ADDENDUM NUMBER 2:

Pease WWTF SBR1 Aeration Improvements Bid Proposal #31-14

Issued: January 2, 2013

This Addendum forms part of the original document marked: **Pease WWTF SBR1 Aeration Improvements Bid Proposal #31-14**

A. Section 011000-Summary, Item 1.2, paragraph D:

Add the following to this paragraph:

"5. The City or its subcontractor will perform all disconnects and reconnects to electrical equipment for this project. The timing for this work will be coordinated with the Contractor."

B. Section 011000-Summary, Item 1.2, paragraph D.1.c:

Add the following sentence at the end of this paragraph:

"All new valves, piping and fittings shall come pre-primed from the manufacturer. Field painting is not required."

C. Drawings:

As part of Addendum No. 1, the original shop drawings entitled "Sequencing Batch Reactor for Pease Development Authority", dated March 26, 1996 were provided for the Contractor's information.

The original shop drawings were updated for the City's pre-purchase of equipment for SBR1. The revised drawings are added as part of this Addendum No. 2 and are attached as "Table of Contents, Installation Drawings, Pease Development Authority, Project ID #: 104846I". Note the part numbers in the packing slip included as part of Addendum No. 1 are consistent with the part numbers on the attached drawings. Also note the references to field welds, which are the responsibility of the Contractor.

All else remains unchanged from the original bid document.

Please acknowledge receipt of this addendum within your proposal, failure to do so may subject a bidder to disqualification.

End of Addendum #2

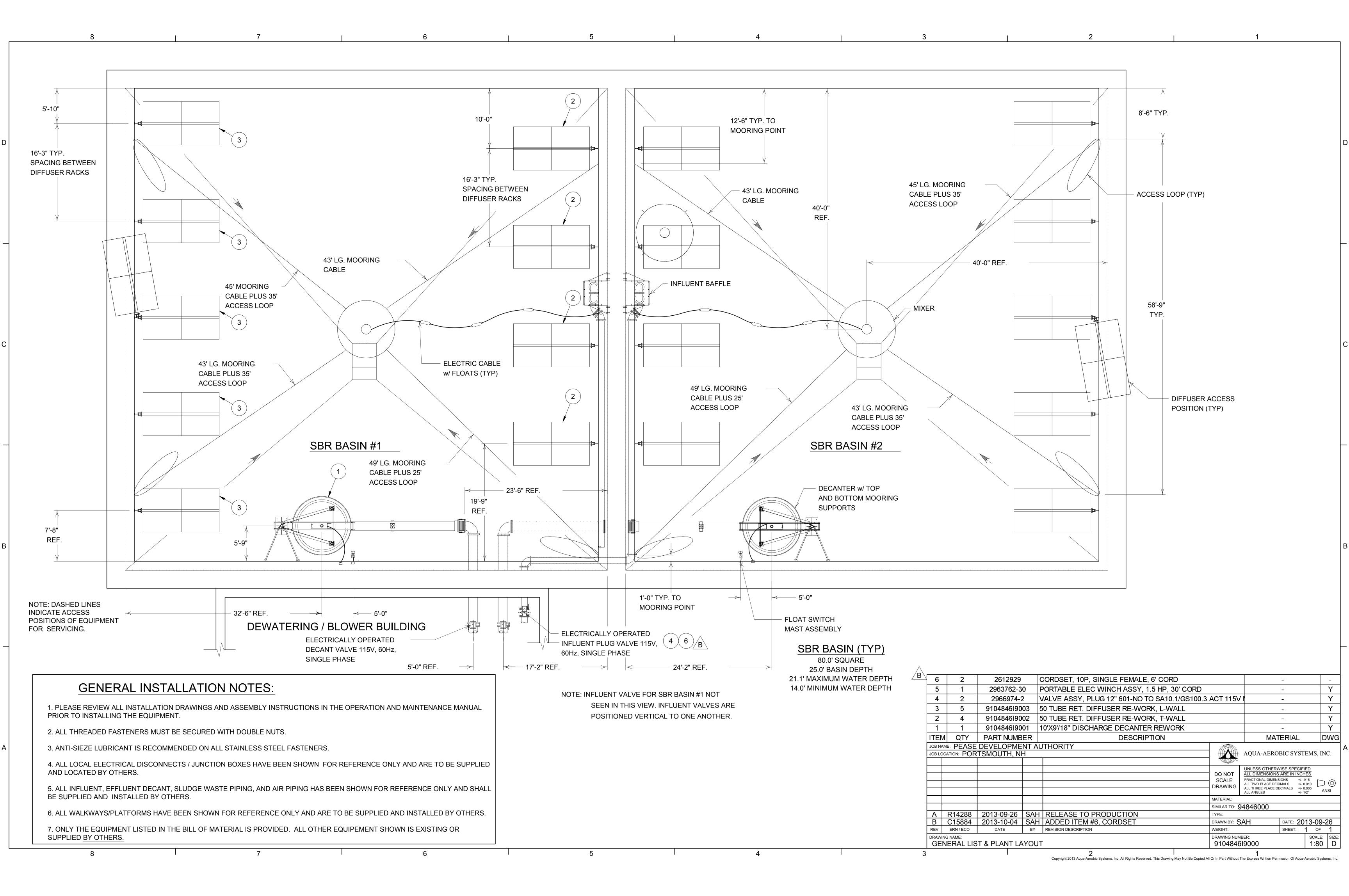
TABLE OF CONTENTS

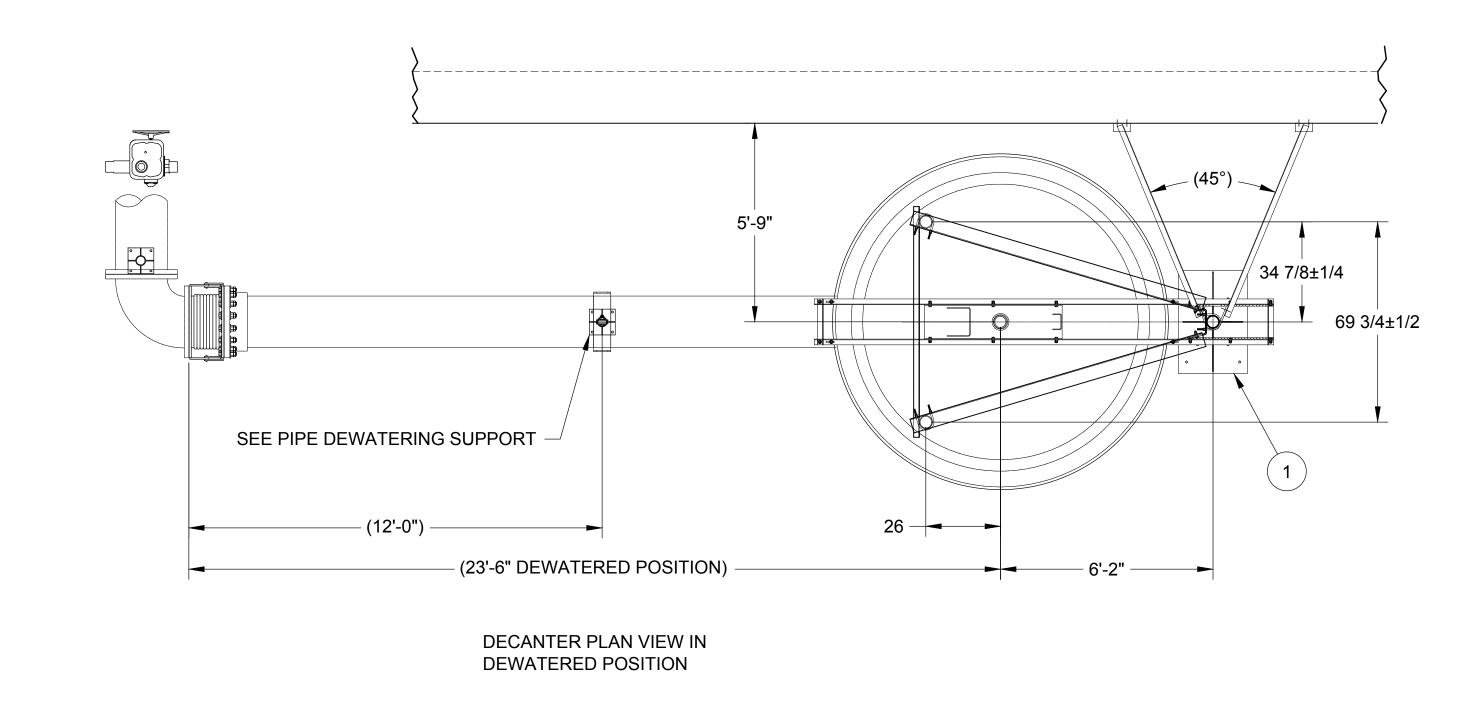
INSTALLATION DRAWINGS

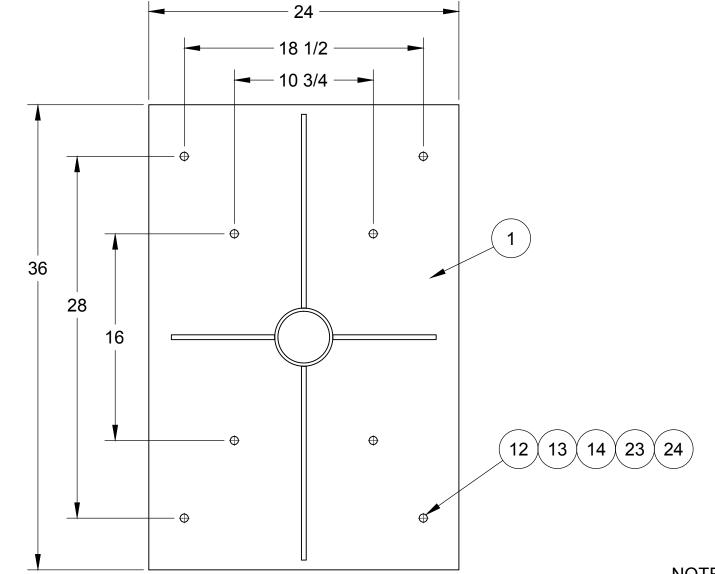
PEASE DEVELOPMENT AUTHORITY

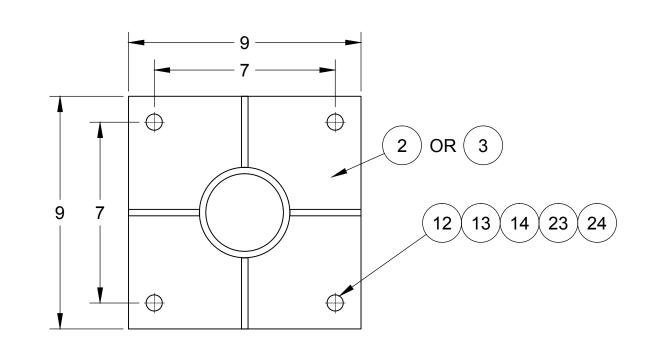
PROJECT ID #: 104846I

DRAWING NO.	DESCRIPTION
910484619000	GENERAL LIST & PLANT LAYOUT
9104846I9001 9104846I9001	10'x9'/18" DISCHARGE DECANTER REWORK (SH.1 OF 2) 10'x9'/18" DISCHARGE DECANTER REWORK (SH.2 OF 2)
910484619002	50 TUBE RET. DIFFUSER RE-WORK, T-WALL (SH.1 OF 2)
910484619002	50 TUBE RET. DIFFUSER RE-WORK, T-WALL (SH.2 OF 2)
910484619003	50 TUBE RET. DIFFUSER RE-WORK, L-WALL (SH.1 OF 2)
910484619003	50 TUBE RET. DIFFUSER RE-WORK, L-WALL (SH.2 OF 2)
2606006	AIR HOSE ASSEMBLY
2961245	VERTICAL AIR COLUMN ASSEMBLY (304 SS) 50-TUBE ELEC. WINCH
2961338	LIFTING MECHANISM ASSEMBLY, 50-TUBE
2963000	KIT, ADHESIVE ANCHOR, CARTRIDGE, 1/2", WEJ-IT
2963762-30	WINCH ASSEMBLY, PORTABLE, ELEC w/30FT POWER CORD









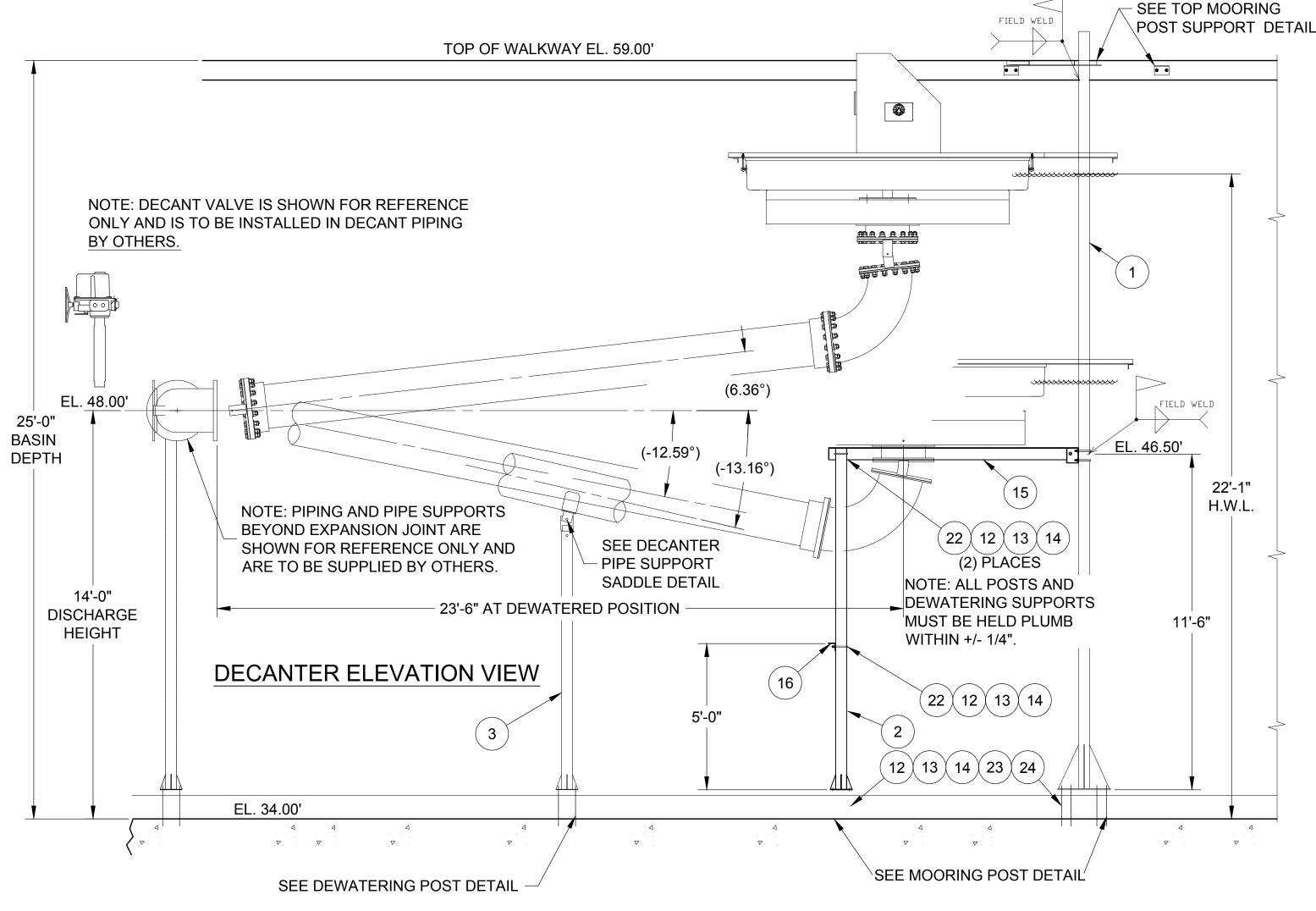
DEWATERING SUPPORT POST DETAIL

NOTE: MOORING / SUPPORT POSTS ARE TO BE HELD VERTICAL AND PLUMB WITHIN +/- 1/4" TO ALLOW VERTICAL MOVEMENT OF THE UNIT. POSTS MUST BE FILLED WITH CONCRETE (SUPPLIED BY OTHERS) AFTER INSTALLATION.

NOTE: POST MUST BE FILLED WITH CONCRETE AFTER INSTALLATION BY OTHERS.

NOTE: MOORING / SUPPORT POSTS ARE TO BE HELD VERTICAL AND PLUMB WITHIN +/- 1/4" TO ALLOW VERTICAL MOVEMENT OF THE UNIT. POSTS MUST BE FILLED WITH CONCRETE (SUPPLIED BY OTHERS) AFTER INSTALLATION.

MOORING POST ANCHOR DETAIL

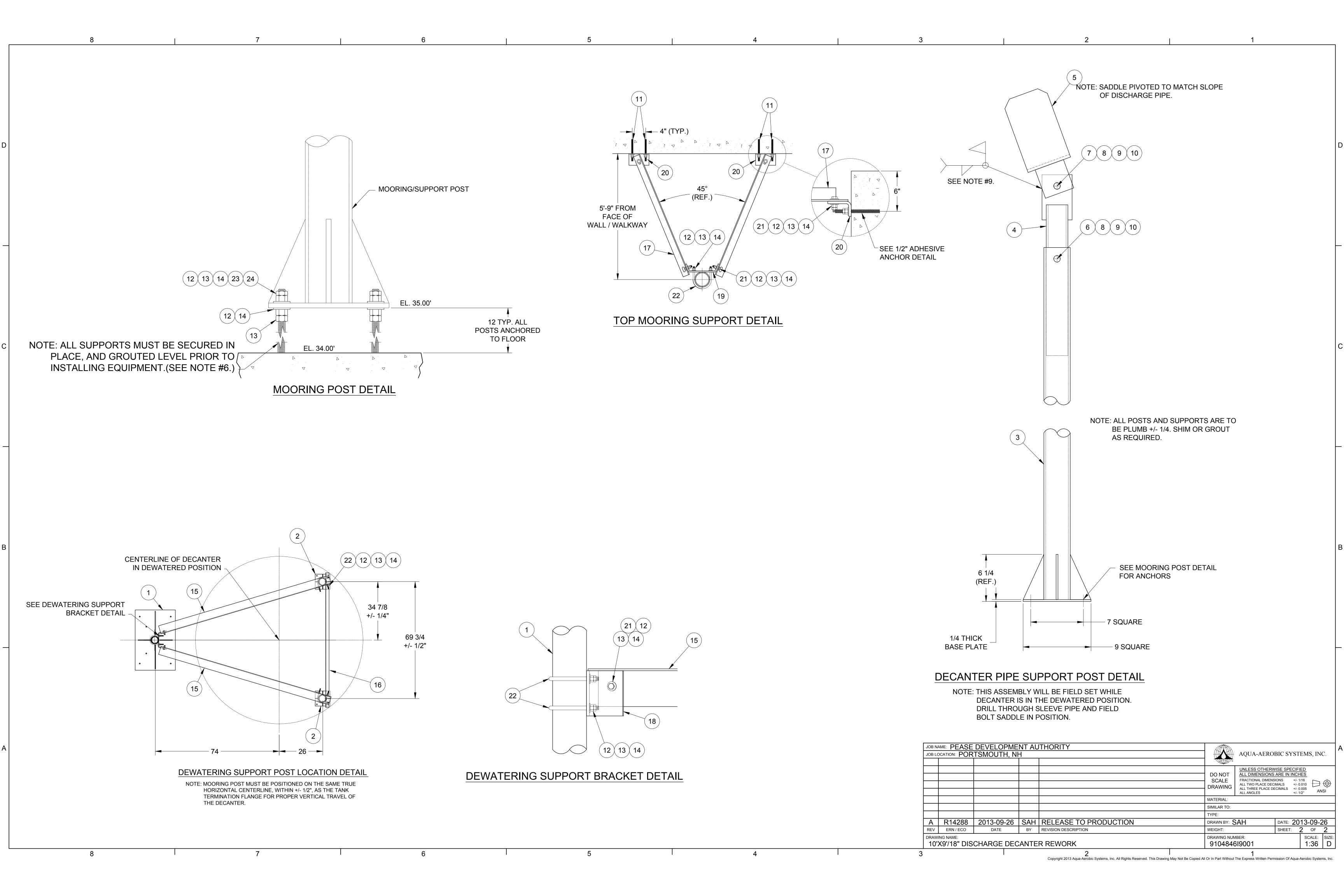


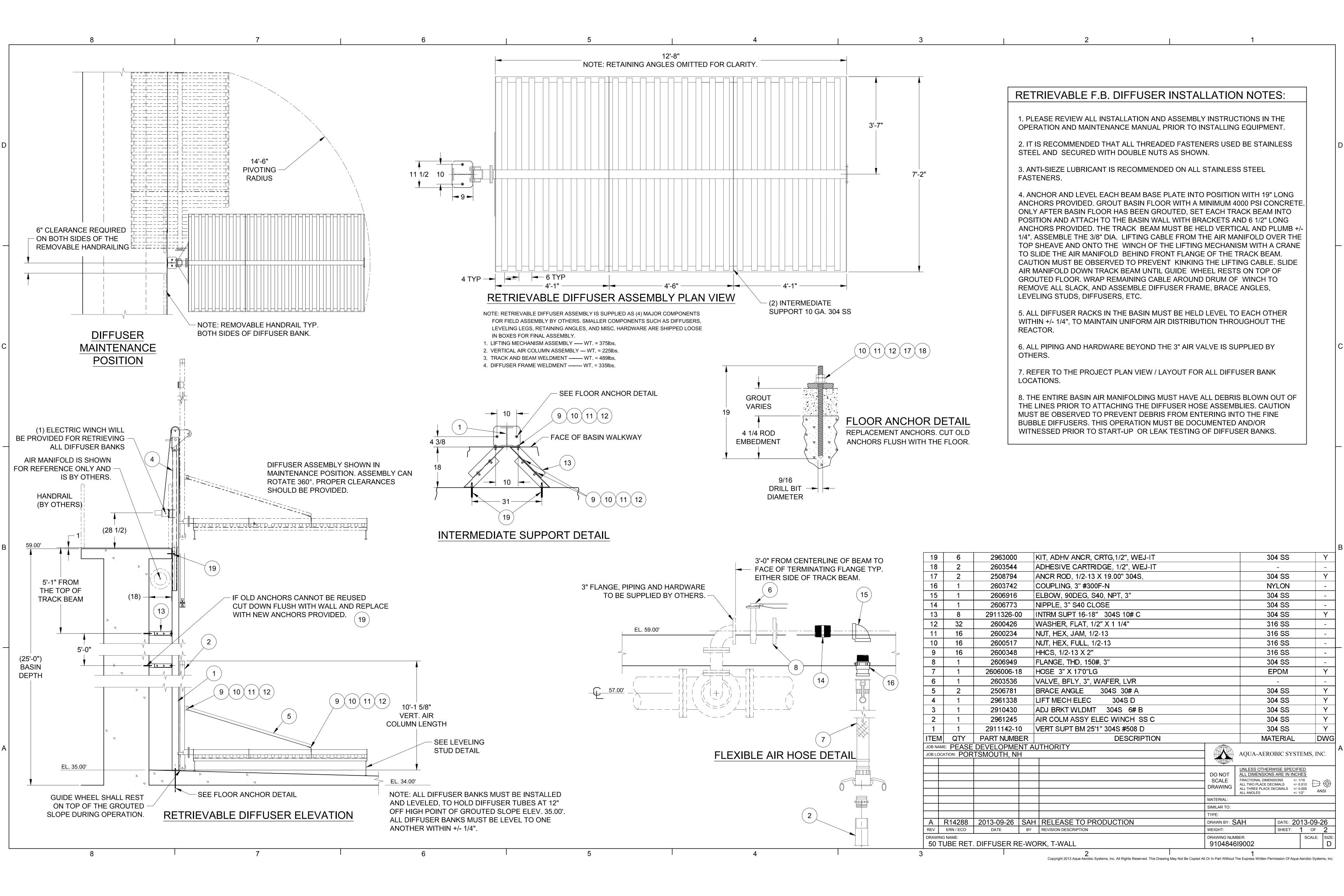
DECANTER INSTALLATION NOTES:

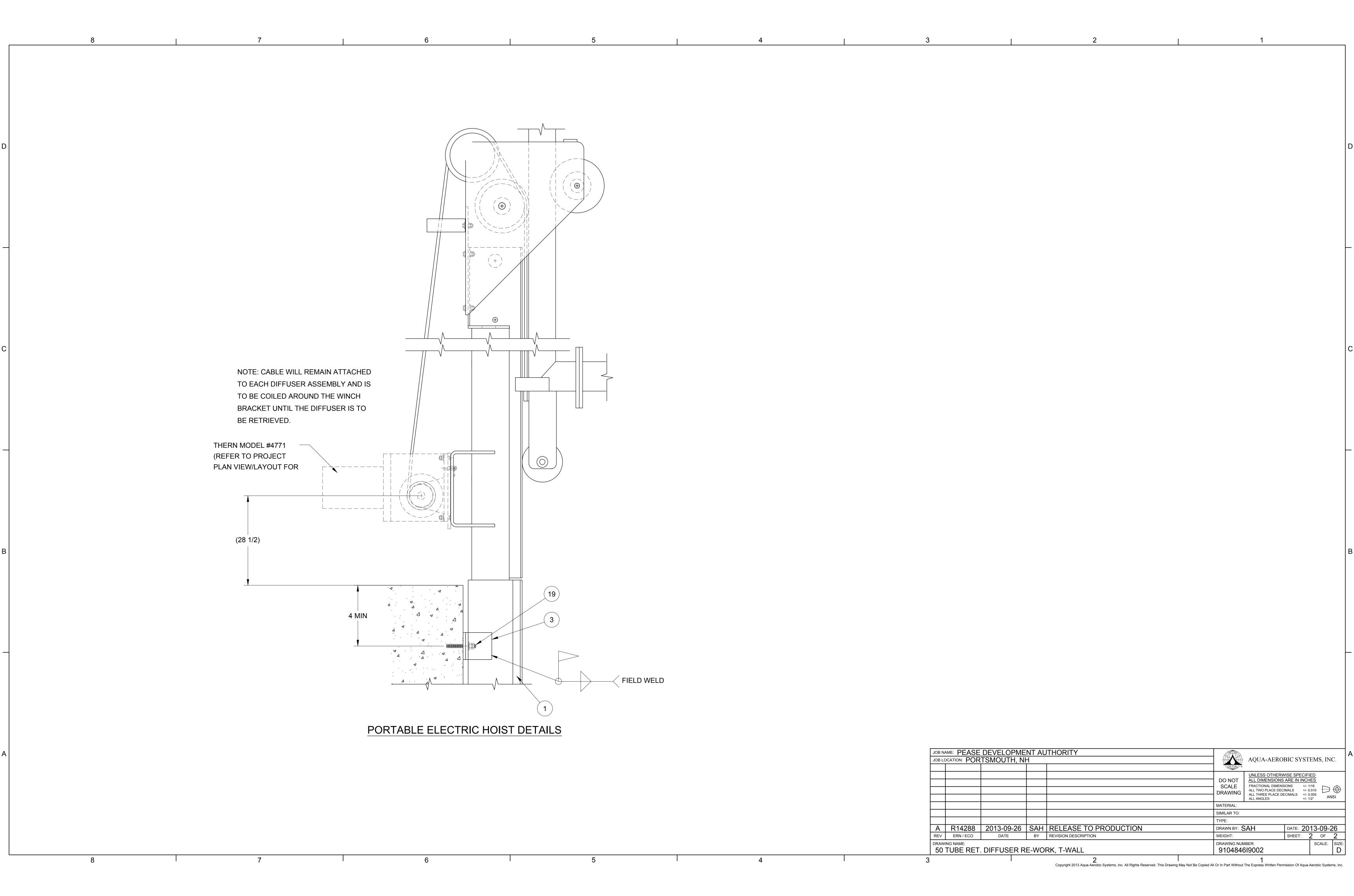
- 1. PLEASE REVIEW ALL INSTALLATION DRAWINGS AND ASSEMBLY INSTRUCTIONS IN THE OPERATION AND MAINTENANCE MANUAL PRIOR TO INSTALLING THE EQUIPMENT.
- 2. ALL THREADED FASTENERS MUST BE SECURED WITH FULL NUT & JAM NUT.
- 3. ANTI-SIEZE LUBRICANT IS RECOMMENDED ON ALL STAINLESS STEEL FASTENERS.
- 4. ALL LOCAL ELECTRICAL DISCONNECTS/JUNCTION BOXES HAVE BEEN SHOWN FOR REFERENCE ONLY AND ARE TO BE SUPPLIED AND LOCATED BY OTHERS.
- 5. ALL EFFLUENT DECANT PIPING HAS BEEN SHOWN FOR REFERENCE ONLY AND SHALL BE SUPPLIED AND INSTALLED BY OTHERS.
- 6. POSTS ARE TO BE HELD VERTICAL AND PLUMB TO WITHIN +/- 1/4" TO ALLOW VERTICAL MOVEMENT OF UNIT. POSTS ARE TO BE FILLED WITH CONCRETE, BY OTHERS, AFTER INSTALLATION.
- 7. REFER TO BASIN LAYOUT DRAWING FOR LOCATION OF DECANTER.
- 8. TOUCH UP ALL WELDED AREAS OF EQUIPMENT INSTALLATION WITH HOT STICK GALVANIZE KIT.
- 9. NEW ADHESIVE ANCHORS HAVE BEEN PROVIDED IN CASE THE EXISTING ANCHORS CAN NOT BE REUSED. IF THE EXISTING ANCHORS CANNOT BE USED THEY MUST BE CUT OFF FLUSH WITH THE GROUT.
- 10. ONLY THE EQUIPMENT DESCRIBED IN THE BILL OF MATERIAL IS BEING PROVIDED. ALL OTHER EQUIPMENT SHOWN IS EITHER EXISTING OR BY OTHERS AND IS SHOWN FOR REFERENCE ONLY.

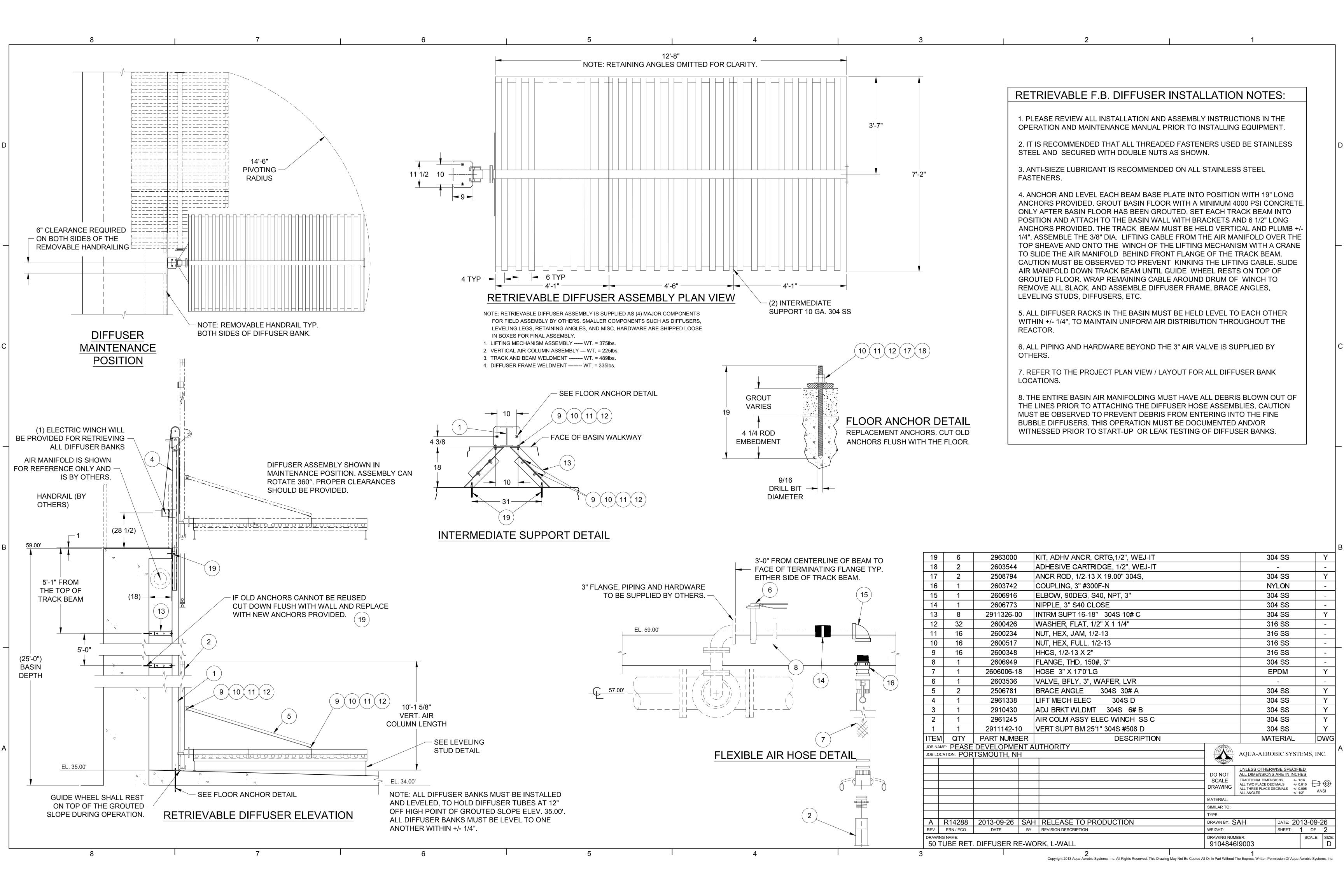
24	20	2603544	ADHESIVE CARTRIDGE, 1/2", WEJ-IT	-	-
23	20	2508794	ANCR ROD, 1/2-13 X 19.00" 304S,	304 SS	Υ
22	7	2605934	U-BOLT, 4" PIPE, 1/2-13 X 7 3/4"	304 SS	Υ
21	6	2600348	HHCS, 1/2-13 X 2"	316 SS	-
20	2	2509135	BRACKET, TOP SUPPORT, WALL	304 SS	Υ
19	1	2509119	BRACKET, SUPPORT, MOORING POST	304 SS	Υ
18	1	2509120	PLATE, MOUNTING, DEWATERING ANGLE	304 SS	Υ
17	2	2519487-35-SX0	TOP SUPT ANGLE, MRG POST, 74" LG	304 SS	Υ
16	1	2507915	ANGLE, BOTTOM STABILIZING	304 SS	Υ
15	2	2507977	ANGLE, DEWATERING SUPPORT	304 SS	Υ
14	68	2600426	WASHER, FLAT, 1/2" X 1 1/4"	316 SS	-
13	40	2600234	NUT, HEX, JAM, 1/2-13	316 SS	_
12	40	2600517	NUT, HEX, FULL, 1/2-13	316 SS	-
11	4	2963000	KIT, ADHV ANCR, CRTG,1/2", WEJ-IT	304 SS	Υ
10	4	2602580	WASHER, FLAT, 3/4" X 1 7/8"	316 SS	-
9	2	2602579	NUT, HEX, JAM, 3/4-10	316 SS	_
8	2	2600496	NUT, HEX, FULL, 3/4-10	316 SS	-
7	1	2602577	HHCS, 3/4-10 X 2.75"	304 SS	_
6	1	2603879	HHCS, 3/4-10 X 5"	304 SS	-
5	1	2903200	SADDLE, PIPE, 16-18"	304 SS	Υ
4	1	2910202	PIPE SUPPORT SLEEVE	304 SS	Υ
3	1	2910200-25	DCNTR PIPE SUP 4"x8'-6" 304S B	304 SS	Υ
2	2	2910499-08	DWTNG SUP 4"S10X11'6"304 74#B	304 SS	Υ
1	1	2910187-25	MOORING POST WELDMENT, 4" S40 X 25'	304L SS	Υ
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	DWG
		DEVELOPMENT A	AUTHORITY		
JOB LOCA	TION: POR	TSMOUTH, NH		AQUA-AEROBIC SYSTEMS	s, INC.

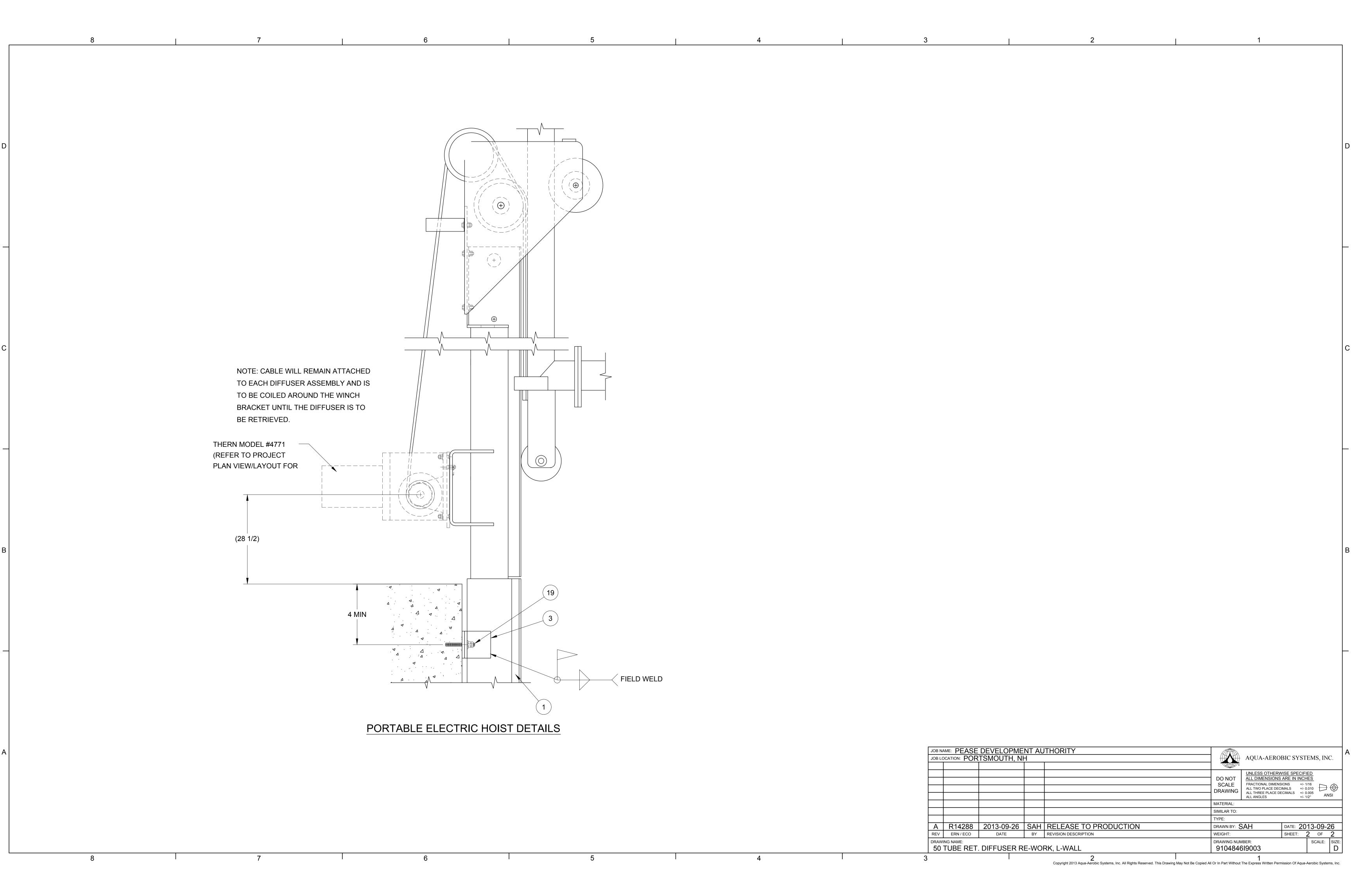
JOB NAME: PEASE DEVELOPMENT AUTHORITY												
JOB	JOB LOCATION: PORTSMOUTH, NH						AQUA-AERO	BIC SYST	EMS, IN	C.		
						DO NOT SCALE DRAWING DRAWING UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN INCHES ALL DIMENSIONS +/- 1/16 ALL TWO PLACE DECIMALS +/- 0.00 ALL ANGLES +/- 1/2°				vsi		
					MATERIAL:							
						SIMILAR TO:						
	TYPE:					TYPE:						
Α	R14288	2013-09-26	SAH	RELEASE TO PRODUCTION		DRAWN BY: SAH DATE: 2013-			13-09-26			
RE\	/ ERN / ECO	DATE	BY	REVISION DESCRIPTION		WEIGHT:		WEIGHT:		SHEET:	1 OF	2
	DRAWING NAME: 10'X9'/18" DISCHARGE DECANTER REWORK						DRAWING NUMBER: SCALE: SIZ 910484619001 1:36 D					
3	Copyright 2013 Aqua-Aerobic Systems, Inc. All Rights Reserved. This Drawing May Not Be Copied All Or In Part Without The Express Written Permission Of Aqua-Aerobic Systems, Inc.											

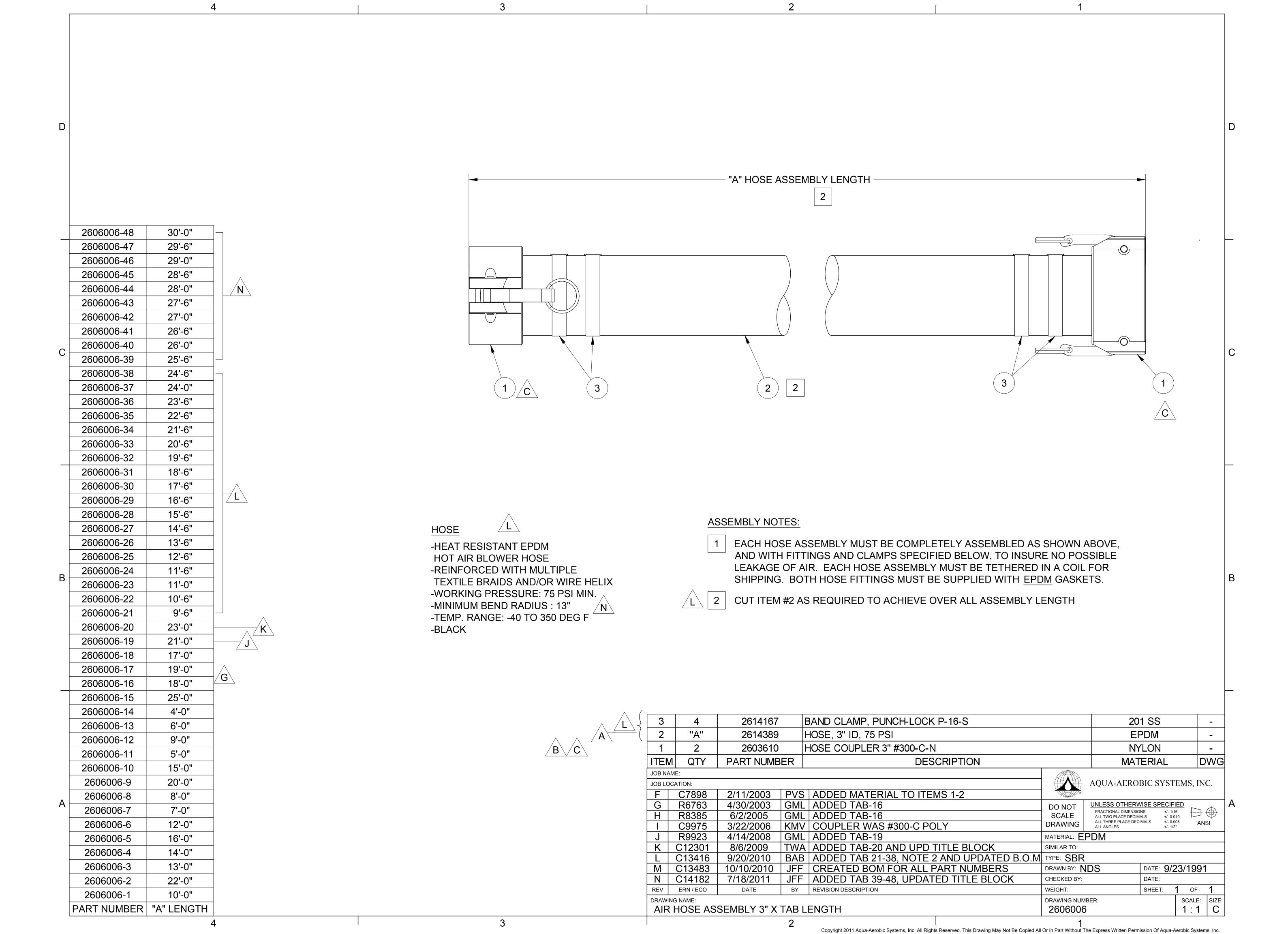


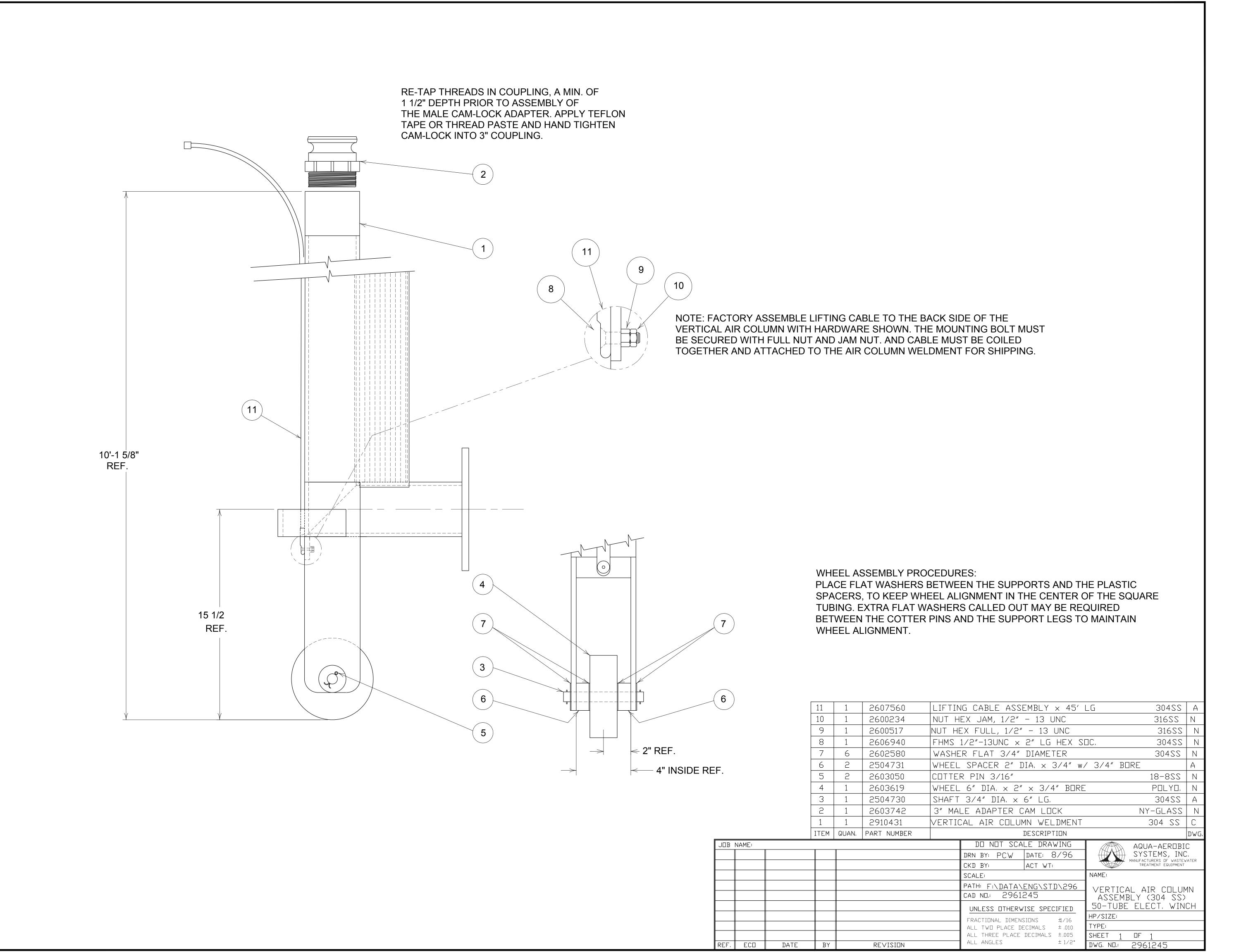


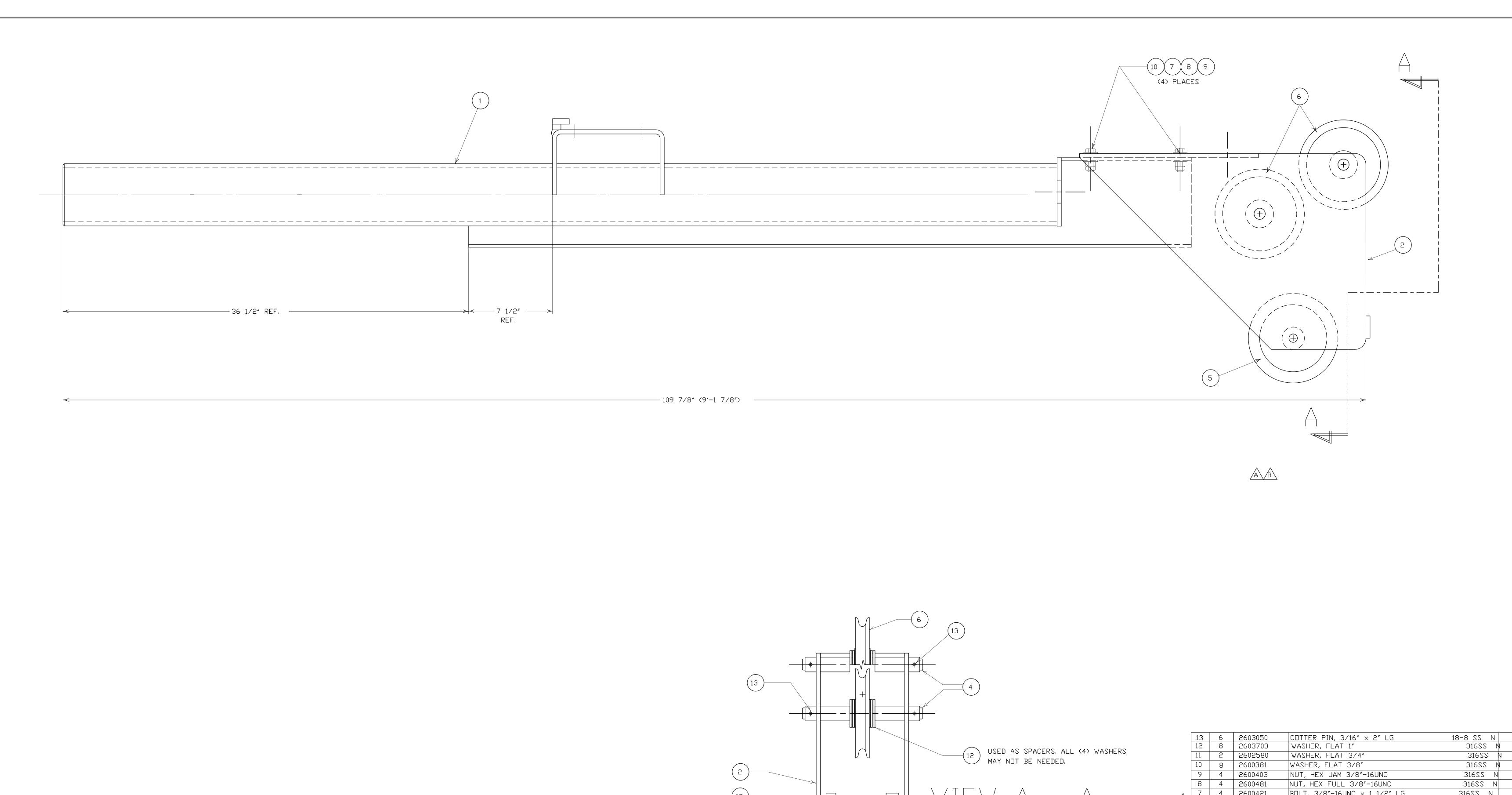












12 USED AS SPACERS. ALL (4) WASH MAY NOT BE NEEDED. 13 3	HERS	<u>∕B</u>	13 12 11 10 9 8 7 6 5 4 3 2 1 ITEM	6 8 2 8 4 4 4 2 1 2 1 1 1 QUAN.	2603050 2603703 2602580 2600381 2600403 2600481 2600421 2611203 2505592 2504932 2504933 2911372 2911371 PART NUMBER	WASHE WASHE NUT, H NUT, H BOLT, SHEAV VERTI SHAFT SHAFT WHEEL	R PIN, 3/16" x 2" LG R, FLAT 1" R, FLAT 3/4" R, FLAT 3/8" HEX JAM 3/8"-16UNC HEX FULL 3/8"-16UNC 3/8"-16UNC x 1 1/2" LG E, 8" DIA, 6 5/8" TREAD x ICAL AIR COLUMN GUIDE WH T, 1" DIA x 10 3/4" LG POSITIONER BRACKET NG BEAM WELDMENT DESCRIPTION		
5	J□B NAME:	2/03/05 3/13/97 DATE		ITEM #	‡6 WAS PART #260 N□TE REVISI□N		DO NOT SCALE DRAWING DRN BY: GML DATE: 1/10/97 CKD BY: SCALE: PATH: F:\DATA\ENG\STD\296 CAD NO: 2961338 UNLESS OTHERWISE SPECIFIED FRACTIONAL DIMENSIONS #/16 ALL TWO PLACE DECIMALS # .010 ALL THREE PLACE DECIMALS # .005 ALL ANGLES # 1/2°	AQUA-AEROBIC SYSTEMS, INC. MANUFACTURERS OF WASTEWATE TREATMENT EQUIPMENT NAME: LIFTING MECHANISM ASSEMBLY, 50-TUBE LOW ELECT. WINCH 14" ABOVE WAS HP/SIZE: TYPE: SHEET 1 OF 1 DWG. NO.: 2961338	

CONVERTED FROM P/L 02-28-05.

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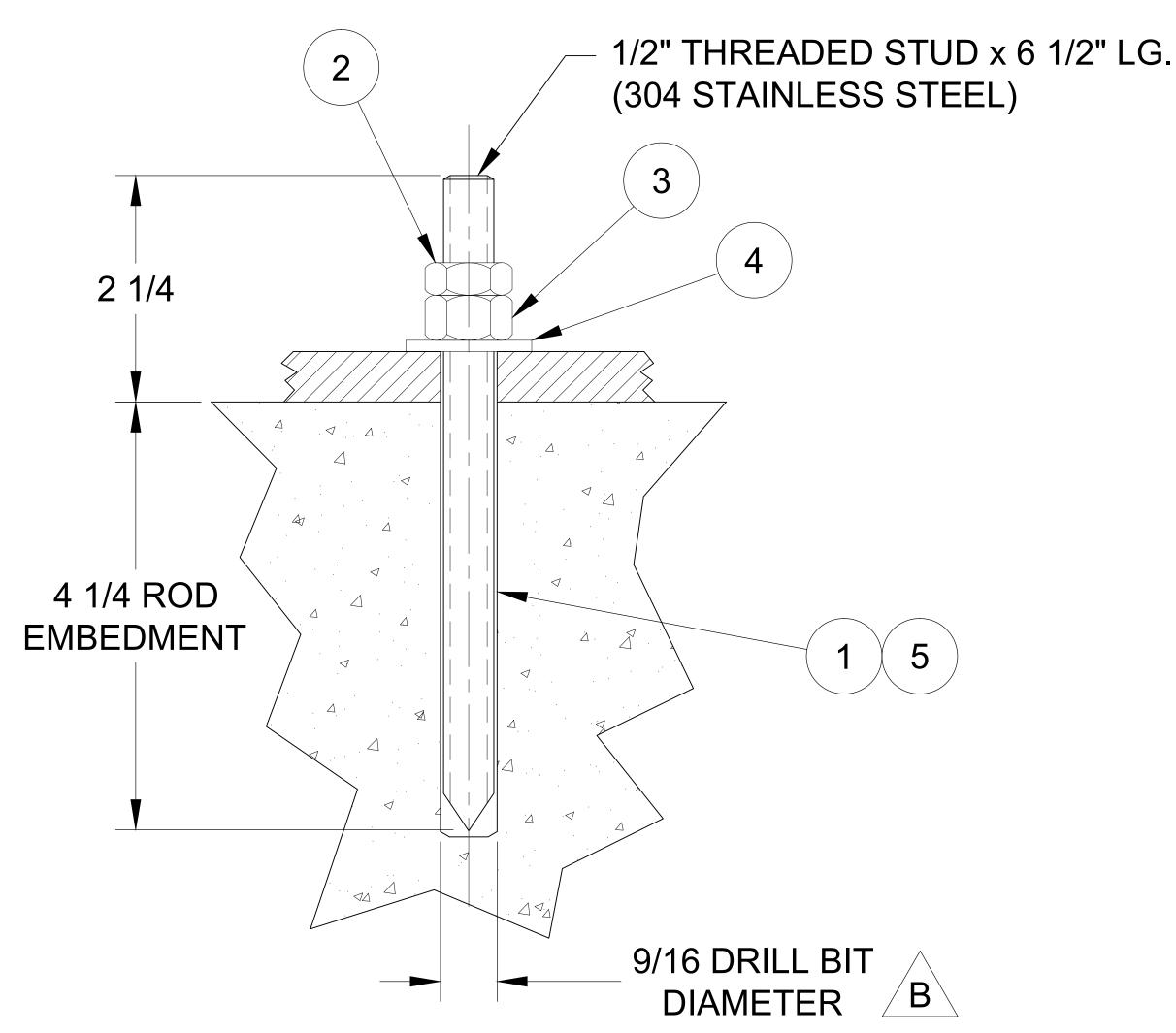
 $\backslash \mathsf{D} /$

INSTALLATION NOTES:

1. LOCATE ALL ANCHOR RODS, AND ADHESIVE CARTRIDGES PROVIDED WITH THE EQUIPMENT CALLED OUT ON INSTALLATION DRAWINGS. READ AND FOLLOW ALL INSTALLATION INSTRUCTIONS PROVIDED WITH YOUR ANCHOR COMPONENTS AND WITHIN THE MISC. SECTION OF YOUR O&M MANUAL BEFORE ATTEMPTING TO INSTALL

ANY ANCHORS.

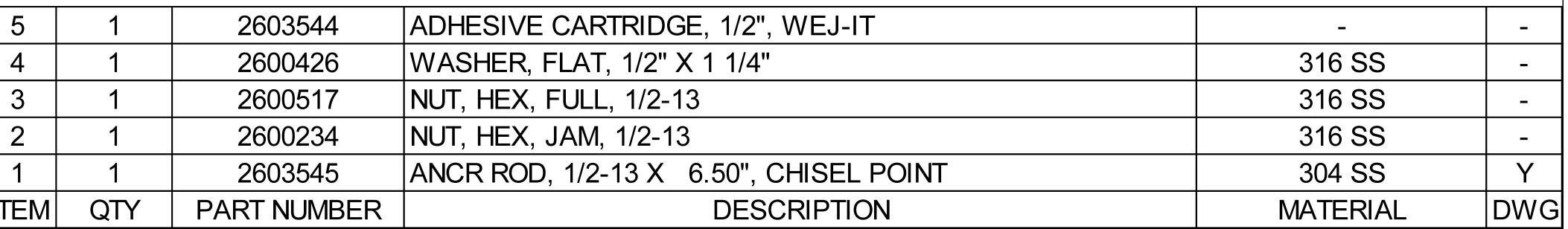
- 2. THE ADHESIVE CAPSULE CONTAINS QUARTZ SAND, HARDENING AGENT AND VINYLESTER RESIN...ALL SELF-CONTAINED IN A GLASS VIAL CAPSULE. EACH ANCHOR SIZE HAS AN APPROPRIATE SIZE CAPSULE EMBEDMENT DEPTH.
- 3. LOCATE AND DRILL OUT ANCHOR HOLE STRAIGHT AND TO DEPTH SHOWN. AFTER DRILLING BLOW OUT AND CLEAN HOLE WITH SMALL PIECE OF TUBING (SUPPLIED BY INSTALLER) TO REMOVE ANY DUST AND DEBRIS.
- 4. INSERT APPROPRIATE DIAMETER ADHESIVE CARTRIDGE INTO PRE-DRILLED HOLE. SET UP ANCHOR ROD WITH NUTS PER INSTRUCTIONS AND INSERT INTO HAMMER DRILL ENGAGING TOP NUT INTO SOCKET OF ROTARY HAMMER DRILL. DRIVE THE ROD ASSEMBLY WITH THE SOCKET INTO HOLE TO THE EMBEDMENT MARK TWISTING SLIGHTLY. THE SET ANCHOR ROD MAY NOT BE DISTURBED OR LOADED BEFORE THE END OF THE SPECIFIED CURE TIME HAS ELAPSED.
- 5. ONCE THE ADHESIVE HAS CURED, REMOVE NUTS AND WASHER FROM ROD ASSEMBLY. PLACE EQUIPMENT INTO POSITION AND ATTACHED WASHER AND FULL NUT OVER STUD. USE A MAX. TORQUE OF 18 ft./lbs. THEN THREAD ON JAM NUT, LOCKING JAM NUT TO THE FULL NUT WITH MAX. 18 ft./lbs. OF TORQUE.



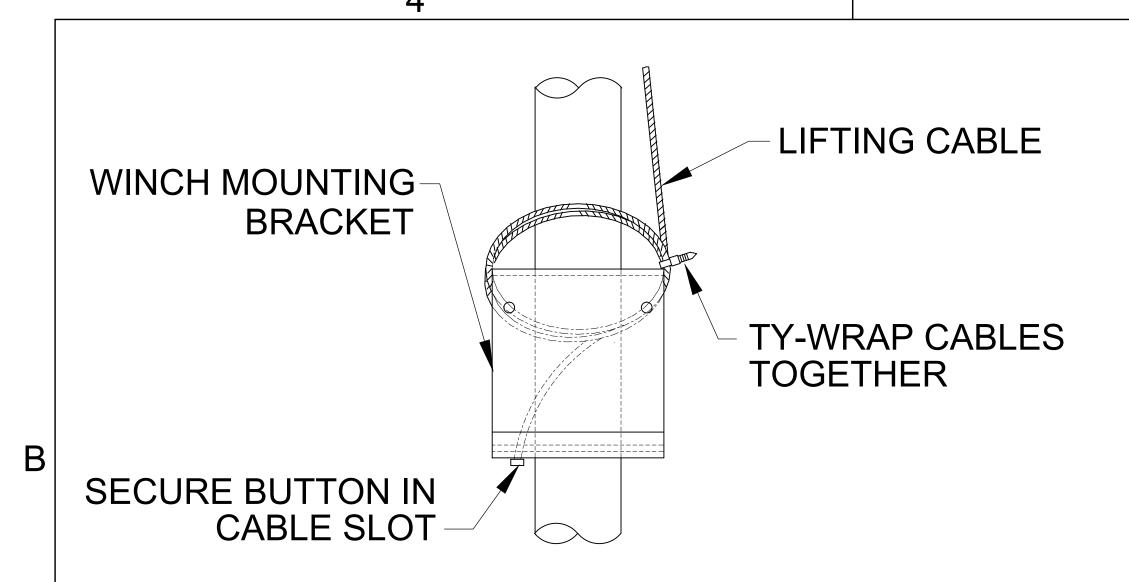
Cure Time Table (3/8"-1" DIA. Approx)

Base Mat'l Ten	Approx.	
°F	°C	Cure Time
ABOVE 68	20	10 MIN.
50	10	20 MIN.
32	0	1.0 HRS.
23	-5	5.0 HRS.

BELOW 23 DEG. F
CONSULT ENGINEERING



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JOB NA	AME:					•			,
JOB LOCATION:					AQUA-AERO	EMS, IN	C.		
					®				
						UNLESS OTHERV ALL DIMENSIONS			
					SCALE	FRACTIONAL DIMENS		7/16 0.010	
					DRAWING	ALL THREE PLACE DE ALL ANGLES		0.005	NSI
Α	C9067	2004-11-18	DAL	PART WAS #2610325	MATERIAL: 3(
В	C10765	2007-10-01	RHP	REMOVE 'HILTI' REFERENCES	SIMILAR TO:				
С	C12723	2010-02-08	CJC	ADDED "Y" TO BOM	TYPE: ANC	HOR			
D	C15581	2013-04-18	CJC	REV'D CURE TIME	DRAWN BY: N	: MAH DATE: 200		03-09-0	ე8
REV	ERN / ECO	DATE	BY	REVISION DESCRIPTION	WEIGHT:		SHEET:	1 OF	1
1	NG NAME:		.aa		DRAWING NUMBER:			SCALE:	SIZE:
KIT, ADHV ANCR, CRTG, 1/2", WEJ-IT				2963000			1/2	∣ B	

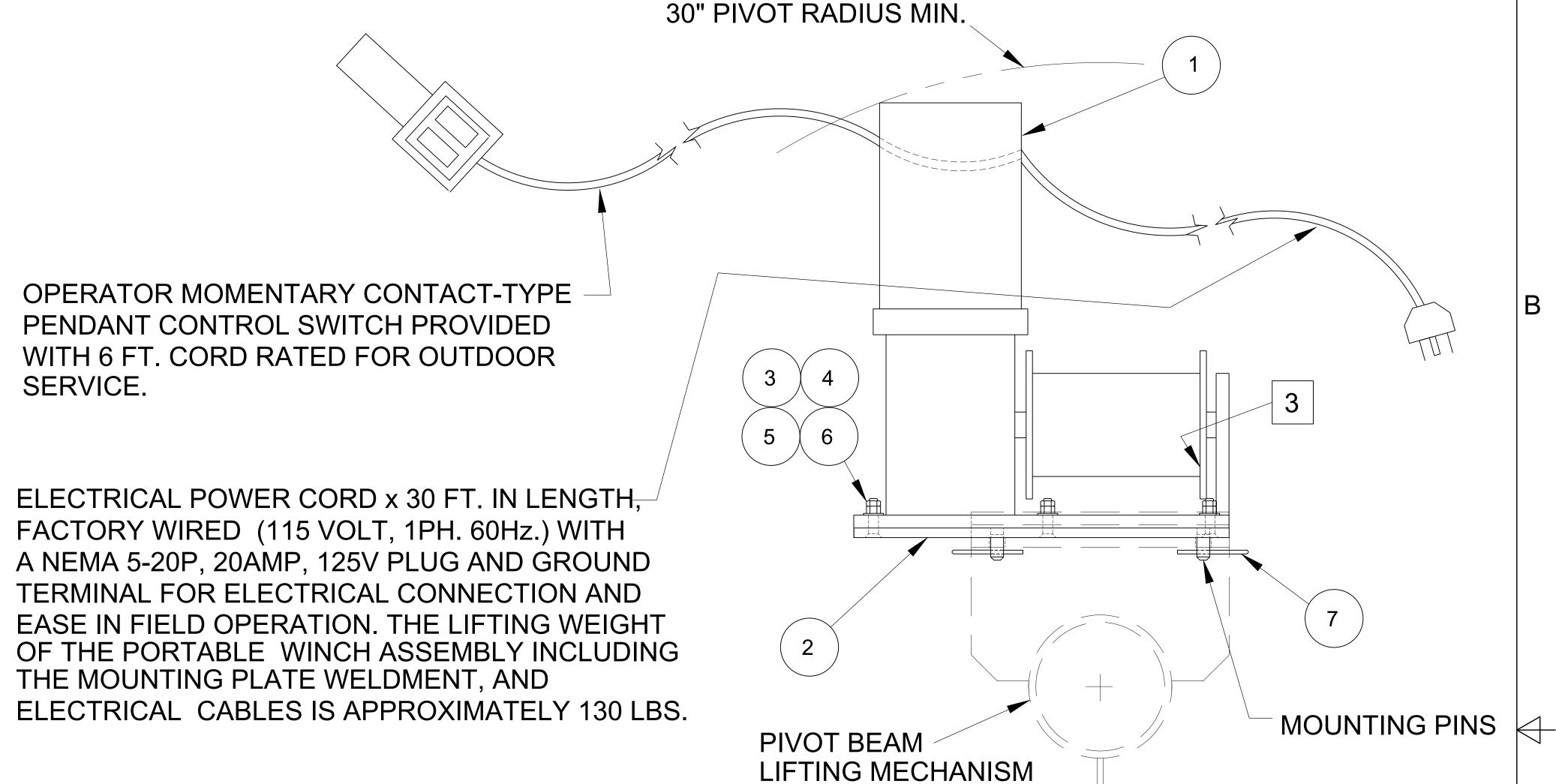


NOTE: WHEN THE ELECTRIC WINCH IS NOT IN USE PULL LIFTING CABLE TIGHT AND WRAP AROUND WINCH MOUNTING BRACKET. THIS WILL PREVENT LOOSE CABLE FROM FALLING BACK INTO BASIN.

LIFTING CABLE STORAGE POSITION DETAIL

OPERATIONAL NOTES:

- PORTABLE ELECTRIC WINCH ASSEMBLY INCLUDES THERN MODEL #4771AC-P54 WINCH WITH A RATING OF 1500 LB. LIFT AT FULL DRUM CAPACITY. POWER REQUIREMENT: 115V, 1PH, 60Hz. WHICH WILL DRAW A MAXIMUM OF 12.6 FULL LOAD AMPS. (20 AMPS NEMA 5-20R).
- 2 120 VOLT GFI TYPE GROUNDED ELECTRICAL OUTLETS ARE REQUIRED TO SUPPLY POWER TO THE ELECTRICAL WINCH. IT IS RECOMMENDED THAT THE OUTLETS BE LOCATED WITHIN 15 FEET (15'-0") DISTANCE FROM THE CENTERLINE OF THE VERTICAL SUPPORT BEAM LOCATION, AND LOW ENOUGH TO NOT INTERFERE WITH THE WINCH OR SWINGING OF THE PIVOTING MECHANISM.
- POSITION THE WINCH ASSEMBLY INTO THE GROOVE OF THE PIVOTING MECHANISM MOUNTING PLATE INSERTING BOTH PINS IN TOP HOLES. SECURE WINCH PLATE PINS IN PLACE WITH COTTER PINS PROVIDED. AFTER WINCH HAS BEEN ATTACHED, PLUG ELECTRICAL POWER CORD INTO BASIN OUTLET TO POWER UNIT. NEXT, INSERT SWAGED BUTTON END OF LIFTING CABLE INTO SIDE SLOT OF WINCH DRUM AND HOLD TAUT IN PLACE TO COIL AROUND DRUM. TURN ON POWER COILING UP LIFTING CABLE ONTO DRUM NEATLY FROM SLOT SIDE. A MINIMUM OF THREE (3) FULL WRAPS OF CABLE ARE REQUIRED AROUND DRUM IN ORDER TO SAFELY LIFT DIFFUSER BANK. IF EXTENSION CORDS ARE USED TO POWER WINCH IT MAY OVERHEAT AND SHUT DOWN FROM THE OVERLOAD.



7	2	2607339	F	PIN, COTTER HITCH			18-8SS	_	
6	6	2600951 WASHER, FLAT 5/16" + 3/4" OD				316SS	-		
5	6	6 2605980 NUT, HEX JAM 5/16"-18UNC			316SS	-			
4	6	2600516	1	NUT, HEX FULL 5/16"-18UNC			316SS	-	
3	6	2606972	F	FHSCS 5/16"-18UNC x 2" LG			18 - 8SS	-	
2	1	2911024	F	PLATE, WINCH MOUNTING WELDMEN	Τ		304SS	В	
1	1	2612124-30 WINCH, ELEC, THERN #4771AC-P54, 115V/1PH/60HZ				_	_		
ITEM	QTY	Y PART NUMBER DESCRIPTION			MATERIAL	DWG			
JOB NAME:					DO NOT		AQUA-AER		
JOB LOCATION:				SCALE		SYSTEMS, MANUFACTURERS OF WA			
					DRAWING		TREATMENT EQUIP		A
					UNLESS OTI			$\rightarrow \bigoplus$	
					FRACTIONAL DIMENSIONS ALL TWO PLACE DECIMALS ALL THREE PLACE DECIMALS		CE DECIMALS +/- 0.010		
					ALL THREE PLA ALL ANGLES	ICE DECIMALS	+/- 0.005 +/- 1/2°	ANSI	
					MATERIAL:				
					SIMILAR TO: 2963295				
					TYPE: WINCH				
					DRAWN BY:	SDS	DATE: 7/26/20	11	
Α	R12684	7/26/2011	SDS	NEW PART	CHECKED BY:		DATE:		
REV	ERN / ECO	DATE	BY	REVISION DESCRIPTION	WEIGHT: 13	0 LBS	SHEET: 1	OF 1	

DRAWING NAME:

WINCH ASSEMBLY, PORTABLE, ELEC w/ 30FT PWR CORD

DRAWING NUMBER:

2963762-30

SCALE: SIZE:

NONE B