSTRUCTIONS OR REQUIREMENTS OF INSTRUCTIONS OF INSTRUCTURES OF INSTRU	10. ALL BUTT AND GROUVE WELDS STALL BE FULL PENETRATION, UNLESS NOTED OTHERWISE.	3. NO WELDING OF ANY REINFORCING IS PERMITTED, UNLESS SPECIFICALLY STATED ON THE PLANS. REINFORCEMENT TO BE WELDED TO MEET THE DECIMPENENTS OF A STM 4726	
UNLESS THE DOCUMENT DATE IS SHOWN.	 ALL SPLICING OF MEMBERS SHALL BE AS SHOWN ON THE DRAWINGS, ANY SPLICING OF THE STEEL MEMBERS PROPOSED BY THE STEEL FABRICATOR SHALL BE SHOWN ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER PRIOR TO EARDY ATTOM 	10 BE WELDED TO WEET THE REQUIREMENTS OF ASTM A700.	
 THESE DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONDUCTION FOR THE OFFENDER OF THE OFFENDER OFFENDER OF THE OFFENDER OF THE OFFENDER OF THE OFFENDER OF THE OFFENDER OFFENDER		5. LAP SPLICES AND DEVELOPMENT LENGTHS PER DETAIL ON DRAWING S-501.	
CONSTRUCTION, SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE.		6. REINFORCEMENT SHALL BE PLACED SO AS NOT TO COME IN CONTRACT WITH METALLIC CONCRETE PENETRATIONS.	
 THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND FOR CHECKING DIMENSIONS. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK. 		 ALL REINFORCING TO TERMINATE WITH STANDARD HOOKS AS SHOWN ON PLANS. ALL STIRRUPS AND TIES TO BE CLOSED WITH 132° DEMINS 	
9. PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION, SUCH MEASURES INCLUDE,		IN WALL ELEMENTS, VERTICAL BARS SHALL BE LOCATED ON OUTERMOST LAYER UNLESS SPECIFICALLY NOTED	
BUT MAY NOT BE LIMITED TO, BRACING AND SHORING FOR LOADS DURING CONSTRUCTION. RETAIN A REGISTERED CIVIL ENGINEER WHOM IS PROPERLY QUALIFIED TO DESIGN BRACING, SHORING, ETC. VISITS TO THE SITE BY THE OWNER'S REPRESENTATIVE WILL NOT THE UTIOF DRSERVATION OF THE ABOVE NOTED ITEMS.	21. ALL STEEL FABRICK HOW AND DETAILS TO COMPET WITH WOST STRINGENT OF, AND CODE, AND CODE, AND THE 2019 CBC.	OTHERWISE.	
	 ALL WELDING TO BE BY AWS CERTIFIED WELDERS AND SHALL CONFORM TO ALL 2019 CBC AND AWS REQUIREMENTS. ALL WELDERS SHALL BE PRE-QUALIFIED BY THE PROJECT WELDING INSPECTOR FOR THE WELD TYPES AND POSITIONS 		
BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE OWNERS REPRESENTATIVE. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION	USED IN THE PROCEDURES THEY WILL BE PERFORMING.		
FROM THE OWNER'S REPRESENTATIVE.	 UNLESS NOTED OTHERWISE, ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIP GALVANIZED, UNLESS IT IS PART OF THE PAINTED TANK ASSEMBLY. 		
11. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING A SAFE PLACE TO WORK AND MEETING THE REQUIREMENTS OF ALL APPLICABLE JURISDICTIONS. EXECUTE WORK TO ENSURE THE SAFETY OF PERSONS AND ADJACENT PROPERTY			
AGAINST DAMAGE BY FALLING DEBRIS AND OTHER HAZARDS IN CONNECTION WITH THIS WORK.			4
 UNLESS NOTED OTHERWISE, REFER TO DRAWINGS OTHER THAN STRUCTURAL FOR FINISHES, SLOPES, DEPRESSIONS, OPENINGS, CURBS, STAIRS, RAMPS, TRENCHES, EQUIPMENT AND LOCATIONS AND EXTENT OF SUCH CONDITIONS. 	HELICAL ANCHORS	DEFERRED SUBMITTALS	
13. CONTRACTOR TO COORDINATE ALL NEW WORK WITH EXISTING SITE CONDITIONS AND REPORT ANY DISCREPANCIES TO	 CONTRACTOR SHALL SUBMIT HELICAL ANCHOR SHOP DRAWINGS INCLUDING MANUFACTURER DATA, CURRENT VALID ENGINEERING TEST REPORTS AND SITE SPECIFIC CAPACITY CALCULATIONS STAMPED AND SIGNED BY A CALIFORNIA LICENSED 	1. DEFERRED SUBMITTALS ARE BY THE CONTRACTOR. DETAILS SHOWN IN THESE SECTIONS ARE FOR BIDDING PURPOSES ONLY AND NOT FOR CONSTRUCTION	
THE ENGINEER PRIOR TO CONSTRUCTION.	PROFESSIONAL ENGINEER. SITE SPECIFIC ANCHOR CALCULATIONS SHALL BE BASED UP ON THE PROJECT GEOTECHNICAL REPORT.	2. DEFERRED SUBMITTALS INCLUDE:	
14. DETAILS OR CONDITIONS NOT FULLY DEVELOPED ON STRUCTURAL DOCUMENTS ARE SIMILAR TO DEVELOPED DETAILS.	 FOR BIDDING PURPOSES, ANCHOR SCHEMATIC DESIGN IS BASED UPON HUBBELL POWER SYSTEMS INC. CHANCE ANCHORS PER FSR-7794 	1 MG SAMOA TANK ROOF REPLACEMENT 1 MG SAMOA HELICAL ANCHORS	
15. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.	3. ANCHOR DESIGN SHALL PROVIDE FOR A MINIMUM 50 YEAR DESIGN LIFE WITH CORROSION ALLOWANCE BASED UPON THE SITE	 CONTRACTOR SHALL SUBMIT STEEL TANK ROOF PLANS AND CALCULATIONS TO THE OWNER FOR APPROVAL AND DEDUIT DUOD TO ANY CONSTRUCTION OF ANS AND CALCULATIONS MIST BE DEEDADED. SEALED, AND SIGNED BY A 	
16. ALL PLANS TO BE COORDINATED WITH GENERAL NOTES AND TYPICAL DETAILS AS APPLICABLE.	SPECIFIC SOIL CORROSIVITY ANALYSIS REPORT. 4. MINIMUM ANCHOR CAPACITY AND EMBEDMENT PARAMETERS ARE AS FOI LOWS	CALIFORNIA LORSED ENGINEER. CALCULATIONS SHALL INCLUDE ANALYSIS OF NEW ROOF WITH SEISMIC SLOSHING WAVE CONSIDERATION.	
 ALL LADDERS, RAILINGS, PLATFORMS, AND SAFETY ELEMENTS SHALL BE PROVIDED IN CONFORMANCE WITH CAL / OSHA STANDARDS. 	a. 1MG SAMOA TANK, 13 KIP TENSION CAPACITY WITH ANCHORS AT 4'-0' OIC AROUND PERIMETER. FINAL EMBEDMENT LENGTH	4. CONTRACTOR'S STEEL TANK ROOF SUBMITTAL PACKAGE WILL BE SUBJECT TO OWNER REVIEW AND COMMENT.	
	BY ANCHOR DESIGNER, APPROXIMATED AT 17 FEET MAXIMUM AS TO REMAIN ABOVE EXISTING GROUND WATER TABLE AS IDENTIFIED IN THE PROJECT GEOTECHNICAL REPORT.	CONTRACTOR WILL BE RESPONSIBLE FOR ADDRESSING OWNER REVIEW COMMENTS AND RESUBMITTING THE TANK ROOF SUBMITTAL AS NECESSARY. OWNER RESERVES RIGHT TO REQUEST DESIGN MODIFICATIONS BASED ON SEDUCEADULTY (MAINTENANCE DECUIDENENTS, ETC.	
		SERVICEADILIT / WRITE LAWICE REQUIREMENTS, ETC.	
FOUNDATIONS	SPECIAL INSPECTIONS		
1. FOUNDATION DESIGN WILL BE BASED ON CRITERIA AND RECOMMENDATIONS PRESENTED IN THE GEOTECHINCAL INVESTIGATION REPORT HEMMIN RESERVICES SEISMIC DETEORED AND RECOMMENDATIONS AND	1. SPECIAL INSPECTION IN ACCORDANCE WITH 2019 CALIFORNIA BUILDING CODE CHAPTER 17 IS REQUIRED ON THE FOLLOWING PORTIONS OF THE WORK:		
SAMOA, CALIFORNIA, PREPARED BY PREPARED BY CRAWFORD & ASSOCIATES, INC. DATED JULY 2021.	STRUCTURAL STEEL CONCRETE		
 ALLOWABLE BEARING PRESSURE FOR TANK FOUNDATIONS IS 3,000 PSF WITH A 1/3 INCREASE FOR SEISMIC, FOR BOTH TANK SITES. 	HELICAL ANCHORS		
	2. (REFER TO THE STATEMENT OF SPECIAL INSPECTIONS FOR MORE SPECIFIC REQUIREMENTS)		
	Bar is one inch on		/ MUNICIPAL WATER THE STRUCTURAL GENERAL NOTES
	original size sneet 0 1"	GHD 718 Third Street DIS I KICT Euroka California 95501 USA	
No. Issue Checked Approved Date Author S. GOULD Drafting Check S. MCHANEY Project Manager NS		Conditions of Use This document and the ideas and designs incorporated herein, as an instrument of professional service, is the invenent of Torrient No.	Date Scale Scale Scale
Designer S. GOULD Design Check B. CROWELL Project Director SXM		GHD. This document may only be used by GHD's client (and any other person who GHD has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.	07-23-2021 AS SHOWN S-01 9 of 14
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				STATEMENT OF SP	ECIAL INSPECTIONS	
STATEMENT OF SPECIAL INSPECTIONS	3	QUALIFICATIONS	OF INSPECTORS AND T	ESTING TECHNICIANS		TABLE 1705.2 - STE
THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED IN ACCORDANCE WITH TH AND STRUCTURAL TESTING REQUIREMENTS OF THE BUILDING CODE SECTIONS 1704	E SPECIAL INSPECTION AND 1705.	THE QUALIFICATIONS OF ALL PERSON	NEL PERFORMING SPECIAL INSPECTION AND	TESTING ACTIVITIES ARE SUBJECT TO THE	ITEM 1: MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS, AND WASHERS.	AGENCY ∰ (QUALIF.); AWS∕AISC-SSI, ICC-SWSI
THIS STATEMENT OF SPECIAL INSPECTIONS ENCOMPASS THE FOLLOWING DISCIPLIN	ES:	KEY FOR MINIMUM QUALIFIC	ATIONS OF INSPECTION AGENTS:	CIANS SHALL BE PROVIDED IF REQUESTED.	A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	REFERENCE SIDS.: AISC 360, SECTION A3.3 AND APPLICABLE ASTM MATERIAL STANDARDS
STRUCTURAL SPECIAL INSPECTIONS FOR 1704 STRUCTURAL SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE STRUCTURAL SPECIAL INSPECTIONS FOR WIND RESISTANCE		WHEN THE REGISTERED DESIGN PRO PERFORMING A STIPULATED TEST OR DESIGNATION SHALL APPEAR BELOW T	DFESSIONAL IN RESPONSIBLE CHARGE DEE INSPECTION HAVE A SPECIFIC CERTIFICATIO THE AGENCY NUMBER ON THE SCHEDULE.	MS IT APPROPRIATE THAT THE INDIVIDUAL N OR LICENSE AS INDICATED BELOW, SUCH	B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	
THE SCHEDULE OF SPECIAL INSPECTIONS SUMMARIZES THE SPECIAL INSPECTIONS / SPECIAL INSPECTORS WILL REFER TO THE APPROVED PLANS AND SPECIFICATIONS F INSPECTION REQUIREMENTS, ANY ADDITIONAL TESTS AND INSPECTIONS REQUIRED I PLANS AND SPECIFICATIONS WILL ALSO BE PERFORMED.	AND TESTS REQUIRED. FOR DETAILED SPECIAL BY THE APPROVED	PE/SE STRUCTURAL ENGINEER PE/GE GEOTECHNICAL ENGINEE EIT ENGINEER-IN-TRAINIG - EXAMINATION	- A LICENSED SE OR PE SPECIALIZING IN THE I R - A LICENSED GE OR PE SPECIALIZING IN SC A GRADUATE ENGINEER WHO HAS PASSED THI	DESIGN OF BUILDING STRUCTURES IL MECHANICS AND FOUNDATIONS FUNDAMENTALS OF ENGINEERING	ITEM 2: INSPECTION OF HIGH-STRENGTH BOLTING: SCOPE: A. SNUG-TIGHT JOINTS.	AGENCY # (QUALIF.): AWS/AISC-SSI, ICC-SWSI
THE SPECIAL INSPECTIONS IDENTIFIED ARE IN ADDITION TO THOSE REQUIRED BY OT BUILDING CODE.	HER SECTIONS OF THE	AMERICAN CONCRETE INSTITUTE (ACI)			PERIODIC CONTINUOUS B. PRETENSIONED AND SLIP-CRITICAL JOINTS USING	
THE SPECIAL INSPECTION COORDINATOR SHALL KEEP RECORDS OF ALL INSPECTION INSPECTION REPORTS TO THE OWNER AND THE REGISTERED DESIGN PROFESSIONA CHARGE. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE AT CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED. T SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE REGISTERED DESIGN RESPONSIBLE CHARGE. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE TH	IS AND SHALL FURNISH L IN RESPONSIBLE TENTION OF THE THE DISCREPANCIES GN PROFESSIONAL IN TE CONTRACTOR OF	ACI-CCI CONCRETE CONSTRUCT ACI-CCI CONCRETE CONSTRUCT ACI-LTT LABORATORY TESTING TI ACI-STT STRENGTH TESTING TEC AMERICAN WELDING SOCIETY (AWS) CC AMERICAN WELDING SOCIETY (AWS) CC AMERICAN SOCIETY (AWS) CC AMERICAN SOCIETY (AWS) CC AMERICAN SOCIETY (AMERICAN)	IN INSPECTOR CHINCIAN - GRADE 182 HINCIAN ERTIFICATION IG INSPECTOR		TURN-OF-NUT MATCHMAKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION. ☑ PERIODIC	REFERENCE STDS. AISC 360 SECTION M2.5
HIS OR HER RESPONSIBILITIES. INTERIM REPORTS SHALL BE SUBMITTED TO THE OWNER AND THE REGISTERED DESI	IGN PROFESSIONAL IN	INTERNATIONAL CODE COUNCIL (ICC) (TEM 3: MATERIAL VERIFICATION OF STRUCTURAL STEEL	AGENCY # (QUALIE.): PE/SE
RESPONSIBLE CHARGE IN ACCORDANCE WITH SECTION 1704.1.2. A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING COMPLETION OF ALL REC INSPECTIONS, TESTING AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INS SUBMITTED PRIOR TO PROJECT COMPLETION. THE FINAL REPORT WILL DOCUMENT T SPECIAL INSPECTIONS AND CORRECTION OF DISCREPANCIES NOTED IN INSPECTION SPECIAL INSPECTIONS AND CORRECTION OF DISCREPANCIES NOTED IN INSPECTION	QUIRED SPECIAL SPECTIONS SHALL BE THE REQUIRED	ICC-SMSI STRUCTURAL MASONRY S ICC-SWSI STRUCTURAL STEL AND ICC-SFSI SPRAY-APPLIED FIREPRC ICC-PCSI PRESTRESSED CONCRET ICC-RCSI REINFORCED CONCRETE	SPECIAL INSPECTOR WELDING SPECIAL INSPECTOR DOFING SPECIAL INSPECTOR TE SPECIAL INSPECTOR SPECIAL INSPECTOR		SCOPE: A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360 X PERIODIC CONTINUOUS	REFERENCE SIDS. AISC 360, SECTION A3.3 AND APPLICABLE ASTM MATERIAL STANDARDS
JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE R CONTRACTOR.	ESPONSIBILITY OF THE	AMERICAN SOCIETY OF NONDESTRUCT	IVE TESTING (ASNT)		B. FOR OTHER STEEL, IDENTIFICATION ON MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN APPROVED CONSTRUCTION DOCUMENTS.	A REFERENCE STDS. APPLICABLE ASTM MATERIAL STANDARDS
THE CONTRACTOR IS REQUIRED TO COORDINATE ALL INSPECTIONS. THE CONTRACT OWNER'S REPRESENTATIVE AND THE SPECIAL INSPECTOR A MINIMUM OF 24 HOURS SPECIAL INSPECTIONS THAT ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY THE C REPRESENTATIVE AND THE SPECIAL INSPECTOR A MINIMUM OF 24 HOURS PRIOR TO	OR SHALL NOTIFY THE PRIOR TO ANY DWNER'S ANY CONCRETE TO BE		TABLE 1705.6 - SOILS	;	C. MANUFACTURER'S CERTIFIED TEST REPORTS	
		ITEM 1: VERIFY MATERIALS E ADEQUATE TO ACHIE	ELOW SHALLOW FOUNDATIONS ARE AGE VE THE DESIGN BEARING CAPACITY.	NCY # (QUALIF.): PE/GE	ITEM 4: MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK	AGENCY # (QUALIF.): AWS-CWI, ASNT
THE OWNER FOR REVIEW. SPECIALLY INSPECTED WORK THAT IS INSTALLED OR COVERED WITHOUT THE APPRO		TEM 2: VERIFY EXCAVATIONS	CONTINUOUS	NCY # (QUALIF.): PE/GE	A MANUFACTURER'S CERTIFIED TEST REPORTS	
IS SUBJECT TO REMOVAL OR EXPOSURE.		AND HAVE REACHED	PROPER MATERIAL.		TITEM 5: MATERIAL VERIFICATION OF WELD FILLER MATERIALS	AGENCY # (QUALIF.): AWS-CWI, ASNT
ONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF TH OTHERWISE SPECIFIED. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUINSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATIC SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED, IT IS THE AGENT'S RESPONSI SUFFICIENT NUMBER OF INSPECTORS TO ASSURE THAT ALL THE WORK IS INSPECT	E WORK UNLESS UIRING SPECIAL DN OF THE WORK IS BILITY TO EMPLOY A D IN ACCORDANCE	ITEM 3: PERFORM CLASSIFICA FILL MATERIALS.	ATION AND TESTING OF COMPACTED AGE	NCY # (QUALIF.): PE/GE	A. DENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	REFERENCE STDS. AISC 360, SECTION A3.5 AND APPLICABLE AWS A5 DOCUMENTS
WITH THE PROVISIONS OF THE BUILDING CODE.		THICKNESSES DURIN COMPACTED FILL.	G PLACEMENT AND COMPACTION OF	NCY # (QUALF.): PE/GE	B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	
CONTRACTOR STATEMENT OF RESPONSIBILITY		TITEM 5: PRIOR TO PLACEMEN	T OF COMPACTED FILL, INSPECT AGE	NCY # (QUALIF.): PE/GE	SCOPE:	AGENCY # (QUALIF.): AWS-CWI, ASNT
EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OR FABRICATION OF A S COMPONENT DESIGNATED ABOVE AS PART OF THE MAIN WIND FORCE OR MAIN SEISN SYSTEMS ABOVE MUST SUBMIT A STATEMENT OF RESPONSIBILITY PER SECTION 1700	SYSTEM OR MIC FORCE RESISTING 6.	SUBGRADE AND VER PROPERLY.	IFY THAT SITE HAS BEEN PREPARED		A. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK 1. COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS DEPENDOIC CONTINUOUS AULTIPASS FILLET WELDS DEPENDIC ST CONTINUOUS	
SCHEDULE OF INSPECTION AND TESTING AGENCIES					3. SINGLE-PASS FILLET WELDS > %6".	REFERENCE STDS. AWS D1.1
THIS STATEMENT OF SPECIAL INSPECTIONS / QUALITY ASSURANCE PLAN INCLUDES THE FOLLOWING BUILDING SYSTEMS:					4. PLUG AND SLOT WELDS	
SOILS AND FOUNDATIONS UWOOD CONSTRUCTION GAST-IN-PLACE CONCRETE MECHANICAL & ELECTRICAL SYSTEMS PRECAST CONCRETE ARCHITECTURAL SYSTEMS MASONRY LEVEL 1 STRUCTURAL STEEL MASONRY LEVEL 1 STRUCTURAL STEEL					5. SINGLE-PASS FILLET WELDS < %6". ⊠ PERIODIC □ CONTINUOUS 6. FLOOR AND ROOF DECK WELDS.	REFERENCE STDS.
SPECIAL INSPECTION AGENCIES FIRM AND CONTACT INFO.						AWS D1.3
1. SPECIAL INSPECTION COORDINATOR TBD					1. VERIFICATION OF WELDABILITY OF REINFORCING STEEL	
2. CONCRETE INSPECTOR TBD					OTHER THAN ASTM A706 ⊠ PERIODIC □ CONTINUOUS	
3. STEEL INSPECTOR TBD					2. REINFORCING STEEL RESISTING FLEXURAL AND AXIAL	
4. SOILS INSPECTOR TBD 5. CONCRETE TESTING AGENCY TBD					AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	REFERENCE STDS. AWS D1.4 ACI 318 SECTION 4.2.2
					3. SHEAR REINFORCEMENT. ☐ PERIODIC ⊠ CONTINUOUS 4. OTHER REINFORCING STEEL.	
			Bar is one inch on original size sheet 0 1"		GHD Inc. 718 Third Street Eureka California 95501 USA T 1 707 443 8326 F 1 707 444 8330	Client HUMBOLDT BA DISTRICT Project SAMOA RESER RETROFIT
Author S. GOULD Drafting Check S. MCHANEY Project Manager NS					Conditions of Use This document and the ideas and designs incorporated herein, as an instrument of professional service GHD. This document may only be used by GHD's client (and any other person who GHD has ag	, is the property of Project No. reed can use this 11218859
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EM 7: INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE	AGENCY # (QUALIF.): AWS-CWI, ASNT
COPE: A. DETAILS SUCH AS BRACING AND STIFFENING.	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	
C. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED. ☑ PERIODIC □ CONTINUOUS	
TABLE 1705.3 - CONCRETE CO	ONSTRUCTION
EM 1: INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VENIFY PLACEMENT. ☑ PERIODIC □ CONTINUOUS	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS: ACI 318: CH. 20, 25.2 25.3, 26.6.1-26.6.3
IEM 2: REINFORCING BAR WELDING:	AGENCY # (QUALIF.): ACI-CWI
COPE: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	
PERIODIC CONTINUOUS	REFERENCE STDS.:
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM %6", AND.	ACI 318: 26.6.4
C. INSPECT ALL WELDS.	
INSPECT ANCHORS CAST IN CONCRETE:	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI
	REFERENCE STDS: ACI 318 17.8.2
HARDENED CONCRETE MEMBERS.	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. □ PERIODIC ☑ CONTINUOUS	REFERENCE STDS.: ACI 318: 17.8.2.4
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	REFERENCE STDS.: ACI 318: 17.8.2
	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI ACI 318 CH. 19, 26.4.3, 26.4.4
EM 6: PRIOR TO CONCRETE PLACEMENT, FABRICATED SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	AGENCY # (QUALIF.): ACI-CFTT, ACI-STT REFERENCE STDS.: ASTM C172 ASTM C31 ACI 318: 26.4, 26.12
TEM 7: INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI
PROPER APPLICATION TECHNIQUES.	REFERENCE STDS.: ACI 318: 26.5, ACI 506: 3.4
EM 8: VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI
	ACI 318: 26.5.3-26.5.5
EM 9: INSPECT PRESTRESSED CONCRETE FOR:	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS.: ACI 318: 26.10.2
.COPE: A. APPLICATION OF PRESTRESSING FORCES; AND.	
 PERIODIC X CONTINUOUS B. GROUTING OF BONDED PRESSTRESSING TENDONS. 	
PERIODIC K CONTINUOUS	
EM 10: INSPECT ERECTION OF PRECAST CONCRETE MEMBERS. ☑ PERIODIC □ CONTINUOUS	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS.: ACI 318: 26.9.2
EM 11: VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS WHEN BEAMS AND STRUCTURAL SLABS.	AGENCY # (QUALIF.): ACI-CFTT, ACI-STT REFERENCE STDS.: ACI 318: 26.10.2, 26.11.2
EM TT: ITSTELT FORMWORK FOR STAPE, LUCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	AGENCY # (QUALIF.): ACI-CCI, ICC-RCSI REFERENCE STDS.: ACI 318: 26.11.2(B)

60% DESIGN AY MUNICIPAL WATER Title SPECIAL INSPECTIONS Size ANSI D RVOIR SEISMIC Date 07-23-2021 Scale AS SHOWN 10 of 14

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