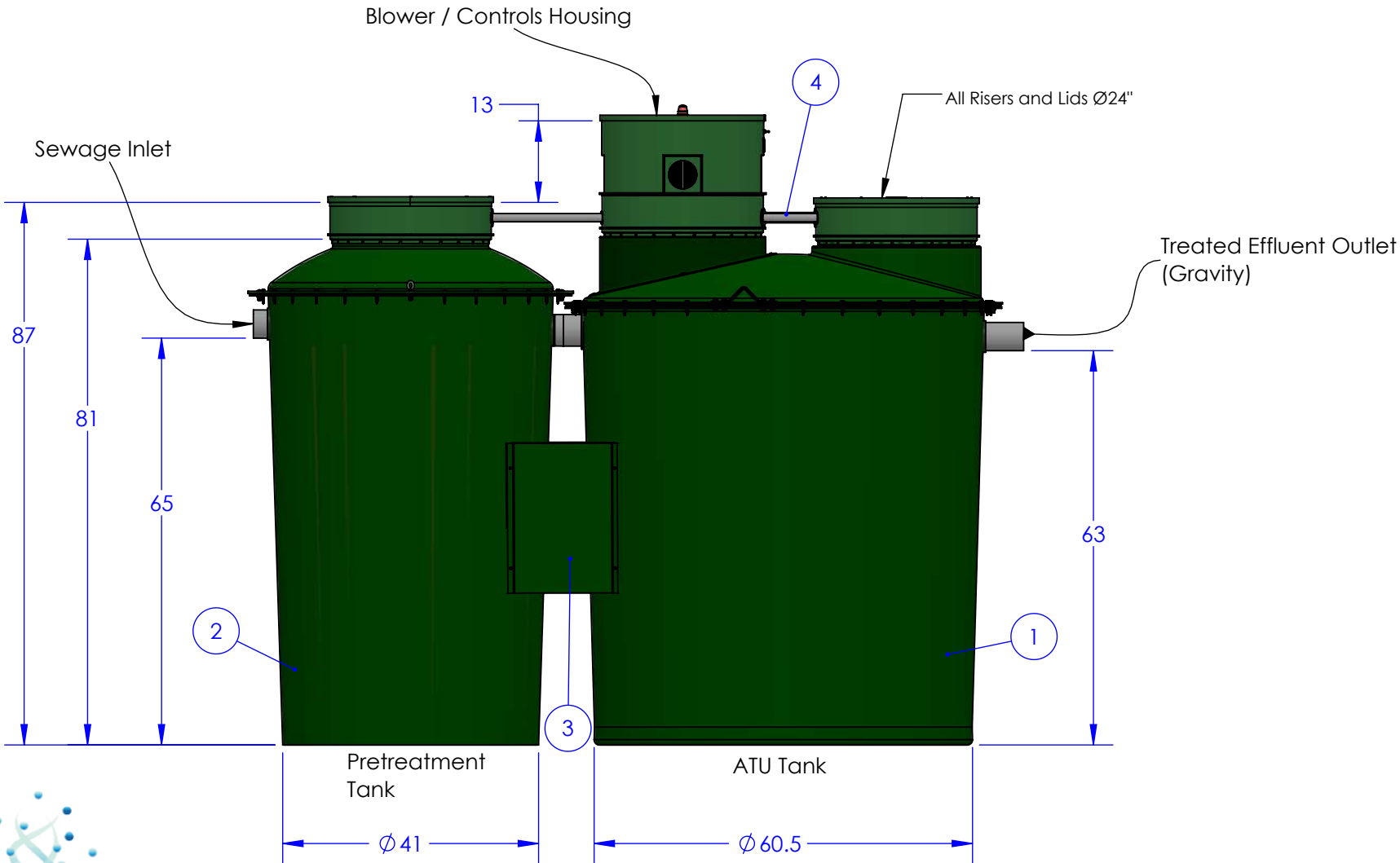
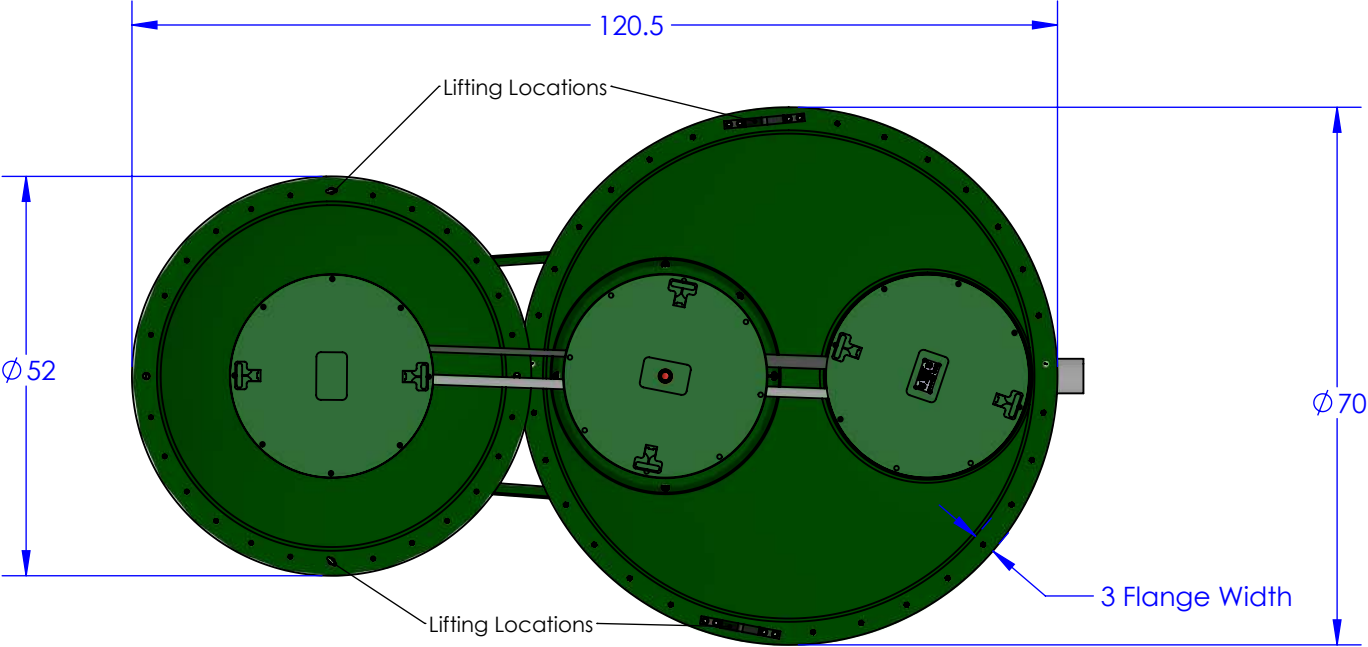


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ITEM NO.	Part Number	DESCRIPTION	QTY.
1	HA-AN400-P	Tank, AN400 245 ATU (AP500)	1
2	HA-180052	Tank, AN400 245 Pretreatment Complete (PP400)	1
3	HA-130002	Kit, SNG 2 Tank Connecting Standard	1
4	HA-130052	Assembly, Re-Circulation AN-400 245 Complete	1

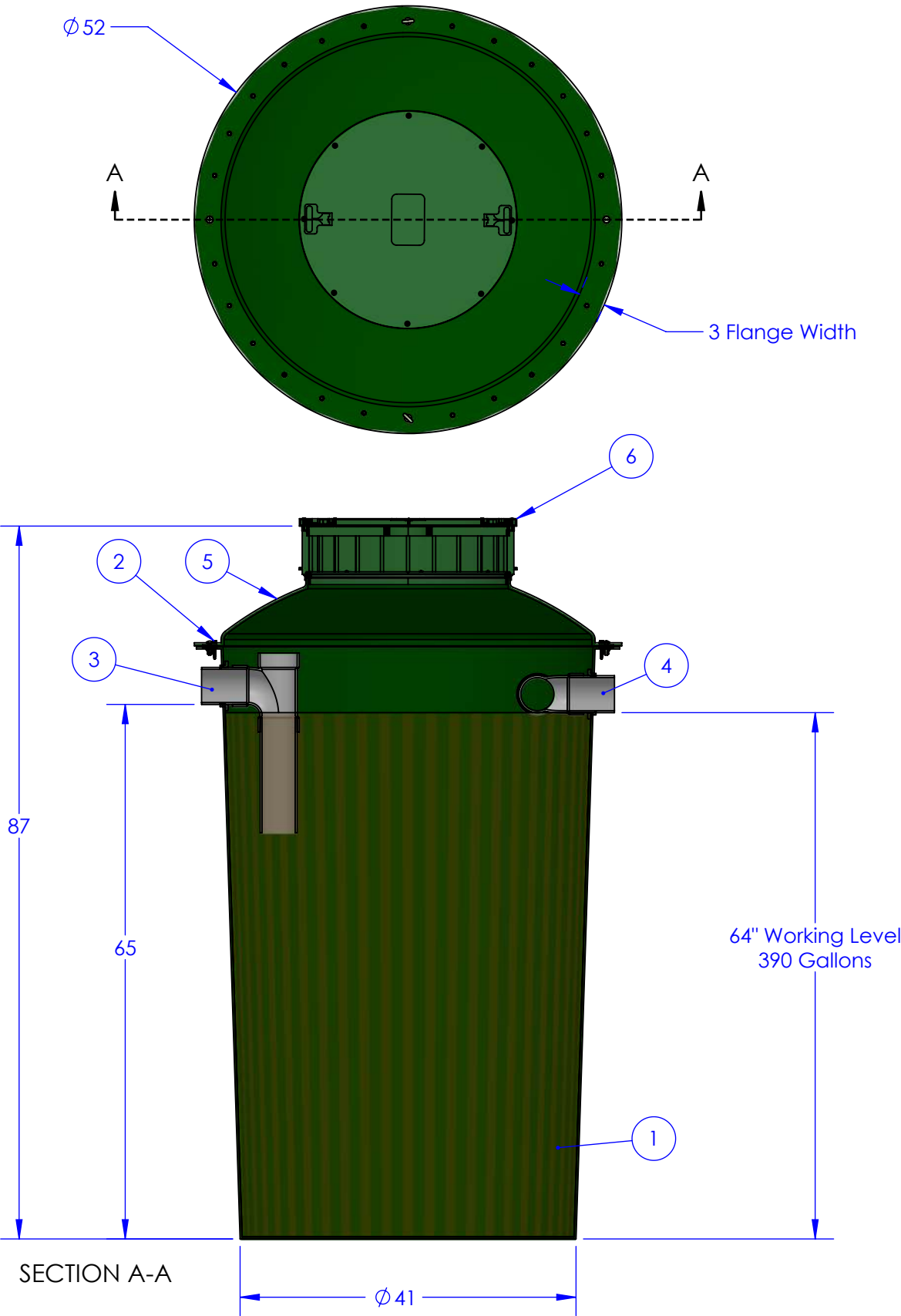
- 1) All auxiliary plumbing, wiring, and installation methods must conform to all country, state, province, and local code.
- 2) All plumbing and connections to be plumbed with SCH 40 PVC or equivalent.
- 3) All pipe and conduit penetrations to be sealed with grommets that meet ASTM C923. All tank, riser, and component joints to be sealed with butyl rope sealant that meets ASTM C990.
- 4) All manufacturer electrical connections are terminated in NEMA rated enclosures with NEMA rated cord grips. (NEMA 4X Min.)
- 5) All Electrical components (wire, connectors, control panel, conduit etc.) UL listed.
- 6) For details pertaining to installation requirements, (tank assembly, internal plumbing connections, wiring etc) see HydroAction Installation Manual, and System detail prints.
- 7) Any additional questions pertaining to HydroAction AN series wastewater treatment systems, contact HydroAction.

Hydro-Action Specifications	
Model	AN-400
Daily Treatment Capacity	450 Gallons
Total System Working Volume	1,197 Gallons
Primary Treatment WorkingVolume	390 Gallons
Aerobic Working Volume	614 Gallons
Clarifier Working Volume	193 Gallons
Treatment Certification	NSF 245
Supply Power Requirement	1 Phase 120VAC 60Hz 20Amp
Air Supply	HiBlow HP-80 / 2.8 CFM
Tank Material	Fiberglass
Clarifier Material	Fiberglass
Blower / Controls Housing	Polyethylene



Print / Part Number	Description	Revision	Date
HA-180052	Tank, AN400 245 Pretreatment Complete (PP400)		

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ITEM NO.	Part Number	DESCRIPTION	QTY.
1	HA-180051	Tank, Body PP400	1
2	HA-130070	Kit, Small Pretreat Tank/Dome	1
3	HA-100102	Assembly, Plumbing Inlet PP	1
4	HA-100101-AN	Assembly, Plumbing Outlet AN PP	1
5	HA-180034	Dome, PP400 (AK Chop)(RTM)	1
6	HA-XXXXXX	Kit, Lid/Riser 24" HVY Pre/Pump	1

Tank body and dome are constructed of filament wound and spray chopped fiberglass

Tank Body and Dome Assembly Instructions:

Tank body and dome to be assembled by Hydro-Action or Hydro-Action Distributors only.

Using components found in HA-130070 (Kit, Small Pretreat Tank/Dome)

- 1) Make sure tank body flange and dome flange are clean and free of any dust or debris.
- 2) Adhere/apply gasket to tank flange.
- 3) Place dome onto the tank body flange. Make sure dome and tank body are concentric with one another.
- 4) Install fasteners (self tapping screws, tamper resistant bolts, and eyebolts). Tamper resistant bolts installed above inlet and outlet pipe, and eyebolts installed 90 degrees from inlet and outlet pipes.

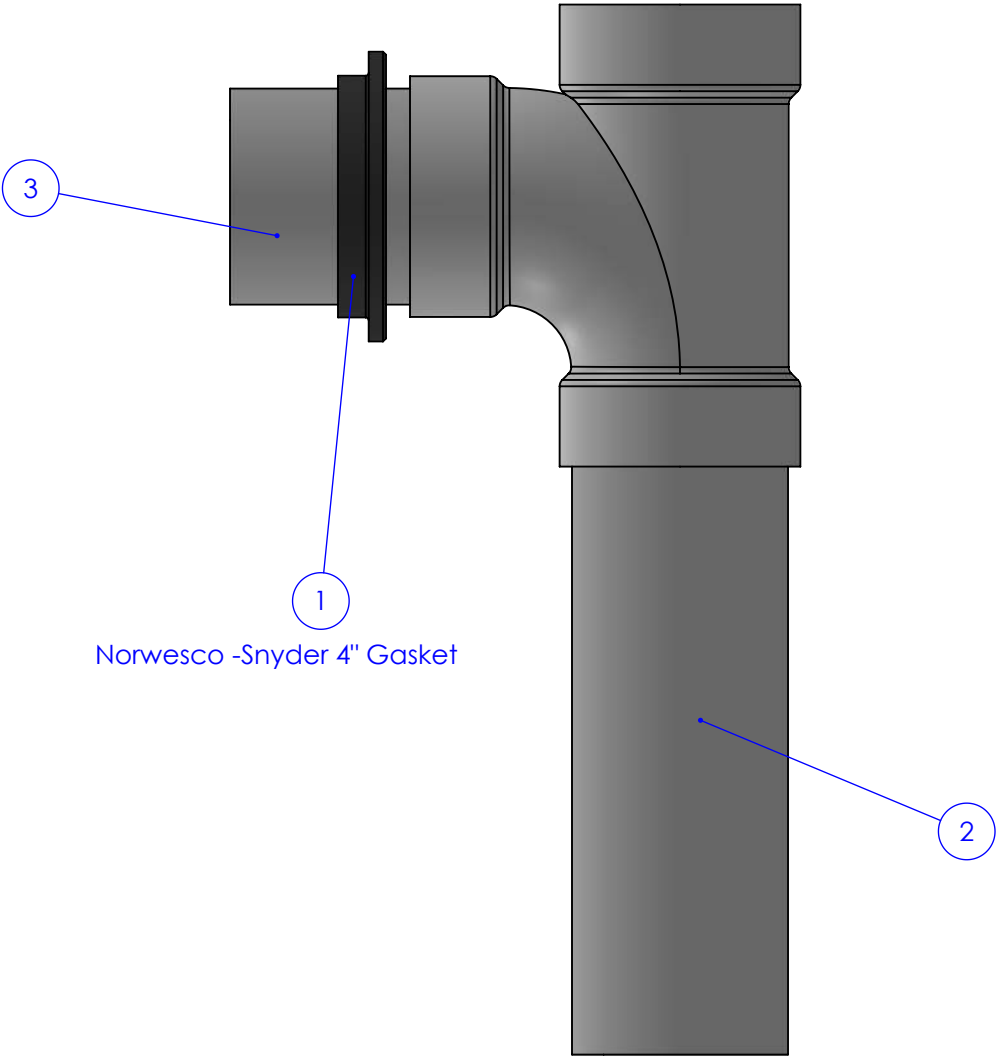
Once Dome is installed on tank body it is not to be removed. Unauthorized removal of Dome will void manufactures warranty.



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Print / Part Number	Description	Revision	Date
HA-100102	Assembly, Plumbing Inlet PP		3/20/2023

ITEM NO.	Part Number	DESCRIPTION	QTY.	Length
1		4" Sch40 Pipe Gasket	1	
2	100025	Pipe, 4" PVC Sch40	1	14in
3	100025	Pipe, 4" PVC Sch40	1	5.5in
4	180125	Tee, Sanitary 4" Sch40	1	



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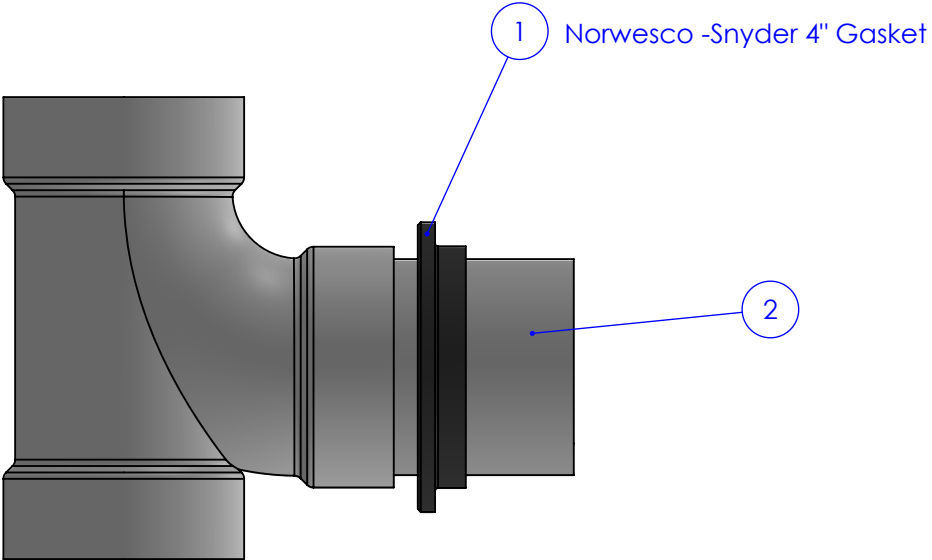
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Signature

Print / Part Number	Description	Revision	Date
HA-100101-AN	Assembly, Plumbing Outlet AN PP		3/20/2023

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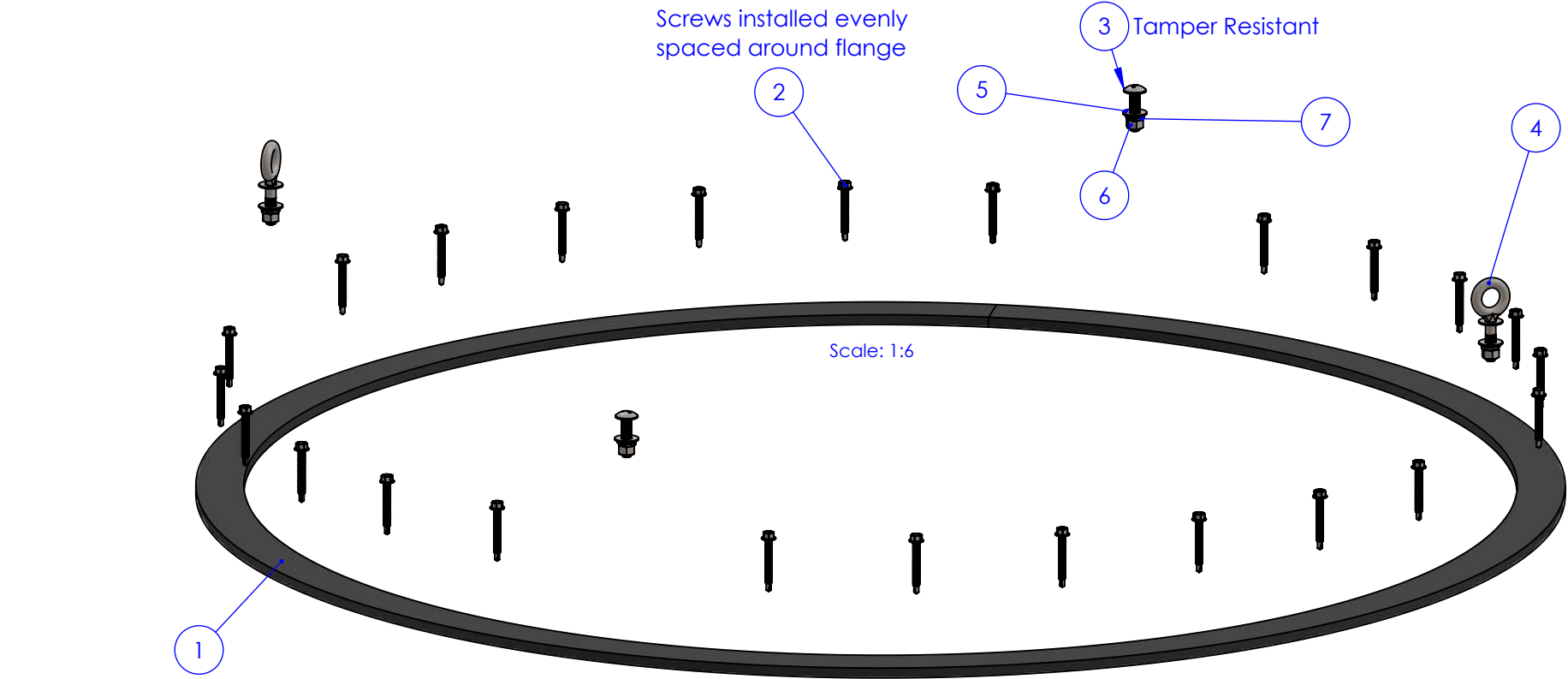
ITEM NO.	Part Number	DESCRIPTION	QTY.	Length
1		4" Sch40 Pipe Gasket	1	
2	100025	Pipe, 4" PVC Sch40	1	5.5in
3	180125	Tee, Sanitary 4" Sch40	1	



	Drawn by T.Genshock	Scale 1:4	Sheet 4 : 19	Material	Weight	Tolerances Unless Otherwise Specified ±0.125" or 1°	Signature
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Print / Part Number	Description	Revision	Date
HA-130070	Kit, Small Pretreat Tank/Dome		

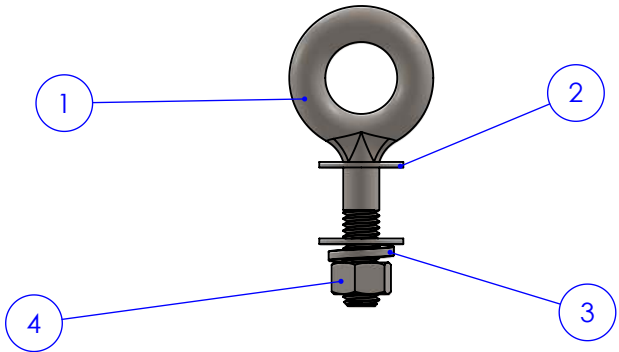
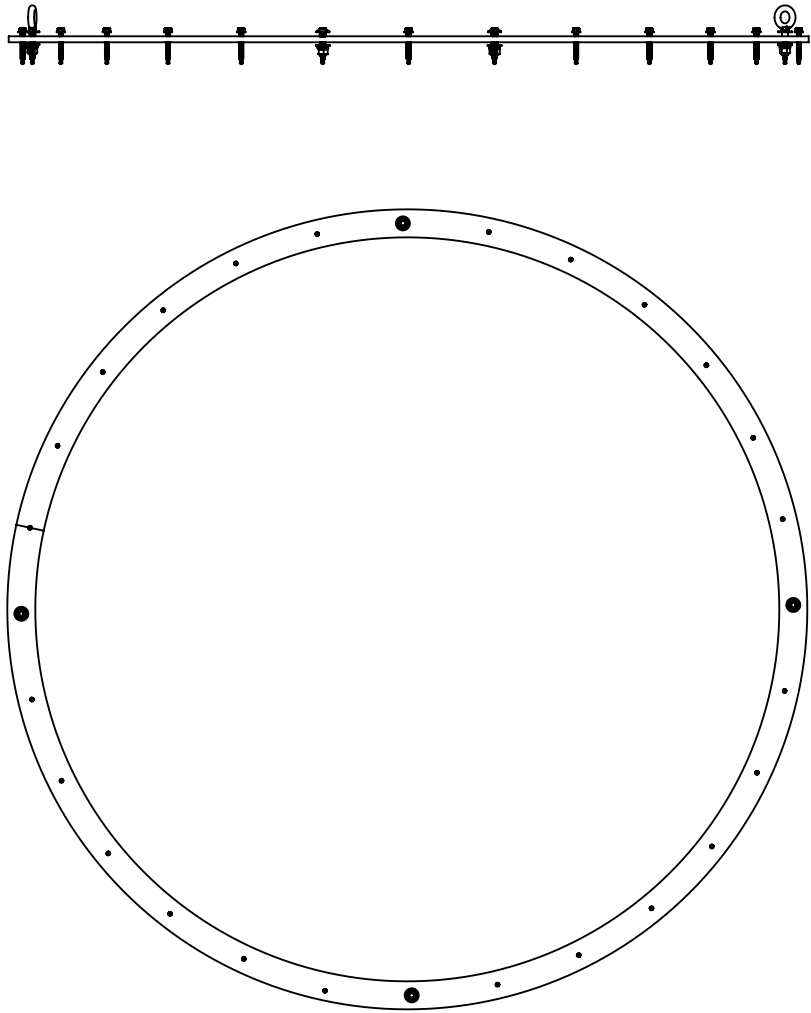
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ConSeal CS-102, meets ASTM C990

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	160033	Gasket, 3/8" x 1-3/4" x 50' Black	1
2	200095	Screw, 5/16 x 2 HWH SDS 410	26
3	760068	Bolt, 3/8-16 x 1-1/2 SS Spanner	2
4	HA-120001	Assy, Eyebolt	2
5	200006	Washer, 3/8 Standard SS	2
6	200013	Nut, 3/8-16 Stainless Steel	2
7	200034	Washer, SS 3/8 LockWasher	2

All fasteners made of Stainless Steel, may be slightly ferrous.



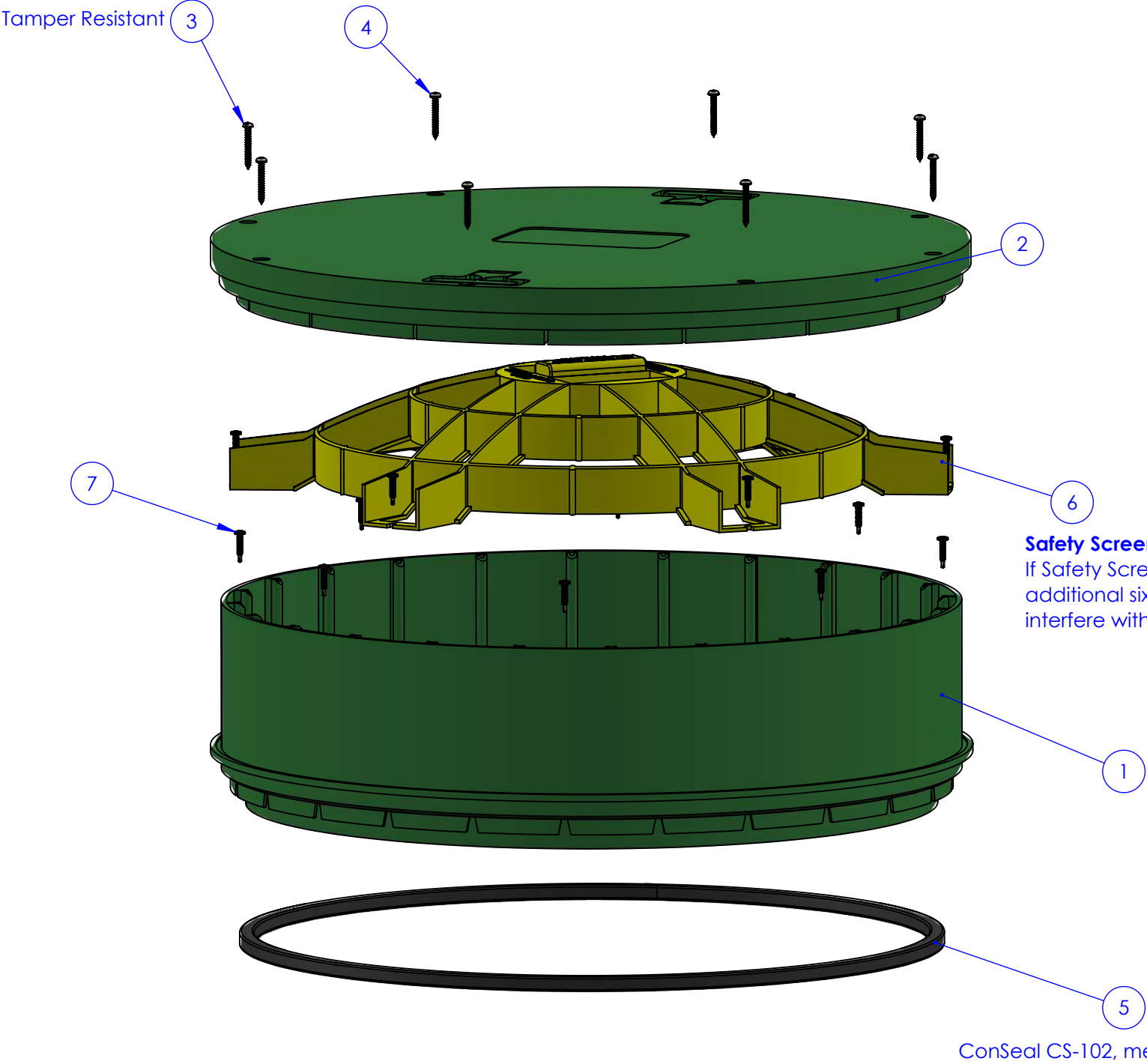
HA-120001

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	200091	Bolt, Eye 3/8-16 x 1-1/2 SS	1
2	200006	Washer, 3/8 Standard SS	2
3	200034	Washer, SS 3/8 LockWasher	1
4	200013	Nut, 3/8-16 Stainless Steel	1



Drawn by	Scale 1:12	Sheet 5 : 19	Material	Weight	Tolerances Unless Otherwise Specified	Signature
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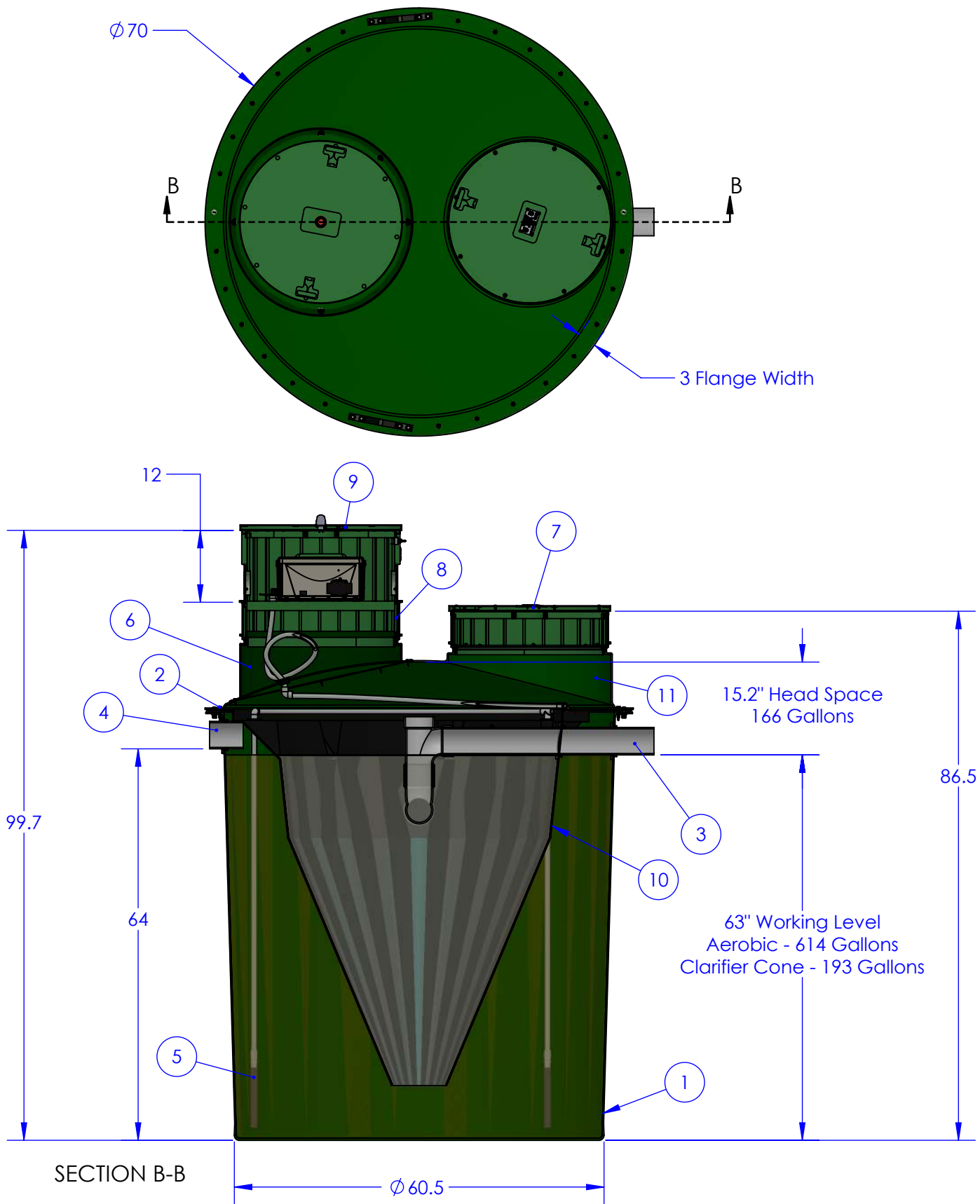


ITEM NO.	Part Number	DESCRIPTION	QTY.
1	241022	Riser, Tank 24" x 6" PL	1
2	120184	Cover, 24" 3008-West	1
3	200070	Screw, 1-1/2" #10 TriGroove SM	2
4	200075	Screw, 1-1/2" #10 Square Truss A	6
5	160034	Gasket, 1/2" x 21' Conseal	1
6	700080 (optional)	SAFETY SCREEN, 3008-SS 24"	1
7	200059	Screw, 1" #10 Self Tap PPH SS	14

* All fasteners are made of stainless steel, may be slightly ferrous.

Print / Part Number	Description	Revision	Date
HA-AN400-P	Tank, AN400 245 ATU (AP500)		

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ITEM NO.	Part Number	DESCRIPTION	QTY.
1	HA-180075	Tank, Body AP500 / PP800	1
2	HA-130072	Kit, Small ATU Tank/Dome/Cone	1
3	HA-100071	Assembly, Outlet ATU	1
4	HA-100066	Assembly, Inlet AN ATU	1
5	HA-100058-3DRP	Assembly, Diffuser (3) Drop	1
6	HA-170053	Base, 24" Circle Ops	1
7	HA-130063	Kit, Lid/Riser HVY ATU	1
8	241022	Riser, Tank 24" x 6" PL	1
9	EC50-30-L-80-PLC	Assembly, Ops Nitrogen Reduction AN400	1
10	HA-240050	AP500 Poly Cone	1
11	HA-180080	Dome, AP500 RTM (No Riser)	1

Tank body and dome are constructed of filament wound and spray chopped fiberglass

Tank Body, Dome, and Cone Assembly Instructions:
Tank body and dome to be assembled by Hydro-Action or Hydro-Action Distributors only.

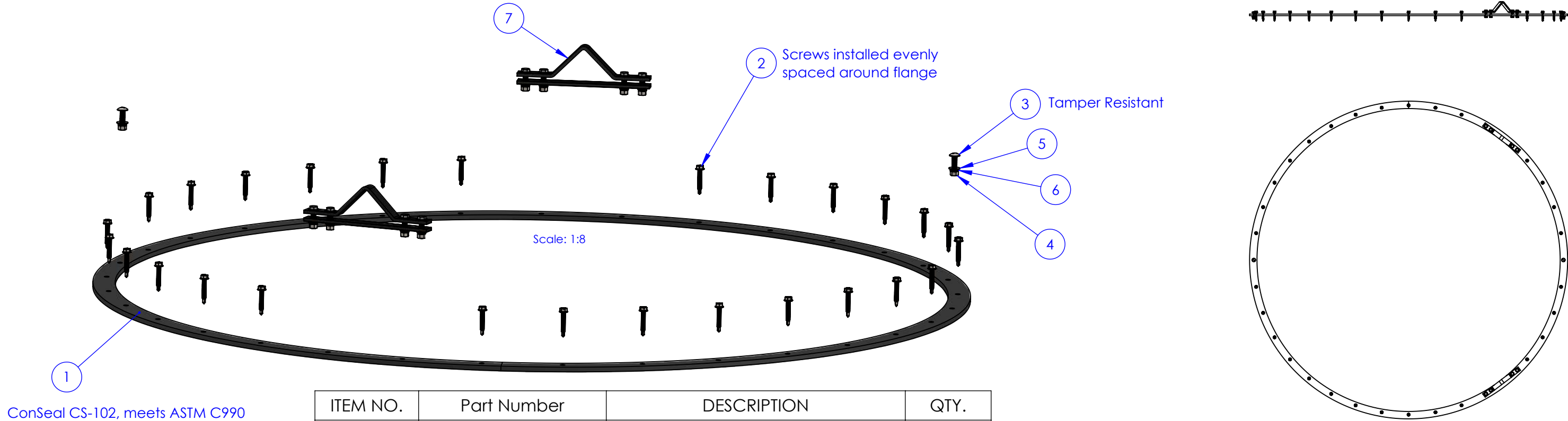
Using components found in HA-130072 (Kit, Small Pretreat Tank/Dome)

- 1)Make sure tank body flange, dome flange and cone flange are clean and free of any dust or debris.
- 2)Adhere/apply gasket to tank flange and cone flange.
- 3) Place cone into the tank body followed by the dome onto tank body flange. Make sure dome, cone, and tank body are concentric with one another.
- 4) Install fasteners (self tapping screws, tamper resistant bolts, and lifting lugs). Tamper resistant bolts installed above inlet and outlet pipe, and lifting lugs installed 90 degrees from inlet and outlet pipes.

Once Dome is installed on tank body it is not to be removed. Unauthorized removal of Dome will void manufactures warranty.

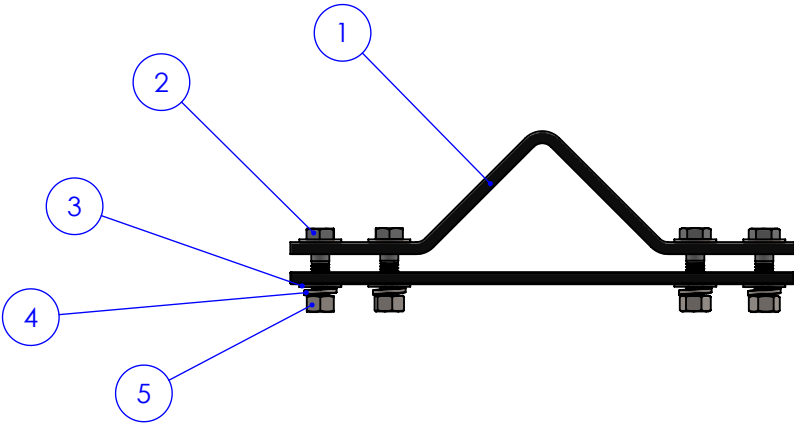
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ITEM NO.	Part Number	DESCRIPTION	QTY.
1	160033	Gasket, 3/8" x 1-3/4" x 50' Black	1
2	200095	Screw, 5/16 x 2 HWH SDS 410	30
3	760068	Bolt, 3/8-16 x 1-1/2 SS Spanner	2
4	200013	Nut, 3/8-16 Stainless Steel	2
5	200006	Washer, 3/8 Standard SS	2
6	200034	Washer, SS 3/8 LockWasher	2
7	HA-130001	Lifting Lug Set	2

All fasteners made of Stainless Steel, may be slightly ferrous.



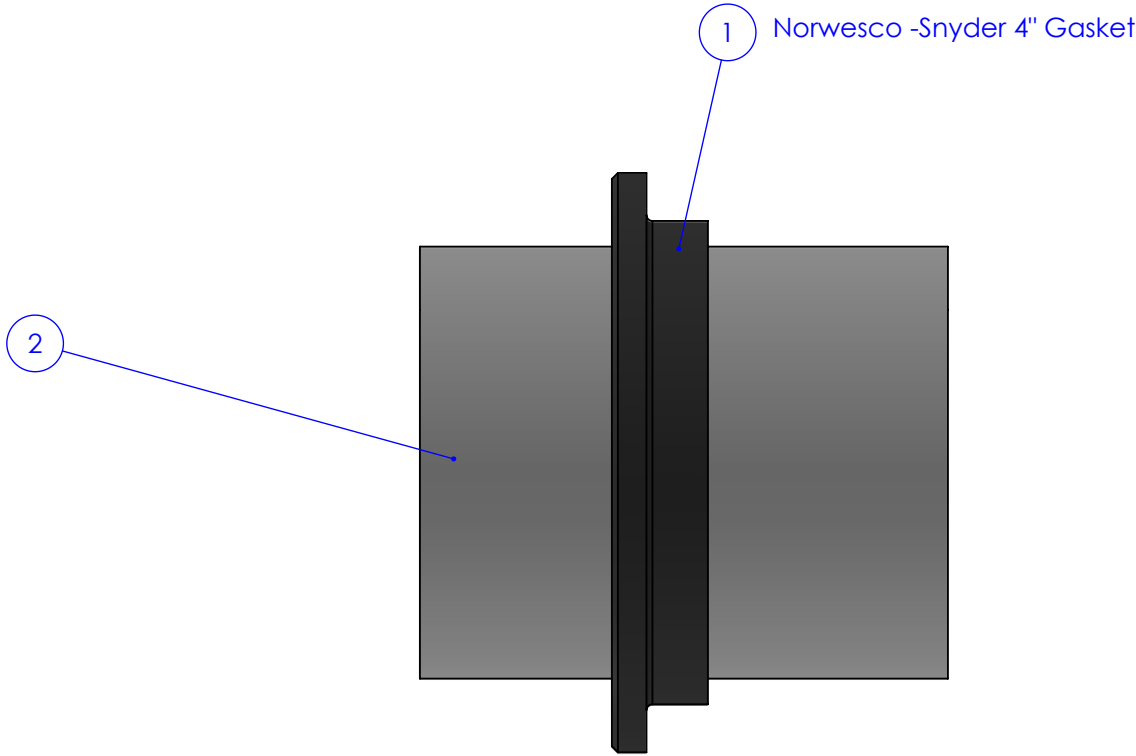
HA-130001

ITEM NO.	Part Number	DESCRIPTION	QTY.
1	PL-LUG	Bracket, Lifting Lug Small	1
2	760063	Bolt, 3/8-16 x 1-1/2" SS HHCS AT	4
3	200006	Washer, 3/8 Standard SS	8
4	200034	Washer, SS 3/8 LockWasher	4
5	200013	Nut, 3/8-16 Stainless Steel	4

Print / Part Number	Description	Revision	Date
HA-100066	Assembly, Inlet AN ATU		

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ITEM NO.	Part Number	DESCRIPTION	QTY.	Length
1		4" Sch40 Pipe Gasket	1	
2	100025	Pipe, 4" PVC Sch40	1	5.5in

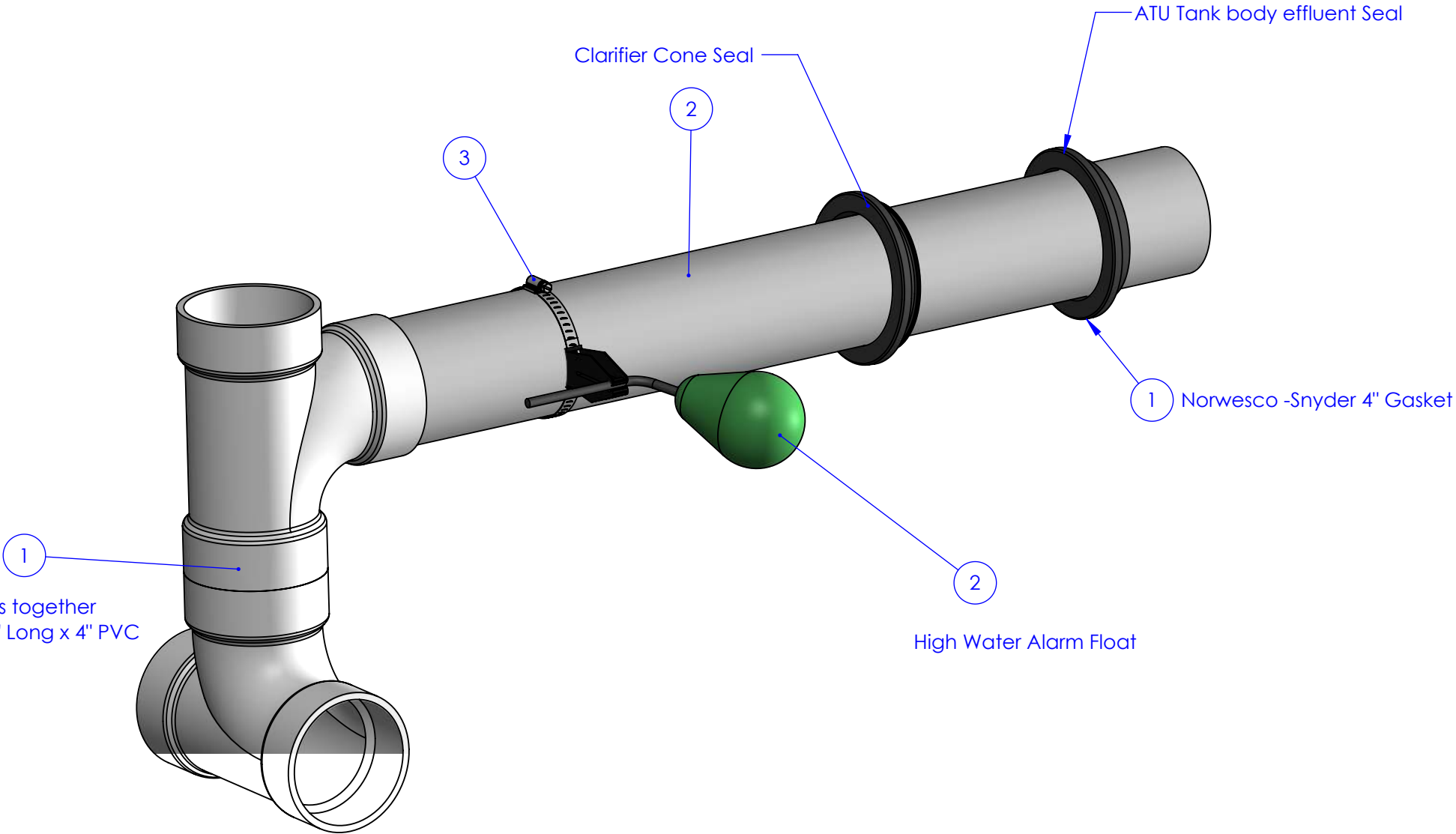


Drawn by	Scale	Sheet	Material	Weight	Tolerances Unless Otherwise Specified
	1:2	9 : 19			

Signature

Print / Part Number	Description	Revision	Date
HA-100071	Assembly, Outlet ATU		3/20/2023

ITEM NO.	Part Number	DESCRIPTION	QTY.
1		4" Sch40 Pipe Gasket	1
2	120044	Switch, Float MM 20' Green	1
3	240041	Clamps 3-9/16-4 w/Clip	1
4	180125	Tee, Sanitary 4" Sch40	2



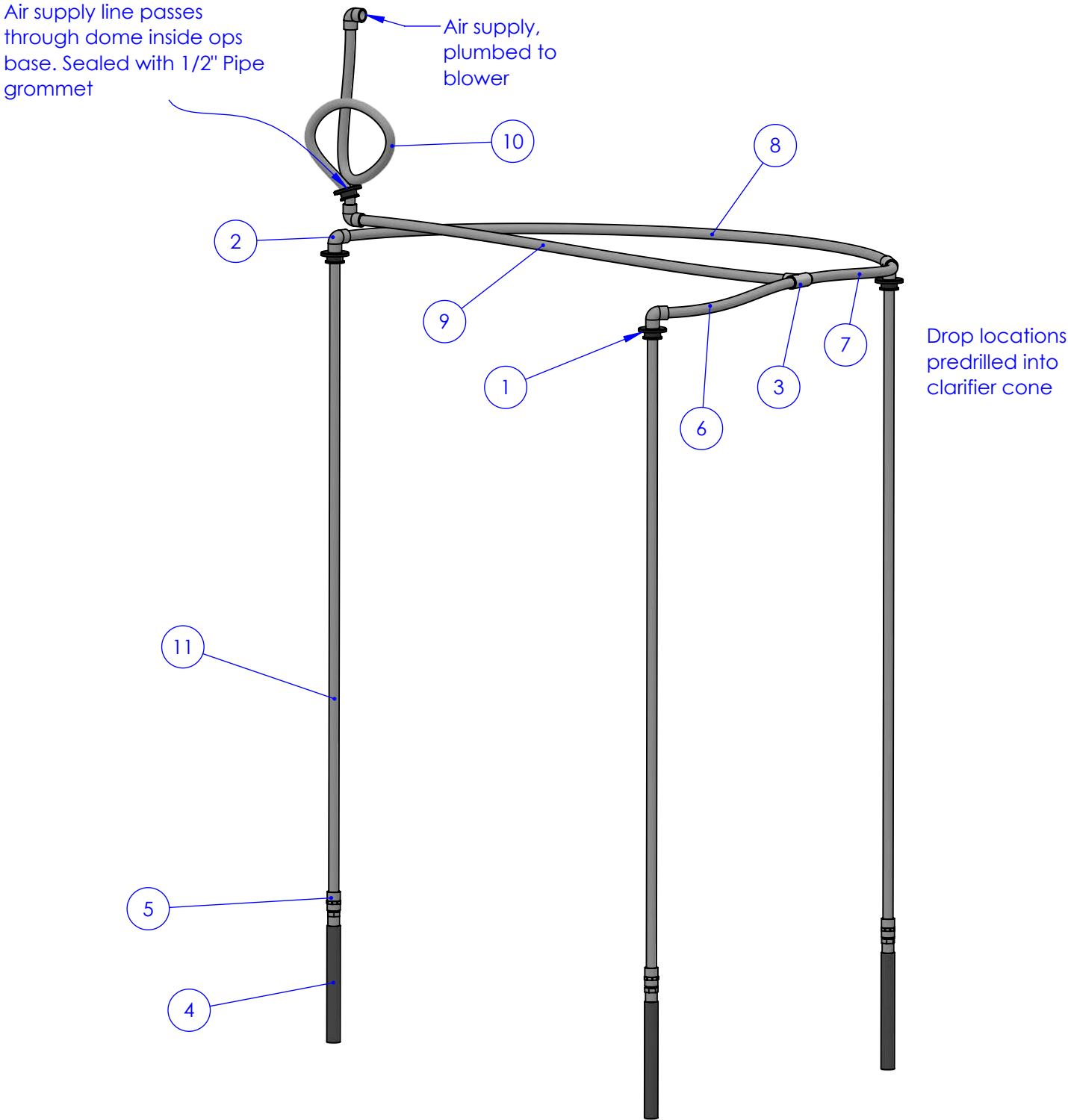
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Print / Part Number HA-100058-3DRP	Description Assembly, Diffuser (3) Drop	Revision	Date
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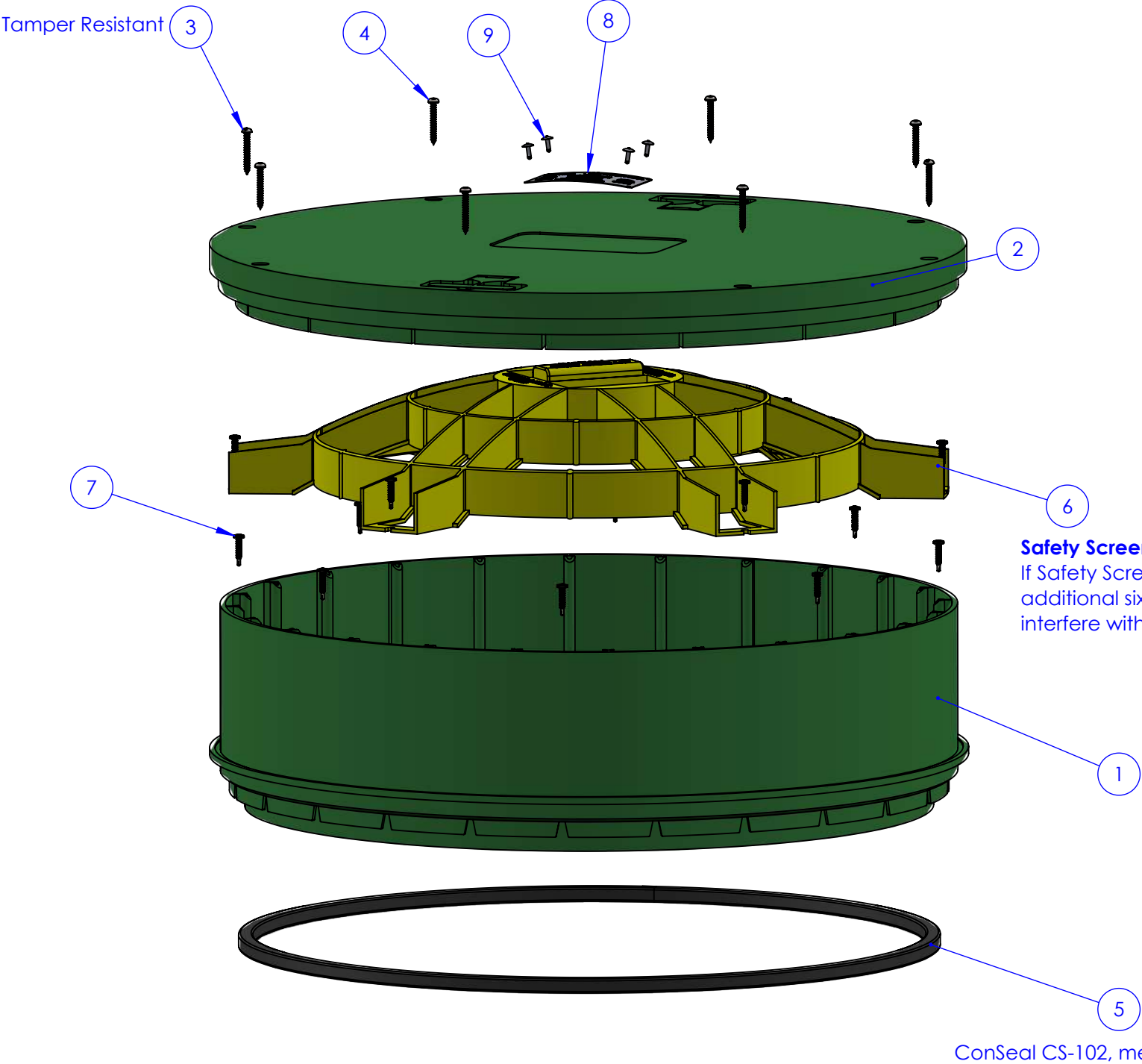


ITEM NO.	Part Number	DESCRIPTION	QTY.	Length
1	AKR50030	Grommet, 1/2" Sch40	4	
2	180103	Elbow, 90 Degree 1/2" Sch40 PVC SxS	4	
3	180100	Tee, 1/2" Sch40 PVC SxSxS	2	
4	100033	Diffuser, Air	1	
5	180099	Adapter, Female 1/2" Sch40 PVC	1	
6		Hose, Spa Flex Sch40 PVC	1	18.8in
7	700041	Hose, Spa Flex Sch40 PVC	1	22.8in
8		Hose, Spa Flex Sch40 PVC	1	58in
9	700041	Hose, Spa Flex Sch40 PVC	1	45.2in
10	700041	Hose, Spa Flex Sch40 PVC	1	43.6in
11	180114	Pipe, 1/2" Sch40 PVC	3	55.5in



Drawn by T.Genshock	Scale 1:12	Sheet 11 : 19	Material	Weight	Tolerances Unless Otherwise Specified ±0.25" or 1°	Signature
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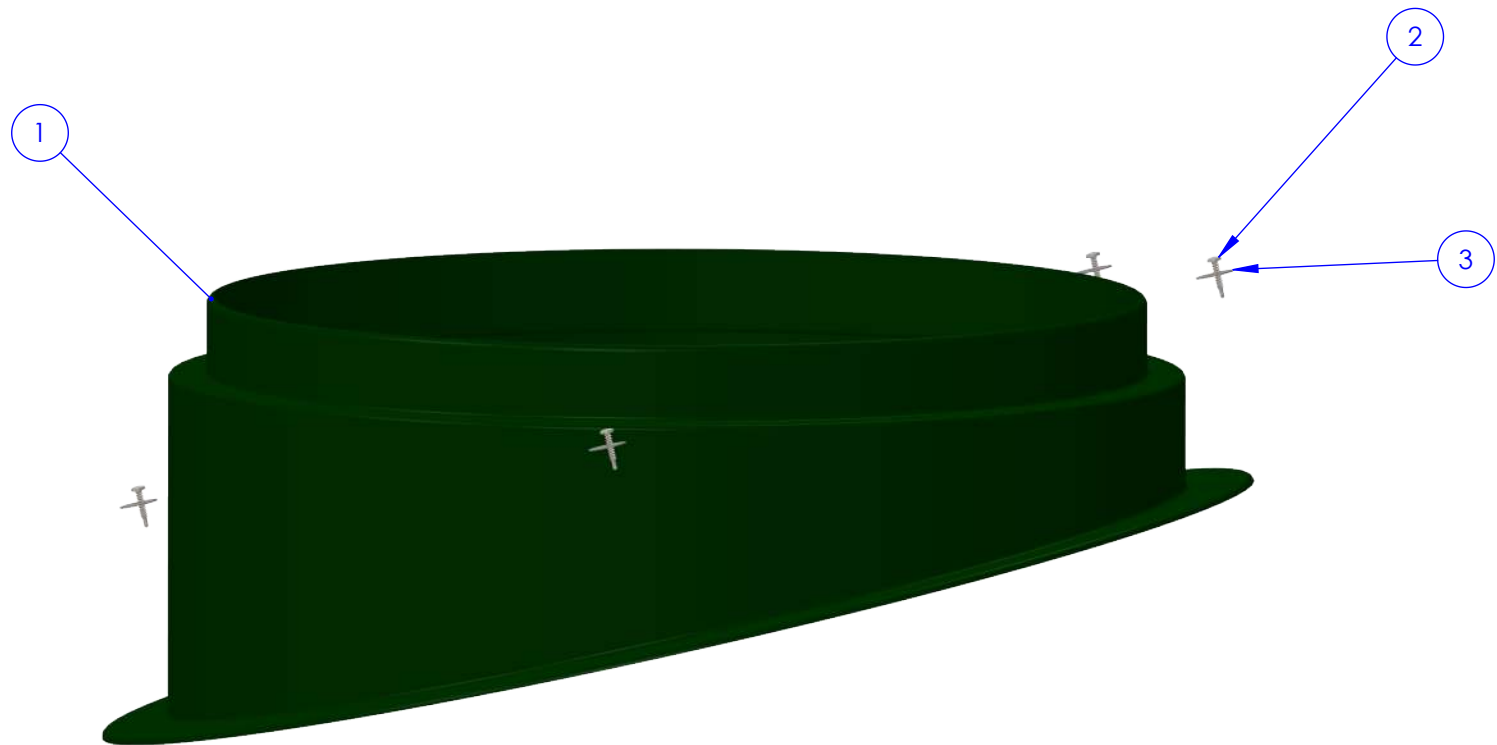
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ITEM NO.	Part Number	DESCRIPTION	QTY.
1	241022	Riser, Tank 24" x 6" PL	1
2	120184	Cover, 24" 3008-West	1
3	200070	Screw, 1-1/2" #10 TriGroove SM	2
4	200075	Screw, 1-1/2" #10 Square Truss A	6
5	160034	Gasket, 1/2" x 21' Conseal	1
6	700080 (optional)	SAFETY SCREEN, 3008-SS 24"	1
7	200059	Screw, 1" #10 Self Tap PPH SS	14
8	Tag Serial Number AN-400	TAG, AN DATA PLATE	1
9	200025	Rivet, 1/8" Grip 1/8" Dia. Pop	4

* All fasteners are made of stainless steal, may be slightly ferrous.

Print / Part Number	Description	Revision	Date
HA-170053	Base, 24" Circle Ops		



ITEM NO.	Part Number	DESCRIPTION	QTY.
1	HA-170053	AK / CIRCLE OPS / DK. GREEN	1
2	200059	Screw, 1" #10 Self Tap PPH SS	5
3	200051	Washer, 1" x #10 Fender	5

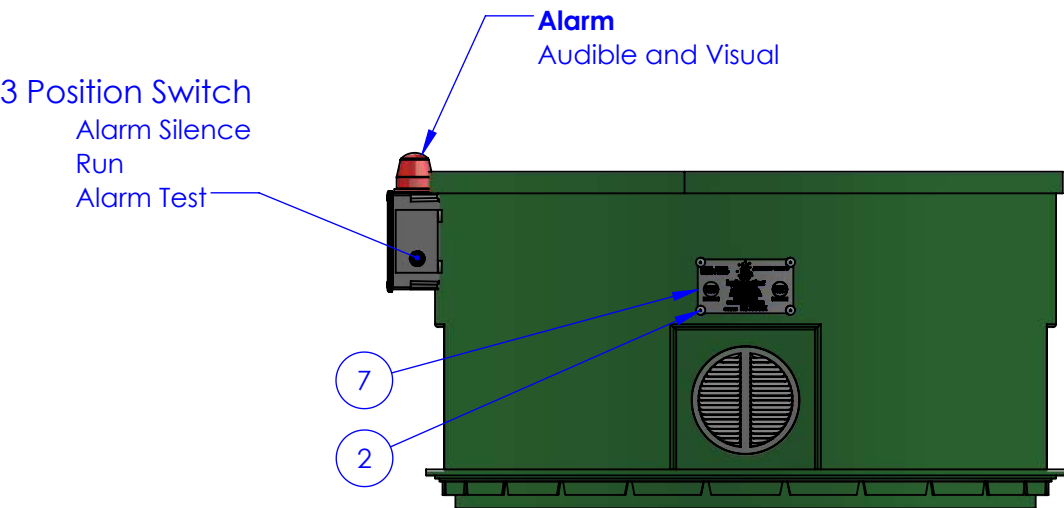
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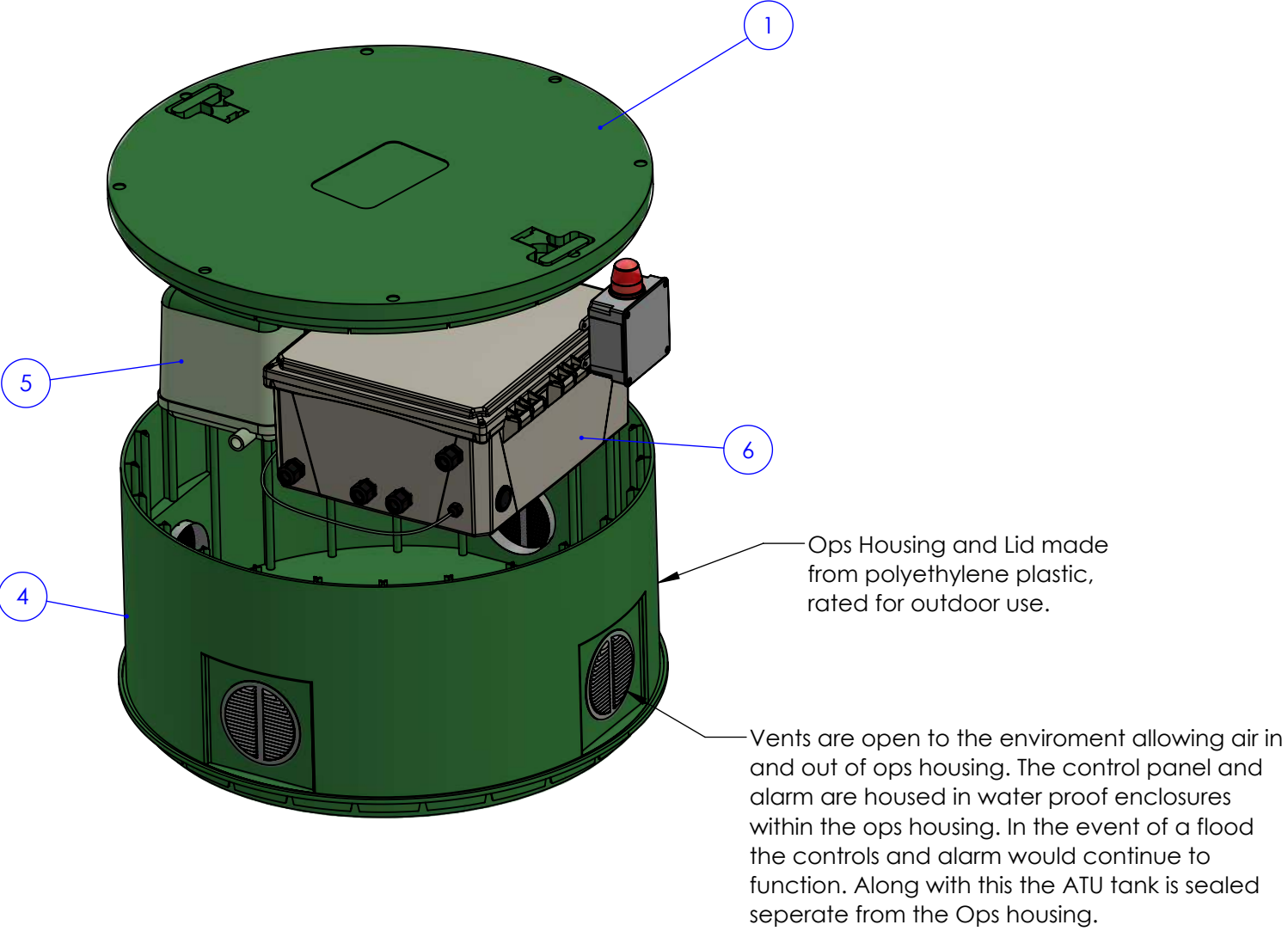
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Print / Part Number	Description	Revision	Date
EC50-30-L-80-PLC	Assembly, Ops Nitrogen Reduction AN400		

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Ops housing can be located remotely, as long as it is within 50ft of the treatment system. All wiring, conduit, and plumbing must be extended accordingly. Alarm light must be unobstructed and visible from 3 sides.



ITEM NO.	Part Number	DESCRIPTION	QTY.
1	120184	Cover, 24" 3008-West	1
2	200025	Rivet, 1/8" Grip 1/8" Dia. Pop	4
4	HA-160029	Basin, 24" x 12" PL W/ Louvers and Holes	1
5	100121	Hiblow HP-80 Air Pump	1
6	HA-120105	AN Series Control Panel	1
7	Ops Data Plate	TAG, AN Ops DATA PLATE	1



Drawn by	Scale 1:8	Sheet 14 : 19	Material	Weight	Tolerances Unless Otherwise Specified	Signature
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Component Breakers				
CB1 - Spray Pump	CB2 - ReCirc Pump	CB3 - Mixer Pump	CB4 - Blower	CB5 - PLC/Relays
20 Amp	20 Amp	20 Amp	10 Amp	10 Amp

Control Panel Enclosure
NEMA: 1, 2, 3, 3R, 4, 4X, 5, 12, 13

Supply Power Terminal		
Service - 120VAC Single Phase 30 Amp		
L1	N	

Ground Bar

Water Tight Cord Grip x 4
NEMA: 4X, 6, 12

Supply Power

Pretreat Tank Whip

Aerobic Tank Whip

Dosing Tank Whip
(If Applicable)

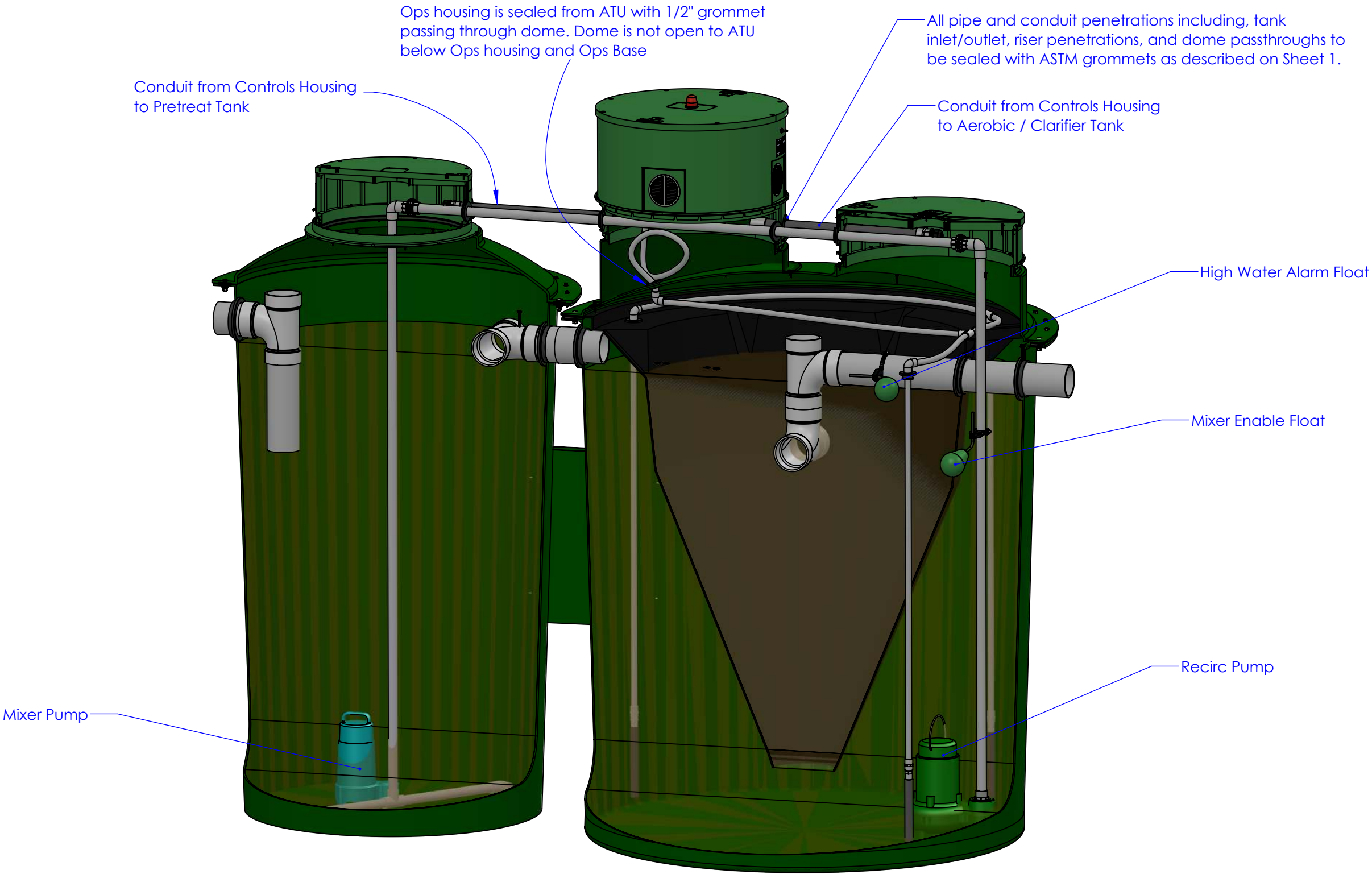
X1	N1	SP1	N	RP1	N	MP1	N	C1	N	1	2	3	4	5	6
Alarm / Control Power 115V	Alarm / Control Power "N"	Spray Pump Float (Black)	Spray Pump (White)	ReCirc Pump (Black)	ReCirc Pump (White)	Mixer Pump Float (Black)	Mixer Pump (White)	Blower (Black)	Blower N (White)	Recirc Timer Float	Recirc Timer Float	Spray Timer Override Float	Spray Timer Override Float	High Water Alarm Float	High Water Alarm Float

Blower Pressure Switch

Dosing Method Switch (3 Position)
Spray
Gravity(None)
Time Dose



Print / Part Number	Description	Revision	Date
HA-190308-U	AN-400 Waste Water Treatment System		4/27/2023

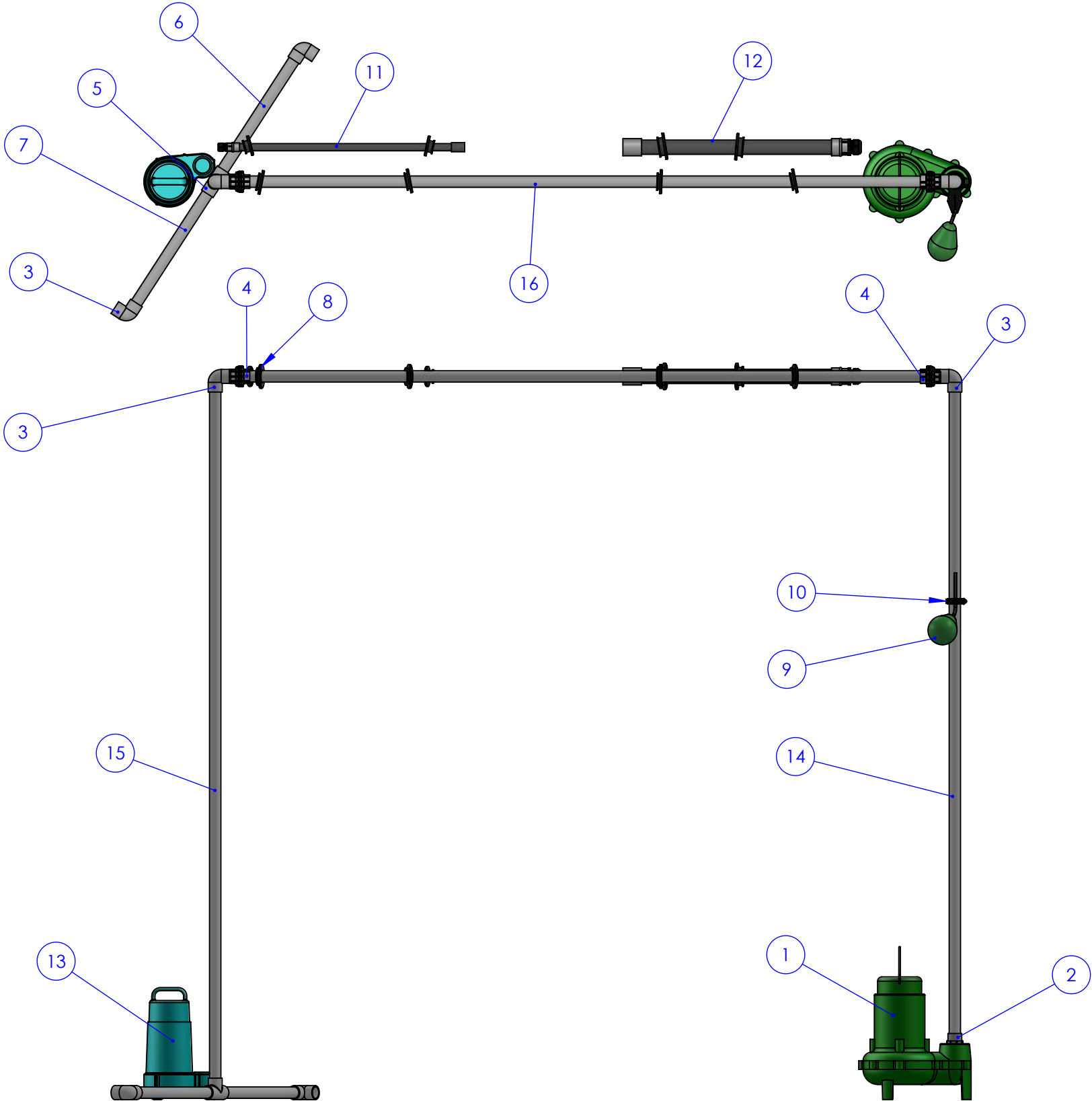


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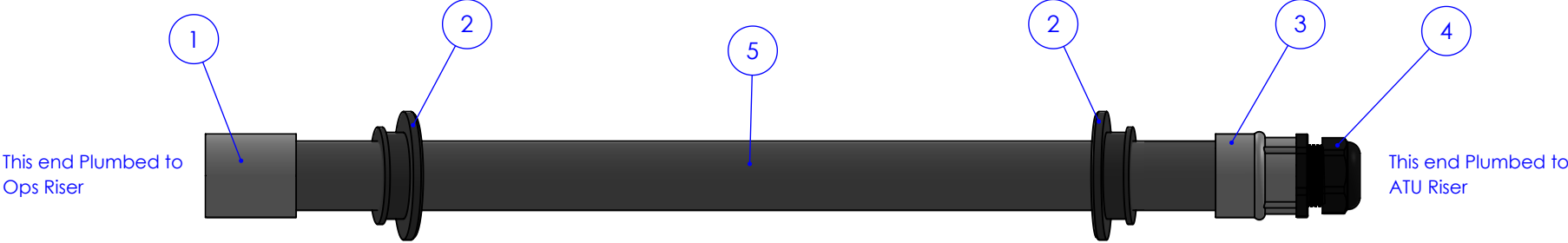
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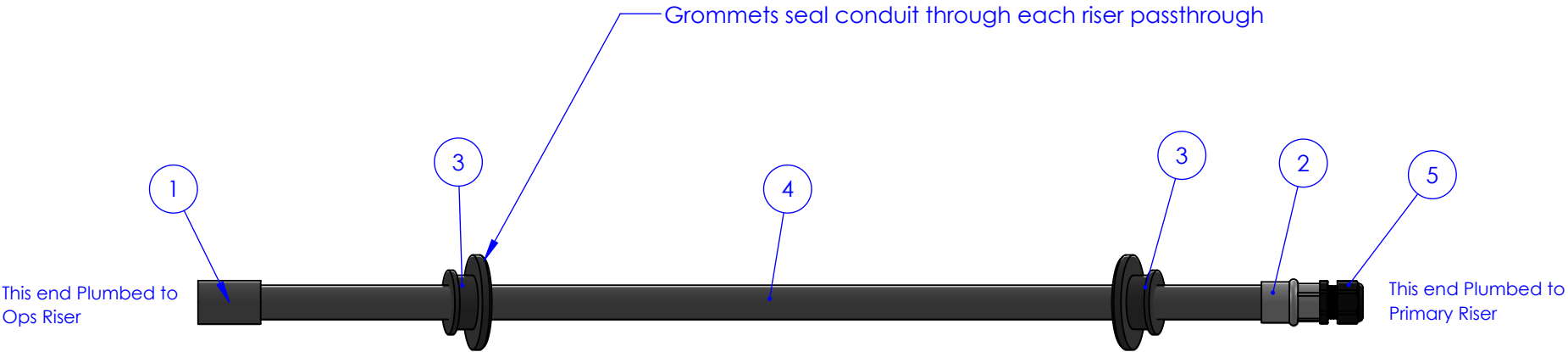
ITEM NO.	Part Number	DESCRIPTION	QTY.	Length
1	100151	Pump, Zoeller N264 Recirc Pump	1	
2	700051	Adapter Male 1-1/4" x 1" PVC	1	
3	700032	Tee, 1" Sch40 PVC SxSxS	4	
4	700016	Union, Socket 1" Sch40 PVC SxS	2	
5	700032	Tee, 1" Sch40 PVC SxSxS	1	
6	700026	Pipe, 1" Sch40 PVC	1	17in
7	700026	Pipe, 1" Sch40 PVC	1	17in
8	AKR50000	Grommet, 1" Sch40	4	
9	120044	Switch, Float MM 20' Green	1	
10	240041	Clamps 3-9/16-4 w/Clip	1	
11	HA-200034	Assembly, Conduit 1/2"	1	
12	HA-200035	Assembly, Conduit 1-1/4" PVC	1	
13	HA-100151	Pump, Effluent 1/3HP w/Float	1	
14	700026	Pipe, 1" Sch40 PVC	1	76.5in
15	700026	Pipe, 1" Sch40 PVC	1	82in
16	700026	Pipe, 1" Sch40 PVC	1	82in

Print / Part Number	Description	Revision	Date
HA-200035	Assembly, Conduit 1-1/4" PVC		



HA-200035

ITEM NO.	Part Number	DESCRIPTION	QTY.	Length
1	700039	Coupling, 1-1/4" Conduit Sch40 PVC SxS	1	
2	AKR50360	Grommet, 1-1/4" Sch40	2	
3	180129	Adapter, Female 1-1/4" PVC Conduit	1	
4	240053	Fitting, Compression 1-1/4" Cord Grip	1	
5	700034	Pipe, 1-1/4" Conduit Sch40 PVC	1	24in



HA-200034

ITEM NO.	Part Number	DESCRIPTION	QTY.	Length
1	180108	Coupling, 1/2" Conduit SxS	1	
2	180107	Adapter, Female 1/2" Conduit FNPT x S	1	
3	AKR50030	Grommet, 1/2" Sch40	2	
4	180113	Pipe, 1/2" Conduit Sch40 PVC	1	26in
5	240051	Fitting, 1/2" Compression CordGrip	1	

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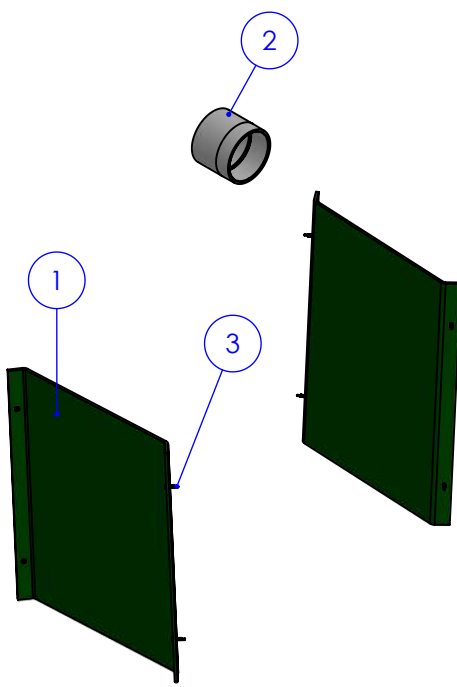
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Method 1

The fiberglass panels and the tank bodies are bonded together using 2 part polyester resin (same resin as tank and panel matrix) with self tapping screws that hold the panels to the tank while the resin cures. Tanks can be joined before or after assembling dome to tank body.

Instructions:

- 1) Push tanks together and glue 4" PVC coupling to outlet of pretreatment tank and inlet of ATU.
- 2) Prep fiberglass panel and tank bodies by sanding/scuffing faces to be bonded.
- 3) Apply resin to panels and tank bodies where bonding will occur.
- 4) Forcefully push the fiberglass panels against tank bodies and secure in place with self tapping screws.



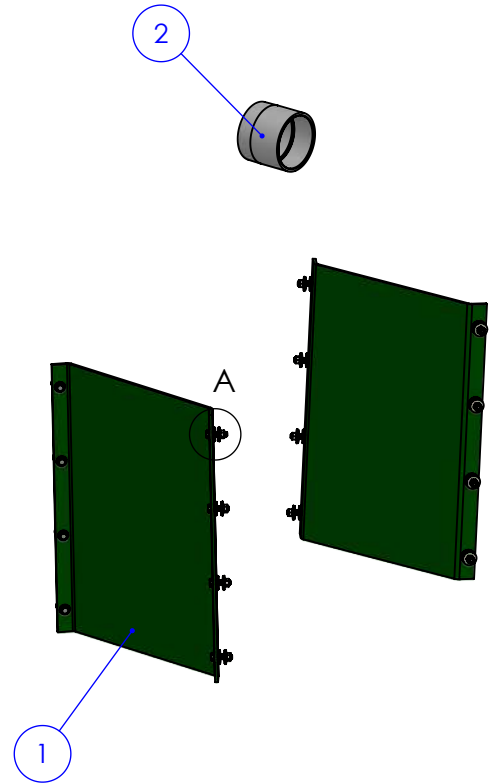
ITEM NO.	Part Number	DESCRIPTION	QTY.
1	240019	FG Connecting Panel 24x16	2
2	700031	Coupling, 4" Sch40 PVC SxS	1
3	200059	Screw, 1" #10 Self Tap PPH SS	8

Method 2

The fiberglass panels and the tank body are mechanically joined using stainless steel bolts with rubber bonded sealing washers. Tanks must be joined prior to assembling dome to tank body.

Instructions:

- 1) Push tanks together and glue 4" PVC coupling to outlet of pretreatment tank and inlet of ATU.
- 2) Hold panel to tank bodies and predrill 8 bolt holes evenly across the 2 mounting faces. Complete for each panel.
- 3) Insert bolts with washers as shown in Detail A. A metal bonded sealing washer is to be on both the interior and exterior wall of the tank body.
- 4) Thread 3/8-16 nuts on to bolts and torque to 235 in-lbs.



ITEM NO.	Part Number	DESCRIPTION	QTY.
1	240019	FG Connecting Panel 24x16	2
2	700031	Coupling, 4" Sch40 PVC SxS	1
3	200013	Nut, 3/8-16 Stainless Steel	16
4	760063	Bolt, 3/8"-16 x 1-1/2"L SS Hex	16
5	200006	Washer, 3/8 Standard SS	16
6	HA-XXXXXX	Metal Bonded Sealing Washer, 1-3/16"OD	32

