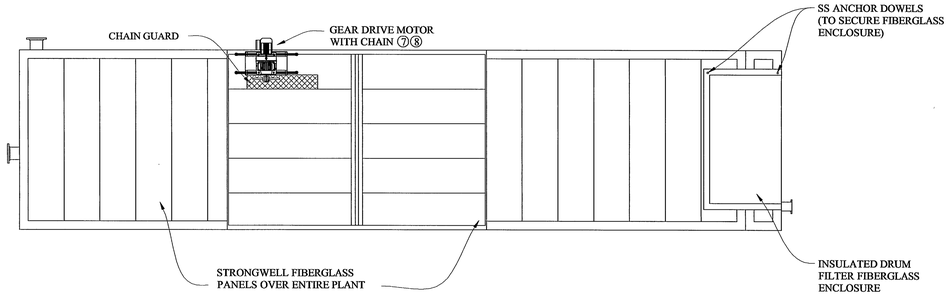
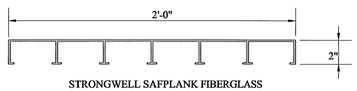


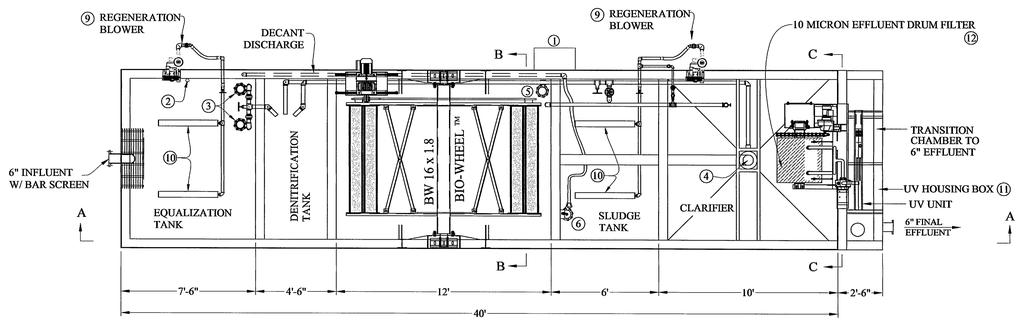
COVER SYSTEM - PLAN VIEW

SCALE: 1/4" = 1'-0"



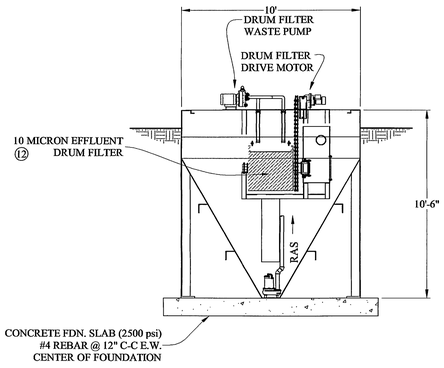
STRONGWELL SAFPLANK FIBERGLASS REINFORCED PLASTIC DECK PANEL (2" x 24" NOMINAL SIZE)

NO SCALE



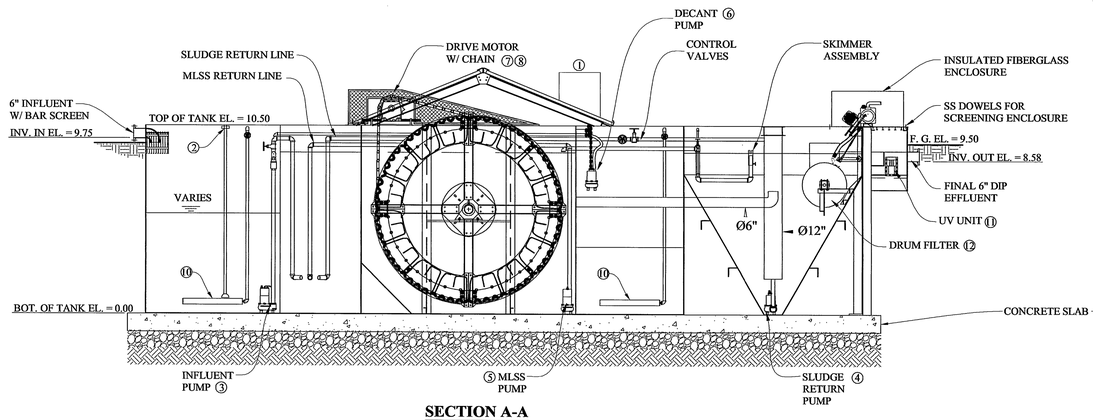
EQUIPMENT - PLAN VIEW

SCALE: 1/4" = 1'-0"



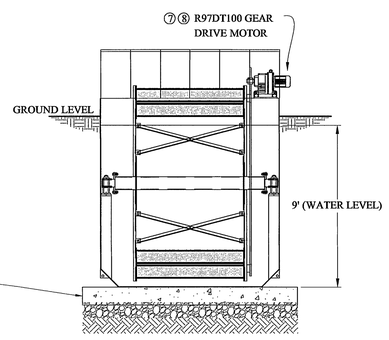
SECTION C-C

SCALE: 1/4" = 1'-0"



SECTION A-A

SCALE: 1/4" = 1'-0"



SECTION B-B

SCALE: 1/4" = 1'-0"

BIO-WHEEL ™

BW 16 x 1.8
19,500 GPD
WASTEWATER
TREATMENT PLANT

SCALE: 1/4"=1'

WASTEWATER TECHNOLOGY INC.
P.O. BOX 737
MONTEREY, VIRGINIA 24465
PH. 1 (800)-741-8941
FAX (540)-468-3129

WWTP GENERAL NOTES:

1. See Sheet C6.1 for WWTP Facility Site Plan.
2. All WWTP control panels shall be located in the WWTP laboratory building. Install PVC electrical conduit between WWTP and lab building and route power and control circuitry as required.
3. A licensed electrician shall be required to install all electrical conduit, wiring, control circuitry, and control panels. The electrical contractor shall provide shop drawings showing proposed conduit and control wiring installation prior to start of work.
4. Refer to all WWTP shop drawings provided by the manufacturer.
5. Provide sacrificial anodes for corrosion protection. Install anodes in accordance with manufacturer's recommendations.
6. The WWTP manufacturer shall provide detailed instructions for installation and start-up of the treatment plant.
7. Back fill around WWTP and provide a minimum of 4-inches of reveal around the perimeter of the treatment plant. Grade site to ensure positive drainage away from the treatment plant. Use VDOT #57 stone backfill. Do not compact around steel tank structure.
8. Refer to project manual for detailed material and equipment specifications.
9. Install soda ash feed system so that soda ash solution is administered at the influent of the primary equalization tank. Install soda ash feed system in accordance with manufacturer's instructions.
10. A licensed Class III Wastewater Operator shall provide daily operations and maintenance for this WWTP facility after start-up. Wastewater licensure shall comply with the latest DPOR regulations as set forth by the Commonwealth of Virginia. Testing and monitoring guidelines shall be set forth by the Virginia Department of Environmental Quality.
11. The Operations and Maintenance manual for the WWTP facility shall be provided prior to start-up. The wastewater operator in conjunction with the WWTP manufacturer shall provide this O&M manual to the owner, the consulting engineer, and Virginia Department of Environmental Quality. The manual shall reflect all necessary operating procedures that are particular and specific to this treatment system.
12. The WWTP facility shall have a Class I reliability rating as set forth by the Virginia Department of Environmental Quality. An emergency back-up electrical generator shall be provided with automatic transfer switch capability. The generator shall be sized to accommodate the ultimate WWTP facility. DO NOT provide mechanical compaction around WWTP installation.
13. All electric motors shall be rated as single phase devices. Three-phase power is unavailable to the project area.

TANK VOLUME SCHEDULE

TANK CLASSIFICATION	MEASUREMENTS	VOLUME (CF)	VOLUME (GALLONS)
EQUALIZATION TANK 1	7'-6"L x 9'H x 10'W	675	5,049
DENITRIFICATION TANK	4'-6"L x 9'H x 10'W	405	3,029
BIO-WHEEL TANK	12'L x 9'H x 10'W	1,080	8,078
SLUDGE TANK	6'L x 9'H x 10'W	540	4,039
CLARIFIER	10'L x 10'W	100 SF	---

EQUIPMENT SCHEDULE

ITEM	MAKE	MODEL	CAPACITY	QUANTITY
1	WWTP CONTROL PANEL IN NEMA 3R STEEL ENCLOSURE W/ ALARM LIGHT AND HORN	#065601	N/A	
2	PRESSURE TRANSDUCER INFLUENT PUMP AND FLOW EQ. BLOWER CONTROLLER	#073612	N/A	
3	GOULDS SUBMERSIBLE INFLUENT PUMP	3866 WS0512B	1/3 HP 120V 1 PH 1750 RPM 2" DISCHARGE	---
4	GOULDS SUBMERSIBLE RAS PUMP	3866 WS1012B	0.5 HP 460 V 1 PH 1750 RPM 2" DISCHARGE	---
5	GOULDS SUBMERSIBLE MLSS PUMP	3866 WS1012B	1 HP 460/480 V 3 PH 1750 RPM	---
6	GOULDS DECANT PUMP	PE31AV PUMP	0.33 HP 115V 1 PH 3000 RPM	---
7	SEW EURODRIVE GEAR MOTOR R-SERIES	R107DT100LS4 -BMHR-KS	7.5 RPM RATIO 223:1 TORGUE RATED 38,400 IN.LB. SERVICE FACTOR 1.9, 3/60/460-480 V CLASS F INSULATION, SEVERE DUTY, INVERTOR DUTY, MTG POS. B3 US INSTALLATION	---
8	SEW INVERTER W/ KEYPAD (LOCATED IN WWTP CONTROL PANEL)	9A2305.0, ATV18U72M2	5 HP 3 PH 60 HERTZ 460/480 VOLTS	---
9	SIEMENS REGENERATIVE BLOWER	2BH7320OAK52	2.35 HP 1 PH 60 HERTZ 208-230 VOLTS	2
10	EDI FLEXAIR TUBE DIFFUSERS	"T" SERIES	---	5
11	AQUA AZUL UV DISNF.	AZ-4800	120V, 60HZ	1
12	10-MICRON EFFLUENT FILTER WITH CONTROLS; FILTRATE PUMP AND INSULATED ENCLOSURE		1 HP, 3 Ph, 460 V (19,500 GPD ADF)	1

COMMONWEALTH OF VIRGINIA
DANIEL M. EARLY
Lic. No. 031787
16 JAN 2009
PROFESSIONAL ENGINEER

ACS DESIGN
ENGINEERING • SURVEYING
LANDSCAPE ARCHITECTURE
CONSTRUCTION MANAGEMENT

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ROANOKE, VIRGINIA 24017
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INFO@ ACSDESIGNLLC.COM
WWW . ACSDESIGNLLC.COM

WIRTZ SERVICES, LLC
WIRTZ CENTRAL SEWER SYSTEM
FRANKLIN COUNTY, VIRGINIA

DRAWN BY:	AH,WTW
DESIGNED BY:	DME
CHECKED BY:	DES
DATE:	16 JAN 2009
JOB NUMBER:	05353A

REVISIONS:

No. 1
No. 2
No. 3
No. 4
No. 5

SHEET NO.:
C6.3

WWTP
EQUIPMENT PLAN