

**ADDENDUM NO. 1**  
**TO**  
**PLANS AND SPECIFICATIONS**  
**FOR**  
**HONOKOHAU WATER TANK REPLACEMENT**  
**LAHAINA, MAUI, HAWAII**

**FOR AND BY THE:**  
**DEPARTMENT OF WATER SUPPLY**  
**COUNTY OF MAUI**  
**DWS JOB NO. 19-02B**  
**NOVEMBER 8, 2019**

Please see attached pages for amendments to the plans and specifications.

Please acknowledge the receipt of this Addendum No. 1 by recording the date of its receipt in the space provided on page 4 of the PROPOSAL and signing and returning the attached "Receipt of Addendum Acknowledgement" form.



FOR

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Jeffrey T. Pearson, P. E.  
Director, Department of Water Supply

**RECEIPT OF ADDENDUM #1 ACKNOWLEDGEMENT**

**PLANS AND SPECIFICATIONS**

**FOR**

**HONOKOHAU WATER TANK REPLACEMENT**

**LAHAINA, MAUI, HAWAII**

**FOR AND BY THE:**

**DEPARTMENT OF WATER SUPPLY**

**COUNTY OF MAUI**

**DWS JOB NO. 19-02B**

**NOVEMBER 8, 2019**

Please acknowledge the receipt of the above **ADDENDUM** issued by the Department of Water Supply, County of Maui, by signature and recording the date of receipt below.

Bidder:

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Authorized Signatory: \_\_\_\_\_ Date: \_\_\_\_\_

## QUESTIONS WITH DWS RESPONSE:

1.     QUESTION:     Will this project require a building permit and will DWS provide the permits?

RESPONSE:     A building permit and demolition permit will be required for this project. Please refer to the Technical Specifications Section 10 – General Requirements, Section 10.18 “Permits”.
  
2.     QUESTION:     Is it possible to get an exception to the law which requires at least 80% of the labor to be performed by Hawaii Residents?

RESPONSE:     Please refer to the Instructions to Bidders, Section 12 “Employment of State Residents on Construction Procurement Contracts, Chapter 103B HRS (Act 68, SB2840)” of the Contract Documents.
  
3.     QUESTION:     Will there be a nearby staging area provided by the County?

RESPONSE:     Please refer to the Technical Specifications, Section 10 – General Requirements, Section 10.20 “Storage and Handling of Materials”.
  
4.     QUESTION:     Can a water quality analysis be done for the water in the tank to help determine required cathodic protection?

RESPONSE:     DWS took a water sample and performed an analysis.  
                                  Conductivity = 180 umhos  
                                  pH = 8.27
  
5.     QUESTION:     Will water be available at the site during construction?

RESPONSE:     There will be water available at the existing standpipe within the tank site. Please refer to the Technical Specifications, Section 10 – General Requirements, Section 10.04 “Temporary Water”.
  
6.     QUESTION:     Will a cone roof with a 1:12 slope be acceptable in lieu of a “dome” roof.

RESPONSE:     A cone roof will be acceptable.
  
7.     QUESTION:     AWWA D103-09 requires use of preformed NSF61 approved EPDM gaskets. As such, will lap joint with preformed NSF61 EPDM gaskets be acceptable?

RESPONSE:     AWWA D103-09 Section 10.3 Gasketing and Sealants states “Gasketing and/or sealants shall be supplied with the tank and installed between all joints in compliance with the erection instructions.” Please refer to the Technical Specifications, Section 20 – Epoxy Coated Steel Storage Tank, Section 2.01 H “Gaskets” and I “Sealants”.

8. QUESTION: Will factory fusion bonded epoxy coated carbon steel internal roof supports be acceptable?
- RESPONSE: Yes, that is acceptable.
9. QUESTION: Will fusion bonded epoxy coated steel overflow pipe with fusion bonded epoxy coated pipe supports be acceptable?
- RESPONSE: Please refer to the Technical Specifications, Section 20 – Epoxy Coated Steel Storage Tank, Section 2.02 C.
10. QUESTION: In lieu of 304 stainless steel, will hot dipped galvanized steel be acceptable for the ladder, safety cage, and climb prevention shield be acceptable?
- RESPONSE: Please refer to the Technical Specifications, Section 20 – Epoxy Coated Steel Storage Tank, Section 2.02 D.
11. QUESTION: In lieu of aluminum or 316 stainless steel, will hot dipped galvanized steel handrail be acceptable?
- RESPONSE: Please refer to the Technical Specifications, Section 20 – Epoxy Coated Steel Storage Tank, Section 2.03 B-3.
12. QUESTION: What is the square footage of non-skid material on the tank roof service area?
- RESPONSE: This will be part of the tank design and provided by the tank manufacturer. Roof service area should allow for maintenance and access to the roof, vent, and hatch.
13. QUESTION: In lieu of aluminum or stainless steel, will hot dipped galvanized steel checker plate gangway be acceptable.
- RESPONSE: Please refer to the Technical Specifications, Section 20 – Epoxy Coated Steel Storage Tank, Section 2.03 B-5.
14. QUESTION: Are there more as-builts showing the existing tank pipe connection and foundation details.
- RESPONSE: Please see attached as-built drawings.

## **ADDENDUM NO. 1 – AMENDMENTS SUMMARY**

- The “Proposal” section of the Contract Documents is to be removed and replaced with the attached revised “Proposal” dated 11-8-2019 which make the following changes:

Section 2 – CONTRACT TIME - extended to calendar 365 days from calendar 180 days.

Item No. 7 of PROPOSAL SCHEDULE - to include geotechnical study and foundation design.

Page 9 of the PROPOSAL to specify how the bid will be awarded:

“Bid award shall be made to the lowest bidder for Bid Alternative ‘B’ – Stainless Steel Tank (minus Item D) if funding is available. If sufficient funds are not available to award Bid Alternative ‘B’, the bid award shall be made to the lowest bidder for Bid Alternative ‘A’ – Epoxy Coated Tank (minus Item D).”

- Technical Specifications – Section 20 – Epoxy Coated Steel Storage Tank, Section 2.01 G “Tank Bolts” to be deleted and replaced with:  
“AWWA D103 Section 2.2. Bolts, nuts, and washers, Type 316 stainless steel, unless shear load requires the use of Type 304 stainless steel. Any variance from Type 316 stainless steel shall be clearly identified in the Bidder’s proposal.”

**PROPOSAL FOR:**  
**HONOKOHAU WATER TANK REPLACEMENT**  
**DWS JOB NO. 19-02B**  
**LAHAINA, MAUI, HAWAII**

BIDDER'S NAME: \_\_\_\_\_

Director  
Department of Water Supply  
County of Maui  
200 South High Street  
Wailuku, Maui, Hawaii 96793

The undersigned bidder, agrees to furnish and pay for all labor, materials, tools, and equipment, necessary to complete in place, the work called for in the bid documents in accordance with their intent and meaning for the TOTAL SUM BID of: \_\_\_\_\_  
\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_),  
as itemized in the attached Proposal Schedule.

The undersigned bidder declares the following:

1. It is incorporated or organized under the laws of the State of Hawaii, or is registered to do business in the State of Hawaii as a separate branch or division that is capable of fully performing under the contract and shall submit documents to the Department to demonstrate compliance.
2. It has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal.
3. It has not been assisted or represented on this matter by any individual who has, in a County capacity, been involved in the subject matter of this contract within the past two years.
4. It has not and will not, either directly or indirectly offered or given a gratuity (i.e., an entertainment or gift) to any State or County employee to obtain a contract or favorable treatment under a contract.
5. It will not maintain for its employees any segregated facilities at any of its establishments.
6. It does not and will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained.

The undersigned bidder further agrees to the following:

1. The submittal of this bid is verification that it has reviewed and understands the bid documents and agrees to accept and abide with the terms of the conditions contained herein, that it has inspected the project site and has satisfied himself as to the quantities involved, the material and equipment required, and the work involved. The Bidder declares that it has exercised his own judgment regarding the subsurface conditions, and has utilized all data which it believes pertinent from the Department of Water Supply of the County of Maui, referred to as the "Department", and other sources in arriving at his conclusion.
2. **Contract Time** shall not exceed 365 CALENDAR DAYS. The contract time shall commence on the date of notification to begin work, which date will be issued in the notice to proceed.
3. **Liquidated Damages** shall be THREE HUNDRED DOLLARS (\$300.00) for each calendar day the contract time is exceeded.
4. Bid award shall be made to the lowest responsive, responsible bidder based on a comparison of the total sum bid amount minus any verified credits for Hawaii Products Preference and Apprenticeship Programs.
5. That the quantities given in the attached Proposal Schedule are approximate only and are intended principally to serve as a guide in determining and comparing the bids.
6. The County does not, expressly or by implication, agree that the actual amount of work will correspond therewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work as may deemed necessary or advisable by the Director of Water Supply, and that all increased or decreased quantities of work shall be performed at the unit prices set forth in the attached Proposal Schedule except as provided for in the specifications.
7. In case of a discrepancy between unit prices and the totals in the attached Proposal Schedule, the unit prices shall prevail. If the addition of the totals are incorrect, the total sum bid shall be corrected.
8. Work for this project will be measured and paid for under the appropriate Lump Sum or Unit Price Bid proposal items listed in the proposal schedule. Work for which there is no proposal item shall be considered incidental to the various proposal items and will not be paid for separately.
9. If this proposal is accepted, it shall execute a contract with the County to provide all necessary labor, machinery, tools, equipment, apparatus and any other means of construction, to do all the work and to furnish all the materials specified in the contract in the manner and within the contract time, and that it shall accept in full payment therefore the sum of the unit price bid and/or lump sum bid prices as set forth in the attached Proposal Schedule for the actual quantities of work performed and materials furnished.

10. To furnish satisfactory performance and payment bond or security for 100% of the contract price, in accordance with Section 103D-324, Hawaii Revised Statutes, within 10 days after the award of the contract or within such time as the Director of Finance may allow after the undersigned has received the contract documents for execution, and is fully aware that non-compliance with the aforementioned terms will result in the forfeiture of the full amount of the bid guarantee required under Section 103D-323, Hawaii Revised Statutes.
11. The County reserves the right to reject any or all bids and to waive any defects when in the Director's opinion such rejections or waiver will be for the best interest of the public.
12. To submit proof of compliance with the requirements of section 103D-310(c), Hawaii Revised Statutes, prior to award of contract.
13. The County reserves the right to add a contingency amount to the contract amount up to 5% of the accepted total sum bid.
14. To submit with the bid a signed *Certification of Compliance with HRS 396-18, Safety and Health Programs, which is included in these bid documents*. Failure to submit the required certification with the bid may be grounds for disqualification of the bid.
15. To submit with the bid a signed *Certification of Bidder's Participation in Approved Apprenticeship Program Under Act 17* (Form 1) if taking credit for an Apprenticeship Program, pursuant to Section 103-55.6, Hawaii Revised Statutes. Further, if awarded the contract, the bidder agrees to certify monthly in writing that the bidder is a party to a registered apprenticeship agreement for each apprenticeable trade employed for the entire duration of the bidder's work on the project.
16. This bid is subject to Chapter 103B, Hawaii Revised Statutes (Act 68, SB 2840), related to the Employment of State Residents on Construction Procurement Contracts that requires the awarded contractor to ensure that Hawaii Residents compose not less than eighty percent of the workforce employed to perform the contract. This requirement shall also apply all subcontracts of \$50,000 or more.



Accompanying this proposal is bid security in the amount of:

\_\_\_\_\_ DOLLARS  
(\$ \_\_\_\_\_), in the form checked below and in accordance with Section 103D-323, Hawaii Revised Statutes.

- |                          |                                     |   |                     |
|--------------------------|-------------------------------------|---|---------------------|
| <input type="checkbox"/> | Surety Bond*                        | ) | * Use standard form |
|                          |                                     | ) |                     |
| <input type="checkbox"/> | Cash                                | ) |                     |
|                          |                                     | ) |                     |
| <input type="checkbox"/> | Cashier's Check                     | ) |                     |
|                          |                                     | ) |                     |
| <input type="checkbox"/> | Certified Check                     | ) |                     |
|                          |                                     | ) |                     |
| <input type="checkbox"/> | _____                               | ) |                     |
|                          | (Fill in other acceptable security) | ) |                     |

The undersigned acknowledges receipt of any addendum issued by the Department of Water Supply by recording in the space below the date of receipt.

Addendum No. 1: \_\_\_\_\_ Addendum No. 2: \_\_\_\_\_

Addendum No. 3: \_\_\_\_\_ Addendum No. 4: \_\_\_\_\_

**HAWAII PRODUCTS PREFERENCE SCHEDULE**

Product Description	Class	Manufacturer	Cost FOB Jobsite, Unloading, Including Applicable General Excise and Use Taxes	Preference Amount (10% for Class I or 15% for Class II)
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
			\$	\$
<b>TOTAL SUM OF PREFERENCE AMOUNTS</b>				\$

Attach additional sheets as necessary.

Notes for Hawaii Product Preference:

1. Bidders shall fill out the above schedule for each Hawaii product for which a preference is being requested. Hawaii products must be listed in the Hawaii products list at the State of Hawaii SPO website or an approved Certification for Hawaii Product Preference (form SPO-38) shall be attached to the bid proposal for items not listed on the SPO website. Pending certifications or unlisted certifications from the State or other Counties shall not be acceptable unless prior approval from the County of Maui Purchasing Division is obtained.
2. All Hawaii products listed are subject to verification. Any product that cannot be validated due to vague, ambiguous, illegible or unverifiable language; or incorrect manufacturer name, is subject to denial. The Purchasing Administrator’s decision is final.
3. Bidders shall attach written quotes from manufacturers to the bid proposal for each Hawaii product for which a preference is being requested. Quotes shall be dated and shall have the manufacturer’s name and contact information, product description, quantities, unit price and total price. Any Hawaii product preference without an accompanying written quote from the manufacturer will be denied.
4. Bidders shall provide justification for any additional loading, unloading and transportation costs, and taxes. These costs may be in the form of estimates; however, if the additional costs are deemed unreasonable by the Purchasing Administrator, such costs shall be denied and the Preference Amount adjusted accordingly. The Purchasing Administrator’s decision is final.

## **SUBCONTRACTOR AND JOINT CONTRACTOR LISTING**

In accordance with Section 103D-302, Hawaii Revised Statutes, the undersigned as bidder has listed below the name of each person or firm, who will be engaged by the bidder on the project as joint contractor or subcontractor and the nature of work to be done by each. It is understood that failure to comply with these requirements may be cause for rejection of the bid submitted.

If no joint contractor or subcontractor is to be engaged, the bidder must complete the form by writing "NONE". If left blank, the Department will interpret the blank as no joint contractor or subcontractor will be used.

Each bidder shall fill in contractor's and subcontractors' license numbers. Bidders must list not only their name and all subcontractor's names, but also a valid license number for each contractor and subcontractor as indicated on the DCCA contractor's licensing website at <http://pvl.ehawaii.gov/pvlsearch/app>. It is the bidder's responsibility to only work with contractors and subcontractors that are in good standing with the State of Hawaii DCCA contractor's licensing office and are represented as such on the DCCA website. If contractor's license cannot be verified as being in good standing on the DCCA website at the time of bid opening, then the County has discretion to reject the contractor's bid on this basis.

The County will verify the license of the contractor and all of the listed subcontractors, on the State Website at <http://pvl.ehawaii.gov/pvlsearch/app>, of the lowest bidder after the bid opening. The County will also print out the license status for the contractors and each subcontractor listed and keep them in the bid file.

The County will also verify the licenses of the 2<sup>nd</sup> and 3<sup>rd</sup> contractor and their subcontractors in case the low bidder does not end up with the contract. If, for whatever reason, the County does not end up contracting with one of the three lowest bidders, the County will check the licenses of the other bidders, on a later date, and that verification date will be at the sole discretion of the County.

If a subcontractor is listed, and the license number is listed but not listed accurately, or numbers are transposed, or the subcontractor name listed does not match DCCA listing, or the name and license number cannot be verified through the State Website, etc., the County will have the sole discretion to accept or reject that contractor's bid based on the ability to quickly locate that license number on the State Website using the license holder information provided below.

If the State contractor's licensing website is unavailable after the bid opening, or if the County internet service is down, etc., the County has the sole discretion to verify licenses as soon as possible at a later date, but prior to the award of a contract.

**CONTRACTOR:**

	<u>NAME</u>	<u>NATURE OF WORK</u>	<u>LICENSE CLASS</u>	<u>LICENSE NO.</u>
1.	_____	_____	_____	_____

**SUBCONTRACTOR:**

	<u>NAME</u>	<u>NATURE OF WORK</u>	<u>LICENSE CLASS</u>	<u>LICENSE NO.</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
6.	_____	_____	_____	_____
7.	_____	_____	_____	_____
8.	_____	_____	_____	_____
9.	_____	_____	_____	_____
10.	_____	_____	_____	_____
11.	_____	_____	_____	_____
12.	_____	_____	_____	_____

**JOINT CONTRACTOR:**

	<u>NAME</u>	<u>NATURE OF WORK</u>	<u>LICENSE CLASS</u>	<u>LICENSE NO.</u>
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____

(Use additional sheets, if necessary)

**PROPOSAL SCHEDULE**

**HONOKOHAU WATER TANK REPLACEMENT  
DWS JOB #19-02B**

<b>ITEM NO.</b>	<b>DESCRIPTION</b>	<b>UNIT</b>	<b>TOTAL</b>
1	Mobilization (Max 1% of total bid)	Lump Sum	\$ _____
2	Demobilization (Max 1% of total bid)	Lump Sum	\$ _____
3	Demolish and properly dispose of existing 30,000 gallon glass-lined steel tank.	Lump Sum	\$ _____
4	Existing concrete foundation preparation, including grinding down existing starter ring below grade and sealing with epoxy concrete sealant, all other incidental work to accommodate new water tank and pipe connections; in place complete.	Lump Sum	\$ _____
5	Waterline/Tank hydro-testing, chlorination, and flushing of new waterlines, including removal of temporary risers and all incidental work, all in accordance with the project specifications, plan notes, and DWS Water System Standards.	Lump Sum	\$ _____
6	Site restoration, including landscaping, and pavements; in place complete.	Lump Sum	\$ _____
7	Upon inspection of existing concrete foundation, a new foundation or repairs to the existing foundation may be required; in place complete. Including geotechnical report and foundation design.	Allowance	\$ 50,000
<b>ITEM A</b>	<b>SUBTOTAL</b>		\$ _____

<b>BID ALTERNATIVE 'A' – EPOXY COATED STEEL TANK</b>			
8A	30,000 Gallon Fusion Bonded Epoxy Coated Steel Bolted Water Tank. Inclusive of in-tank riser pipe and support brackets, stainless steel ladder and platform with safety railing and cage, tank floor with pipe entrance connections, manhole access hatches, structural engineering, building permit application, and all appurtenances; in place complete.	Lump Sum	\$ _____
<b>ITEM B (ITEM A + BID ALTERNATIVE 'A')</b>		<b>TOTAL SUM BID</b>	\$ _____

<b>BID ALTERNATIVE 'B' – STAINLESS STEEL TANK</b>			
8B	30,000 Gallon Stainless Steel Bolted Water Tank. Inclusive of in-tank riser pipe and support brackets, stainless steel ladder and platform with safety railing and cage, tank floor with pipe entrance connections, manhole access hatches, structural engineering, building permit application, and all appurtenances; in place complete.	Lump Sum	\$ _____
<b>ITEM C (ITEM A + BID ALTERNATIVE 'B')</b>		<b>TOTAL SUM BID</b>	\$ _____

<b>Act 17, SLH 2009 - Apprenticeship Program (ITEM D1) **</b>		(\$ _____)
Bidders applying for preference under ACT 17, SHL 2009 Apprenticeship Program shall indicate amount of preference (Five Percent - 5% of TOTAL SUM BID) here: Subject to Verification		
<b>Act 175, SLH 2009 - Hawai'i Product Preference Program (ITEM D2) **</b>		(\$ _____)
Bidders applying for the Hawai'i Product Preference under ACT 175, SHL 2009 shall indicate amount of preference here: Subject to Verification		
<b>ITEM D</b>	<b>TOTAL CREDITS</b>	\$ _____
<b>TOTAL FOR BID COMPARISON ONLY (ITEM B or ITEM C minus ITEM D)</b>		\$ _____

\*\* Bid award shall be made to the lowest responsive, responsible bidder based on a comparison of the TOTAL SUM BID (Item B or Item C) minus verified CREDITS (Item D) for Hawaii Products Preference and Apprenticeship Programs.  
 Bid award shall be made to the lowest bidder for Bid Alternative 'B' – Stainless Steel Tank (minus Item D) if funding is available. If sufficient funds are not available to award Bid Alternative 'B', the bid award shall be made to the lowest bidder for Bid Alternative 'A' – Epoxy Coated Tank (minus Item D).

The undersigned hereby certifies that the bid prices contained in the attached Proposal Schedule have been carefully checked and are submitted as correct and final.

This declaration is made with the understanding that the undersigned is subject to the penalty of perjury under the laws of the United States and violation of the Hawaii Penal Code, Section 710-1063, unsworn falsification to authorize, of the Hawaii Revised Statutes, for knowingly rendering a false declaration.

\_\_\_\_\_  
Bidder

By \_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Business Address

\_\_\_\_\_  
Business Telephone / Business Facsimile

\_\_\_\_\_  
Business Email

\_\_\_\_\_  
Contractor's License No.

\_\_\_\_\_  
Date

**NOTE:**

If bidder is a CORPORATION, the legal name of the corporation shall be set forth above, the corporate seal affixed, together with the signature(s) of the officer(s) authorized to sign contracts for the corporation. Please attach to this page current (not more than six months old) evidence of the authority of the officer(s) to sign for the corporation.

If bidder is a PARTNERSHIP, the true name of the partnership shall be set forth above, with the signature(s) of the general partner(s). Please attach to this page current (not more than six months old) evidence of the authority of the partner authorized to sign for the partnership.

If bidder is an INDIVIDUAL, the bidder's signature shall be placed above.

If signature is by an agent, other than an officer of a corporation or a partner of a partnership, a POWER OF ATTORNEY must be on file with the Department before opening bids or submitted with the bid. Otherwise, the Department may reject the bid as irregular and unauthorized.

**CERTIFICATION OF COMPLIANCE  
WITH HRS 396-18, SAFETY AND HEALTH PROGRAMS  
(FOR CONTRACTOR BIDDING ON COUNTY JOBS IN EXCESS OF \$100,000)**

PROJECT NAME:                   **HONOKOHAU WATER TANK REPLACEMENT**  
PROJECT NUMBER:               **DWS JOB NO. 19-02B**

This is to certify that the undersigned will comply with the requirements of HRS 396-18, as follows:

- (A) Pursuant to HRS 396-18, all bids and proposals in excess of \$100,000 shall include a signed certification from the bidder that a written safety and health plan for the job will be available and implemented by the notice to proceed dates of the project. The written safety and health plan shall include:
  - (1) A safety and health policy statement reflecting management commitment;
  - (2) A description of the safety and health responsibilities of all levels of management and supervisors on the job and a statement of accountability appropriate to each;
  - (3) The details of:
    - (a) The mechanism for employee involvement in job hazard analysis;
    - (b) Hazard identification, including periodic inspections and hazard correction and control.
    - (c) Accident and "near-miss" investigations; and
    - (d) Evaluations of employee training programs;
  - (4) A plan to encourage employees to report hazards to management as soon as possible and to require management to address these hazards promptly; and
  - (5) A certification by a senior corporate or company manager that the plan is true and correct
- (B) Failure to submit the required certification may be grounds for disqualification of the bid.
- (C) Failure to have available on site or failure to implement the written safety and health plan by the project's notice to proceed date shall be considered willful noncompliance and be sufficient grounds to disqualify the award and terminate the contract.

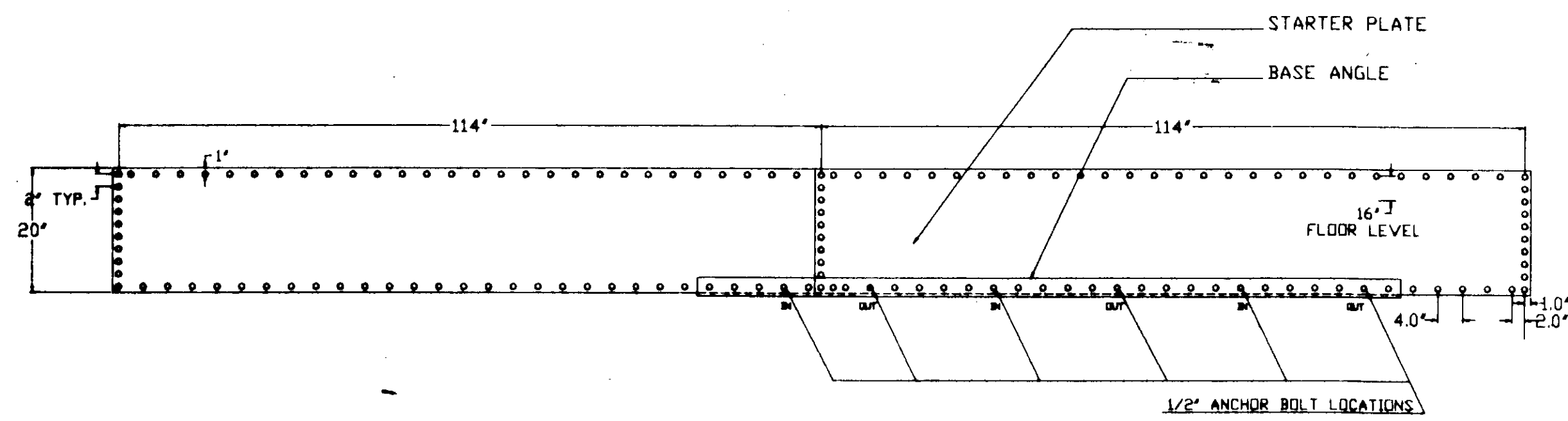
\_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Signature and Title

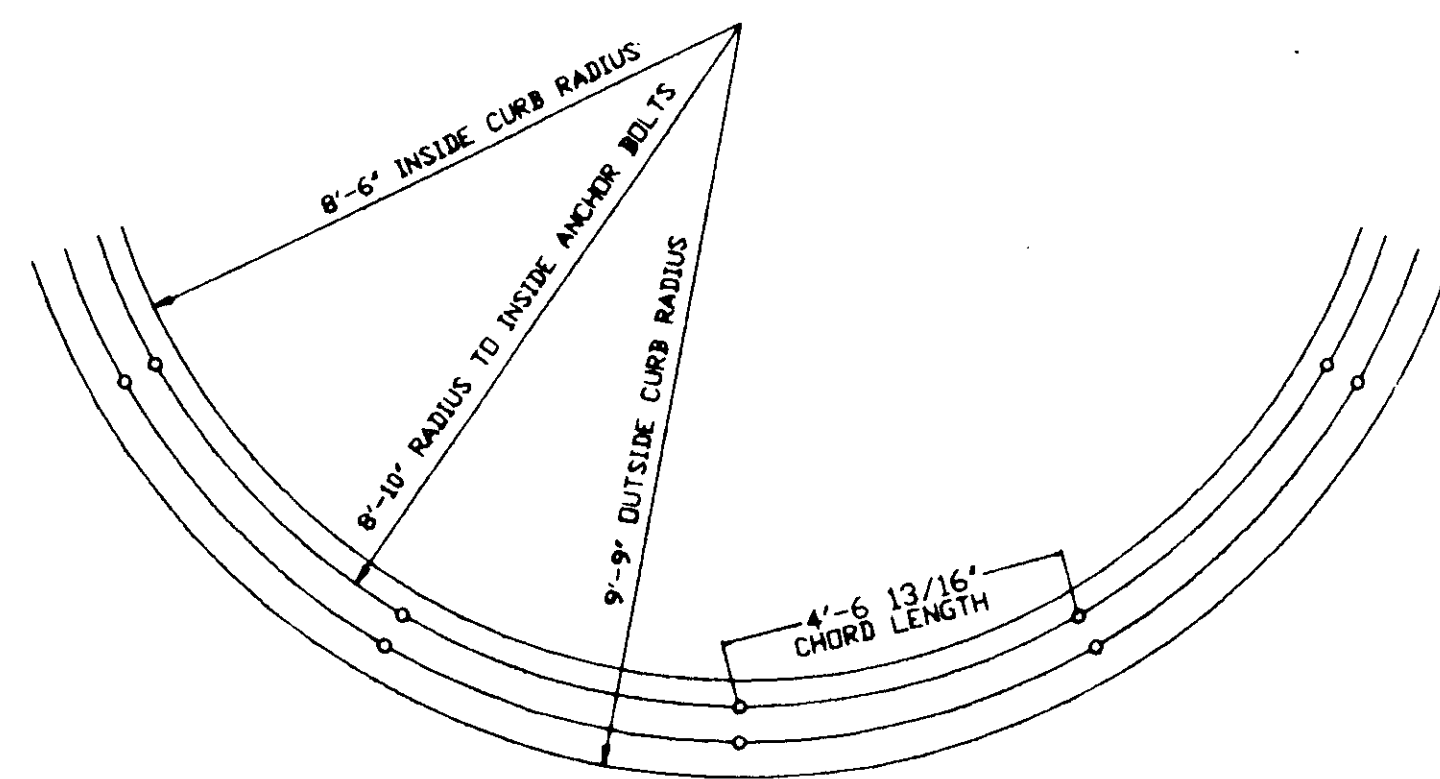
Date: \_\_\_\_\_



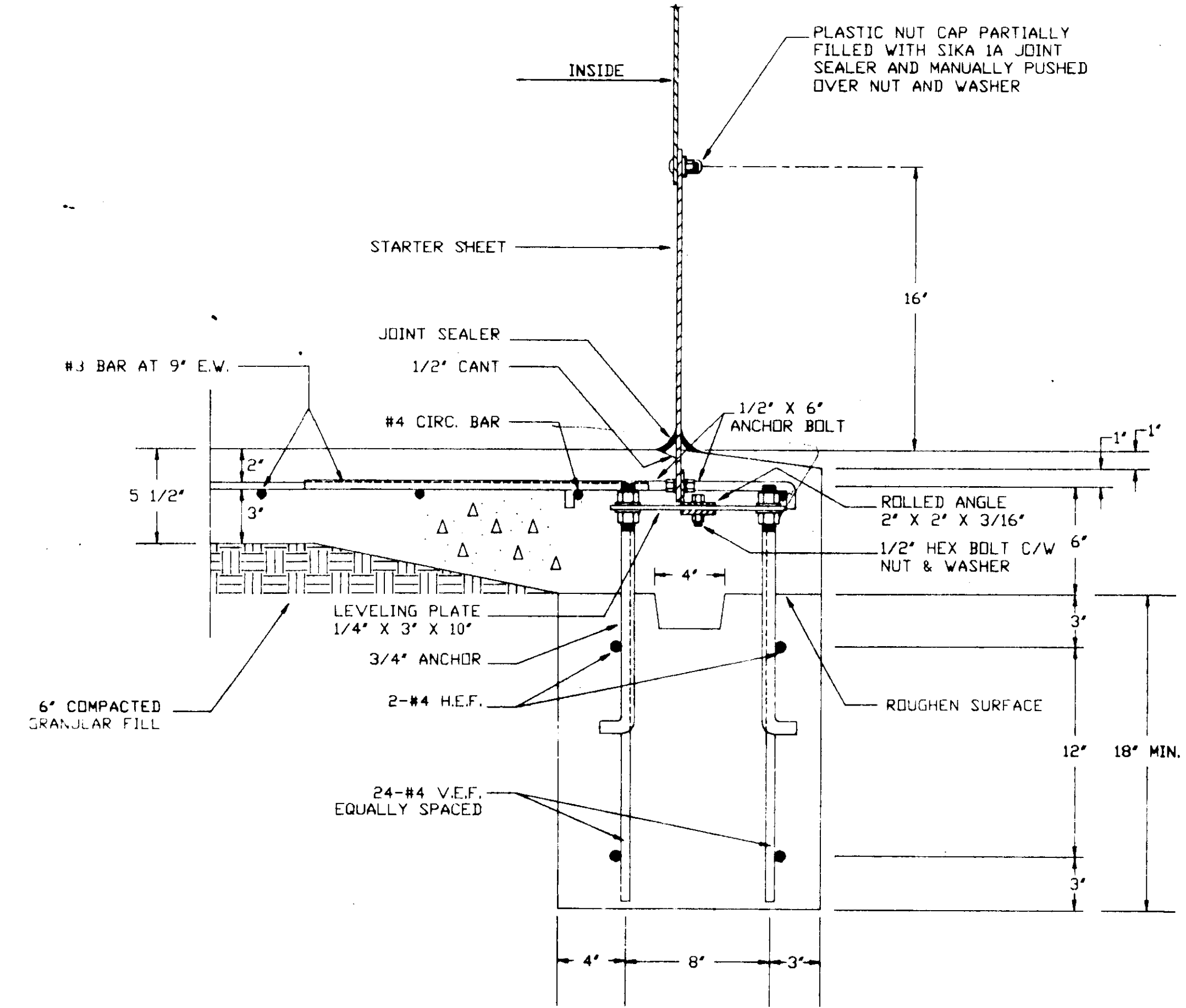




STARTER PLATE AND BASE ANGLE  
AS VIEWED FROM OUTSIDE OF TANK



ANCHOR BOLT LAYOUT



BASE CURB SECTION  $\Delta$

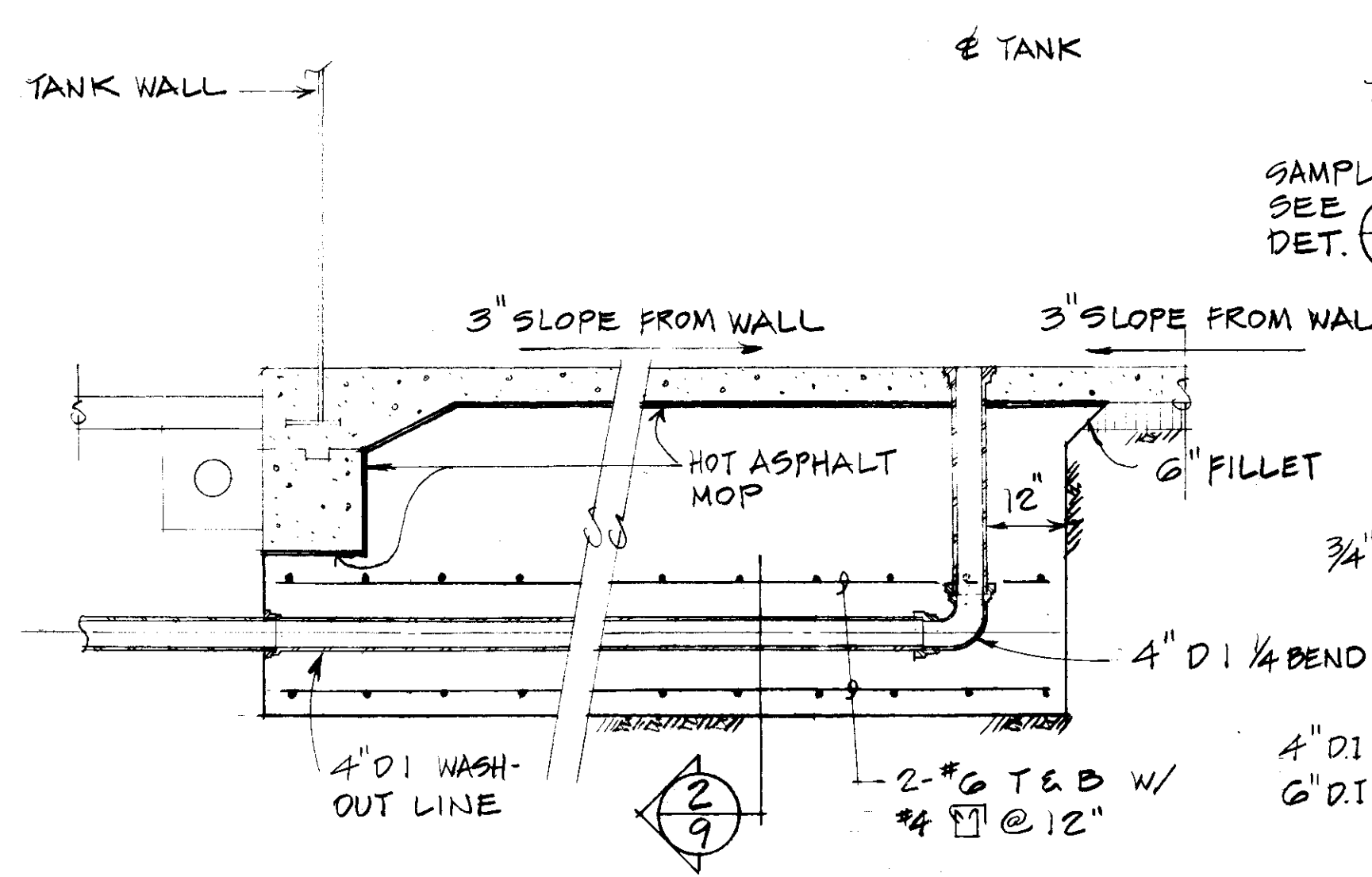
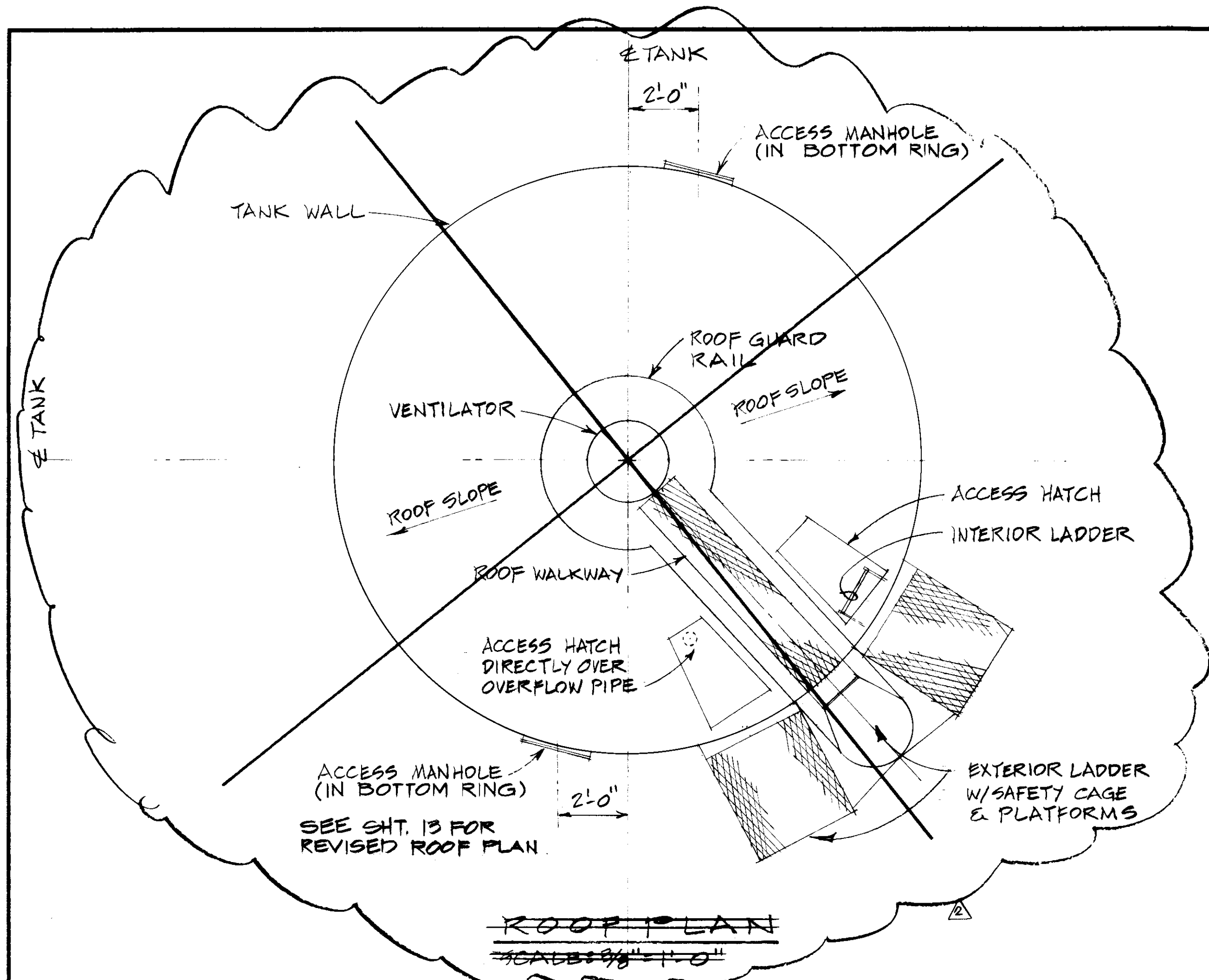
NOTE: WIRE TIE ALL ANCHOR RODS TO REINFORCING

FOUNDATION NOTES:

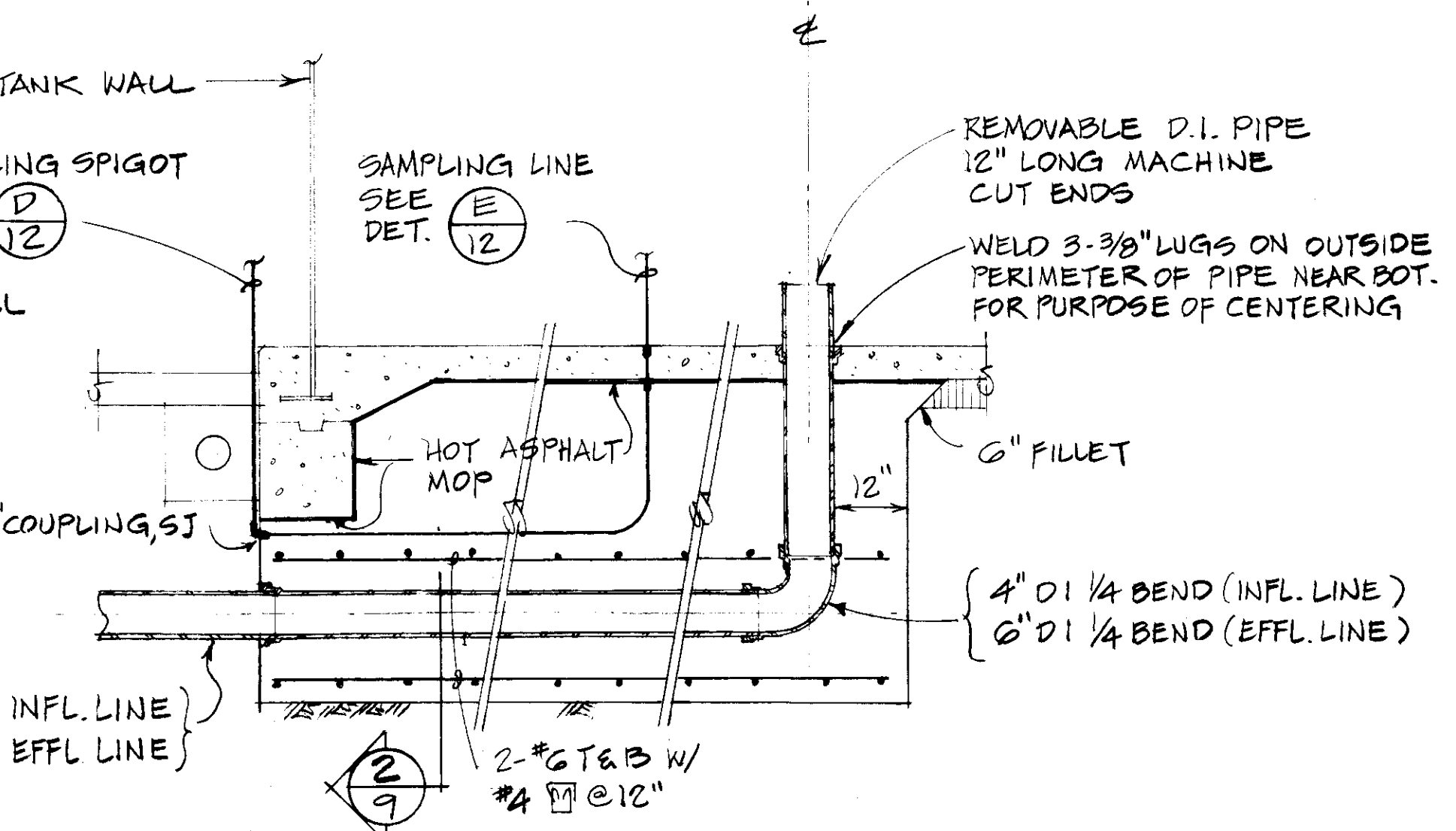
1. EXCAVATE MIN. 24" DIA. TO UNIFORM DEPTH OF UNDERSIDE OF RING WALL FOUNDATION.
2. EXCAVATE FOR PIPE TRENCHES. INSTALL PIPES. REMOVE ANY LOOSE SOIL. INSTALL REINFORCED CONCRETE PIPE JACKETS, AS PER OWNERS DRAWINGS.
3. FORM AND PLACE REINFORCED CONCRETE RINGWALL FOUNDATION.
4. PLACE GRANULAR FILL INSIDE FOUNDATION RINGWALL IN 6" LIFTS AND COMPACT TO MIN. 95% MODIFIED PROCTOR, MAX. DRY DENSITY.
5. INSTALL TANK STARTER RING.
6. INSTALL REINFORCING FOR CONCRETE FLOOR AND PLACE CONCRETE.

"AS BUILT"  
SILVERSWORD CONTRACTING  
4/10/00

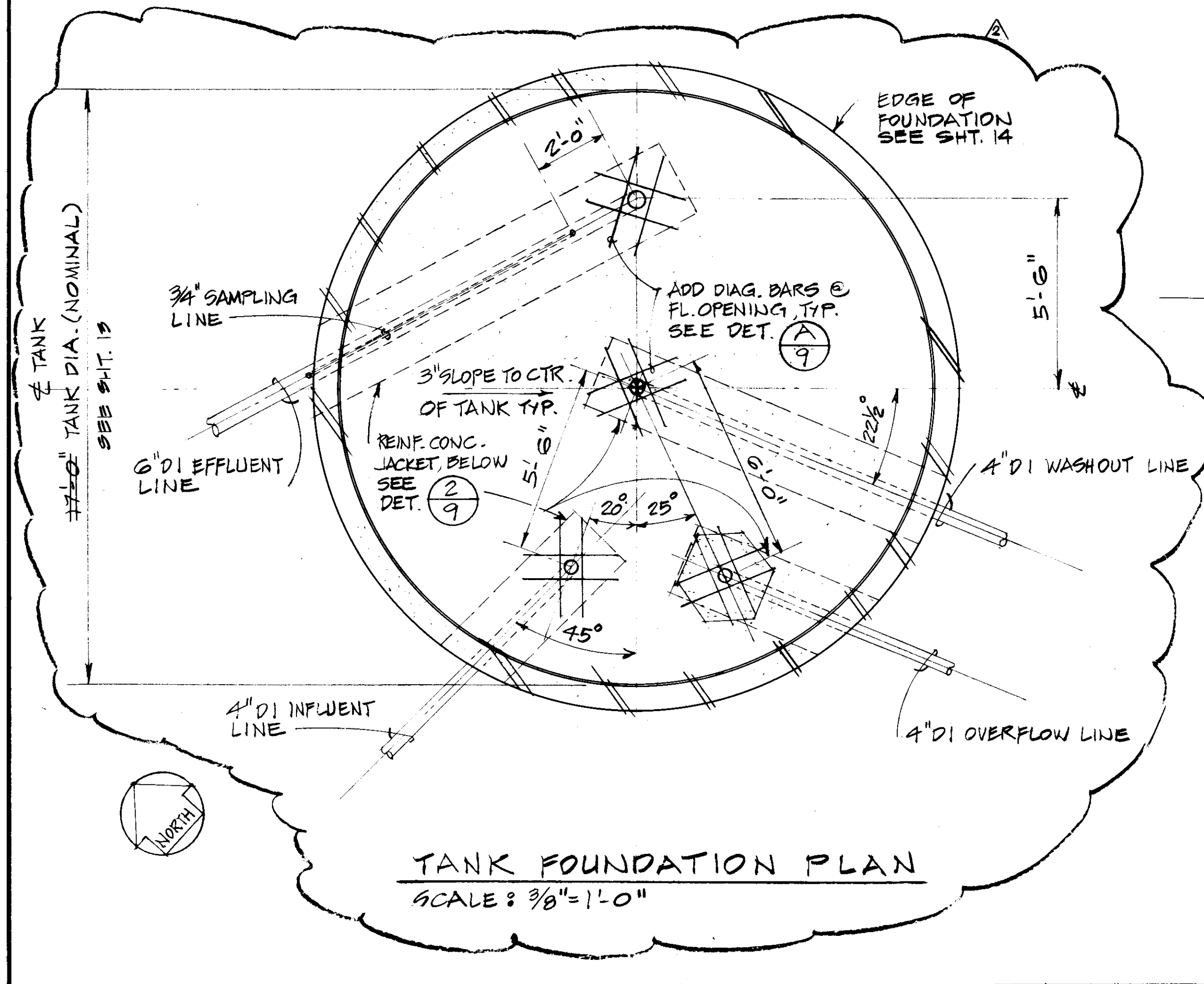
8									
7									
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4									
3									
2									
1									
THIS SHEET ADDED 4/25/00 MJE INSTALLED REBAR IN BASE CURB DETAIL 8/8/89 M.V.S.								LYCO, INC. MARLBORO, NEW JERSEY  TITLE SUPERBLUE SB1816 WATER STORAGE STANDPIPE FOR HONOKOHAI WATER TREATMENT FACILITY, HONOKOHAI VALLEY, LAHAINA, MAUI, HAWAII	
DRAWN BY EKD/SCALE M.V.S. D.V. NTS DATE 5/31/89 JOB NO. 2207								DRAWING NO. 2207-2	



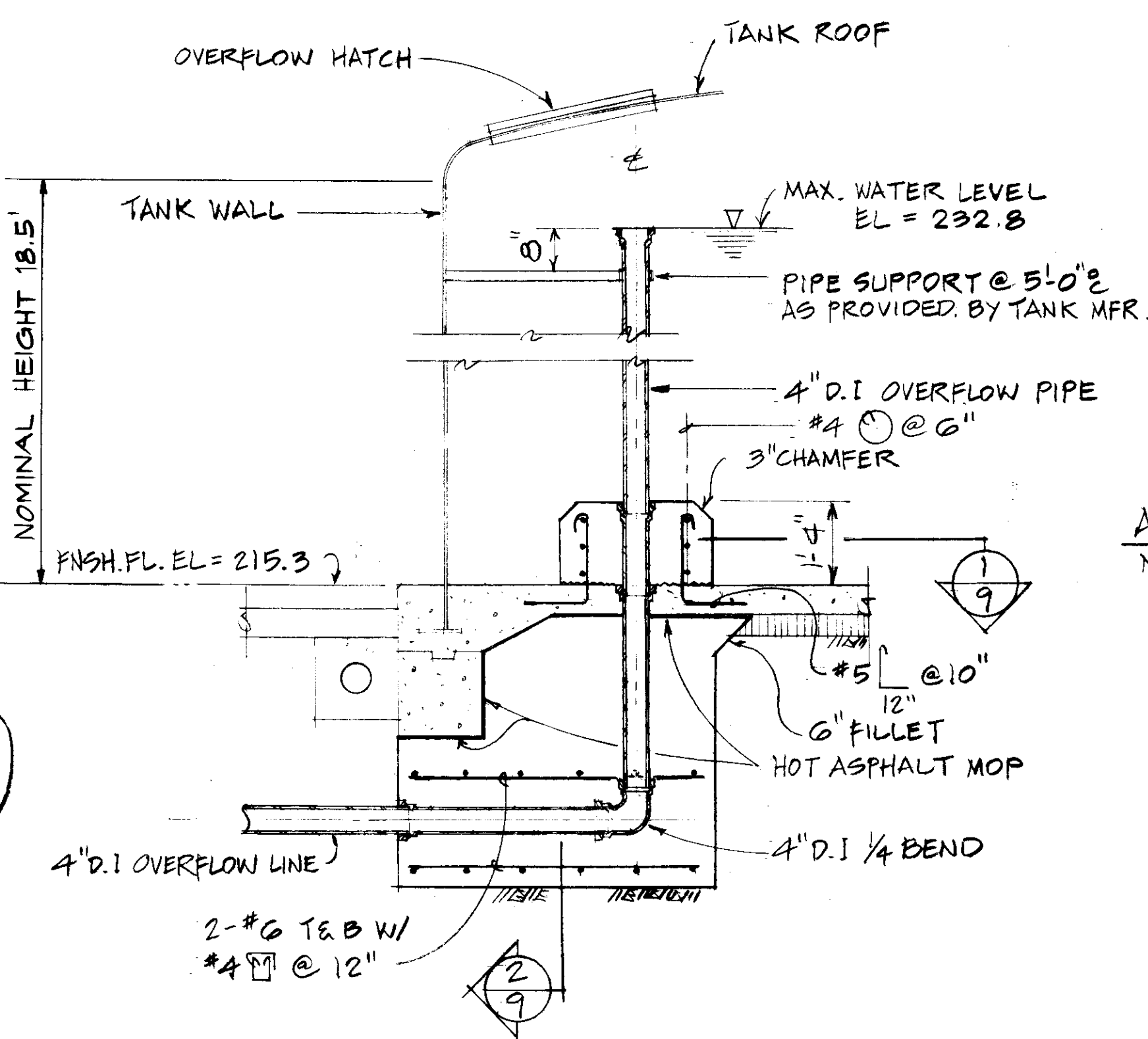
WASHOUT LINE DETAIL  
NOT TO SCALE



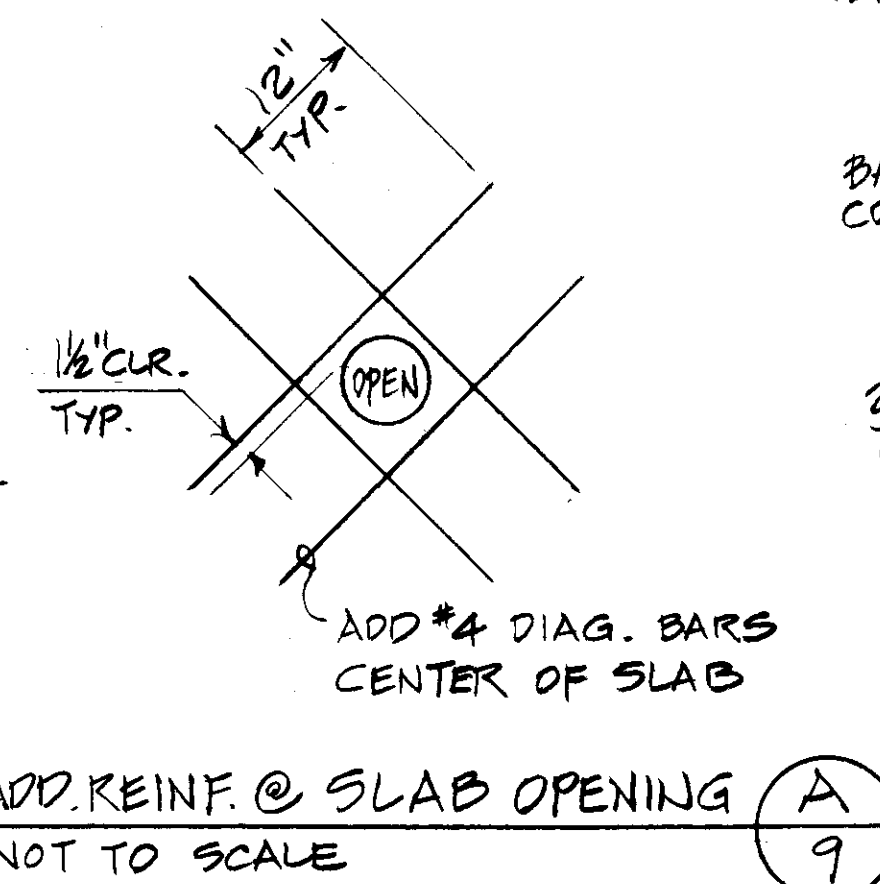
INFLUENT / EFFLUENT LINE DETAIL  
NOT TO SCALE



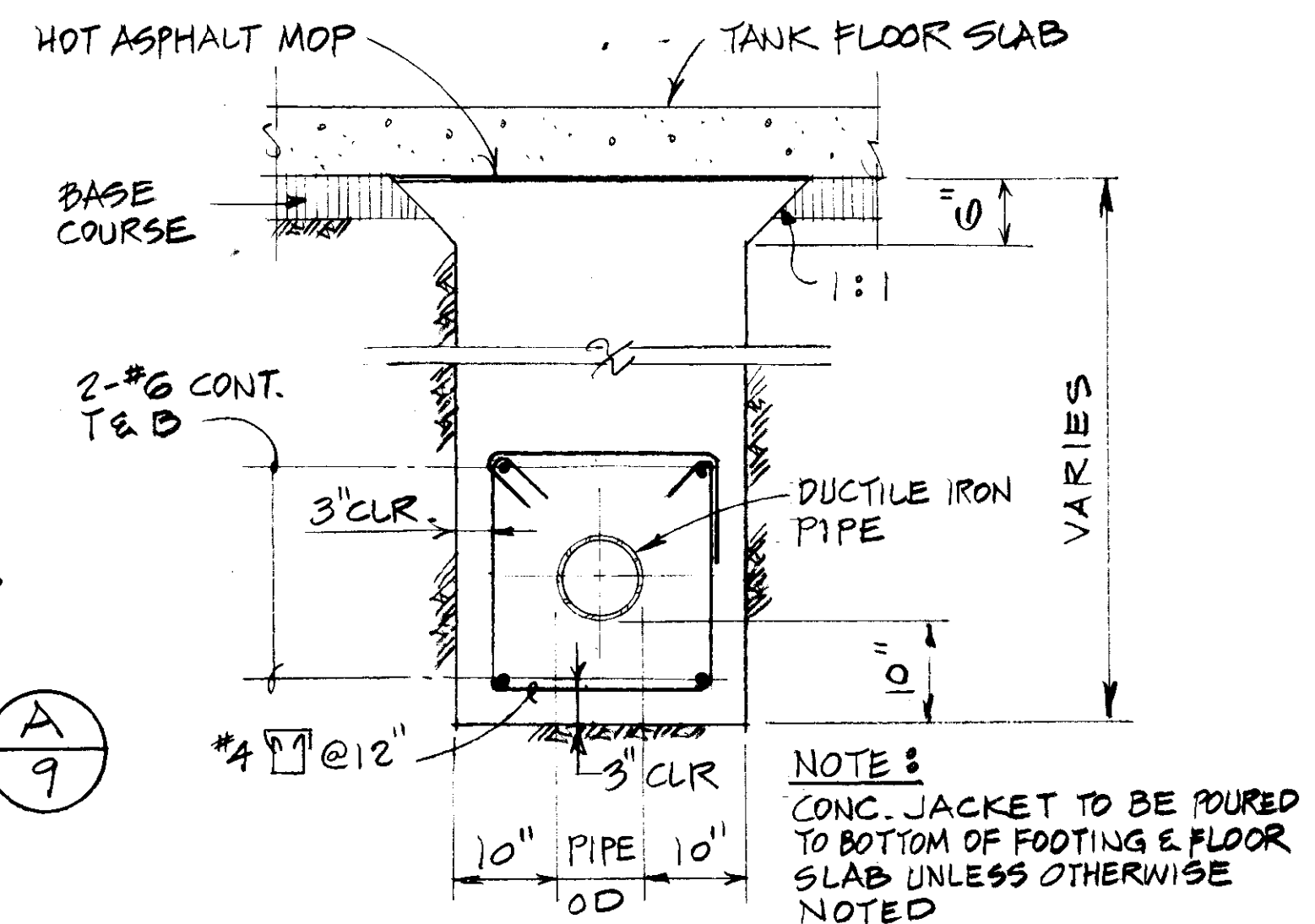
TANK FOUNDATION PLAN  
SCALE: 3/8" = 1'-0"



OVERFLOW LINE DETAIL  
NOT TO SCALE

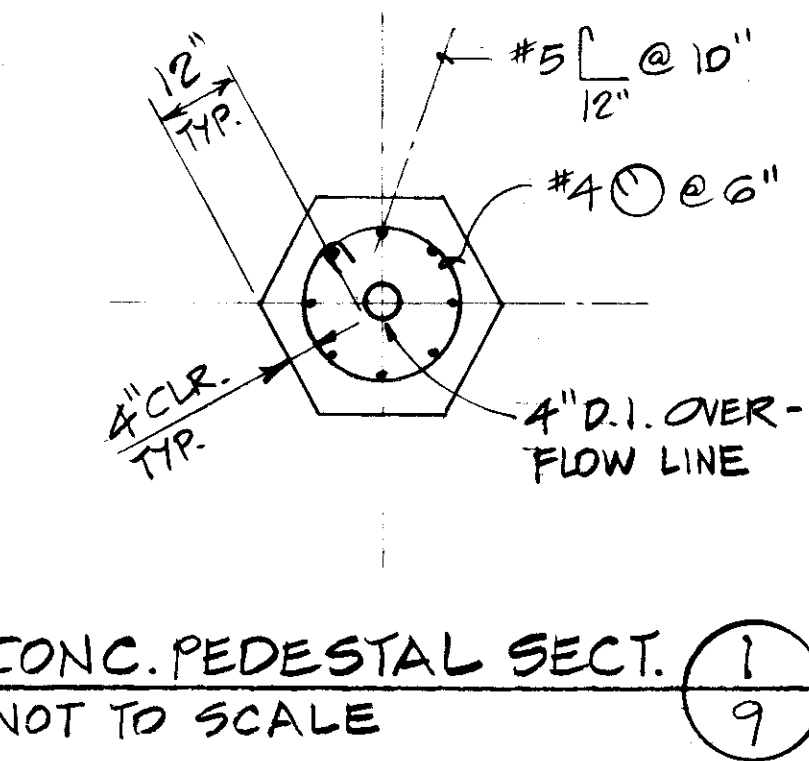


CONC. PEDESTAL SECT. (1)  
NOT TO SCALE



REINF. CONC. JACKET (2)  
NOT TO SCALE

**NOTE**  
SEE SHTS 13, 14 & 15 FOR  
ADDITIONAL STORAGE TANK  
PLANS AND DETAILS



GRAPHIC SCALE  
3/8" = 1'-0"

REVISION	DATE	AS-BUILT REVISIONS	M&E

REGISTERED PROFESSIONAL ENGINEER  
 GEOFFREY B. GOEGEL  
 HAWAII U.S.A.

M & E PACIFIC, INC.  
 ENGINEERS & ARCHITECTS  
 HONOLULU, HAWAII

**HONOKOHAU WATER TREATMENT FACILITY**  
 HONOKOHAU VALLEY  
 LAHANA, MAUI, HAWAII

**STORAGE TANK PLANS & DETAILS**

DRAWN BY: E.W. ENGINEER: D.Y. G.G.

THIS WORK WAS DONE BY ME OR UNDER MY SUPERVISION  
 1/6/89  
 BY: G.B. Goegel

