

THE CITY OF DAYTONA BEACH

BETHUNE POINT WRF - PHASE I PROCESS UPGRADES

UTILITIES PROJECT NO. 6872



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LOCATION MAP

THE CITY OF DAYTONA BEACH
UTILITIES DEPARTMENT
ENGINEERING DIVISION

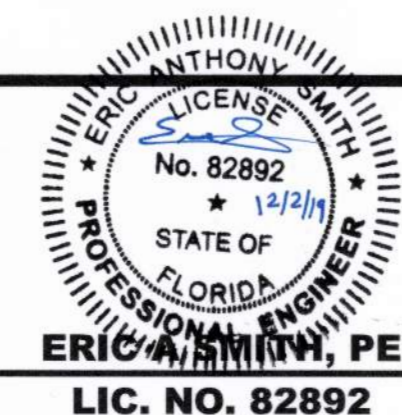
CITY MANAGER
JAMES CHISHOLM

UTILITIES DIRECTOR
SHANNON T. PONITZ

GOVERNING STANDARDS AND SPECIFICATIONS:
 CITY OF DAYTONA BEACH UTILITIES DEPARTMENT STANDARD DETAILS, LATEST EDITION

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:(HOR.)	NTS
Checked By:	EAS	(Vert.)	NTS
File Name:	Clarifier No. 4 As-Built.dwg	Design Date:	08/2019
Rotation:	X: 0d	Drawn By:	KLH
Name:		Checked By:	EAS
Revision:		Date:	



THE CITY OF DAYTONA BEACH
 UTILITIES DEPARTMENT
 125 BASIN ST., STE. 100 • DAYTONA BEACH • FLORIDA 32114
 PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
COVER SHEET & INDEX
PROJECT No. 6872

NOTES

1. THE INFORMATION IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF WORK. ACTUAL CONDITIONS MAY DEVIATE FROM THE INFORMATION SHOWN IN THE PROJECT DOCUMENTS. CONTRACTOR SHALL NOT HOLD OWNER RESPONSIBLE FOR ANY SUCH DEVIATIONS. EXISTING UTILITIES AND STRUCTURES SHOWN IN THE PROJECT DOCUMENTS MAY NOT REFLECT AN ACCURATE/COMPLETE REPRESENTATION OF ACTUAL CONDITIONS. THE PROJECT DRAWINGS DO NOT CLAIM TO SHOW ALL EXISTING UTILITIES AND FEATURES. ALL CONTRACTORS ARE DIRECTED PRIOR TO BIDDING TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED.
2. EXISTING FACILITY AND UTILITY INFORMATION SHOWN ON THE DRAWINGS WAS OBTAINED FROM AVAILABLE RECORDS OR ELECTRONIC FILES. THE OWNER DOES NOT ASSUME RESPONSIBILITY FOR FACILITIES AND UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN. THE CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, SIZES, MATERIAL TYPES AND ELEVATIONS SHOWN AND AROUND OR NEAR AREAS OF NEW CONSTRUCTION PRIOR TO START OF CONSTRUCTION.
3. THE PREPARATION OF THESE DOCUMENTS RELIED ON RECORD DRAWINGS TITLED "UPGRADING AND MODIFICATIONS FOR THE BETHUNE POINT WASTEWATER TREATMENT PLANT" PREPARED BY CDM AND DATED FEBRUARY 1994. THE AVAILABLE PLANS CAN BE PROVIDED TO THE CONTRACTOR UPON REQUEST.
4. CONTRACTOR IS REMINDED THAT CONSTRUCTION ACTIVITIES ARE TO TAKE PLACE AT AN ACTIVE WASTEWATER TREATMENT FACILITY. AT NO POINT DURING CONSTRUCTION CAN THE FACILITY BE TAKEN OFF LINE. IF DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR ANTICIPATES A TEMPORARY OUTAGE OF A PARTICULAR PROCESS WILL BE REQUIRED, THE CONTRACTOR SHALL PROVIDE THE CITY WITH A MINIMUM OF 2 WEEKS NOTICE IN WRITING. AS PLANT OPERATIONS SUPERSEDE THE CONSTRUCTION ACTIVITIES, THE CITY MAY REJECT THE REQUEST AT ANY POINT UP TO AND DURING THE WORK. THE CITY WILL DO ITS BEST TO PROVIDE SUFFICIENT NOTICE TO THE CONTRACTOR SHOULD SUCH A SITUATION ARISE.
5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT FROM DAMAGE EXISTING FACILITIES AND UTILITIES SHOWN OR NOT SHOWN WHICH ARE TO REMAIN IN PLACE. ALL FACILITIES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED TO THE OWNER'S SATISFACTION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
6. THE CONTRACTOR SHALL NOTIFY THE CITY IMMEDIATELY OF ANY CONFLICTS ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN IN THESE PROJECT DOCUMENTS.
7. ALL DEBRIS FROM DEMOLITION IS TO BE DISPOSED OF LEGALLY OFF SITE. ANY SALVAGEABLE MATERIALS OR EQUIPMENT SHALL BE THE PROPERTY OF THE OWNER AND MOVED TO A LOCATION AS DIRECTED BY THE OWNER.
8. THE CONTRACTOR SHALL SHORE, SUPPORT AND PROTECT EXISTING STRUCTURES AND FACILITIES AS NECESSARY TO KEEP THEM IN GOOD WORKING CONDITION.
9. CONTRACTOR SHALL NOTIFY SUNSHINE STATE ONE CALL SERVICE 48 HOURS PRIOR TO PROJECT STAKEOUT AND COMMENCING ANY EXCAVATION/TRENCHING. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES IN THE PATH OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL FIELD CONDITIONS ARE DISCOVERED.
10. PIPE SUPPORTS ARE NOT SHOWN ON THE PLANS FOR CLARITY. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PIPE SUPPORTS REQUIRED PER THE MANUFACTURER RECOMMENDATIONS.
11. FIELD VERIFY LOCATIONS, SIZES, AND CONNECTION MATERIALS OF ALL EXISTING PIPING AND EQUIPMENT BEFORE FABRICATING NEW PIPE OR RETRO FIT OF NEW COMPONENTS.
12. THESE PLANS DO NOT DEPICT EVERY DETAIL NEEDED TO PROVIDE A COMPLETE SYSTEM. THE SUPPLIER SHALL PROVIDE ALL ITEMS REQUIRED TO FURNISH A COMPLETE AND FUNCTIONAL SYSTEM, EVEN IF THEY ARE NOT SHOWN ON THE DRAWINGS.
13. EQUIPMENT SHOWN ON THE PLANS IS FOR REPRESENTATION PURPOSES ONLY AND DOES NOT PURPORT TO SHOW THE FINAL LAYOUT. THE EQUIPMENT SUPPLIER IS RESPONSIBLE FOR THE LAYOUT AND ARRANGEMENT OF THE EQUIPMENT AND ENSURING IT WILL FIT WITHIN THE STRICTURES SHOWN AND WILL MEET THE PERFORMANCE CRITERIA LISTED IN THE SPECIFICATIONS.
14. THE EQUIPMENT SUPPLIER SHALL BE RESPONSIBLE FOR DETERMINING THE NUMBER/LOCATION/SIZE OF ANCHORS REQUIRED TO ANCHOR THE EQUIPMENT TO THE EXISTING STRUCTURE AS NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
15. THE CITY IS OWNER FURNISHING EQUIPMENT ASSOCIATED WITH THE CLARIFIER UPGRADES FROM OVIVO USA, LLC. CONTRACTORS BID PRICE SHALL INCLUDE DEMOLITION OF EXISTING CLARIFIER EQUIPMENT AND INSTALLATION OF NEW CLARIFIER EQUIPMENT, AS SHOWN ON THESE DRAWINGS. OVIVO SCOPE OF SUPPLY CAN BE PROVIDED TO CONTRACTOR UPON REQUEST. CONTRACTOR SHALL INCLUDE IN THEIR BID PRICE ANY ANCILLARY ITEMS NEEDED FOR CLARIFIER INSTALLATION NOT INCLUDED IN OVIVOS SCOPE OF SUPPLY.

BETHUNE POINT WATER RECLAMATION FACILITY SITE ACCESS:

The CONTRACTOR will supply information on each employee, including subcontractors, accessing the Bethune Point Water Reclamation Facility (BPWRF). The following requirements must be met in order to perform work at the BPWRF:

- CONTRACTOR must provide confirmation that background checks are performed on employees, including subcontractors. Background checks must include a review for violent felonies.

- All employees, including subcontractors, must wear an ID badge when on site at the BPWRF. At a minimum, ID badges must include company name, contact information and name of employee.

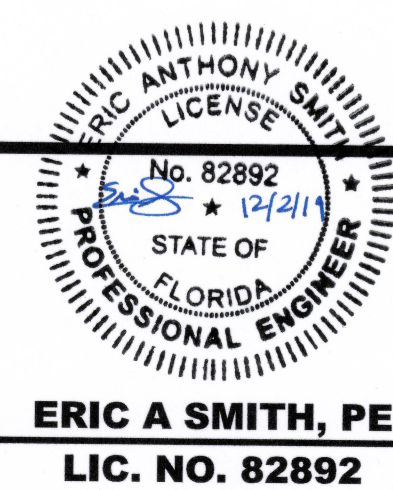
- CONTRACTOR must provide a list of all employees, including subcontractors, accessing the BPWRF. CONTRACTOR must notify the City immediately of any personnel changes.

- CONTRACTOR must provide a single, reachable point of contact for all issues regarding construction at the BPWRF. This contact is responsible for keeping a log of who is on site at all times.

- Before the end of the previous work week, CONTRACTOR must provide a scheduled start and stop time for each work day for the following work week to the CITY for approval. CITY staff will check the CONTRACTOR in at the BPWRF each work day. This is the only way the CONTRACTOR will access the BPWRF. CONTRACTOR will be notified of any worker determined to be problematic or deemed to be in the CITY's best interest for restriction. CONTRACTOR must remove said worker from the BPWRF immediately.

The required information can be provided by e-mail, fax or US mail. Contact information will be provided at the pre-construction meeting.

Contract No.: NA	Project No.: NA
Survey Date: NA	Plot Date: 08/2019
Drawn By: KLH	Scale:(HOR.) NTS
Checked By: EAS	(Vert.) NTS
File Name: Clarifier No 4	Design Date: 08/2019
Rotation: X: 0d	Drawn By: KLH
Xref Name: NA	Checked By: EAS
Name	Revision
Date:	Date:

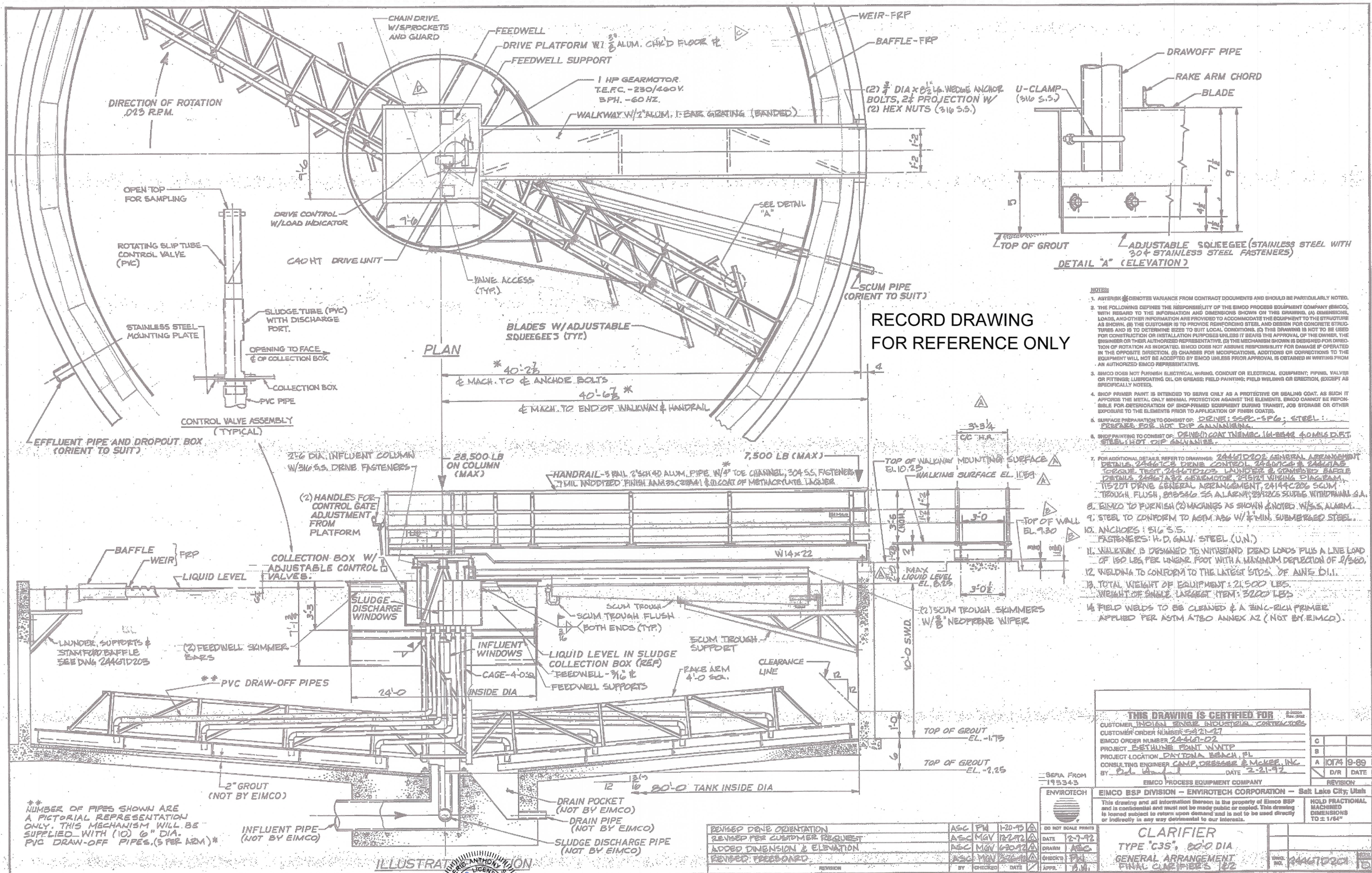


ERIC A SMITH, PE
LIC. NO. 82892



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125 BASIN ST., STE. 100 • DAYTONA BEACH • FLORIDA 32114
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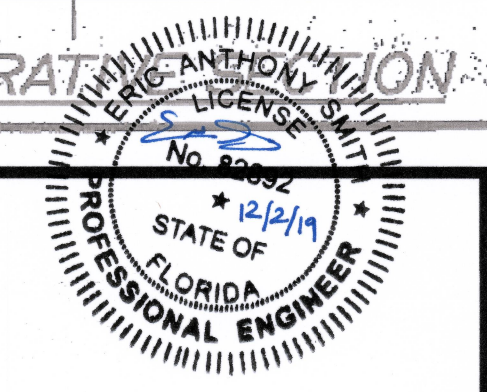
BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
GENERAL NOTES
PROJECT No. 6872



- NOTES:**
- ASTERISK (*) DENOTES VARIANCE FROM CONTRACT DOCUMENTS AND SHOULD BE PARTICULARLY NOTED.
 - THE FOLLOWING DEFINES THE RESPONSIBILITY OF THE SIMCO PROCESS EQUIPMENT COMPANY (SIMCO), WITH REGARD TO THE INFORMATION AND DIMENSIONS SHOWN ON THIS DRAWING. (A) DIMENSIONS, LOADS, AND OTHER INFORMATION ARE PROVIDED TO ACCOMMODATE THE EQUIPMENT TO THE STRUCTURE AS SHOWN. (B) THE CUSTOMER IS TO PROVIDE REINFORCING STEEL AND DESIGN FOR CONCRETE STRUCTURES AND IS TO DETERMINE SIZES TO SUIT LOCAL CONDITIONS. (C) THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR INSTALLATION PURPOSES UNLESS IT BEARS THE APPROVAL OF THE OWNER, THE ENGINEER OR THEIR AUTHORIZED REPRESENTATIVE. (D) THE MECHANISM SHOWN IS DESIGNED FOR DIRECTION OF ROTATION AS INDICATED. SIMCO DOES NOT ASSUME RESPONSIBILITY FOR DAMAGE IF OPERATED IN THE OPPOSITE DIRECTION. (E) CHANGES FOR MODIFICATIONS, ADDITIONS OR CORRECTIONS TO THE EQUIPMENT WILL NOT BE ACCEPTED BY SIMCO UNLESS PRIOR APPROVAL IS OBTAINED IN WRITING FROM AN AUTHORIZED SIMCO REPRESENTATIVE.
 - SIMCO DOES NOT FURNISH ELECTRICAL WIRING, CONDUIT OR ELECTRICAL EQUIPMENT; PIPING, VALVES OR FITTINGS; LUBRICATING OIL OR GREASE; FIELD PAINTING; FIELD WELDING OR ERECTION, (EXCEPT AS SPECIFICALLY NOTED).
 - SHOP PRIMER PAINT IS INTENDED TO SERVE ONLY AS A PROTECTIVE OR SEALING COAT. AS SUCH IT AFFORDS MINIMAL PROTECTION AGAINST THE ELEMENTS. SIMCO CANNOT BE RESPONSIBLE FOR DETERIORATION OF SHOP-PRIMED EQUIPMENT DURING TRANSPORT, JOB STORAGE OR OTHER EXPOSURE TO THE ELEMENTS PRIOR TO APPLICATION OF FINISH COATS.
 - SURFACE PREPARATION TO CONSIST OF: DRY BRUSH - SSPC-SP10; STEEL - PREPARED FOR HOT DIP GALVANIZING.
 - FIELD PAINTING TO CONSIST OF: DRY BRUSH COAT (NEMCO 141-8348 40 MILS DFT); STEEL - HOT DIP GALVANIZING.
 - FOR ADDITIONAL DETAILS REFER TO DRAWINGS: 24410202 GENERAL ARRANGEMENT; DETAILS 24410203 DRIVE CONTROL; 24410204 & 24410205 SCUM TROUGH; 24410206 LAUNDER & STAINLESS STEEL; DETAILS 24410207 GEAR MOTOR; 24410208 WIRING DIAGRAM; 24410209 DRIVE GENERAL ARRANGEMENT; 24410210 SCUM TROUGH FLUSH; 24410211 & 24410212 SCUM WITHDRAWAL G.A.
 - SIMCO TO FURNISH (2) MACHINES AS SHOWN AND NOTED W/ S.S. ALUM.
 - STEEL TO CONFORM TO ASTM A36 W/ 1/2" MIN. SUBMERGED STEEL.
 - ANCHORS: 3/4" S.S. FASTENERS: H.D. GALV. STEEL (U.N.)
 - WALKWAY IS DESIGNED TO WITHSTAND DEAD LOADS PLUS A LIVE LOAD OF 150 LBS PER LINEAR FOOT WITH A MAXIMUM DEFLECTION OF 2/360.
 - WELDING TO CONFORM TO THE LATEST STD'S. OF AWS D11.
 - TOTAL WEIGHT OF EQUIPMENT: 21,500 LBS. WEIGHT OF SINGLE LARGEST ITEM: 3200 LBS.
 - FIELD WELDS TO BE CLEANED & A ZINC-RICH PRIMER APPLIED PER ASTM A780 ANNEX A2 (NOT BY EIMCO).

THIS DRAWING IS CERTIFIED FOR	
CUSTOMER: INDIAN ENGINE INDUSTRIES, CORP.	
CUSTOMER ORDER NUMBER: 5921-27	
EIMCO ORDER NUMBER: 24410202	
PROJECT: BETHUNE POINT WWTTP	
PROJECT LOCATION: DAYTONA BEACH, FL	
CONSULTING ENGINEER: CAMP, DRESSER & MCKER, INC.	
BY: [Signature]	DATE: 2-21-92
EIMCO PROCESS EQUIPMENT COMPANY	
EIMCO BSP DIVISION - ENVIROTECH CORPORATION - Salt Lake City, Utah	
DO NOT SCALE PRINTS	DATE: 2-7-92
REVISION PER CUSTOMER REQUEST	DRAWN: ASC
ADDED DIMENSION & ELEVATION	CHECKED: [Signature]
REVISED: FREEDMAN	APPL: [Signature]
CLARIFIER	
TYPE "C35", 80'-0" DIA	
GENERAL ARRANGEMENT	
FINAL CLARIFIER'S 102	

** NUMBER OF PIPES SHOWN ARE A PICTORIAL REPRESENTATION ONLY. THIS MECHANISM WILL BE SUPPLIED WITH (10) 6" DIA. PVC DRAW-OFF PIPES, (5 PER ARM) **

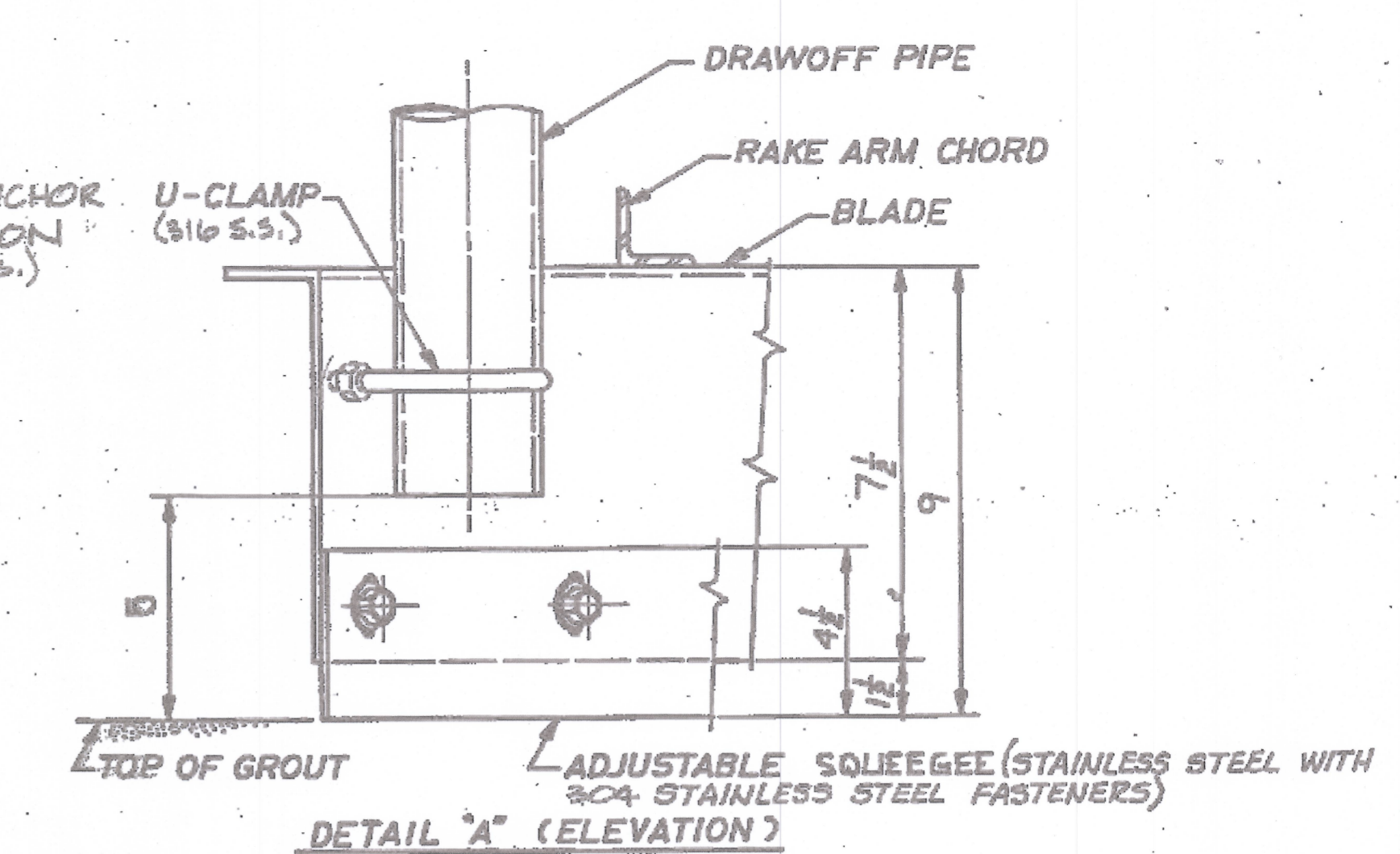
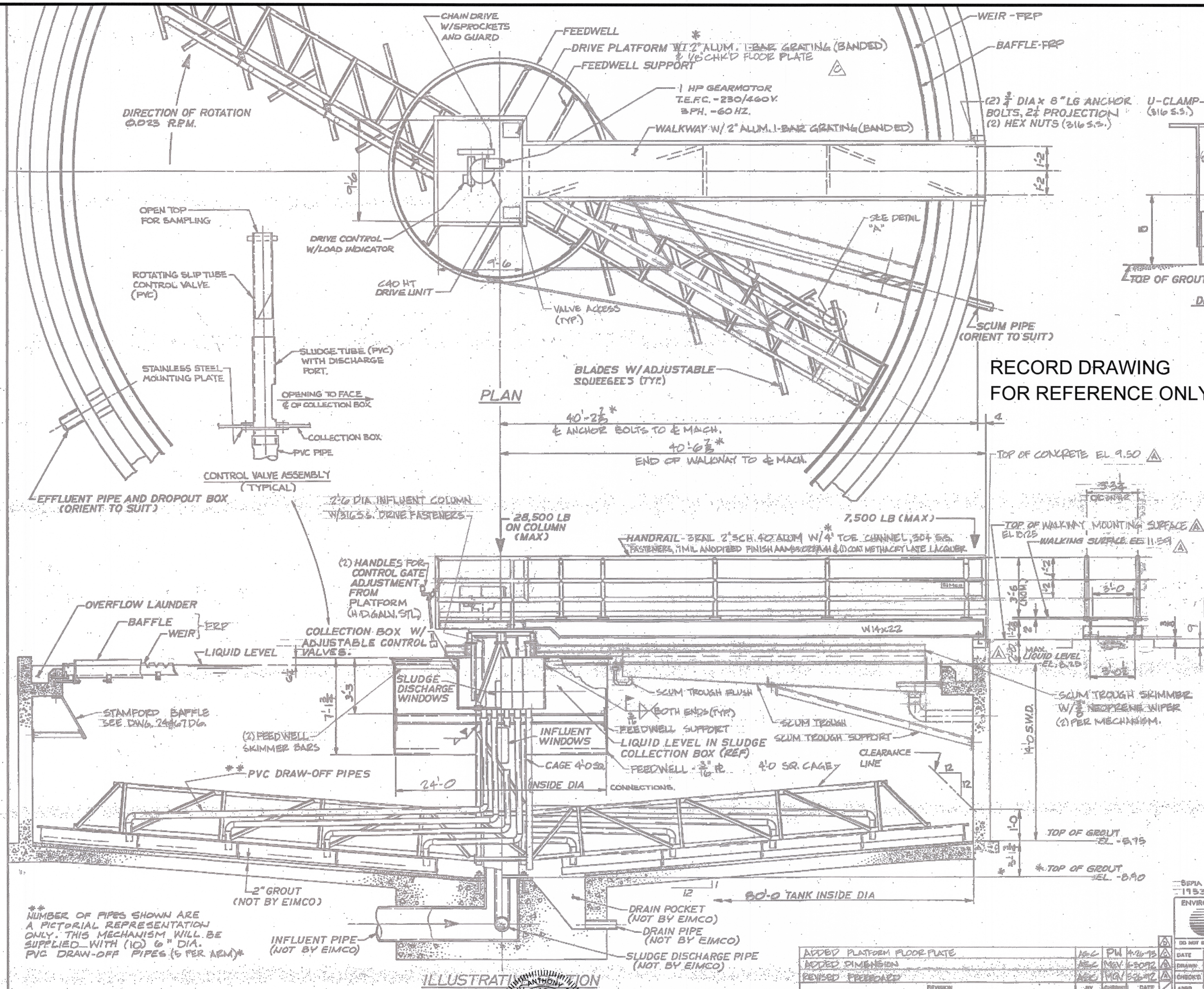


THE CITY OF DAYTONA BEACH
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 PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
CLARIFIER NO. 1 & 2 AS-BUILT
PROJECT No. 6872

Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E SMITH		(Vert.) NTS
File Name:	Clarifier No. 1	Design Date:	08/2019
Rotation:	X: 0d	Drawn By:	KLH
Name:		Checked By:	E SMITH
Revision:		Date:	
		Xref. Name:	NA

3 of 18



RECORD DRAWING FOR REFERENCE ONLY

- NOTES:**
- ASTERISK (*) DENOTES VARIANCE FROM CONTRACT DOCUMENTS AND SHOULD BE PARTICULARLY NOTED.
 - THE FOLLOWING DEFINE THE RESPONSIBILITY OF THE EMCO PROCESS EQUIPMENT COMPANY (EMCO) WITH REGARD TO THE INFORMATION AND DIMENSIONS SHOWN ON THIS DRAWING: (A) DIMENSIONS, LOADS, AND OTHER INFORMATION ARE PROVIDED TO ACCOMMODATE THE EQUIPMENT TO THE STRUCTURE AS SHOWN; (B) THE CUSTOMER IS TO PROVIDE REINFORCING STEEL AND DESIGN FOR CONCRETE STRUCTURES AND IS TO DETERMINE HOW TO SET LOCAL CONDITIONS; (C) THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION OR INSTALLATION PURPOSES UNLESS IT BEARS THE APPROVAL OF THE OWNER, THE ENGINEER OR THEIR AUTHORIZED REPRESENTATIVE; (D) THE MECHANISM SHOWN IS DESIGNED FOR DIRECTION OF ROTATION AS INDICATED; EMCO DOES NOT ASSUME RESPONSIBILITY FOR DAMAGE IF OPERATED IN THE OPPOSITE DIRECTION; (E) CHARGES FOR MODIFICATIONS, ADDITIONS OR CORRECTIONS TO THE EQUIPMENT WILL NOT BE ACCEPTED BY EMCO UNLESS PRIOR APPROVAL IS OBTAINED IN WRITING FROM AN AUTHORIZED EMCO REPRESENTATIVE.
 - EMCO DOES NOT FURNISH ELECTRICAL WIRING, CONDUIT OR ELECTRICAL EQUIPMENT; PIPING, VALVES OR FITTINGS; LUBRICATING OIL OR GREASE; FIELD PAINTING; FIELD WELDING OR BRACING, (EXCEPT AS SPECIFICALLY NOTED).
 - SHOP PRIMER PAINT IS INTENDED TO SERVE ONLY AS A PROTECTIVE OR SEALING COAT. AS SUCH IT AFFORDS THE METAL ONLY MINIMAL PROTECTION AGAINST THE ELEMENTS. EMCO CANNOT BE RESPONSIBLE FOR DETERIORATION OF SHOP-PRIMED EQUIPMENT DURING TRANSPORT, JOB STORAGE OR OTHER EXPOSURE TO THE ELEMENTS PRIOR TO APPLICATION OF FINISH COATINGS.
 - SURFACE PREPARATION TO CONSIST OF: **DRIVE: SSPC-SP10; STEEL 1: F15546; FRP: HOT DIP GALVANIZING.**
 - SHOP PAINTING TO CONSIST OF: **DRIVE: 1 COAT THINE 161-8842; 2 COATS 12 F.T. 3; STEEL: 1 HOT DIP GALVANIZING.**
 - FOR ADDITIONAL DETAILS REFER TO DRAWINGS: 2446102 GENERAL ARRANGEMENT DETAILS, 2446103 DRIVE CONTROL, 2446104 WALKING SURFACE, 2446105 TEST SHEET, 2446106 SCUM TROUGH FLUSH ARRANGEMENT, 2446107 SCUM TROUGH FLUSH ARRANGEMENT, 2446108 SCUM TROUGH FLUSH ARRANGEMENT, 2446109 SCUM TROUGH FLUSH ARRANGEMENT, 2446110 SCUM TROUGH FLUSH ARRANGEMENT, 2446111 SCUM TROUGH FLUSH ARRANGEMENT, 2446112 SCUM TROUGH FLUSH ARRANGEMENT, 2446113 SCUM TROUGH FLUSH ARRANGEMENT, 2446114 SCUM TROUGH FLUSH ARRANGEMENT, 2446115 SCUM TROUGH FLUSH ARRANGEMENT, 2446116 SCUM TROUGH FLUSH ARRANGEMENT, 2446117 SCUM TROUGH FLUSH ARRANGEMENT, 2446118 SCUM TROUGH FLUSH ARRANGEMENT, 2446119 SCUM TROUGH FLUSH ARRANGEMENT, 2446120 SCUM TROUGH FLUSH ARRANGEMENT, 2446121 SCUM TROUGH FLUSH ARRANGEMENT, 2446122 SCUM TROUGH FLUSH ARRANGEMENT, 2446123 SCUM TROUGH FLUSH ARRANGEMENT, 2446124 SCUM TROUGH FLUSH ARRANGEMENT, 2446125 SCUM TROUGH FLUSH ARRANGEMENT, 2446126 SCUM TROUGH FLUSH ARRANGEMENT, 2446127 SCUM TROUGH FLUSH ARRANGEMENT, 2446128 SCUM TROUGH FLUSH ARRANGEMENT, 2446129 SCUM TROUGH FLUSH ARRANGEMENT, 2446130 SCUM TROUGH FLUSH ARRANGEMENT, 2446131 SCUM TROUGH FLUSH ARRANGEMENT, 2446132 SCUM TROUGH FLUSH ARRANGEMENT, 2446133 SCUM TROUGH FLUSH ARRANGEMENT, 2446134 SCUM TROUGH FLUSH ARRANGEMENT, 2446135 SCUM TROUGH FLUSH ARRANGEMENT, 2446136 SCUM TROUGH FLUSH ARRANGEMENT, 2446137 SCUM TROUGH FLUSH ARRANGEMENT, 2446138 SCUM TROUGH FLUSH ARRANGEMENT, 2446139 SCUM TROUGH FLUSH ARRANGEMENT, 2446140 SCUM TROUGH FLUSH ARRANGEMENT, 2446141 SCUM TROUGH FLUSH ARRANGEMENT, 2446142 SCUM TROUGH FLUSH ARRANGEMENT, 2446143 SCUM TROUGH FLUSH ARRANGEMENT, 2446144 SCUM TROUGH FLUSH ARRANGEMENT, 2446145 SCUM TROUGH FLUSH ARRANGEMENT, 2446146 SCUM TROUGH FLUSH ARRANGEMENT, 2446147 SCUM TROUGH FLUSH ARRANGEMENT, 2446148 SCUM TROUGH FLUSH ARRANGEMENT, 2446149 SCUM TROUGH FLUSH ARRANGEMENT, 2446150 SCUM TROUGH FLUSH ARRANGEMENT, 2446151 SCUM TROUGH FLUSH ARRANGEMENT, 2446152 SCUM TROUGH FLUSH ARRANGEMENT, 2446153 SCUM TROUGH FLUSH ARRANGEMENT, 2446154 SCUM TROUGH FLUSH ARRANGEMENT, 2446155 SCUM TROUGH FLUSH ARRANGEMENT, 2446156 SCUM TROUGH FLUSH ARRANGEMENT, 2446157 SCUM TROUGH FLUSH ARRANGEMENT, 2446158 SCUM TROUGH FLUSH ARRANGEMENT, 2446159 SCUM TROUGH FLUSH ARRANGEMENT, 2446160 SCUM TROUGH FLUSH ARRANGEMENT, 2446161 SCUM TROUGH FLUSH ARRANGEMENT, 2446162 SCUM TROUGH FLUSH ARRANGEMENT, 2446163 SCUM TROUGH FLUSH ARRANGEMENT, 2446164 SCUM TROUGH FLUSH ARRANGEMENT, 2446165 SCUM TROUGH FLUSH ARRANGEMENT, 2446166 SCUM TROUGH FLUSH ARRANGEMENT, 2446167 SCUM TROUGH FLUSH ARRANGEMENT, 2446168 SCUM TROUGH FLUSH ARRANGEMENT, 2446169 SCUM TROUGH FLUSH ARRANGEMENT, 2446170 SCUM TROUGH FLUSH ARRANGEMENT, 2446171 SCUM TROUGH FLUSH ARRANGEMENT, 2446172 SCUM TROUGH FLUSH ARRANGEMENT, 2446173 SCUM TROUGH FLUSH ARRANGEMENT, 2446174 SCUM TROUGH FLUSH ARRANGEMENT, 2446175 SCUM TROUGH FLUSH ARRANGEMENT, 2446176 SCUM TROUGH FLUSH ARRANGEMENT, 2446177 SCUM TROUGH FLUSH ARRANGEMENT, 2446178 SCUM TROUGH FLUSH ARRANGEMENT, 2446179 SCUM TROUGH FLUSH ARRANGEMENT, 2446180 SCUM TROUGH FLUSH ARRANGEMENT, 2446181 SCUM TROUGH FLUSH ARRANGEMENT, 2446182 SCUM TROUGH FLUSH ARRANGEMENT, 2446183 SCUM TROUGH FLUSH ARRANGEMENT, 2446184 SCUM TROUGH FLUSH ARRANGEMENT, 2446185 SCUM TROUGH FLUSH ARRANGEMENT, 2446186 SCUM TROUGH FLUSH ARRANGEMENT, 2446187 SCUM TROUGH FLUSH ARRANGEMENT, 2446188 SCUM TROUGH FLUSH ARRANGEMENT, 2446189 SCUM TROUGH FLUSH ARRANGEMENT, 2446190 SCUM TROUGH FLUSH ARRANGEMENT, 2446191 SCUM TROUGH FLUSH ARRANGEMENT, 2446192 SCUM TROUGH FLUSH ARRANGEMENT, 2446193 SCUM TROUGH FLUSH ARRANGEMENT, 2446194 SCUM TROUGH FLUSH ARRANGEMENT, 2446195 SCUM TROUGH FLUSH ARRANGEMENT, 2446196 SCUM TROUGH FLUSH ARRANGEMENT, 2446197 SCUM TROUGH FLUSH ARRANGEMENT, 2446198 SCUM TROUGH FLUSH ARRANGEMENT, 2446199 SCUM TROUGH FLUSH ARRANGEMENT, 2446200 SCUM TROUGH FLUSH ARRANGEMENT.
 - EMCO TO FURNISH (B) MACHINES AS SHOWN & NOTED W/ 6 ALARM.
 - STEEL TO CONFORM TO ASTM A36 W/ 1/4" MIN. SUBMERGED STEEL.
 - ANCHORS: 3/8" S.S. FASTENERS: H.D. GALV. STEEL (U.N.I.)
 - WALKWAYS DESIGNED TO WITHSTAND DEAD LOADS PLUS A LIVE LOAD OF 150 LBS/LINEAR FOOT WITH A MAX. DEFLECTION OF 1/400.
 - EMCO TO PROVIDE THE FOLLOWING SPARE PARTS: (1) DRIVE CHAIN (2) DRIVE SPROCKET (3) DRIVEN SPROCKET (4) DRIVE SIGHT GLASSES
 - WELDING TO CONFORM TO THE LATEST SIDS OF AWS D11.
 - TOTAL WEIGHT OF EQUIPMENT: 21,500 LBS. WEIGHT OF LARGEST SINGLE ITEM: 3200 LBS.
 - FIELD WELDS TO BE CLEANED AND A ZINC-RICH PRIMER APPLIED PER ASTM A780 ANNEX A.2. (NOT BY EMCO).

THIS DRAWING IS CERTIFIED FOR

CUSTOMER: INDIAN ENERGY INDUSTRIAL CONTRACTORS
 CUSTOMER ORDER NUMBER: EP21-27
 EMCO ORDER NUMBER: 24461-01
 PROJECT: BETHUNE POINT WWTP
 PROJECT LOCATION: DAYTONA BEACH, FL
 CONSULTING ENGINEER: CAMP, Dresser & MCKEE, INC.
 BY: [Signature] DATE: 2-21-92

REVISION	DATE	BY	CHKD	APPD
1	2-21-92	ASG	ASG	ASG
2	2-21-92	ASG	ASG	ASG
3	2-21-92	ASG	ASG	ASG

EMCO PROCESS EQUIPMENT COMPANY
 EMCO BSP DIVISION - ENVIROTECH CORPORATION - Salt Lake City, Utah

CLARIFIER
 TYPE "C35", 80" DIA
 GENERAL ARRANGEMENT
 FINN. CLARIFIERS 4.5&6

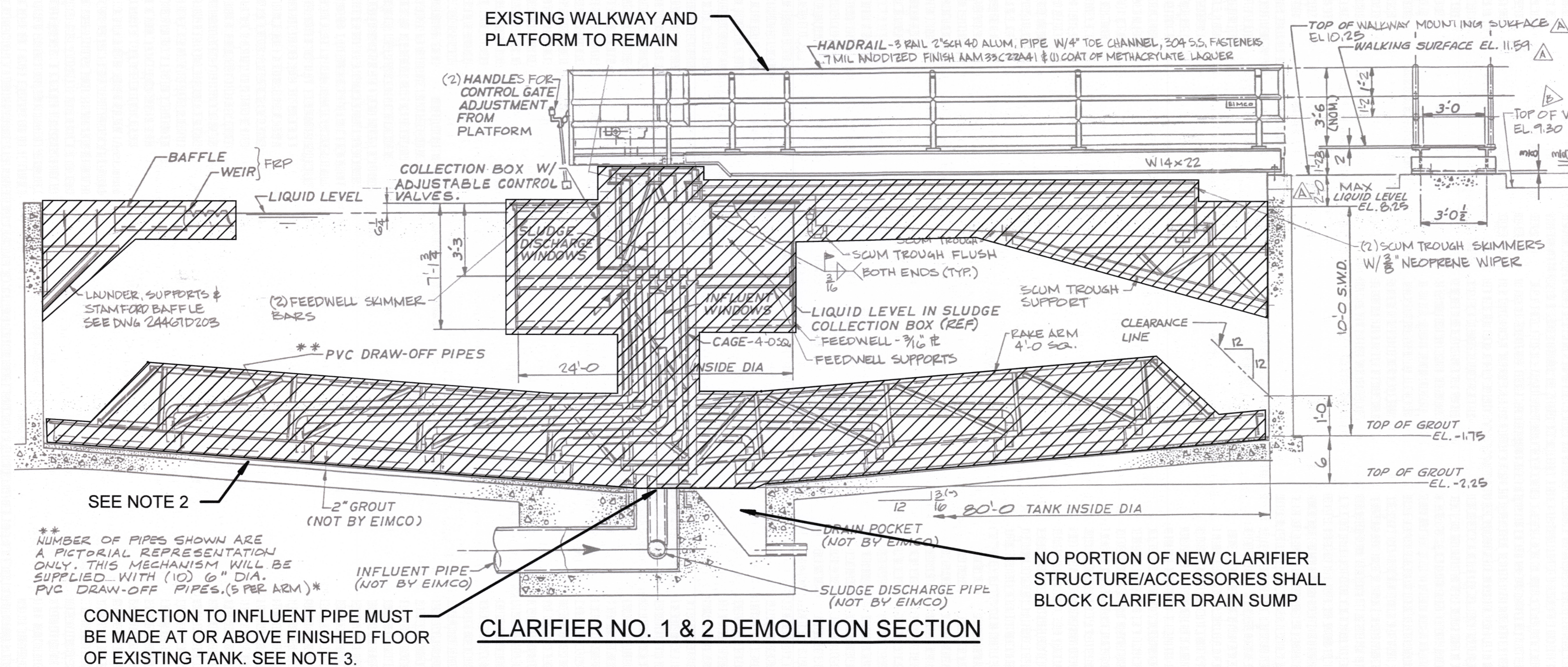
Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	EAS	(Vert.)	NTS
File Name:	Clarifier No 4	Design Date:	08/2019
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Xref Name:	NA	Checked By:	EAS

ERIC A SMITH, PE
 LIC. NO. 82892

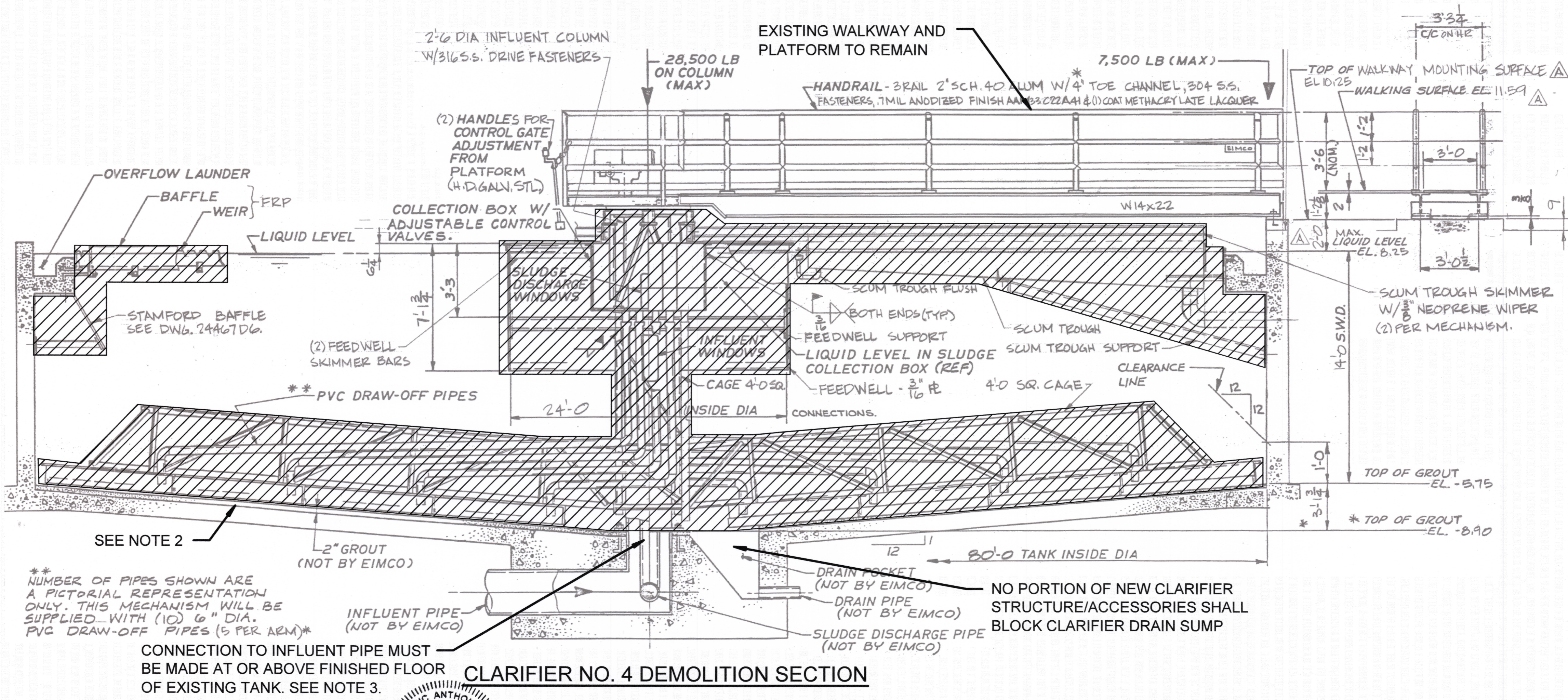
THE CITY OF DAYTONA BEACH
 UTILITIES DEPARTMENT

125 BASIN ST., STE. 100 • DAYTONA BEACH • FLORIDA 32114
 PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
 PHASE I PROCESS UPGRADES
 CLARIFIER NO. 4 AS-BUILT
 PROJECT NO 6872



- NOTES:**
1. CONTRACTOR SHALL COORDINATE EXTENT OF DEMOLITION WITH MANUFACTURER.
 2. GROUT IS ASSUMED TO REMAIN. CONTRACTOR SHALL COORDINATE FIELD MEETING, IF NEEDED, WITH OWNER AND MANUFACTURERS REPRESENTATIVE TO DETERMINE IF GROUT NEEDS TO BE REMOVED/REPLACED.
 3. EXCEPT AS IS NECESSARY TO REMOVE EXISTING CLARIFIER MECHANISM (I.E. REMOVAL OF ANCHOR BOLTS, SUPPORTS, ETC.), CUTTING OF CONCRETE STRUCTURE (I.E. SAW CUTTING, CORE DRILLING, ETC.) IS NOT ALLOWED.



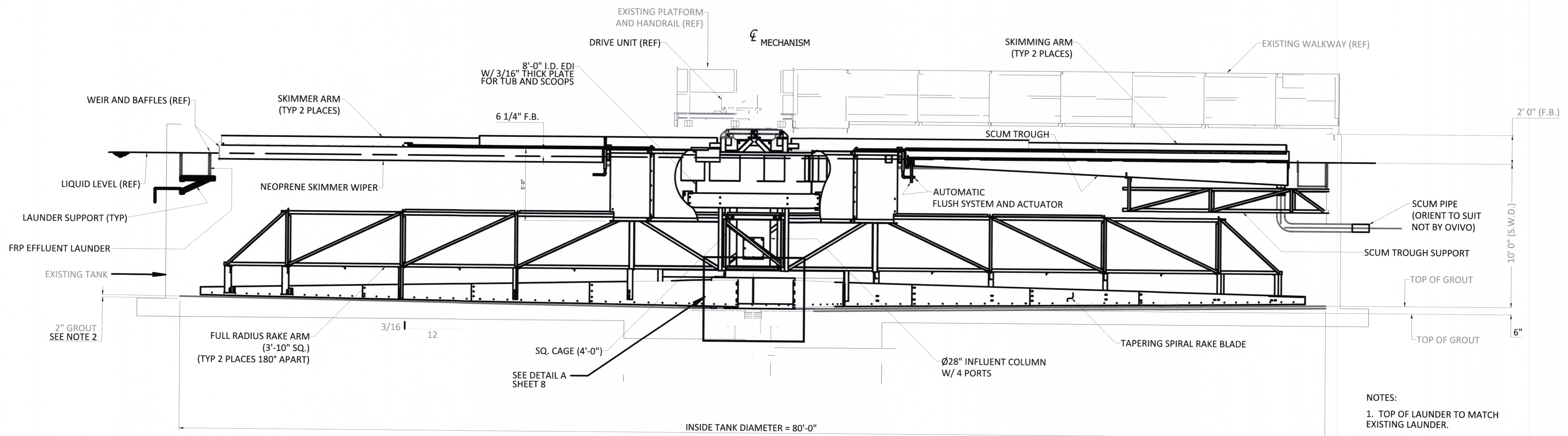
Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E. SMITH	(Vert.)	NTS
File Name:	Clarifier No. 4 As-Built.dwg	Design Date:	08/2019
Rotation:	0d	Drawn By:	KLH
Name:		Checked By:	E. SMITH
Revision:		Xref Name:	NA
Date:			

ERIC ANTHON SMITH
 No. 82892
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
ERIC A SMITH, PE
 LIC. NO. 82892

THE CITY OF DAYTONA BEACH
 UTILITIES DEPARTMENT

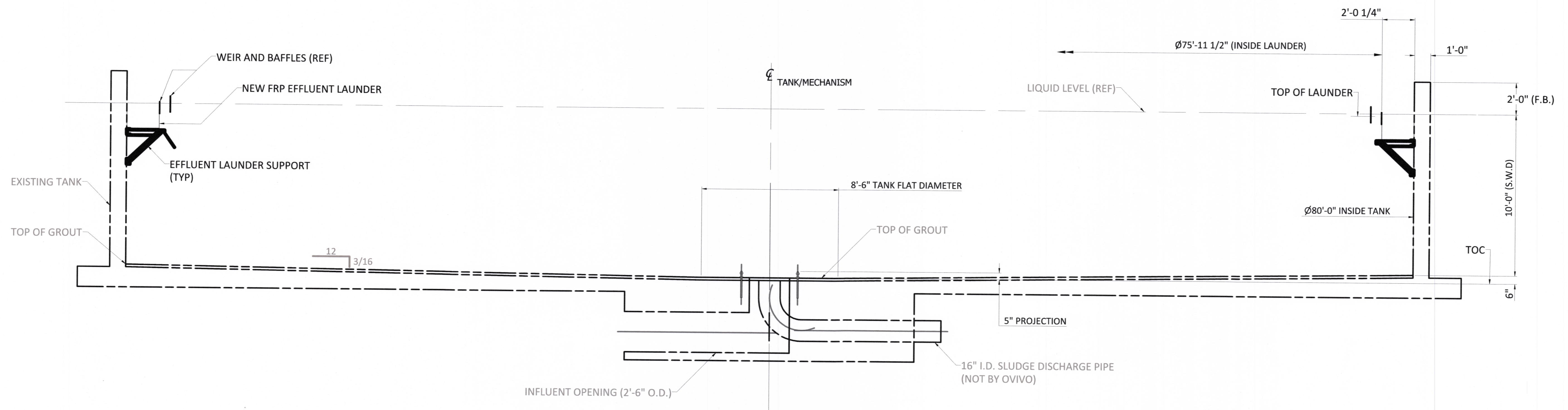
125 BASIN ST., STE. 130 • DAYTONA BEACH • FLORIDA 32114
 PHONE: (386) 671-8800 FAX: (386) 671-8805

**BETHUNE POINT WRF
 PHASE I PROCESS UPGRADES
 CLARIFIERS NO. 1, 2, 4 DEMOLITION NOTES
 PROJECT NO. 6872**



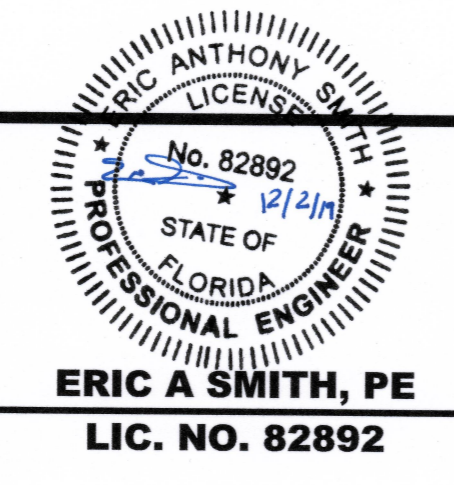
- NOTES:
1. TOP OF LAUNDER TO MATCH EXISTING LAUNDER.
 2. EXISTING GROUT IS ASSUMED TO REMAIN.

CLARIFIERS NO. 1 & 2
SECTION VIEW



EXISTING CLARIFIERS NO. 1 & 2
PROFILE DETAIL

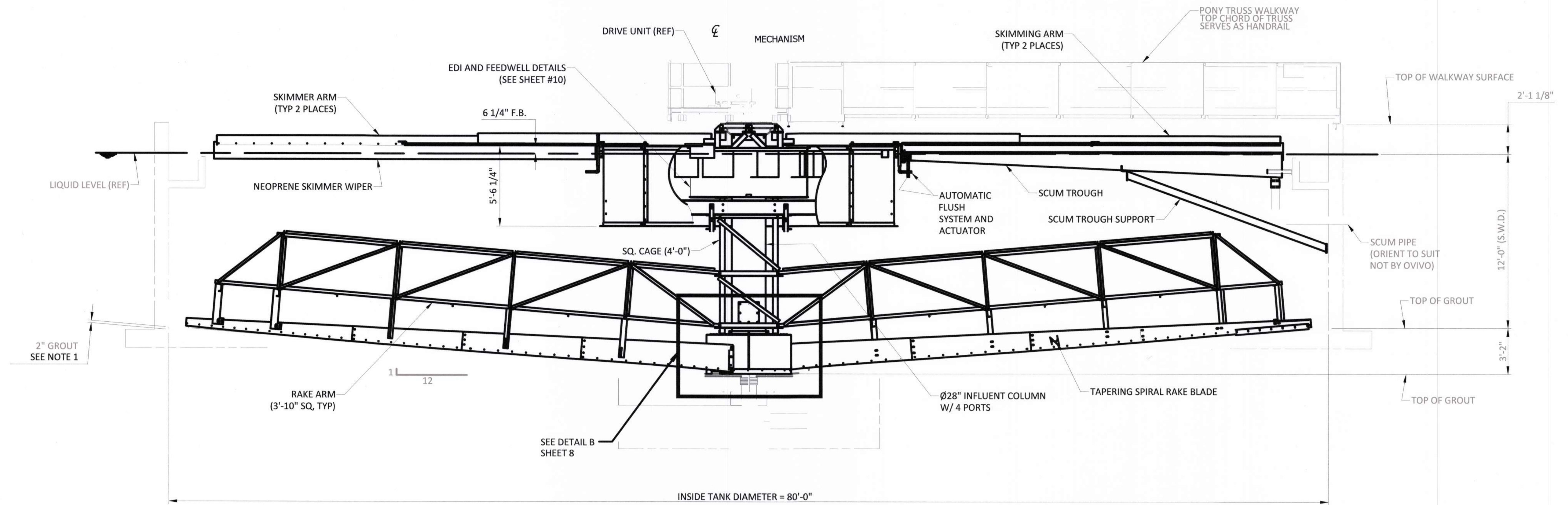
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Survey Date: NA	Plot Date: 08/2019
Drawn By: KLH	Scale: (HOR.) NTS
Checked By: E. SMITH	(Vert.) NTS
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Rotation: 0°	Drawn By: KLH
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Name	Revision
	Date



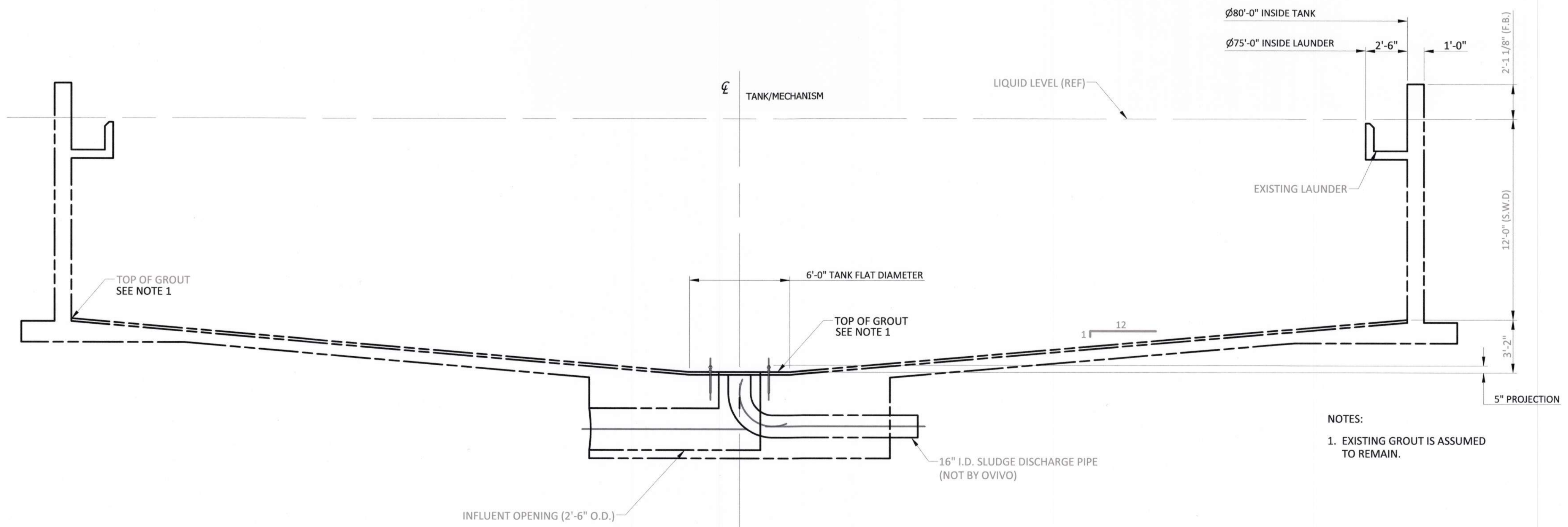
THE CITY OF DAYTONA BEACH
UTILITIES DEPARTMENT

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PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
CLARIFIER NO. 1 & 2 (TYP.)
SECTION/PROFILE VIEW
PROJECT NO. 6872



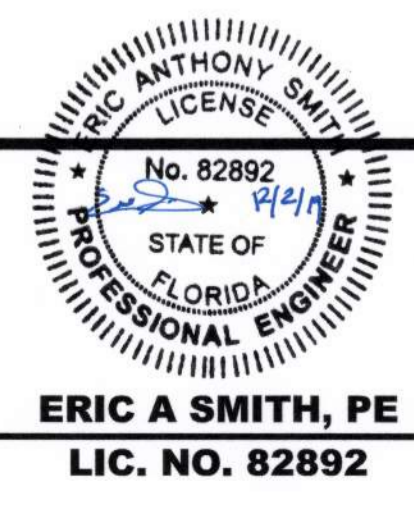
**CLARIFIER NO. 4
SECTION VIEW**



**CLARIFIER NO. 4
PROFILE DETAILS**

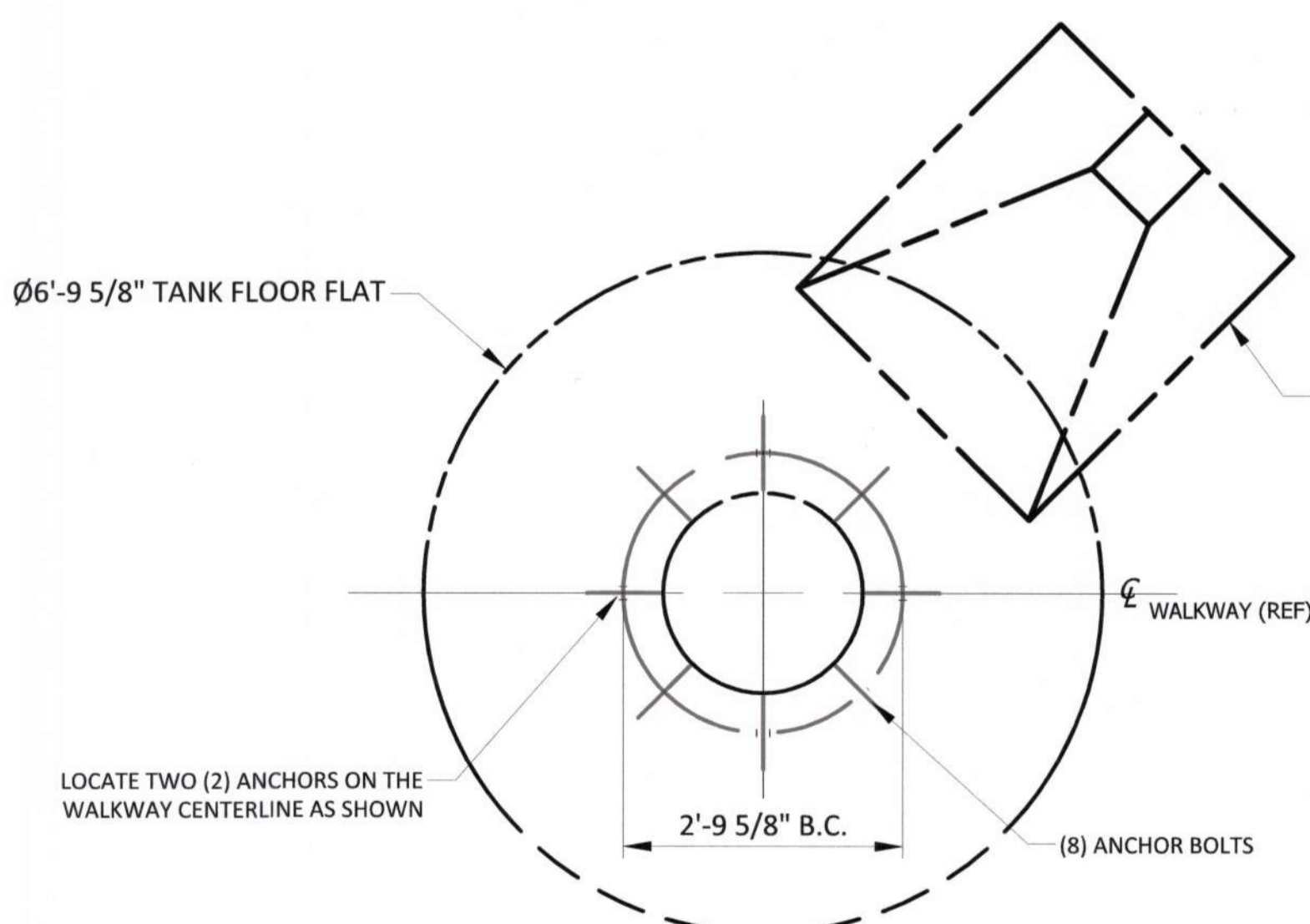
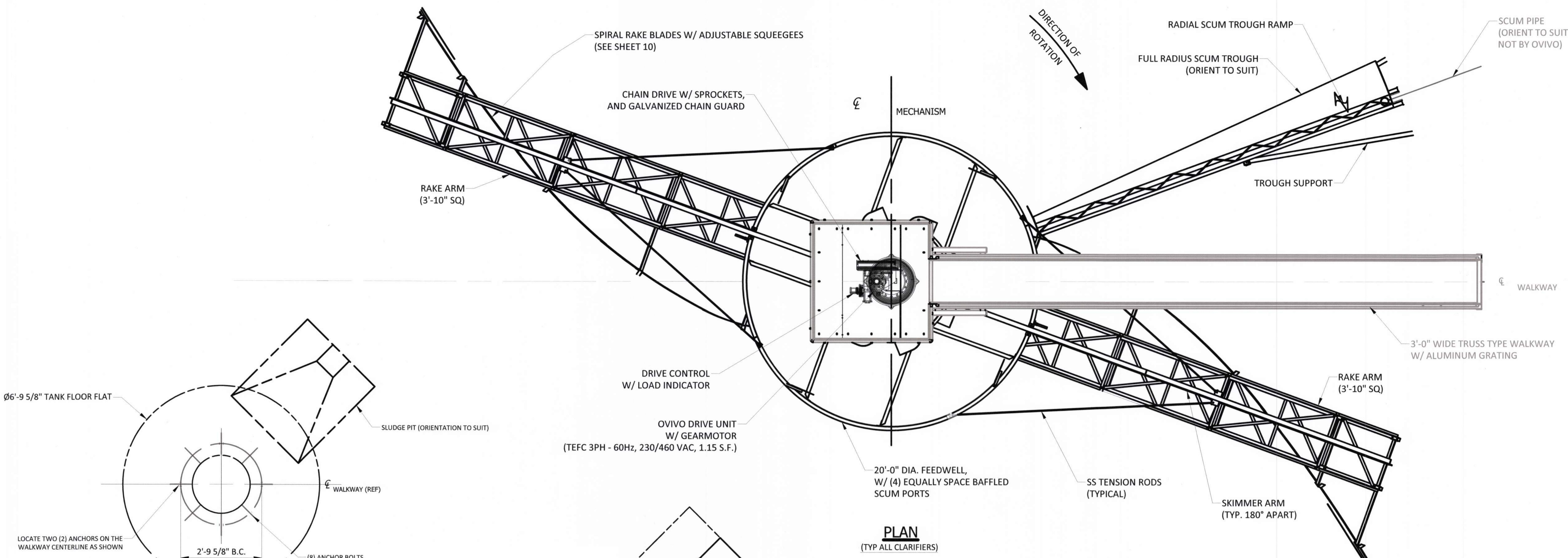
NOTES:
1. EXISTING GROUT IS ASSUMED TO REMAIN.

Contract No.: NA	Project No.: NA
Survey Date: NA	Plot Date: 08/2019
Drawn By: KLH	Scale:(HOR.) NTS
Checked By: E SMITH	(Vert.) NTS
File Name: Clarifier No 4	Design Date: 08/2019
Rotation: 0	Drawn By: KLH
Xref Name: NA	Checked By: E SMITH
Name	Revision:
Date:	

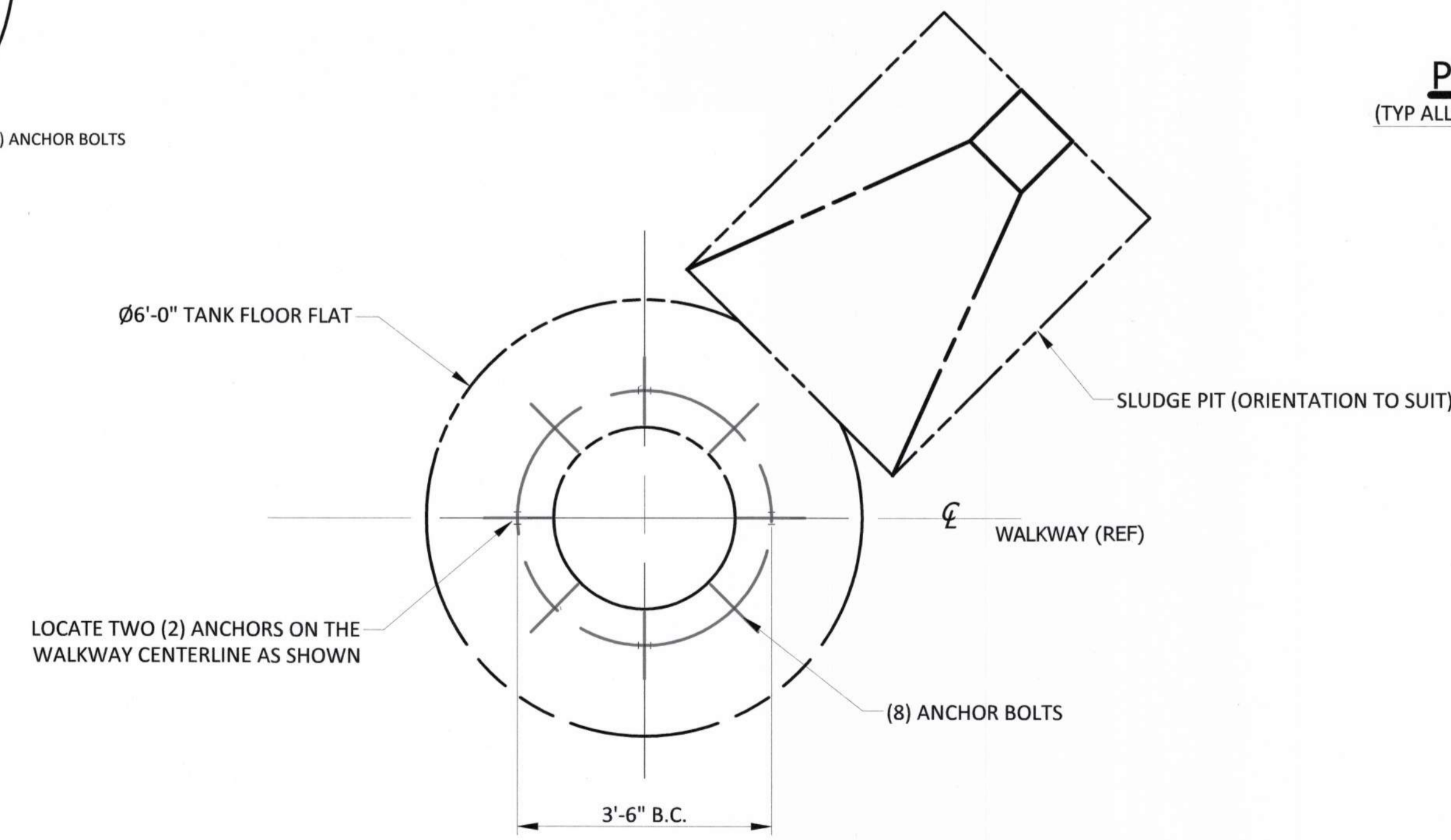


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BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
CLARIFIER NO. 4
SECTION/PROFILE VIEW
PROJECT NO. 6872



DETAIL A
CLAIRFIERS NO. 1 & 2
TANK BOTTOM DETAIL



DETAIL B
CLAIRIFIER NO. 4
TANK BOTTOM DETAIL

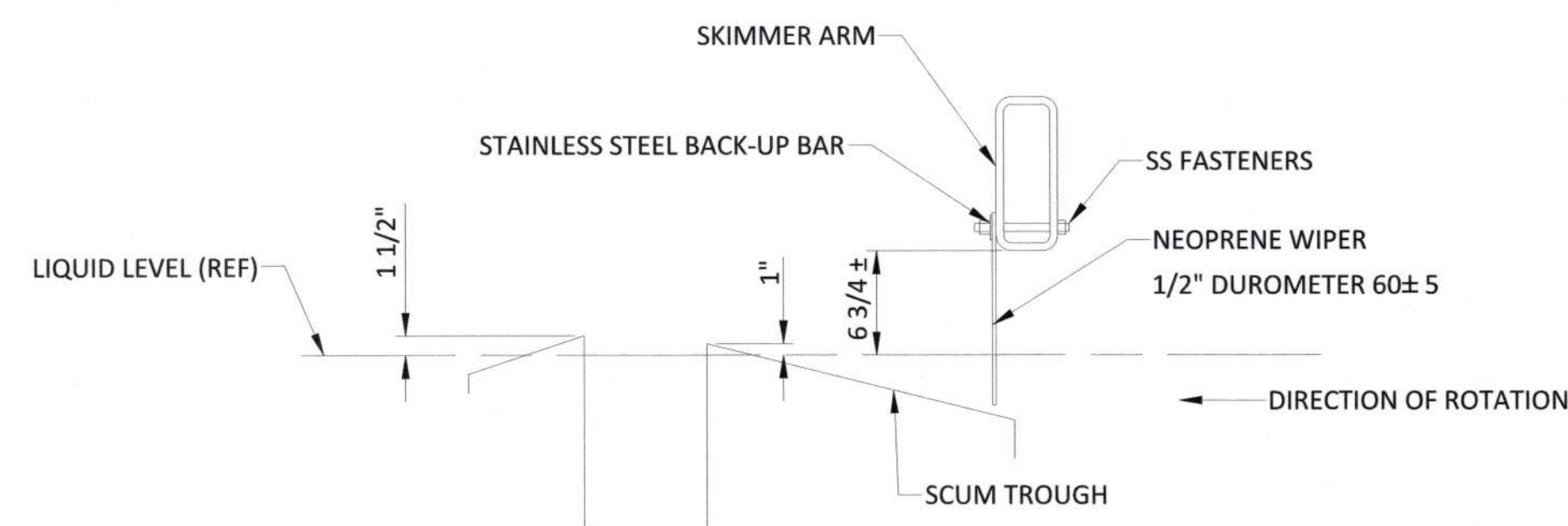
PLAN
 (TYP ALL CLARIFIERS)

Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E SMITH		(Vert.) NTS
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Rotation:	2:00	Drawn By:	KLH
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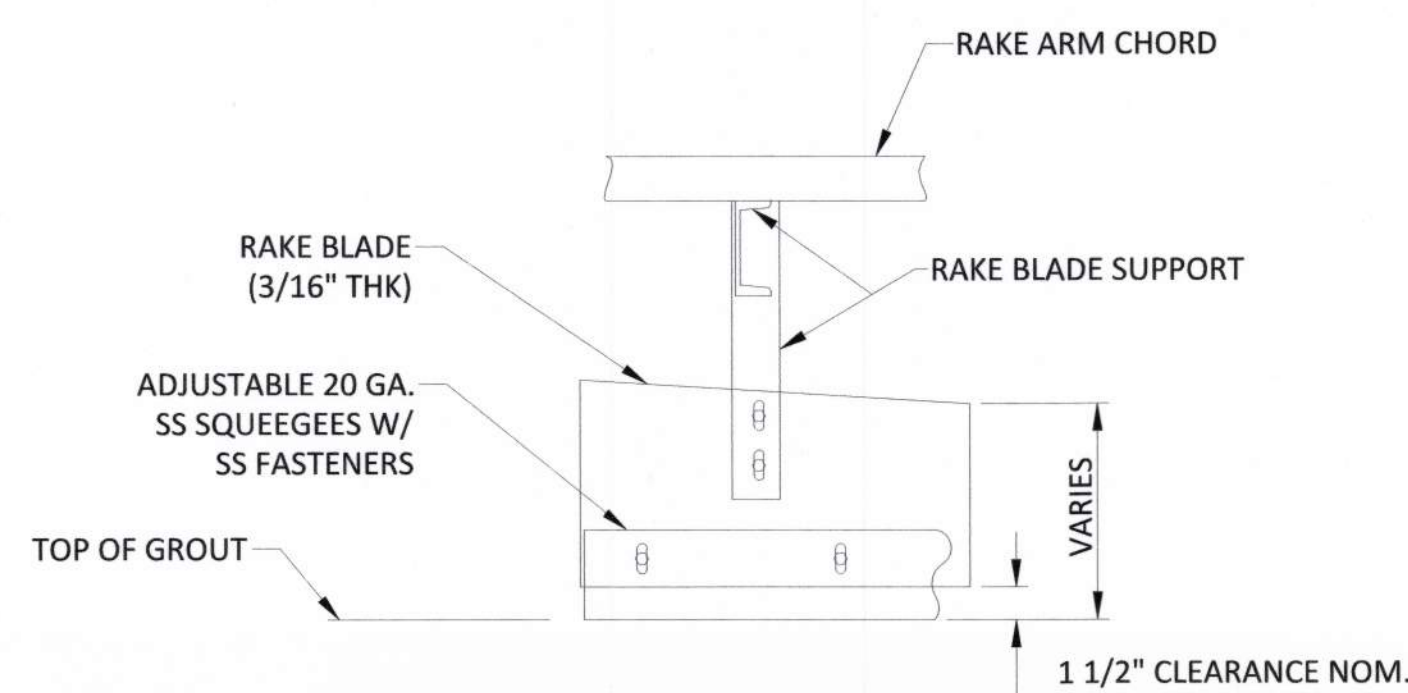


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UTILITIES DEPARTMENT
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 PHONE: (386) 671-8800 FAX: (386) 671-8805

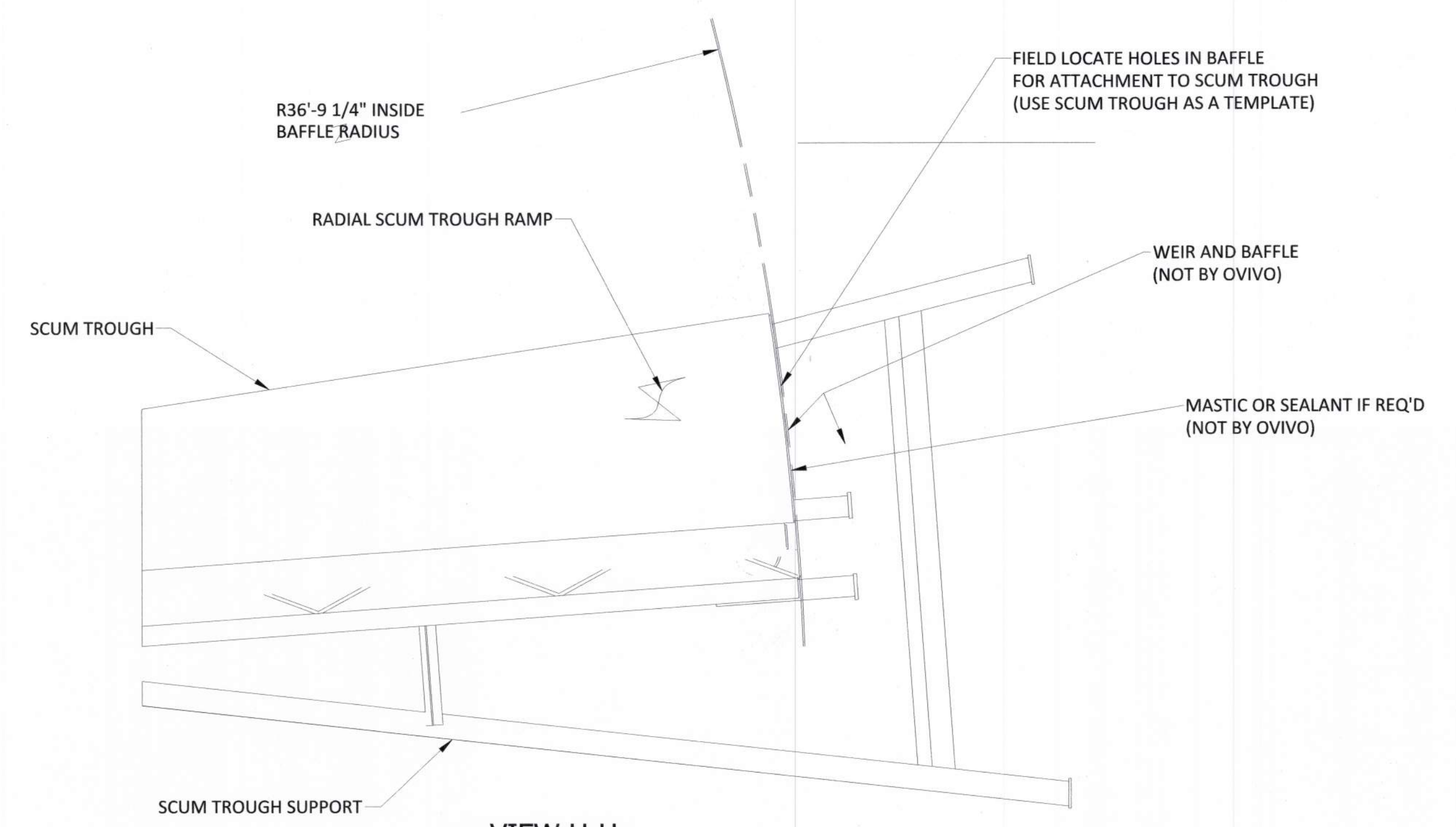
BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
CLARIFIER UPGRADES
PLAN VIEW
PROJECT NO. 6872



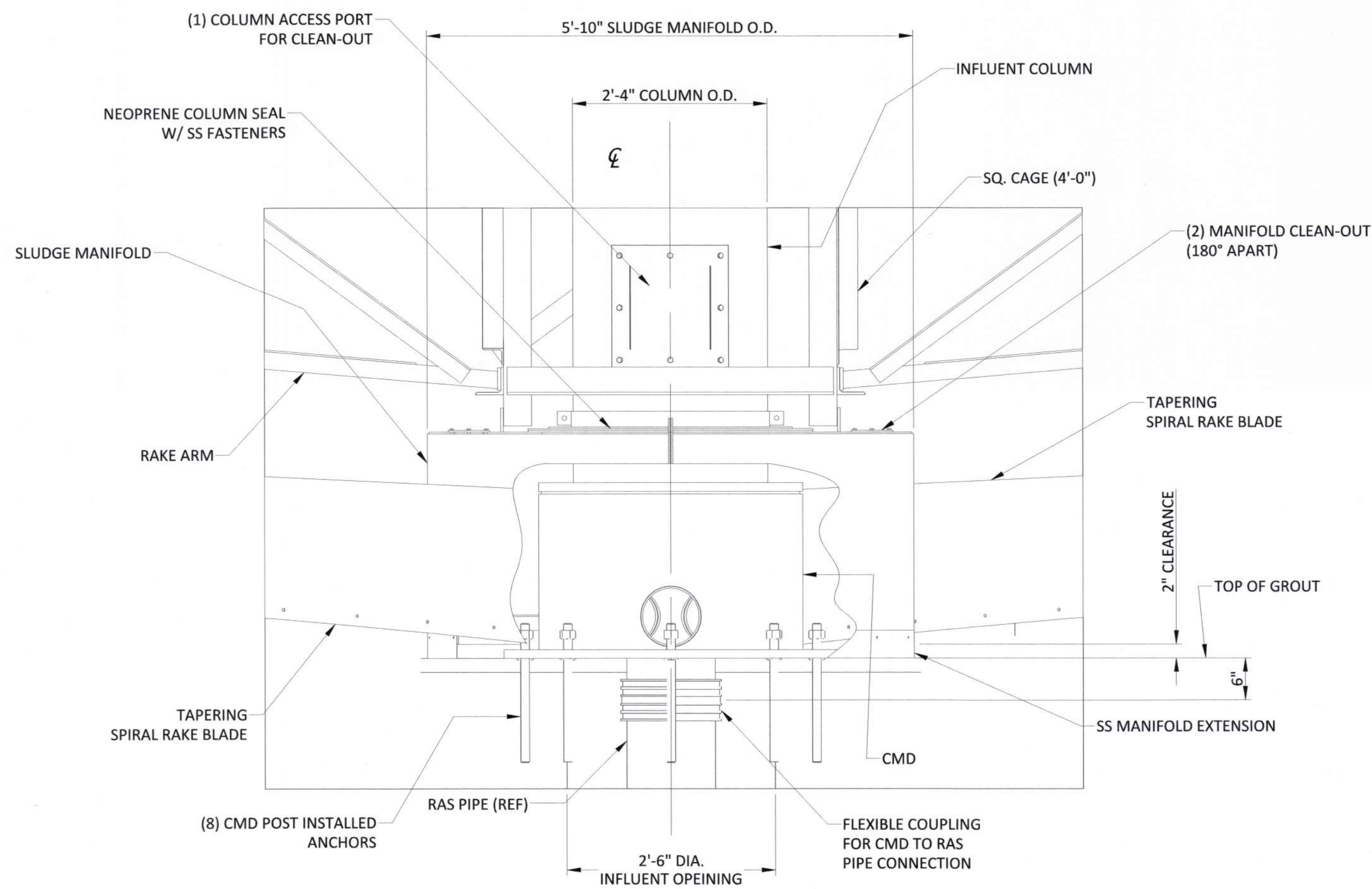
WIPER ARMS
(AT SCUM TROUGH)



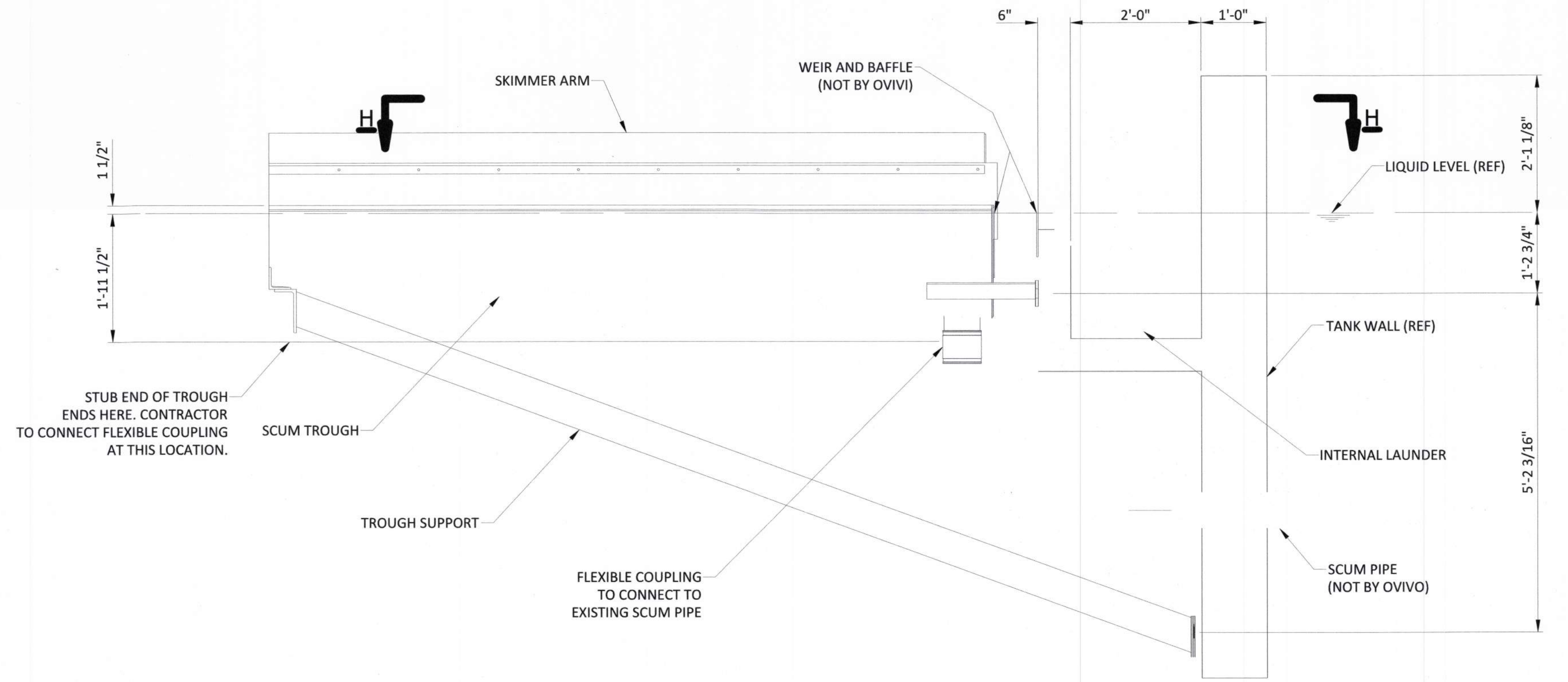
RAKE BLADE DETAIL



VIEW H-H
(SCUM TROUGH DETAILS)

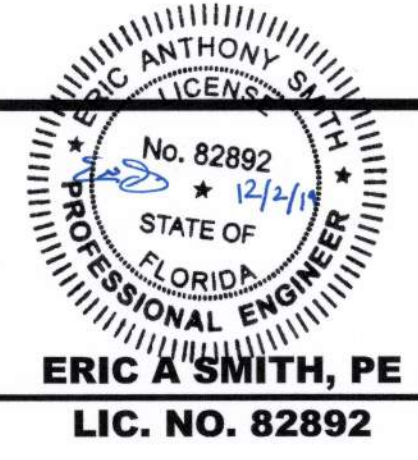


DETAIL A
(ISOMETRIC VIEW ON SHEET 6 & 7)
(SOME PARTS ARE HIDDEN FOR CLARITY)



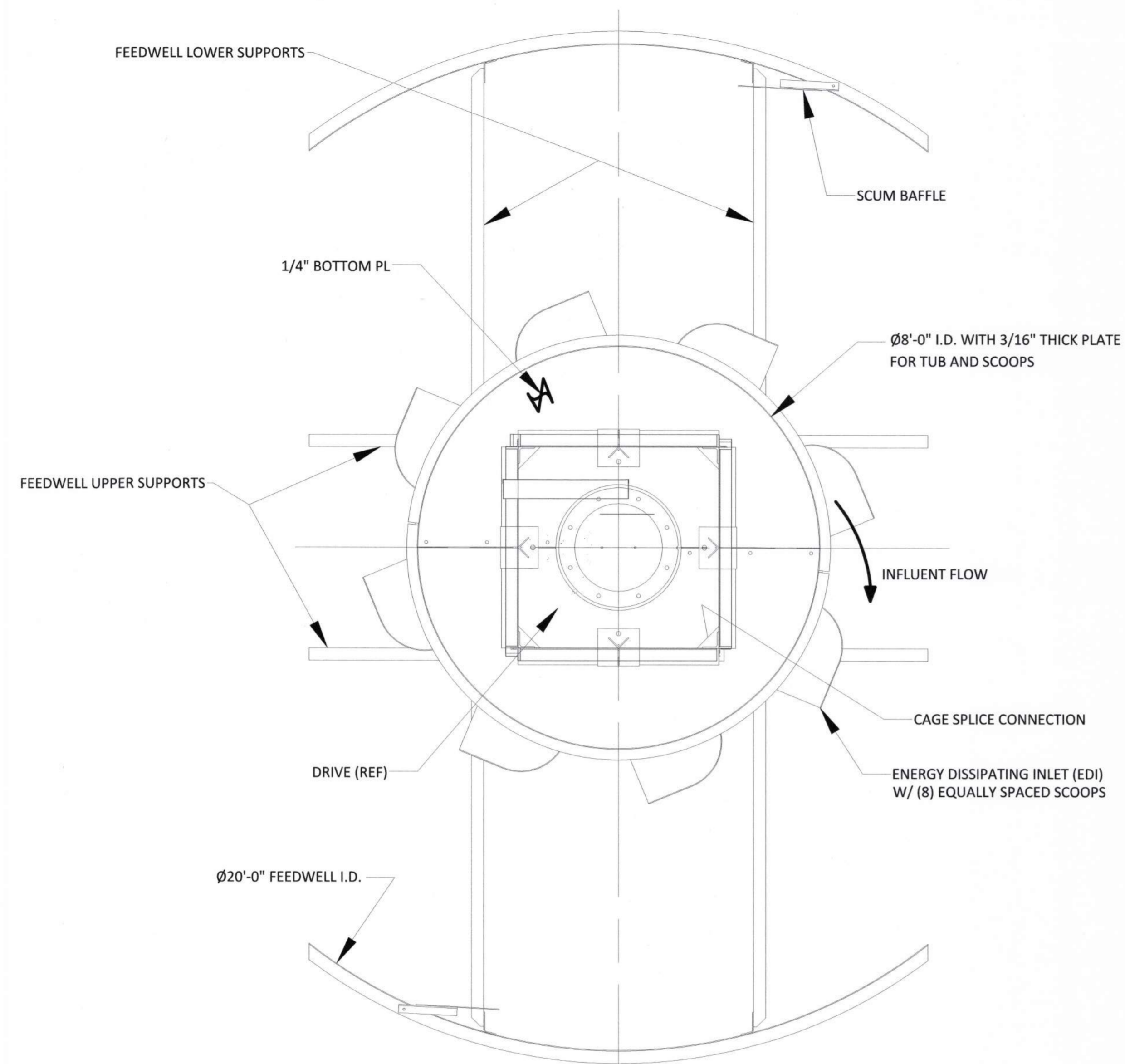
SCUM TROUGH DETAILS

Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E. SMITH		(Vert.) NTS
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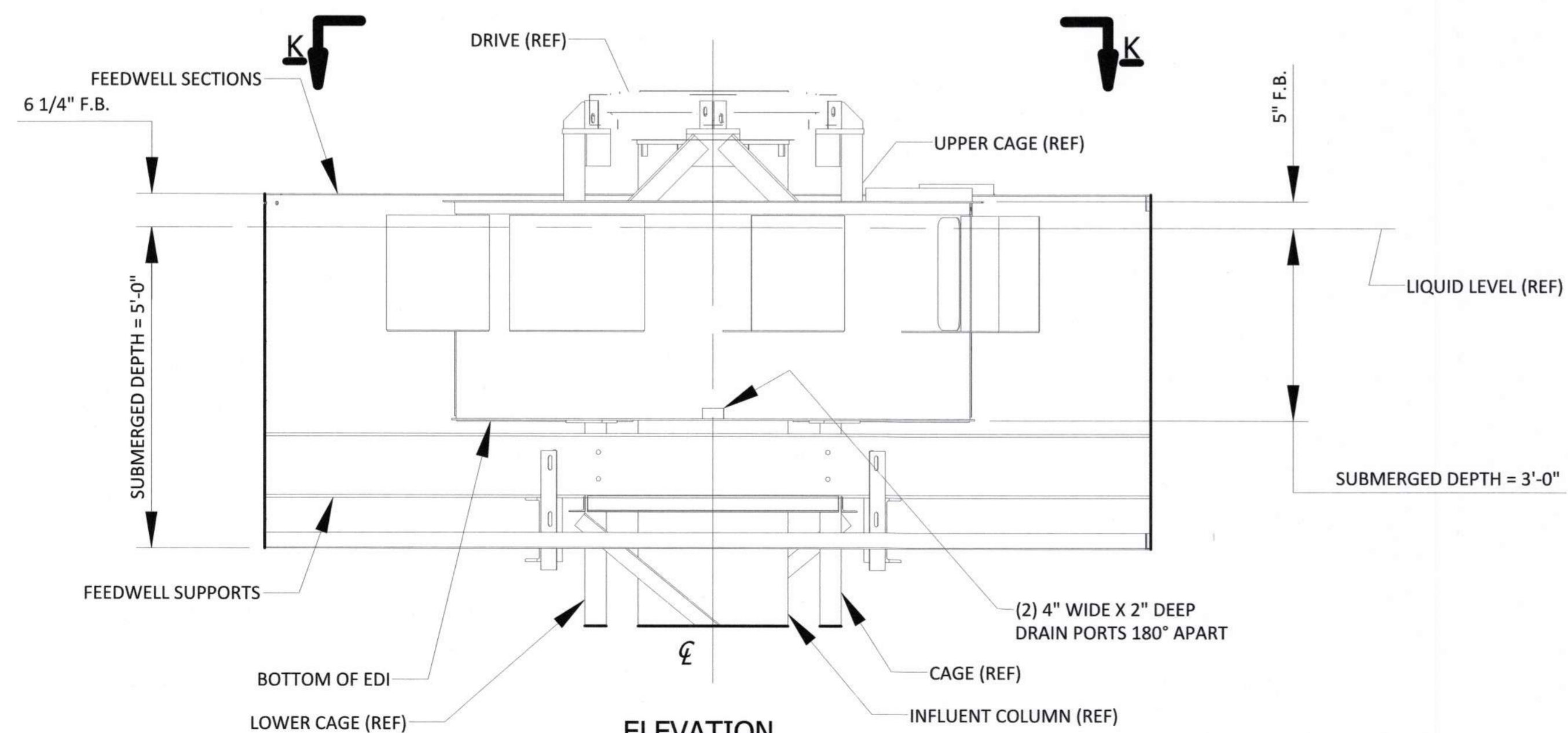


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PHONE: (386) 671-8800 FAX: (386) 671-8805

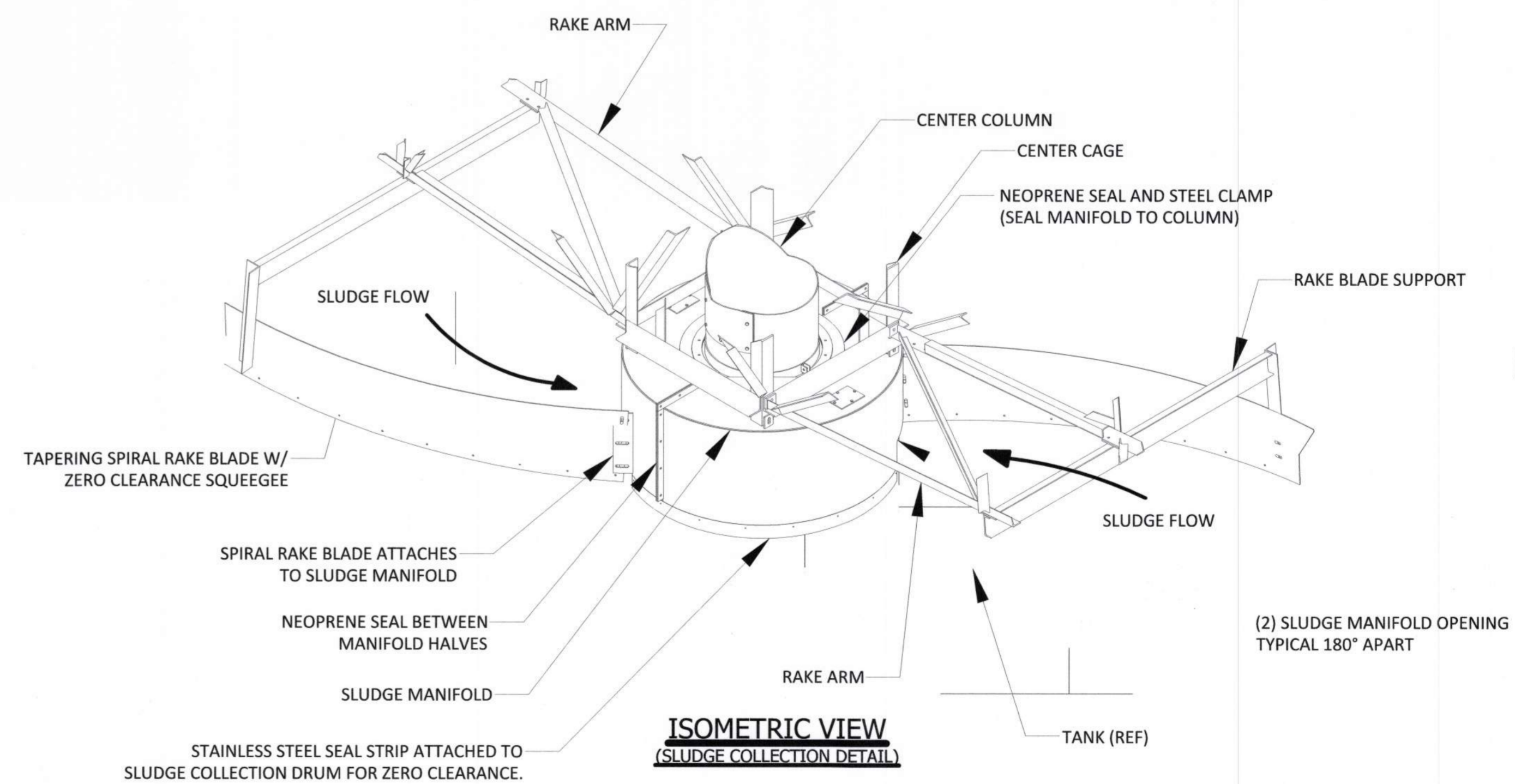
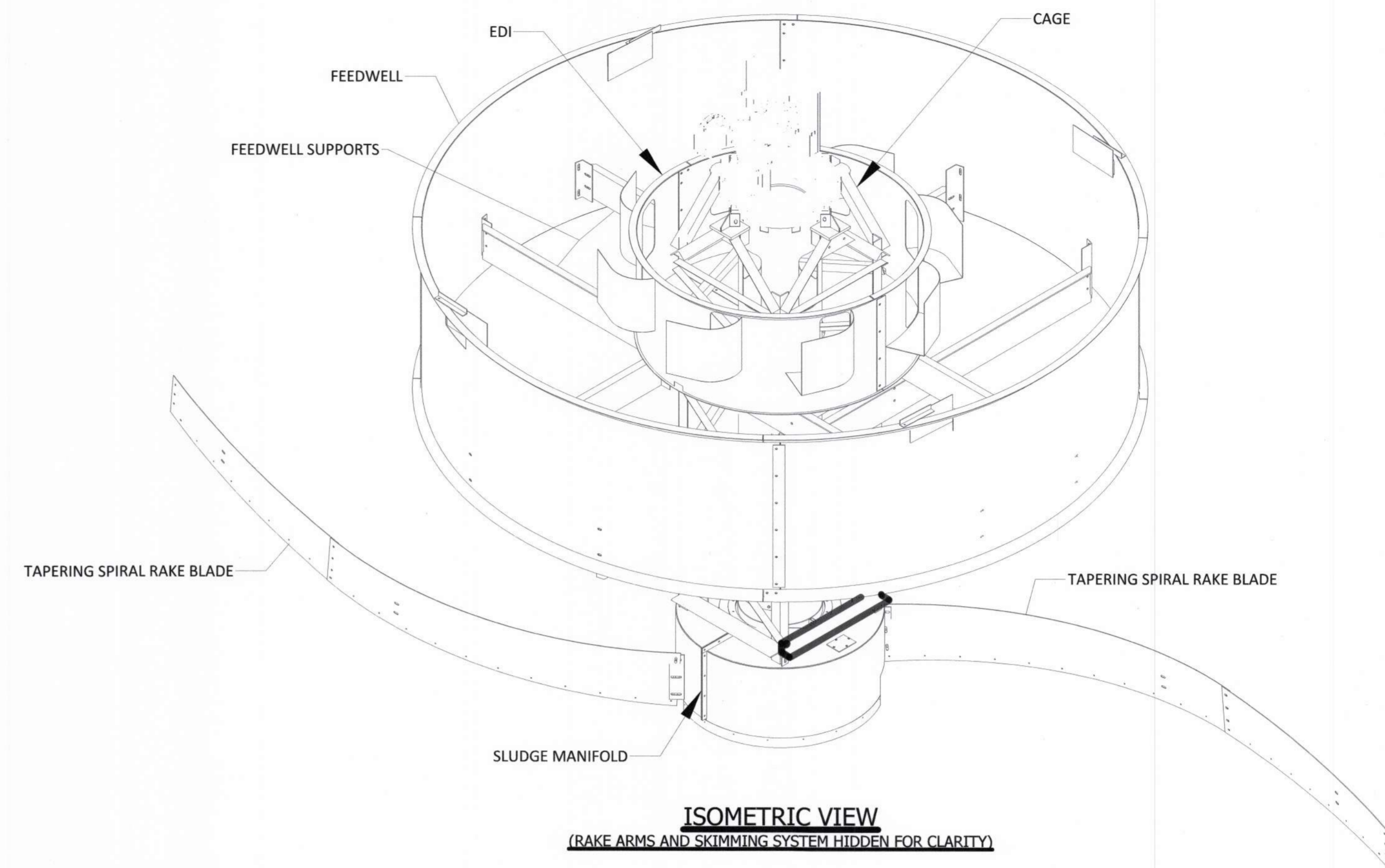
BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
CLARIFIER DETAILS I
PROJECT NO. 6872



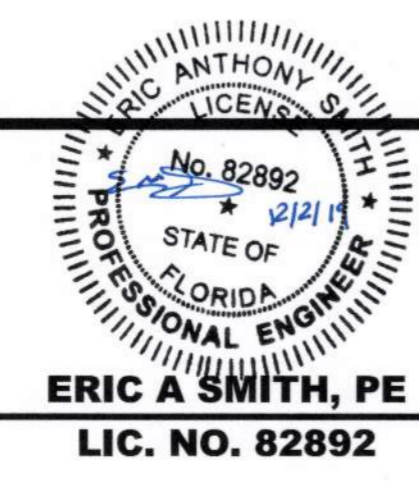
VIEW K-K



ELEVATION
(ENERGY DISSIPATING INLET (EDI) AND FEEDWELL DETAIL)

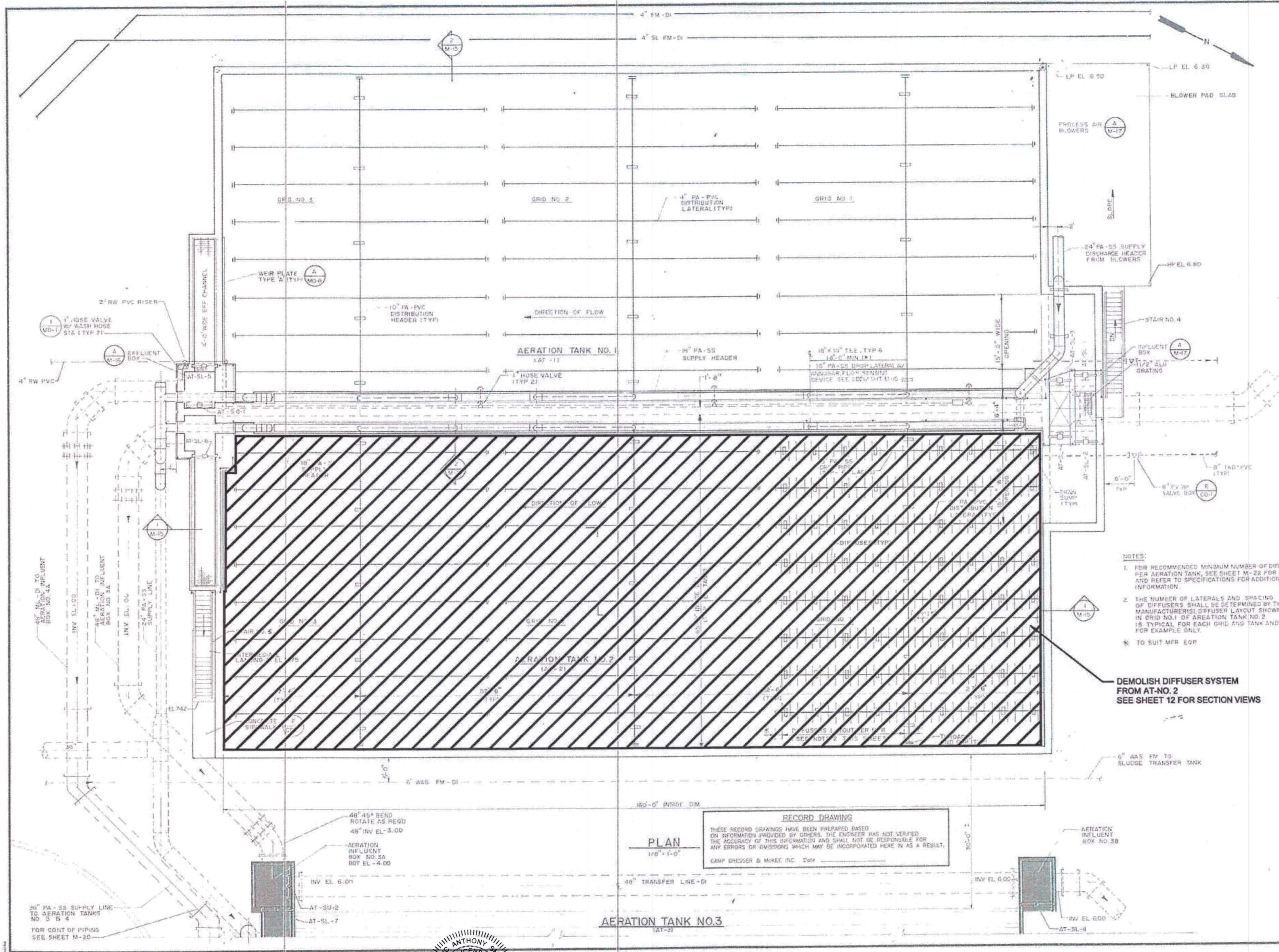


Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E. SMITH		(Vert.) NTS
File Name:	Clarifier No 4	Design Date:	08/2019
Rotation:	X: 0d	Drawn By:	KLH
Name:		Checked By:	E. SMITH
Revision:		Date:	
		Xref Name:	NA



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UTILITIES DEPARTMENT
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PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
CLARIFIER DETAILS II
PROJECT NO. 6872



- NOTES:**
- FOR RECOMMENDED MINIMUM NUMBER OF DIFFUSERS PER AERATION TANK, SEE SHEET M-32 FOR TABLE AND REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 - THE NUMBER OF LATERALS AND SPACING OF DIFFUSERS SHALL BE DETERMINED BY THE MANUFACTURER(S) DIFFUSER LAYOUT SHOWN IN GRID NO.1 OF AERATION TANK NO. 2 IS TYPICAL FOR EACH GRID AND TANK AND IS FOR EXAMPLE ONLY.
- * TO SUIT MFR EGP

DEMOLISH DIFFUSER SYSTEM FROM AT-NO. 2 SEE SHEET 12 FOR SECTION VIEWS

RECORD DRAWING
 THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HERE IN AS A RESULT.
 CAMP DRESSER & MCKEE, INC. Date _____

REVISIONS	NO.	DATE	BY	REVISION
1	10/01	TMM	1/24	CONFORMED DWG
2	2/04	SP	5	RECORD DRAWINGS

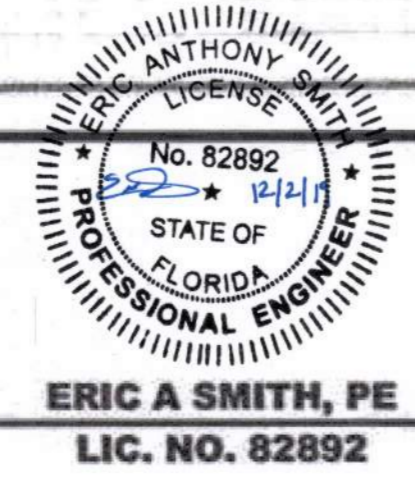
DESIGNED BY: JBB
 DRAWN BY: BER
 CHECKED BY: JMM
 APPROVED BY: _____
 DATE: JUL 2011

CDM
 CAMP DRESSER & MCKEE, INC.
 1000 W. UNIVERSITY AVENUE, SUITE 100
 DAYTONA BEACH, FLORIDA 32114

UPGRADING AND MODIFICATIONS FOR THE BETHUNE POINT WASTEWATER TREATMENT PLANT
AERATION TANKS NO. 1 AND 2 - PLAN
 DAYTONA BEACH, FLORIDA

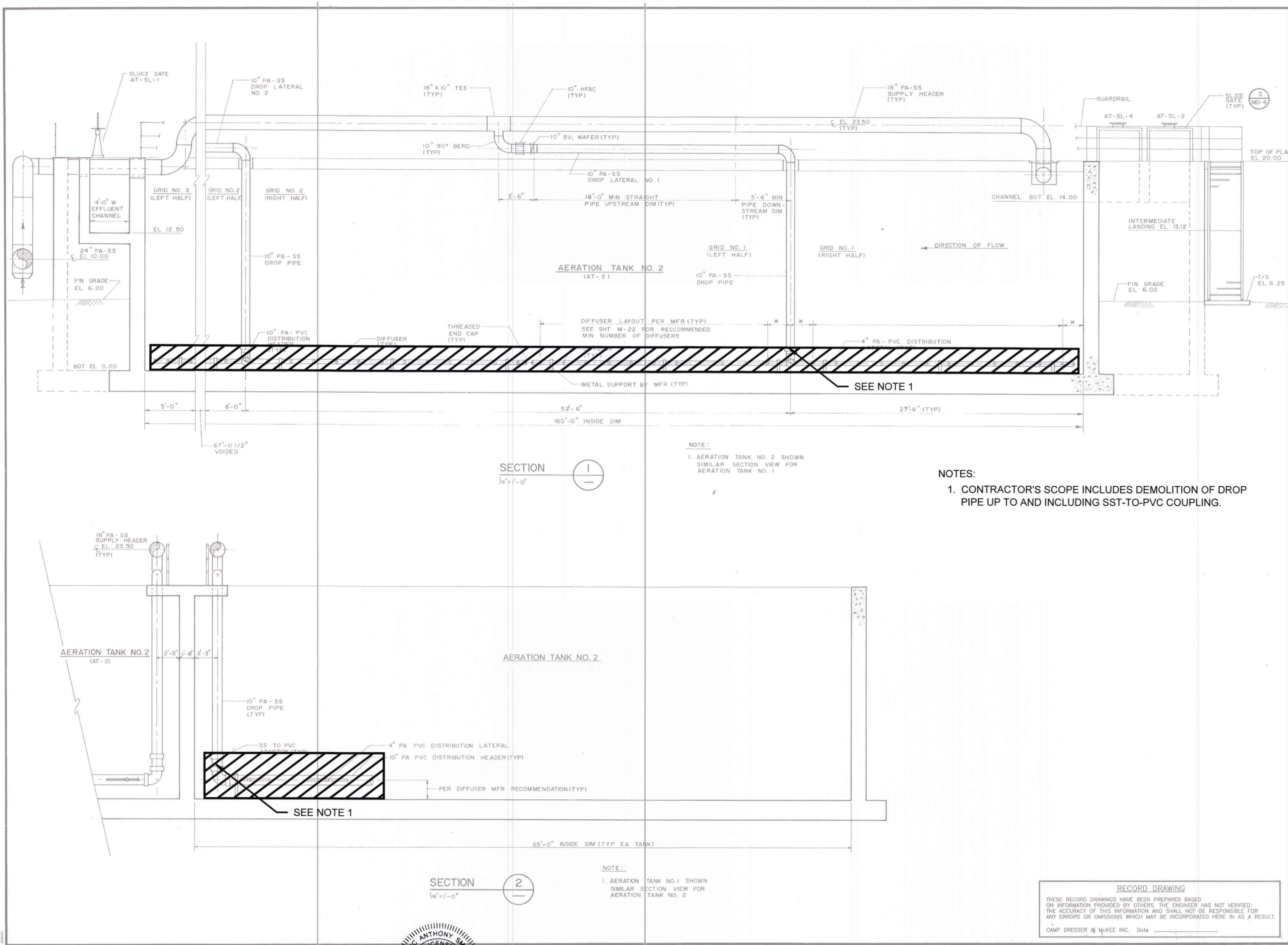
PROJECT NO: 6132-12FD
 SHEET NO: M-14

Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E SMITH	(Vert.)	NTS
File Name:	As-Built.dwg	Design Date:	08/2019
Rotation:	0d	Drawn By:	KLH
Xref Name:	NA	Checked By:	E SMITH



THE CITY OF DAYTONA BEACH
UTILITIES DEPARTMENT
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 PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
AERATION TANK NO. 2
EXISTING LAYOUT AND DEMOLITION PLAN
PROJECT NO. 6872

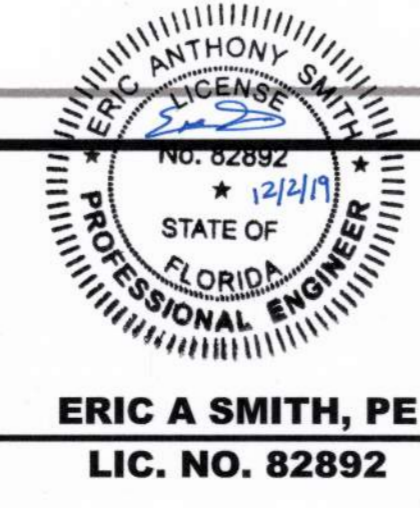


DESIGNED BY: JIRI DRAWN BY: BERZAWI CHECKED BY: TMM APPROVED BY: DATE: JULY 18, 2019	10/91 TMM C24 2/19/20 P RECORD DRAWINGS	REMARKS
CAMP DRESSER & MCKEE INC.	CDM	
UPGRADING AND MODIFICATIONS FOR THE BETHUNE POINT WASTEWATER TREATMENT PLANT	AERATION TANKS NO. 1 AND 2 - SECTIONS	
PROJECT NO: 6132-12FD	SHEET NO: M-15	

NOTES:
1. CONTRACTOR'S SCOPE INCLUDES DEMOLITION OF DROP PIPE UP TO AND INCLUDING SST-TO-PVC COUPLING.

RECORD DRAWING
THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HERE IN AS A RESULT.
CAMP DRESSER & MCKEE INC. Date

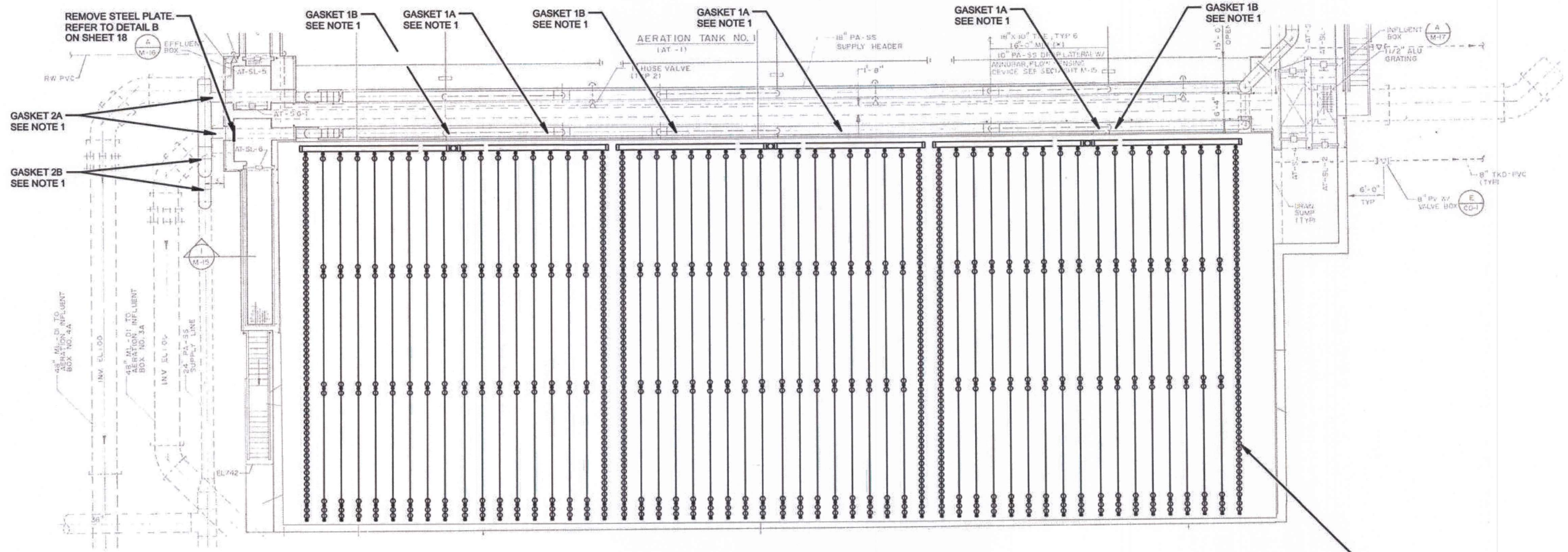
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Survey Date: NA	Plot Date: 08/2019
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Checked By: E SMITH	(Vert.) NTS
File Name: Clarifier No 4	Design Date: 08/2019
As-Built.dwg	Drawn By: KLH
Rotation: 0	Checked By: E SMITH
Xref Name: NA	



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UTILITIES DEPARTMENT
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BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
AERATION TANK NO. 2
EXISTING LAYOUT AND DEMOLITION SECTIONS
PROJECT NO. 6872

12 of 18



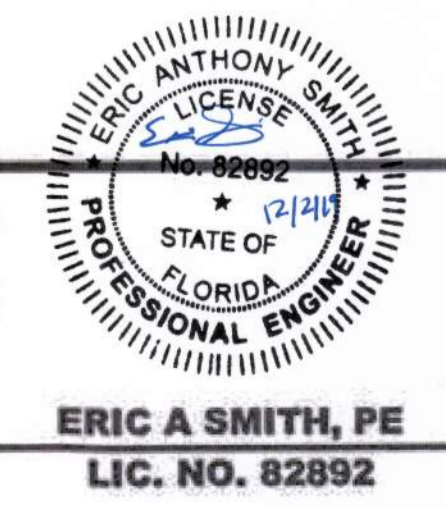
INSTALL DISC DIFFUSERS PER MANUFACTURER RECOMMENDATIONS. SEE NOTE 3.

NOTES:

1. CONTRACTOR TO REPLACE GASKETS ON EXISTING SST PIPING. LOCATIONS SHOWN ARE APPROXIMATE. SEE SHEET 17 FOR PICTURES. REFER TO GASKET SCHEDULE (SHEET 18) FOR SIZE AND NUMBER TO BE REPLACED.
2. PROCESS AIR WILL HAVE TO BE SHUT DOWN FOR GASKET REPLACEMENT. IT IS CITY'S DESIRE FOR ALL GASKETS TO BE REPLACED DURING A SINGLE SHUTDOWN. CONTRACTOR TO COORDINATE WITH PLANT STAFF ON LENGTH OF SHUTDOWN REQUIRED. IF SHUTDOWN LONGER THAN 3 HOURS IS REQUIRED, CONTRACTOR SHALL PROVIDE MEANS OF PROVIDING TEMPORARY AIR TO AT-1 AND AT-4.
3. DIFFUSER LAYOUT SHOWN IS FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE WITH MANUFACTURER ON ACTUAL LAYOUT AND INSTALLATION.

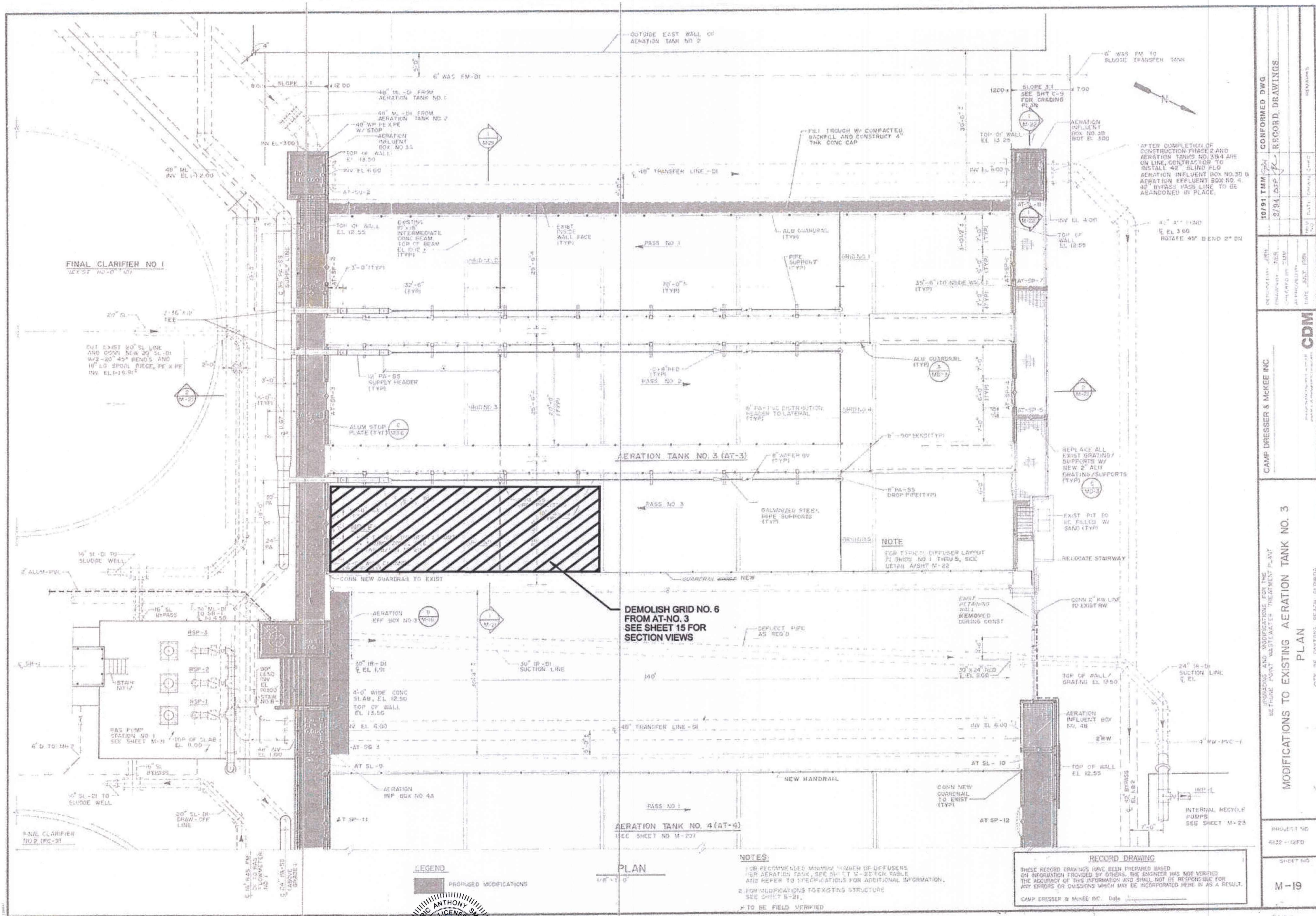
Name	Revision	Date

Contract No.: NA	Project No.: NA
Survey Date: NA	Plot Date: 08/2019
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Checked By: E SMITH	(Vert.) NTS
File Name: As-Built.dwg	Design Date: 08/2019
Rotation: X - Od	Drawn By: KLH
Xref Name: NA	Checked By: E SMITH



THE CITY OF DAYTONA BEACH
UTILITIES DEPARTMENT
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 PHONE: (386) 671-8800 FAX: (386) 671-8805

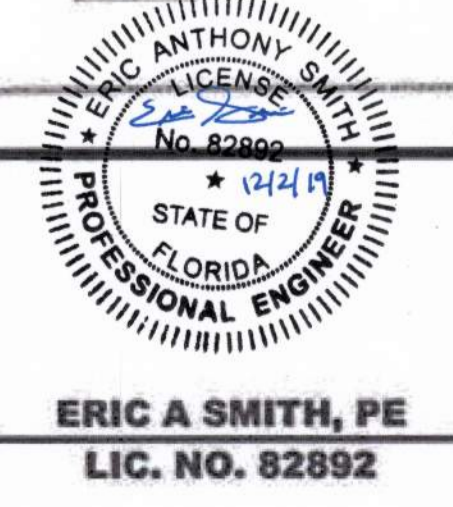
BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
AERATION TANK NO. 2
PROPOSED MODIFICATIONS



10/91 TAM	CONFORMED DWG
2/04 LSP	RECORD DRAWINGS
DATE: 02/05/09	DATE: 02/05/09
BY: [Signature]	BY: [Signature]
CHECKED BY: [Signature]	CHECKED BY: [Signature]
DESIGNED BY: [Signature]	DESIGNED BY: [Signature]
PROJECT NO.	6872-12FD
SHEET NO.	M-19

CDM
 CAMP DRESSER & MCKEE INC.
 10701 TAMM DRIVE
 DAYTONA BEACH, FLORIDA 32114
 PHONE: (386) 255-1100
 FAX: (386) 255-1101
 WWW.CAMPDM.COM

Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E SMITH		(Vert.) NTS
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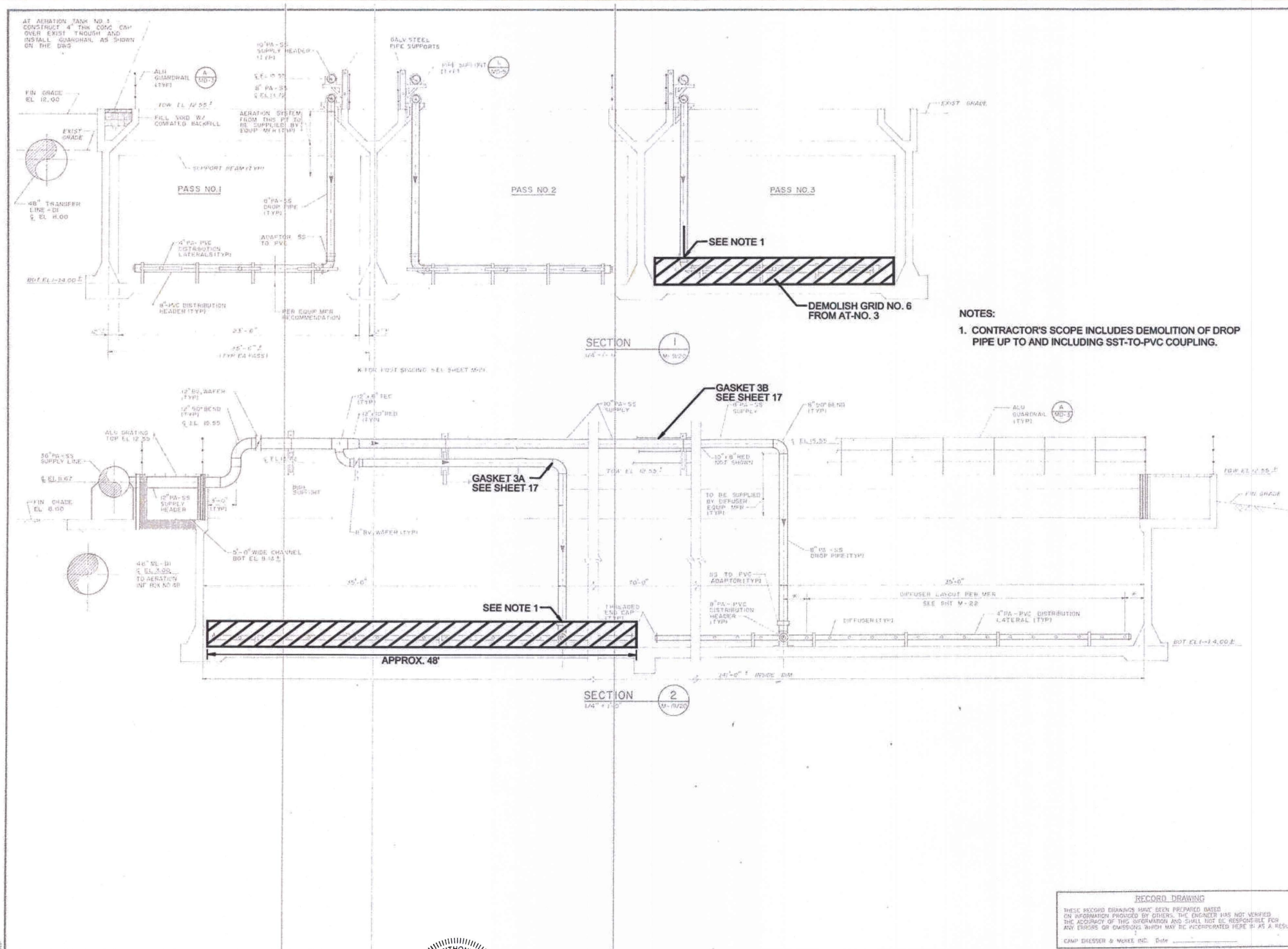


THE CITY OF DAYTONA BEACH
UTILITIES DEPARTMENT
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 PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
AERATION TANK NO. 3
EXISTING LAYOUT AND DEMOLITION PLAN
PROJECT NO. 6872

NOTES:
 1. FOR RECOMMENDED MINIMUM SPACING OF DIFFUSERS FOR AERATION TANK, SEE SHEET M-22 FOR TABLE AND REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 2. FOR MODIFICATIONS TO EXISTING STRUCTURE SEE SHEET S-21.
 * TO BE FIELD VERIFIED

RECORD DRAWING
 THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT.
 CAMP DRESSER & MCKEE INC. Date



NOTES:
 1. CONTRACTOR'S SCOPE INCLUDES DEMOLITION OF DROP PIPE UP TO AND INCLUDING SST-TO-PVC COUPLING.

10/91 TMM: CDM CONFORMED DWG
2/84 JEP RECORD DRAWINGS
CDM
CAMP DRESSER & MCKEE INC.
MODIFICATIONS TO EXISTING AERATION TANKS NO. 3 AND 4
TYPICAL SECTIONS AND DETAILS
PROJECT NO. 6872 - 12FD
SHEET NO. M-21

RECORD DRAWING
 THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT OF SUCH INFORMATION.
 CAMP DRESSER & MCKEE INC. DATE

Contract No.: NA	Project No.: NA
Survey Date: NA	Plot Date: 08/2019
Drawn By: KLH	Scale: (HOR.) NTS
Checked By: E SMITH	(Vert.) NTS
File Name: 6872-12FD	Design Date: 08/2019
Rotation: 0d	Drawn By: KLH
Xref Name: NA	Checked By: E SMITH

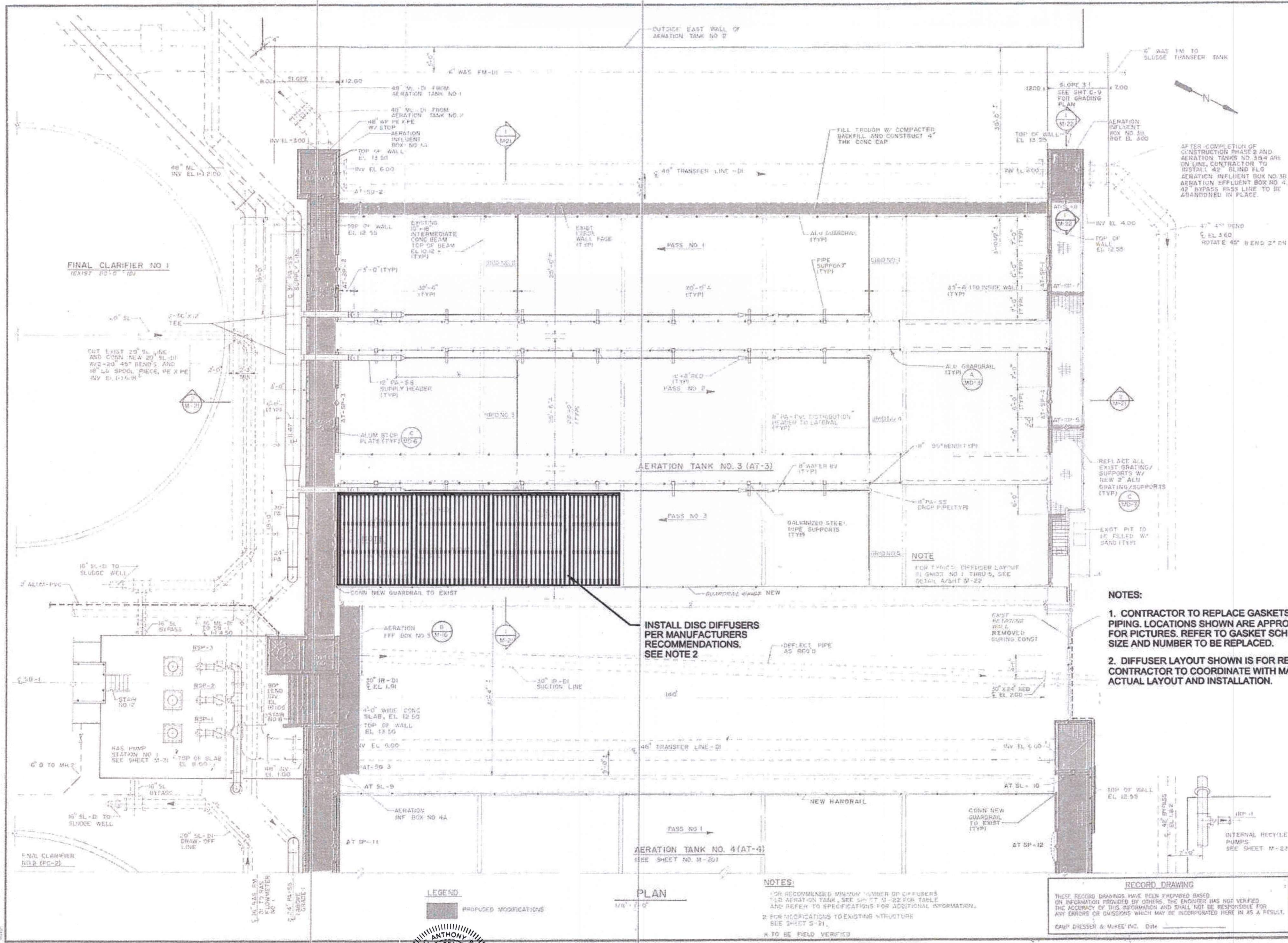

ERIC A SMITH, PE
 LIC. NO. 82892



THE CITY OF DAYTONA BEACH
UTILITIES DEPARTMENT
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 PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
AERATION TANK NO. 3
EXISTING LAYOUT AND DEMOLITION SECTIONS
PROJECT NO. 6872

15
 of
 18
 SHEETS



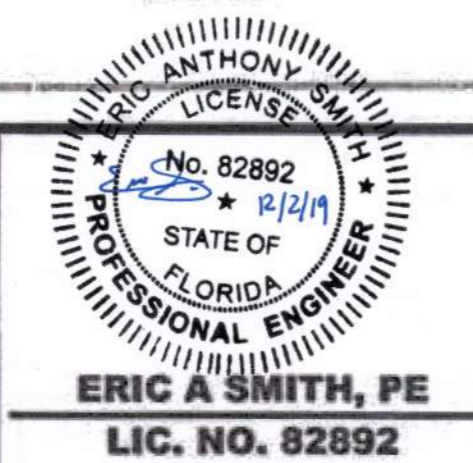
10/31/14 TMA	CONFORMED DWG
2/18/15 EFP	RECORD DRAWINGS
DATE: 02/18/15	DATE: 02/18/15
CDM	
CAMP DRESSER & MCKEE INC.	
VK NO. 3	

- NOTES:**
1. CONTRACTOR TO REPLACE GASKETS ON EXISTING SST PIPING. LOCATIONS SHOWN ARE APPROXIMATE. SEE SHEET 17 FOR PICTURES. REFER TO GASKET SCHEDULE (SHEET 18) FOR SIZE AND NUMBER TO BE REPLACED.
 2. DIFFUSER LAYOUT SHOWN IS FOR REFERENCE ONLY. CONTRACTOR TO COORDINATE WITH MANUFACTURER ON ACTUAL LAYOUT AND INSTALLATION.

RECORD DRAWING
 THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY OTHERS. THE ENGINEER HAS NOT VERIFIED THE ACCURACY OF THIS INFORMATION AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE INCORPORATED HEREIN AS A RESULT.
 CAMP DRESSER & MCKEE, INC. Date: _____

MODIFIC
PROJECT NO
6142-127D
SHEET NO
M-19

Contract No:	NA	Project No:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E SMITH	(Vert.)	NTS
File Name:	Client No 4	Design Date:	08/2019
Rotation:	0d	Drawn By:	KLH
Xref Name:	NA	Checked By:	E SMITH



THE CITY OF DAYTONA BEACH
UTILITIES DEPARTMENT
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 PHONE: (386) 671-8800 FAX: (386) 671-8805

BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
AERATION TANK NO. 3
PROPOSED MODIFICATIONS
PROJECT NO. 6872

Sheet 16 of 18



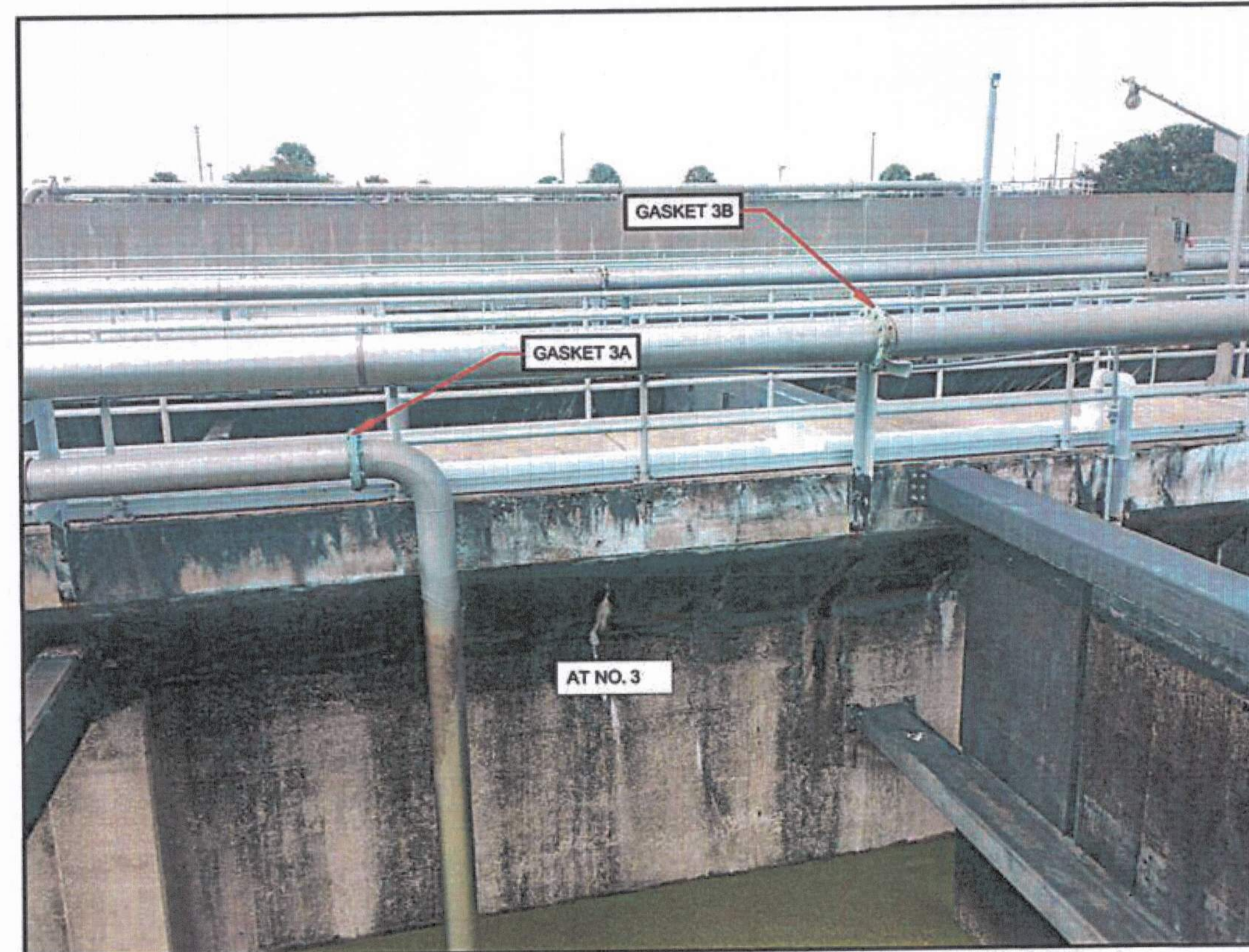
GASKETS 2A AND 2B



GASKETS 2A AND 2B



GASKETS 1A AND 1B

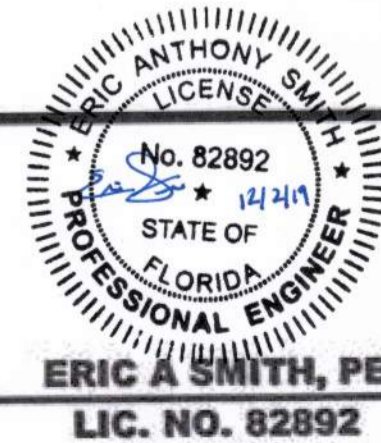


GASKETS 3A AND 3B

NOTES:

1. PROCESS AIR WILL NEED TO BE SHUT DOWN FOR GASKET REPLACEMENT. PROCESS AIR MAY NOT BE SHUT DOWN FOR MORE THAN 3 HOURS AT A TIME AND MAY NOT BE SHUT DOWN ON CONSECUTIVE DAYS. CONTRACTOR IS TO SUBMIT SCHEDULE OF PROPOSED SHUT DOWNS TO CITY 7 DAYS IN ADVANCE FOR CITY APPROVAL.
2. CONTRACTOR MAY CHOOSE TO PROVIDE SUPPLEMENTAL AIR TO AT-NO. 1 AND AT-NO. 4 IN ORDER TO ALLOW FOR A SHUT DOWN OF GREATER THAN 3 HOURS. SUPPLEMENTAL AIR PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL.
3. EXISTING SST PIPING APPEARS TO BE CONNECTED WITH STUB-END PIPING AND LAP JOINT FLANGES. CONTRACTOR TO FIELD VERIFY AND PLAN GASKET REPLACEMENT ACCORDINGLY.
4. CONTRACTOR SHALL FIELD VERIFY GASKET THICKNESS AND BOLT HOLE PATTERN PRIOR TO SUBMITTING TO OWNER AND ORDERING.
5. EXISTING GASKETS UTILIZE FILLER MATERIAL AROUND CIRCUMFERENCE OF THE GASKET TO PROTECT GASKET FROM EXPOSURE. CONTRACTOR SHALL SUBMIT FILLER MATERIAL TO OWNER FOR APPROVAL. AFTER NEW GASKET IS INSTALLED, CONTRACTOR SHALL PLACE APPROVED FILLER MATERIAL AROUND GASKET.

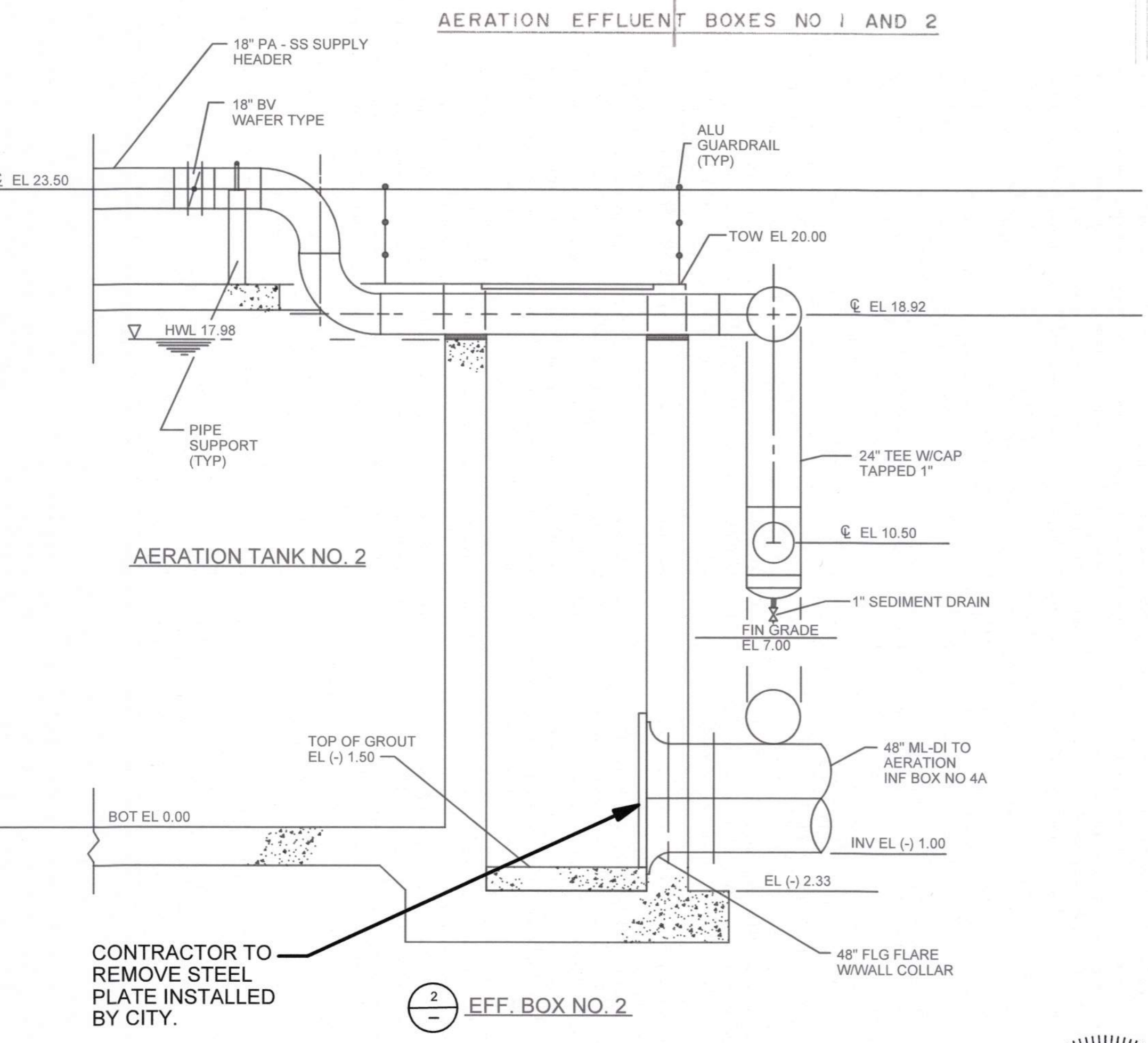
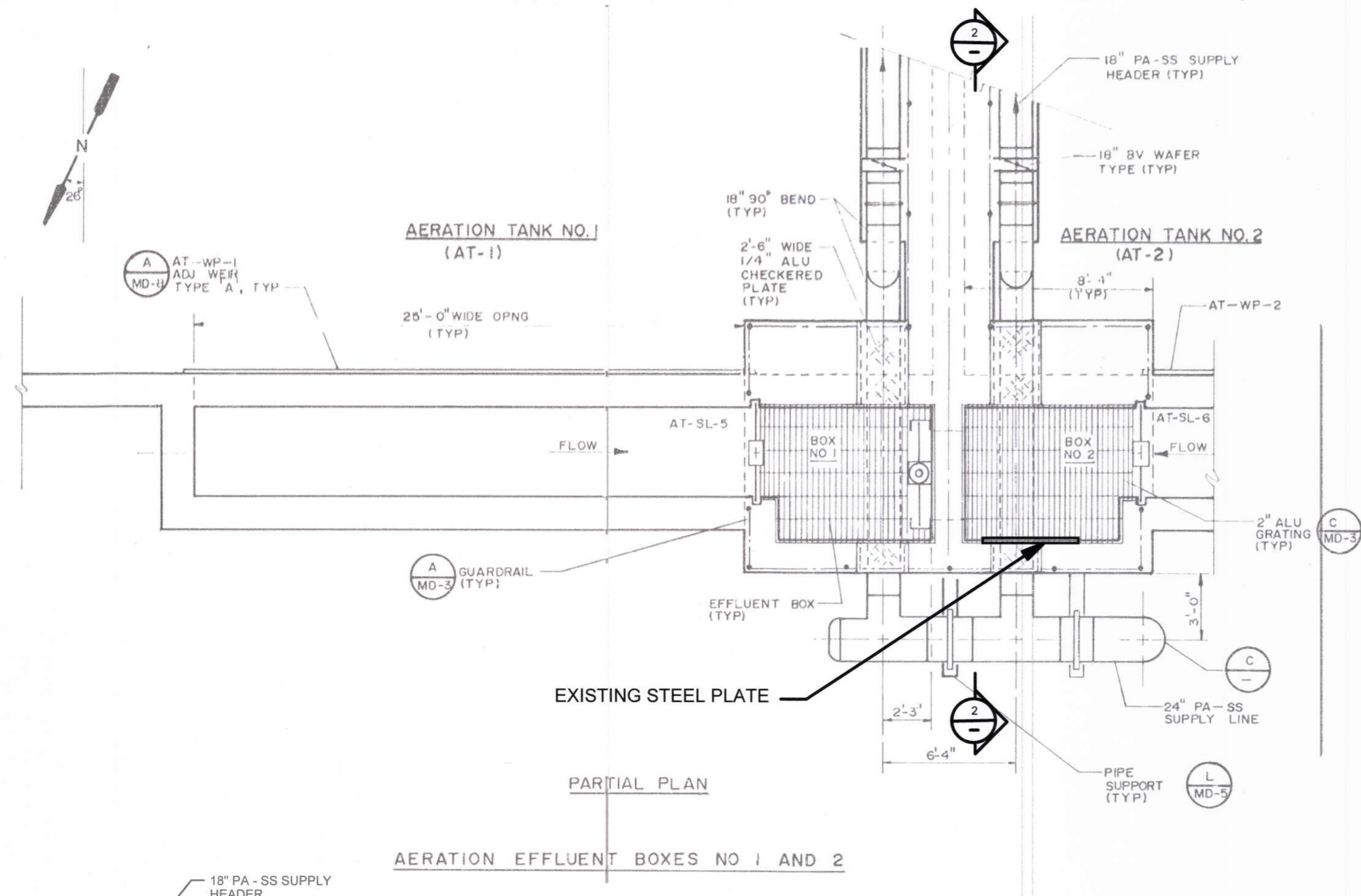
Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS (Vert.) NTS
Checked By:	E. SMITH	Design Date:	08/2019
File Name:	Charted no - As-Built.dwg	Drawn By:	KLH
Rotation:	X - Od	Checked By:	E. SMITH
Kref Name:	NA		



**THE CITY OF DAYTONA BEACH
UTILITIES DEPARTMENT**

125 BASIN ST., STE. 130 • DAYTONA BEACH • FLORIDA 32114
PHONE: (386) 671-8800 FAX: (386) 671-8805

**BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
AERATION TANKS NO. 2 & 3
GASKET LOCATIONS**



Gasket Schedule			
Gasket No.	Size ⁴	Material	QTY. ⁴
1A	10 inch	SEE NOTE 2	3
1B	18 inch		3
2A	18 inch		2
2B	24 inch		2
3A	8 inch		1
3B	10 inch		1

SEE SHEET 17 FOR PICTURES OF GASKETS

GASKETS SHALL MEET THE FOLLOWING REQUIREMENTS:

- SUITABLE FOR PRESSURES EQUAL TO OR LESS THAN 150 POUNDS PER SQUARE INCH GAUGE, WITH LOW FLANGE BOLT LOADINGS, TEMPERATURES EQUAL TO OR LESS THAN 300 DEGREES FAHRENHEIT, AND COMPRESSED AIR SERVICE.
- MATERIAL: EPDM ELASTOMER, 1/8 INCH THICK, 60 SHORE HARDNESS, SMOOTH SURFACE.
- MANUFACTURERS:
GARLOCK, STYLE 8314
JOHN CRANE
OWNER APPROVED EQUAL
- CONTRACTOR TO FIELD VERIFY SIZE AND QUANTITIES PRIOR TO ORDERING GASKETS.

Contract No.:	NA	Project No.:	NA
Survey Date:	NA	Plot Date:	08/2019
Drawn By:	KLH	Scale:	(HOR.) NTS
Checked By:	E SMITH		(Vert.) NTS
File Name:	Clarifier No 4	Design Date:	08/2019
Rotation:	X: 0d	Drawn By:	KLH
Xref Name:	NA	Checked By:	E SMITH



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BETHUNE POINT WRF
PHASE I PROCESS UPGRADES
AERATION SYSTEM DETAILS

SHEET 18 of 18