

# OWNER FURNISHED MATERIALS



## ISSUED FOR CONSTRUCTION

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For the Construction of

WESTERN AREA WWTP PHASE 1 EXPANSION

HUNTSVILLE, ALABAMA

COH PROJECT NO. 71-22-SF01

Garver Project No. 21W10220

VOLUME 6 OF 6

Prepared For:

City of Huntsville, Alabama

July 2022



## Legend

PIPE

VALVES

FITTINGS

POWER EQUIPMENT

Quantity	Size (inches)	Fitting/Valve Type	MJ/FLG	Notes/ specific requirements
<b>Site Civil</b>				
2000 FT	6 (DIPS)	DR 17 HDPE		
600 FT	8	DIP w/ p401 liner		
280 FT	12	DIP w/ p401 liner		
1400 FT	18	DIP w/ p401 liner		
140 FT	24	DIP w/ p401 liner		
120 FT	30	DIP w/ p401 liner		
800 FT	36	DIP w/ p401 liner		
950 FT	42	DIP w/ p401 liner		
1100 FT	48	DIP w/ p401 liner		
6	4	45 Bend	MJ	
1	6	11.25 Bend	MJ	
4	6	22.5 Bend	MJ	
38	6	45 Bend	MJ	
5	6	90 Bend	MJ	
2	8	11.25 Bend	MJ	
4	8	22.5 Bend	MJ	
4	8	45 Bend	MJ	
6	12	45 Bend	MJ	
19	18	45 Bend	MJ	
2	24	22.5 Bend	MJ	
6	24	45 Bend	MJ	
2	30	45 Bend	MJ	
10	36	11.25 Bend	MJ	
16	36	45 Bend	MJ	
2	36	90 Bend	MJ	
1	42	11.25 Bend	MJ	
4	42	45 Bend	MJ	
1	42	90 Bend	MJ	
2	48	22.5 Bend	MJ	
5	48	45 Bend	MJ	
2	48	Plug	MJ	
1	6 x 4	Reducer	MJ	
1	12 x 6	Reducer	MJ	
1	30 x 18	Reducer	MJ	
1	36 x 24	Reducer	MJ	
1	54 x 42	Reducer	MJ	
1	54 x 48	Reducer	MJ	
1	4	Tee	MJ	
7	6	Tee	MJ	
3	6 x 2 x 6	Tee	MJ	
1	48 x 36	Tee	MJ	
1	4	Wye	MJ	
1	6	Wye	MJ	
1	30 x 12	Wye	MJ	
1	30 x 18	Wye	MJ	
2	36 x 24	Wye	MJ	
6	6	Electrofuse Couplings	-	
3	-	Flexim Clamp-on Flow Meters	-	
1	12	Plug Valve	FLG	
1	6	Plug Valve	MJ	
2	18	Plug Valve	MJ	

		<b>Legend</b>	
		PIPE	
		VALVES	
		FITTINGS	
		POWER EQUIPMENT	

Quantity	Size (inches)	Fitting/Valve Type	MJ/FLG	Notes/ specific requirements
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<b>Headworks</b>				
8	4	45 Bend	FLG	
6	4	90 Bend	FLG	
3	2	Air Release Valve	THRD	
3	4	Tee	FLG	
1	4 x 6	Reducer	FLG	
1	6	Wye	FLG	
6	6	90 Bend	FLG	
1	6	Tee	FLG	
2	12	90 Bend	MJ	
1	12	Wye	MJ	
1	4	Plug Valve	FLG	
3	2	Plug Valve	THRD	
3	6	Plug Valve	FLG	

<b>Splitter Box</b>				
2	42	Wall Pipe	MJ	62" long MJXPE spool w/ wall collar @ 7" from PE
2	18	Wall Pipe	MJ	62" long MJXPE spool w/ wall collar @ 7" from PE
3	36	Wall Pipe	MJ	62" long MJXPE spool w/ wall collar @ 7" from PE
1	12	45 Bend	MJ	

<b>Oxidation Ditch</b>				
6	12	Wall Pipe	FLG	62" long FLGXFLG spool w/ 7/8" tapped holes w/ wall collar @ 10.5" from FLG
1	36	Wall Pipe	MJ	48" long MJXPE spool w/ wall collar @ 18" from PE
1	42	Wall Pipe	MJ	48" long MJXPE spool w/ wall collar @ 18" from PE
1	12	90 Bend	FLG	
3	12	Tee	FLG	
*	*	Wall and Floor PRVs	*	Quantity and size to be provided as needed and as noted on the drawings.
4	12	Mud Valve	FLG	

2	Complete Aerator Flender Gearunit Type: XSBN Size: 400 As supplied against S/N : 309242 Original Drawing # 5693708 Ratio: 42.147 Input speed: 1190 RPM Output speed: 28.23 RPM P2= 111.86kW (150hp) Input shaft = o 2.1875x3.56" Output shaft = o 7.625x12.2" Housing is welded steel casing in lieu of cast iron, with pipping to accommodate existing lube system (lube			
2	Oxidation Ditch Mixer Impellers with Coupling Adapter to Above Mentioned Drives. See Plans for Sizing and Mixing Specifications.			
1	Anoxic Zone Aerator Flender Gear Drive Unit			
1	Anoxic Zone Mixer Impeller with Coupling Adapter to Above Mentioned Drives. See Plans for Sizing and Mixing Specifications.			
1	Ovivo 30" Carousel Denitir Gate to be installed between Oxidation Ditch and Anoxic Zone as specified in Drawings and Contract Documents.			
3	HACH D.O./pH sensor and SC4500 controller readout			

<b>Final Clarifier</b>				
100 FT	24	DIP w/ p401 liner		
100 FT	42	DIP w/ p401 liner		
1	42	Wall Pipe	slip bell	105" long MJXPE w/ wall collar @ 30" from PE
1	24	Wall Pipe	MJ	30" long MJXPE w/ wall collar @ 6" from PE
1	36	Wall Pipe	MJ	30" long MJXPE w/ wall collar @ 6" from PE
4	12	Wall Pipe	FLG x PE	30" long FLGXPE w/ wall collar @ 6" from PE
2	4	Wall Pipe	FLG	2 FT long FLGXFLG w/ wall collar 1 FT from FLG
1	24	90 Bend	FLG	
1	24	90 Bend	MJ	
3	4	90 Bend	FLG	
1	4	Wye	MJ	
1	42	90 Bend	FLG	
1	4	45 Bend	MJ	
2	4	Air Relief Valve	FLG	
1	4	Tee	FLG	
2	6	45 Bend	FLG	
100 FT	24	Steel Pipe	WLD	ASTM A106 Grade B or ASTM A53 REV A Grade B; Including seep rings
2	24	90 Bend	WLD	ASTM A106 Grade B or ASTM A53 REV A Grade B
*	*	Wall and Floor PRVs	*	Quantity and size to be provided as needed and as noted on the drawings.
2	4	Swing Check Valve	FLG	
1	24	Telescoping Valve	FLG	
2	4	Plug Valve	FLG	

1	Complete Ovivo standard C60LT drive assembly. Drive unit is completely factory assembled, calibrated and tested.			
1	Complete motor drive package, including 1 HP gearmotor, sprockets, chain and guard.			
1	Drive torque control with micro switches and actuating pin:			
1	Premium Ovivo paint scheme, two (2) coats of Tnemec Series 66HS epoxy @ 4-6 mils DFT:Top coated with (1) coat of Tnemec Series 73 Endura Shield urethane paint @ 3-5 mils DFT (sky blue color).			
1	Walkway, 3 ft wide, pony truss, tank wall to tank wall, walkway truss to serve as handrails with 1 1/4" aluminum I-bar grating.			
1	Platform, 9'-6" x 9'-0", with 3/8" aluminum checker plate decking.			
1	Handrail around platform, aluminum, 1 1/2" diameter, 2-rail with 4" toe plate, sub- assembled systems with fittings factory mounting to posts.			
1	5'-0" Cage, square box truss design.			
2	Primary rake arms, full radius square box design with rake blades, with 304 SS.			
2	Secondary rake arms, partial radius square box design with rake blades, with 304 SS squeegees.			
1	Influent Column, 3'-6" diameter x 1/4" plate with a 24" SCH 10 RAS pipe inside.			
1	Dispersion well- 14'-0" Dia. x 5'-0" Deep w/ 8 hinged gates.			
1	Feedwell, 40' diameter x 7'-6" deep x 3/16" plate, with supports.			
1	Sludge collection box with seals.			
12	6" diameter PVC return activated sludge collections pipes (6 each primary rake arm) with PVC adjustable collection valves.			
2	skimming blades with 10' skimmer assemblies and one			
1	Installation fasteners & shim kit (304 SS).			
1	10' scum box with supports and stub nozzle.			
1	4	Flow Meter	FLG	Rosemount 8750W magnetic flowmeter system

## Legend

PIPE

VALVES

FITTINGS

POWER EQUIPMENT

Quantity	Size (inches)	Fitting/Valve Type	MJ/FLG	Notes/ specific requirements
<b><u>RAS/WAS Pump Station</u></b>				
200 FT	8	DIP w/ p401 liner		
200 FT	18	DIP w/ p401 liner		
80 FT	30	DIP w/ p401 liner		
2	8	Wall Pipe	FLG	58 and 3/16" long w/ wall collar @ 31" and 3/16" from FLG
4	18	Wall Pipe	FLG	59 and 3/16" long w/ wall collar @ 31" and 3/16" from FLG
1	24	Wall Pipe	MJ	42" long MJXPE wall collar @ 1FT from PE
1	36	Wall Pipe	MJ	42" long MJXPE wall collar @ 1FT from PE
1	8	Tee	MJ	
5	8	90 Bend	FLG	
6	2	Air Release Valve	THRD	
4	18 X 30	Tee	FLG	
8	18	90 Bend	FLG	
2	8	Plug Valve	FLG	
2	8	Swing Check Valve	FLG	
4	18	Swing Check Valve	FLG	
4	18	Plug Valve	FLG	
6	2	Plug Valve	THRD	
1	8	Flow Meter	FLG	Rosemount 8750W magnetic flowmeter system
1	30	Flow Meter	BAND	Flexim flexible strap on flow meter system
<b><u>Flange Packs</u></b>				
55	4	Flange Pack w/ Acc.	FLG	
23	6	Flange Pack w/ Acc.	FLG	
10	8	Flange Pack w/ Acc.	FLG	
11	12	Flange Pack w/ Acc.	FLG	
20	18	Flange Pack w/ Acc.	FLG	
2	24	Flange Pack w/ Acc.	FLG	
8	30	Flange Pack w/ Acc.	FLG	
2	42	Flange Pack w/ Acc.	FLG	
<b><u>Restraints</u></b>				
20	4	MJ Acc. Kit	MJ	
85	6	MJ Acc. Kit	MJ	
23	8	MJ Acc. Kit	MJ	
21	12	MJ Acc. Kit	MJ	
42	18	MJ Acc. Kit	MJ	
9	24	MJ Acc. Kit	MJ	
19	30	MJ Acc. Kit	MJ	
50	36	MJ Acc. Kit	MJ	
12	42	MJ Acc. Kit	MJ	
18	48	MJ Acc. Kit	MJ	