

Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045

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Maura J. Rossman, M.D., Health Officer

RECEIPT DATE: 2-24-25 **ONSITE SEWAGE DISPOSAL SYSTEM** P 587971

APPROVAL DATE: 10/30/25 **PERMIT: NEW CONSTRUCTION** A _____

PROPERTY ADDRESS: 4196 Ten Oaks Road (Main House)

SUBDIVISION: Mae Parsley (Parcel 179) LOT: N/A TAX ID: _____

CONTRACTOR: Hatfields Equipment EMAIL: Ken@hatfieldsequipment.com

CONTRACTOR ADDRESS: P.O. Box 519 Annapolis Junction, MD 20701 PHONE: 301-490-4289

CONTRACTOR CERTIFIED FOR BAT INSTALLATION: MDE MANUFACTURER:

PROPERTY OWNER: Abdalla Basheer EMAIL: _____

OWNER ADDRESS: 10904 Kathleen Court, Columbia, MD 21044 PHONE: _____

BAT UNIT MODEL: Norweco-TNTLP 1000 PUMP SIZE: WE07H PUMP TANK CAPACITY: 2000GAL (Backriver)

OPERATION & MAINTENANCE AGREEMENT DATE SIGNED: 3-12-24 DATE RECORDED: 4-5-24

DISTRIBUTION SYSTEM: GRAVITY PRESSURE DOSED BEDROOMS: 7 APPLICATION RATE: 1.2

TRENCHES:	LINEAR FEET REQUIRED: <u>147 (3@49')</u>	INLET DEPTH: <u>2'</u> ^{71 72 73} <u>3.46/3.41/2.63</u>
	TRENCH WIDTH: <u>3'</u>	MAXIMUM BOTTOM DEPTH: <u>8'</u>
	MINIMUM SPACE BETWEEN TRENCHES: <u>10'</u>	EFFECTIVE AREA BEGINNING DEPTH: <u>5'</u>

LOCATION: **SYSTEM TO BE STAKED BY DESIGNER AND VERIFIED BY APPROVING AUTHORITY DURING PRE-CONSTRUCTION INSPECTION.**

NOTES: See BAT installation plan for all LPD specs including lateral distribution system design. Pump, Alarm, and Electrical inspections are required for pump chamber. BAT start-up required.

ISSUED BY: Zack Silvast N.O. ISSUE DATE: 2-24-25 EXPIRATION DATE: 2-24-26

- NOTE: CONTRACTOR MUST SCHEDULE A PRE-CONSTRUCTION INSPECTION PRIOR TO BEGINNING ANY INSTALLATION
- NOTE: CONTRACTOR REGISTERED WITH THE STATE OF MD ON-SITE WASTEWATER PROFESSIONALS BOARD: CONFIRMED
- NOTE: CONTRACTOR MUST SCHEDULE AN INSPECTION AND GAIN APPROVAL OF ALL COMPONENTS PRIOR TO COVERING
- NOTE: STONE MUST BE APPROVED BY HEALTH DEPARTMENT AND GRAVEL TICKET MUST BE AVAILABLE FOR REVIEW.
- NOTE: WATERTIGHT SEPTIC TANKS REQUIRED
- NOTE: ALL PARTS OF SEPTIC SYSTEM SHALL BE AT LEAST 100 FEET DOWNGRADIENT FROM ANY WATER WELL
- NOTE: MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS
- NOTE: AN ELECTRICAL PERMIT IS REQUIRED FOR INSTALLATION OF ANY ELECTRICAL COMPONENTS OF THE SYSTEM
 ELECTRICAL PERMIT ISSUED E 2404620
- NOTE: THE HCHD DOES NOT WARRANT ANY SYSTEM AND CANNOT GUARANTEE THE PERFORMANCE OF THIS SYSTEM AS DESIGNED. BY ACCEPTING THIS PERMIT, THE OWNER AND/OR APPLICANT ACKNOWLEDGE THAT THE SPECIFICATIONS DETAILED IN THIS DESIGN ARE ONE POSSIBLE OPTION AND THAT THE HCHD WILL REVIEW OTHER PROPOSALS. YOU HAVE THE OPTION TO SEEK THE ADVICE OF A QUALIFIED DESIGN CONSULTANT OR PROFESSIONAL ENGINEER FOR FURTHER GUIDANCE.
- NOTE: AN INDIVIDUAL CERTIFIED BY MDE AND THE MANUFACTURER FOR BAT INSTALLATION MUST BE PRESENT AT ALL TIMES DURING BAT INSTALLATION.
- NOTE: MDE RECOMMENDS SEPTIC TANKS, BAT, AND OTHER PRETREATMENT UNITS BE PUMPED AT A FREQUENCY ADEQUATE TO ENSURE THAT SOLIDS ARE NOT DISCHARGED TO THE DISPOSAL AREA

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM.

PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT.

CALL 410-313-1771 TO SCHEDULE INSPECTIONS.

7/17/25 Audio + Visual alarms working. Contractor used Ashland pump
 Audio + Visual alarms wired separately. Contractor confirmed pump levels
 installed per plan for on/off and high alarm floats. Distal End heads are
 all over 3'. Control panel is 34" above grade (MB)

NOT TO SCALE

SEE SEPARATE
 SHEET FOR
 AS-BUILT

Level ✓
 Back river (non-100)
 1000 gal
 Top seam
 1" depth @ 3'
 no baffle
 no baffle filter
 back manhole
 no 6" port
 no watertight test
 not slotted
 12/21/24
 4" back

ROAD NAME

TRENCH/DRAINFIELD DATA

WIDTH	INLET	BOTTOM
3'		8'
NUMBER OF TRENCHES <u>3</u>		
TOTAL LENGTH <u>150 FT</u>		
ABSORPTION AREA <u>450 FT² + SW</u>		
DISTRIBUTION BOX LEVEL <u> </u>		
DISTRIBUTION BOX BAFFLE <u> </u>		
DISTRIBUTION BOX PORT <u> </u>		

SEPTIC TANK DATA

SEPTIC TANK 1 LEVEL yes
 MANUFACTURER Back river (non-100)
 CAPACITY 1000 GAL
 SEAM LOC Top
 TANK LID DEPTH 3'
 BAFFLES
 BAFFLE FILTER
 MANHOLE LOC Front, Middle, & back
 6" PORT LOC
 WATERTIGHT TEST
 SLOTTED
 DATE ON LID 11/6/2025

PUMP/SEPTIC TANK LEVEL yes
 MANUFACTURER Babylon
 CAPACITY 2000 GAL
 SEAM LOC Top
 TANK LID DEPTH 3'
 BAFFLES
 BAFFLE FILTER
 MANHOLE LOC Front & back
 6" PORT LOC
 WATERTIGHT TEST
 SLOTTED
 DATE ON LID 1/10/2025

SEPTIC CONTRACTOR ONSITE INSTALLING SYTEM: Nathan Heath / Todd Tracy
 SEPTIC CONTRACTOR ONSITE LICENSED WITH THE STATE OF MD: YES/NO

PRE-CONSTRUCTION NOTES:

3/7/2025 - installer onsite for pre-con. Tank staked per plan, SPA staked.

Trenches staked. trenches 49' long, w/ ~2" diff in elevation 13' between trenches. OK TO START (SP/MB)

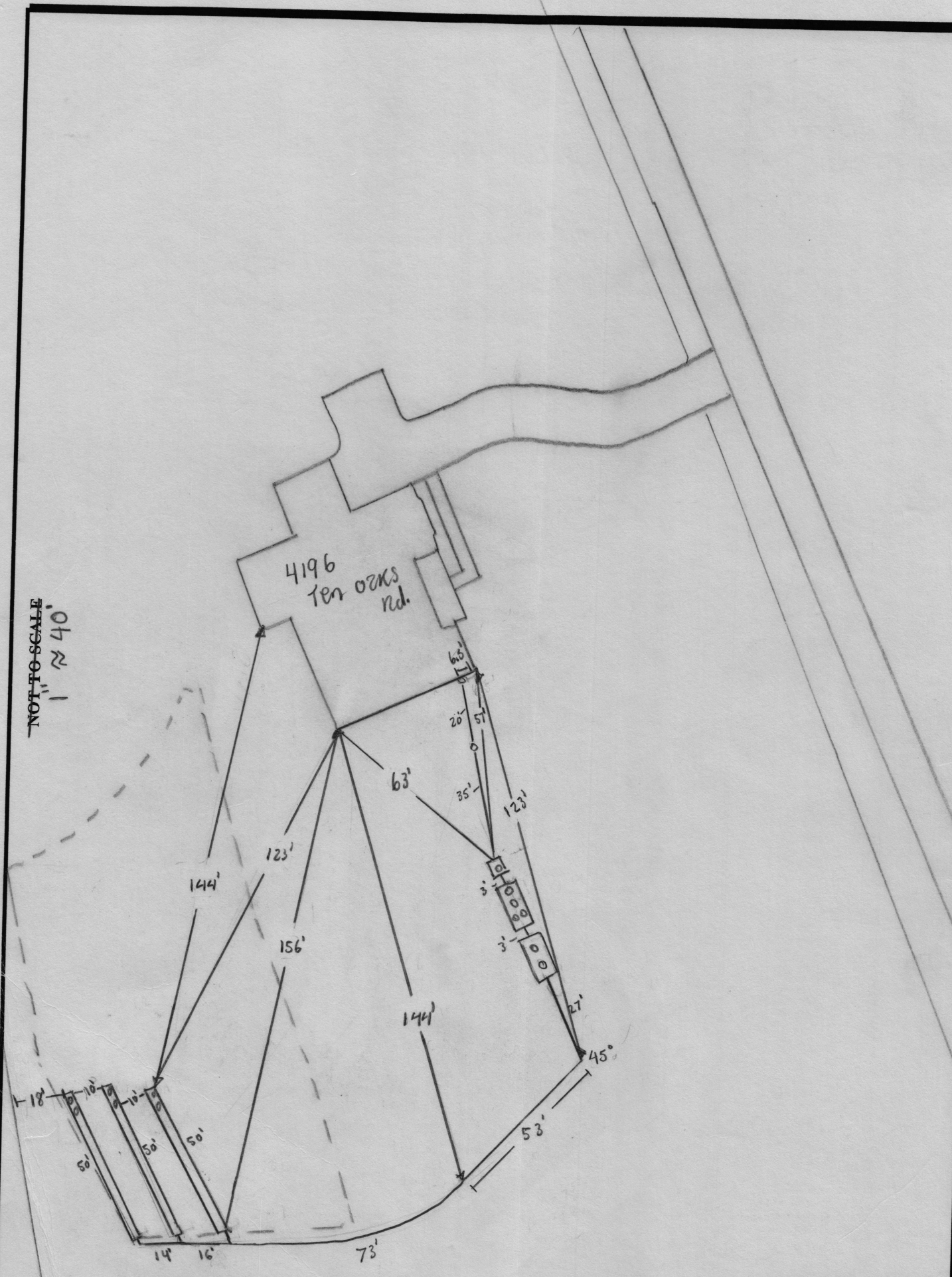
CONTROL PANEL DATA

CONTROL PANEL HEIGHT 34"
 (MIN 30")
 INSPECTION DATE 7/17/25
 INSPECTION PASS/FAIL (CIRCLE ONE)

INSTALLATION NOTES:

3/10/2025 - installer onsite for inspection. upper trench being staked upon arrival. installed set 12" x 24" too low, added stone to be @ elevation per plan. installers using transit for bottom & lateral. onsite while middle trench dig & staked. left & came back in PM for lower trench. lateral set w/ stone & fabric. all lateral risers have 5/16 holes & 3.5" diam. (P)
 3/11/2025 installer onsite for inspection. 2 per manhole. set a 2000 gal PT set. tanks have 3' of cover. PM installed from trenches to ~15' before PT. Respect for FM to tank & SHC. (P) 3/12/25 SHC installed w/ 2 c/o & 17' fall. installer setting Ashland pump equiv. FM connect to PT. ok to receive 211 work. respect for P&A. (SP)

NOT TO SCALE
1" ≈ 40'





BACK RIVER PRE-CAST, LLC
 PO BOX 329
 GLYNDON, MD 21071
 PH# 410-833-3394

NORWECO CERTIFICATION


PROPERTY OWNER: ASDALLA BASGEAR	INSTALLATION COMPANY: HATFIELD
ADDRESS: 4196 TEN OAKS RD	CERTIFIED INSTALLER: TODD TRACEY
CITY, ZIPCODE & COUNTY: GLENELG, 21737, HOWARD	PERMIT#
SIZE OF SYSTEM INSTALLED:	DATE INSTALLED: 3-3-25
1000 GPD CONCRETE	START-UP DATE: 7-18-25
NUMBER OF BEDROOMS:	DATE OF FINAL INSPECTION:
TYPE OF INSTALLATION: NEW	DATE OF ELECTRICAL INSPECTION:
ELECTRICAL WIRING PER ELECTRICAL INSTRUCTIONS: YES	TANK LEVEL: YES
HT. OF CONTROL PANEL ABOVE FINAL GRADE: 42"	BURIAL DEPTH OF TANK: 45"
SYSTEM WIRED ON A 15-AMP DEDICATED CIRCUIT WITH STD. BREAKER: YES	RISERS 4" - 6" ABOVE GRADE: NO
LENGTH(S) OF UF WIRE PAST LAST AERATION RISER(S): 60"	VENTED LID(S) ON AERATION CHAMBER(S): YES
FEMALE PLUG(S) WIRED TO UF WIRE: YES	ANY GROUND SETTLING AROUND TANK:
CONDUIT(S) ENTERING AERATION RISER MADE WITH A WATERTIGHT CONNECTION: YES	NO
ISTHE INSIDE OF THE CONDUIT ENTERING THE CONTROL PANEL(S) AND AERATION RISER(S) SEALED WITH DUCT SEAL: YES	

ON 2ND PAGE MAKE A ROUGH SKETCH OF THE HOUSE ,WHERE THE SYSTEM IS LOCATED, WHERE THE CONTROL PANEL IS LOCATED , WHERE THE FRONT OF THE IS AND DIRECTIONS TO THE PROPERTY.

DIRECTIONS CAN START A FEW STREETS AWAY

EXAMPLE: RT. X LEFT ONTO XX STREET RIGHT ONTO PRIVATE DRIVEWAY 5TH HOUSE OF THE LEFT.

I certify that the Norweco Singulair TNT Wastewater Treatment System was installed according to the manufacture's specifications.



Matthew Geckle

July 18, 2025

Signature of BRP Representative

Vice-President

Date

norweco® SERVICE PRO®

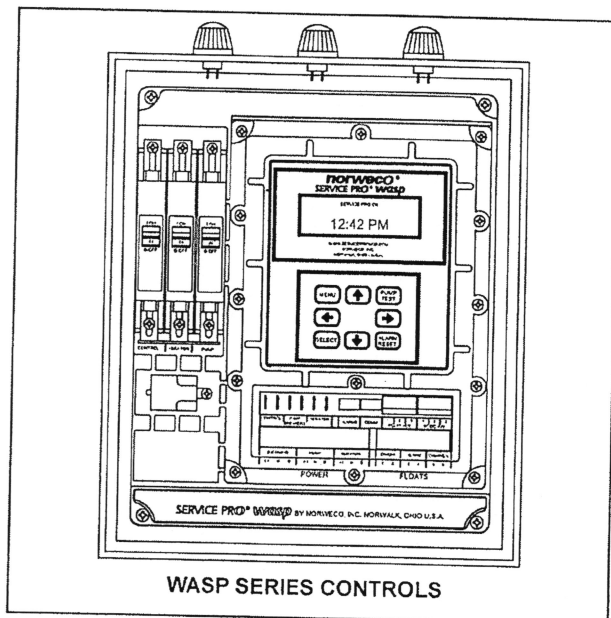
WASP SERIES INTEGRATED SYSTEM CONTROLS

ELECTRICAL WIRING AND CONTROL CENTER INSTALLATION

The information contained in these instructions is not intended to be a complete electrical installation reference, as code requirements vary according to geographic area. These instructions focus only on the specific requirements for the Service Pro WASP controls. They do not cover all installation aspects of the underground electrical cable and control center, preliminary inspection, testing and service of the control center or troubleshooting. More instructions are contained in the Bio-Kinetic Wastewater Treatment System Electrical Wiring and Control Center Installation yellow sheet. All electrical work must be performed in accordance with the latest edition of the National Electrical Code and all applicable local codes.

UNDERGROUND ELECTRICAL CABLE INSTALLATION

1. A separate underground electrical service cable must be installed from the main electrical panel in the home to the Service Pro WASP control center. The electrical service cable must be UL or CSA approved, type UF, #12/2 AWG minimum and must have a full-size center ground. Larger cable is required if the underground service needs to be run more than 80 feet.
2. A separate underground electrical service cable must be installed for each aerator within the Singular system. The electrical service cable must be UL or CSA approved, type UF, #14/2 AWG minimum and must have a full-size center ground. Larger cable is required if the underground service needs to be run more than 80 feet.



WASP SERIES CONTROLS

3. A separate underground electrical service cable must also be installed for the effluent pump and each float switch. The electrical service cable supplying power to the pump must be UL or CSA approved, type UF, #12/2 AWG minimum and must have a full-size center ground. Larger cable is required if the underground service

needs to be run more than 80 feet. **NOTE:** The float switch cables carry low voltage for controls only and do not carry the full electrical load of the pump. Float switch cables should be #16 AWG minimum.

4. Each underground cable must be continuous and unspliced from the Service Pro WASP control center to the main electrical panel in the home, aerator, pump and float switches. Underground cable must be protected in conduit anytime the cable path passes directly across a tank or underground structure.
5. Uncoil the electrical service cables into the influent sewer line trench. Extend the aerator cable to the aerator mounting casting. Extend the pump and float switch electrical service cables to the pump station chamber. **NOTE:** Leave sufficient slack in the cables so they will not be stressed during backfilling or settling.
6. All underground cables should have at least two feet of earth cover to prevent damage from landscaping, trenches, etc. or be installed in an approved conduit.

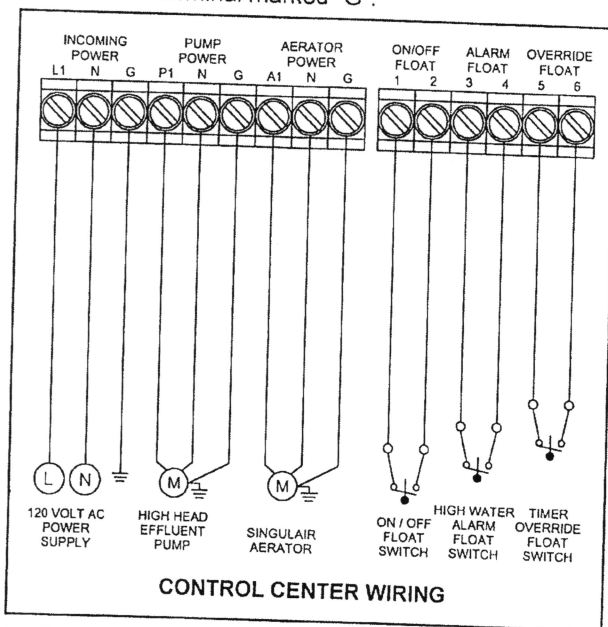
INSTALLATION OF ELECTRICAL CONTROL CENTER

The control center should be wired for operation when the tankage and underground electrical cables are installed. The Service Pro WASP controls should be located so that all warning lights can be readily seen and the audible alarm heard. The mounting location should minimize exposure to direct sunlight, freezing rain or conditions that might prevent routine inspection or access. The control center should always be mounted out of the reach of children.

Remove the control center insert and all packaging from the enclosure. Drill the appropriate openings in the bottom of the enclosure and install a conduit connector in each opening. Exposed wiring to or from the control center should always be encased in conduit. Mount the control center securely using masonry nails, wood screws or common nails as appropriate. Install the control center insert into the enclosure and secure with the four screws provided. The alarm light wires on the insert must now be connected to the alarm lights. Connect the yellow wires to the yellow light, the blue wires to the blue light, and the red wires to the red light.

SERVICE PRO® WASP WIRING AND INSTALLATION (Cont.)

- Use a dedicated 120 volt AC, 20 amp, single-phase circuit breaker in the main electrical panel for service to the Service Pro WASP control center. **CAUTION: Make sure the breaker is de-energized. Check it with an electrical multi-meter before proceeding with installation of the control center. Remember that other circuits in the service panel may remain energized as you are working. Use only tools with insulated handles, stand in a dry location and work with extreme care.**
- Wire from a dedicated breaker in the main service panel to the "INCOMING" power terminal marked "L1" in the control center using copper wire with black insulation.
- Wire from the neutral in the main service panel to the "INCOMING" power terminal marked "N" in the control center using copper wire with white insulation.
- Connect the ground conductor from the main service panel to the "INCOMING" power terminal marked "G" in the control center using bare copper wire. **IMPORTANT: Never allow the white neutral leads and ground leads to be spliced together or connected to common terminals.**
- Connect the power wire from the pump to the "PUMP" power terminal marked "P1" in the control center using copper wire with black insulation.
- Connect the neutral wire from the pump to the "PUMP" power terminal marked "N" in the control center using copper wire with white insulation.
- Connect the ground wire from the pump to the "PUMP POWER" terminal marked "G".
- Connect the power wire from the aerator to the "AERATOR" power terminal marked "A1" in the control center using copper wire with black insulation.
- Connect the neutral wire from the aerator to the "AERATOR" power terminal marked "N" in the control center using copper wire with white insulation.
- Connect the ground wire from the aerator to the "AERATOR POWER" terminal marked "G".
- Connect the wires from the float switches into the terminal block marked "FLOAT" in the Service Pro WASP control center.
- Connect the wires from the on/off float switch to the two float terminals marked "ON/OFF".
- Connect the wires from the high water alarm float switch to the two float terminals marked "ALARM".
- If a timer override float switch is being installed, connect the wires from the timer override float switch to the float terminals marked "OVERRIDE".
- If auxiliary inputs are being connected to the Service Pro WASP control center, push button style terminals are provided for the auxiliary input connections. Use #16 AWG or smaller wires in the push button terminals.
- If the auxiliary device uses dry contact (no voltage supplied) to signal an alarm condition, connect the wires from the auxiliary device to the "AUX 1", "AUX 2" or "AUX 3" terminals marked "AUX RELAY CONTACTS" on the blue push button terminal block.
- If the auxiliary device supplies a voltage (5 to 120 volts) to signal an alarm condition, connect the wires from the auxiliary device to the "AUX 1", "AUX 2" or "AUX 3" terminals marked "AUX AC/DC CONTACTS" on the red push button terminal block. **CAUTION: Do not connect devices to both the "AUX RELAY CONTACTS" and "AUX AC/DC CONTACTS" terminals for a single auxiliary input. Doing so may damage the circuit board.**
- Inspect your work to make sure that there are no breaks in wiring insulation and that all connections are secure. Tighten all screws on the terminal board.
- Carefully form all wiring neatly into the lower part of the Service Pro WASP control center. Do not allow the wires to make contact with other electrical components.
- IMPORTANT:** Seal all conduit openings with duct seal compound or similar appropriate material.
- Clearly label the dedicated circuit breaker used for the Service Pro WASP control center inside the door of the main service panel.
- Place all three circuit breakers in the Service Pro WASP control center in the "off" position. Close and secure the control center cover.



- Connect the power wire from the aerator to the "AERATOR" power terminal marked "A1" in the control center using copper wire with black insulation.
- Connect the neutral wire from the aerator to the "AERATOR" power terminal marked "N" in the control center using copper wire with white insulation.
- Connect the ground wire from the aerator to the "AERATOR POWER" terminal marked "G".

BEFORE LEAVING

Complete all of the remaining steps outlined in the Bio-Kinetic Wastewater Treatment System Electrical Wiring and Control Center Installation yellow sheet. Check to insure that all electrical controls, circuits and wiring for the Singlair system are de-energized. Be sure the red warning tag and distributor identification label are attached to the control center.

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and wastewater treatment

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NORWALK, OHIO
U.S.A. 44857

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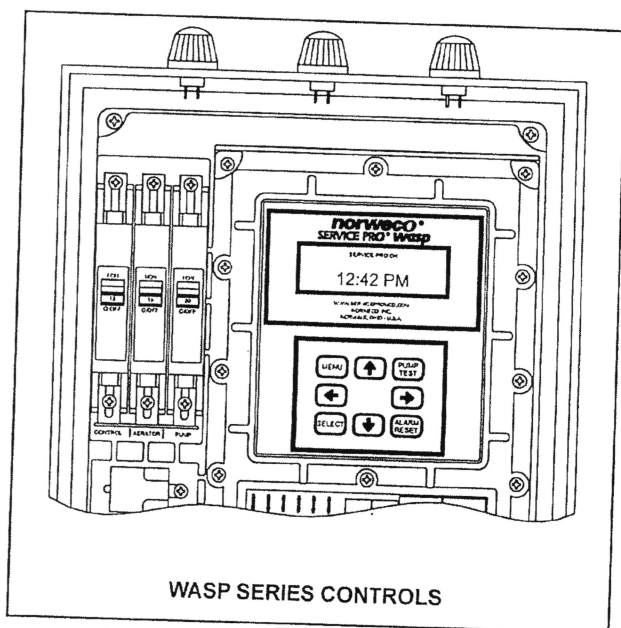
WASP SERIES INTEGRATED SYSTEM CONTROLS

START-UP AND OPERATION INSTRUCTIONS

The information contained in these instructions is not intended to be a complete electrical installation reference, as code requirements vary according to geographic area. These instructions focus only on the specific requirements for the Service Pro WASP controls. They do not cover all installation aspects of the underground electrical cable and control center, preliminary inspection, testing and service of the control center or troubleshooting. More instructions are contained in the Bio-Kinetic Wastewater Treatment System Electrical Wiring and Control Center Installation yellow sheet. All electrical work must be performed in accordance with the latest edition of the National Electrical Code and all applicable local codes.

PROGRAMMING THE PANEL

1. After wiring has been completed, the Service Pro WASP control center must be programmed to operate the Singulair system. Make sure the breakers in the home and in the panel are both in the "on" position and the display in the control center reads "SERVICE PRO OK" on the top line.
2. Press the "MENU" button on the touchpad to access the programming menu of the control center. "SET CLOCK" and "SET HOURS" will be displayed on the screen. Press the up or down arrow button on the touchpad to set the correct hours value.
3. Once the correct hours value is displayed, press the right arrow button to set the minutes value. The display will read "SET MINUTES". Press the up or down arrow button to set the correct minutes value.
4. Once the correct minutes value is displayed, press the right arrow button to set the seconds value. The display will read "SET SECONDS". Press the up or down arrow button to set the correct seconds value.



5. Once the correct seconds value is displayed, press the right arrow button on the touchpad to set the aerator run time. The display will read "AERATOR RUN TIME". Press the up or down arrow button to change the aerator run time in one minute increments. This value can be set from 30 minutes up to continuous operation.
6. Once the aerator run time has been set, press the right arrow button on the touchpad to set the pump timer mode. The display will read "PUMP TIMER MODE". Press the up or down arrow button to change the timer mode. Available options include NO TIMER mode, TIME OF DAY mode and CYCLE TIMER mode. NO TIMER mode operates the pump on a demand use basis controlled by the float switches. TIME OF DAY mode enables the pump to operate at a set time range during the day and works in conjunction with the float switches. CYCLE TIMER mode enables pump operation on a repeat cycle and works in conjunction with the float switches. For TIME OF DAY mode, proceed to step 7 below. For CYCLE TIMER mode, proceed to step 8 below.
7. If the TIME OF DAY mode has been selected, press the right arrow button on the touchpad to set the pump on time. This is the time of day that the pump will begin operating.
 - a. "PUMP ON TIME" and "SET HOURS" will be displayed on the screen. Press the up or down arrow button to set the desired hours value.
 - b. Once the correct hours value has been set, press the right arrow button to set the minutes value. The display will read "SET MINUTES". Press the up or down arrow button to set the desired minutes value.
 - c. Once the correct minutes value has been set, press the right arrow button to set the pump off time. This is the time of day that the pump will be disabled. "PUMP OFF TIME" and "SET HOURS" will be displayed on the screen. Press the up or down arrow button to set the desired hours value.
 - d. Once the correct hours value has been set, press the right arrow button to set the minutes value. The display will read "SET MINUTES". Press the up or down arrow button to set the desired minutes value.
 - e. Proceed to step 9 below.

SERVICE PRO® WASP START-UP AND OPERATION (Cont.)

8. If the CYCLE TIMER mode has been selected, press the right arrow button on the touchpad to set the pump on time. This is the length of time that the pump will operate each cycle.
 - a. "PUMP CYCLE ON TIME" and "SET HOURS" will be displayed on the screen. Press the up or down arrow button to set the desired hours value.
 - b. Once the correct hours value has been set, press the right arrow button to set the minutes value. The display will read "SET MINUTES". Press the up or down arrow button to set the desired minutes value.
 - c. Once the correct minutes value has been set, press the right arrow button to set the seconds value. The display will read "SET SECONDS". Press the up or down arrow button to set the desired seconds value.
 - d. Once the correct seconds value has been set, press the right arrow button to set the pump off time. "PUMP CYCLE OFF TIME" and "SET HOURS" will be displayed on the screen. Press the up or down arrow button to set the desired hours value.
 - e. Once the correct hours value has been set, press the right arrow button to set the minutes value. The display will read "SET MINUTES". Press the up or down arrow button to set the desired minutes value.
 - f. Once the correct minutes value has been set, press the right arrow button to set the seconds value. The display will read "SET SECONDS". Press the up or down arrow button to set the desired seconds value.
9. Press the right arrow button on the touchpad to enter the auxiliary input alarms configuration screen. The display will read "AUXILIARY ALARMS" and the AUX1 value should be selected. Press the up or down arrow button to change the auxiliary 1 input from N-OP (normally open) to N-CL (normally closed) if required. If auxiliary input 1 will not be used, leave AUX1 set to N-OP.
10. Once auxiliary input 1 has been configured, press the right arrow button on the touchpad to configure auxiliary input 2. The AUX2 value should be selected. Press the up or down arrow button to change the auxiliary 2 input from N-OP (normally open) to N-CL (normally closed) if required. If auxiliary input 2 will not be used, leave AUX2 set to N-OP.
11. Once auxiliary input 2 has been configured, press the right arrow button on the touchpad to configure auxiliary input 3. The AUX3 value should be selected. Press the up or down arrow button to change the auxiliary 3 input from N-OP (normally open) to N-CL (normally closed) if required. If auxiliary input 3 will not be used, leave AUX3 set to N-OP.
12. Press the right arrow button on the touchpad to exit the programming menu. The display should read "SERVICE PRO OK" on the top line. The Service Pro WASP control center programming is complete and the system is now ready for operation.

VIEW SYSTEM STATUS AND CONFIGURATION

The Service Pro WASP control center records parameters regarding the Singulair system that can be reviewed at any time. Adjustments to the programming can be made as required. To review recorded data and system parameters:

1. Press the "SELECT" button on the touchpad. The screen should display the elapsed pump run time.
2. Press the right arrow button to review the pump cycle count.
3. Press the right arrow button to review the aerator elapsed run time.
4. Press the right arrow button to review the aerator cycle count.
5. Press the right arrow button to review the auxiliary input configurations.
6. Press the right arrow button to review failsafe mode status, software version and panel serial number.
7. Press the right arrow button to exit the system parameters menu.

PUMP TEST

The Service Pro WASP control center has a built-in pump test feature. To start a pump test, hold the "PUMP TEST" button for five seconds. The screen will display "PUMP TEST" and the pump will turn on. The pump will operate for five minutes and then will turn off.

ALARM TEST

The Service Pro WASP control center has a built-in alarm test feature. To start an alarm test, hold the "ALARM RESET" button for five seconds. The screen will display "ALARM TEST" and the audible and visual alarms will turn on for five seconds. After five seconds, the alarms will turn off.

ALARM CONDITIONS

If the Service Pro WASP control center detects an abnormal condition, the display will indicate the specific problem the system is experiencing. For example, if the aerator is drawing high amps, the display will read "AERATOR HIGH CURRENT." To silence the alarms and attempt to clear the alarm condition, press the "ALARM RESET" button. If the issue has been corrected, the system will turn off the alarms and resume normal operation. If a problem still exists, the audible alarm will be silenced for 48 hours, but the visual alarm will continue to light. In addition, detailed information regarding the specific problem will be displayed on the screen.

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10-1-19

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

WATER RESOURCES DIVISION

MEMORANDUM FOR THE DIRECTOR, BUREAU OF LAND MANAGEMENT
FROM: [Illegible]
SUBJECT: [Illegible]

DEC 29 1963
BUREAU OF LAND MANAGEMENT
WASHINGTON, D. C.

[Illegible text]

[Illegible text]

[Illegible text]

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**FISHER, COLLINS
& CARTER, INC.**

**CIVIL ENGINEERING CONSULTANTS
and LAND SURVEYORS**

Terrell A. Fisher, P.E., L.S.
Earl D. Collins, P.E.
Charles J. Crovo, Sr., P.E., L.S.

Paul W. Kriebel, P.E.
Mark L. Robel, P.L.S.
Frank Manalansan II, L.S.

February 5, 2024

Mr. Zack Silvast
Bureau of Environmental Health
8930 Stanford Blvd
Columbia, MD 21045

Re: 4196 Ten Oaks Road
Site Plan for BAT Installation

Mr. Silvast,

We are in receipt of your comment letter dated January 23, 2024. We are responding to your comments with the following item-by-item response:

Review Comments:

1. *Label title as "Site Plan for BAT Installation."*

Response: The title has been labeled "Site Plan for BAT Installation."

2. Agricultural pump tank is located less than 100' from neighboring well HO-95-0469.
Please correct.

Response: The Agricultural pump has been revised to be 100' from the neighboring well HO-95-00469.

3. Need to show 100' well arc for that neighboring well also.

Response: 100' well arc for that neighboring well has been shown.

4. We recommend putting an effluent filter inside the 1500GAL tank/pump pit for the agricultural structure as an added safety measure to avoid issues with the pump and the 2" force main.

Response: A note has been added to the 1,500 gal tank detail for the contractor to add an effluent filter inside the tank.

5. Bottom left perc hole not labeled.

Response: The bottom left perc hole has been labeled.

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& CARTER, INC.**

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and LAND SURVEYORS**

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Mark L. Robel, P.L.S.
Frank Manalansan II, L.S.

6. Lateral lengths should be 47.25 for 14 perforations with 3.5' spacing.

- a. Need to clearly state that manifold to first perforation should be 1.75'.
- b. Need to clearly state that "last perforation" should be inside elbow.

Response: The manifold to first perforation has been clearly stated to be 1.75' in the Trench Lateral Aerial/Plan View with Linear Dimensions detail and the "last perforation" has been clearly stated to be inside the elbow on End Lateral Turn-Up detail.

7. It was recommended that the manifold be constructed of 3" PVC.

- a. The force main, which is separate, can be either 2" or 3" based on designer preference.
- b. Health has no objections to either choice as long as calculations are correct and that the best pump is chosen for either design.

Response: The force main has been designed as 3" PVC.

8. Need to clearly label trenches 1, 2, and 3 on site plan drawing.

Response: The trenches have been clearly labeled.

9. Need to clearly show spun geotextile fabric 6" above inlet in all three trench details.

Response: The spun geotextile fabric has been shown 6" above the 2" PVC invert on all three trench details.

10. Should specify that stone in trench is $\frac{3}{4}$ " to 2" only.

Response: It has been specified in the trench details that the stone shall be $\frac{3}{4}$ " to 2" only.

11. Show three observation ports, one in each trench.

- a. Need to provide observation port detail.
- b. Should be near middle end.

Response: Observation ports have been shown on each trench in the detail and in plan view.

12. Still should show 4195 Ten Oaks Road existing well on BAT plan.

Response: The exiting well on 4195 Ten Oaks Road has been shown on the BAT plan.

**FISHER, COLLINS
& CARTER, INC.**

**CIVIL ENGINEERING CONSULTANTS
and LAND SURVEYORS**

Terrell A. Fisher, P.E., L.S.
Earl D. Collins, P.E.
Charles J. Crovo, Sr., P.E., L.S.

Paul W. Kriebel, P.E.
Mark L. Robel, P.L.S.
Frank Manalansan II, L.S.

13. Recommend looking at BAT site plan requirements for three other missing general notes from Environmental Health website.

Response: The BAT notes have been updated and reflect what is on the Environmental Health website.

Thank you for your technical review. The comments have been addressed on the revised plans.

Very Truly Yours,
Fisher, Collins and Carter, Inc.



Luke A. Groom, P.E.

W.O. # 22059
Cc: File

FEB 05 2024

Silvast, Zackary

From: Silvast, Zackary
Sent: Wednesday, July 12, 2023 8:18 PM
To: Luke Groom
Cc: Paul Cavanaugh
Subject: regarding OSDS for 4196 Ten Oaks Rd (Mae Parsley) revision comments

To Whom It May Concern,

This was reviewed a few weeks ago, but I did not send comments out officially. I thought that I had typed up the comments in my usual format, and sent them out. I do not know why the file was put back in pending. So I will send these out now formally here and expedite the resubmittal when ready.

1. The actually site plan details should be a larger scale at least 1" = 40' preferably 1"= 30.
2. Some details are on the plan twice, profile twice, multiple tank details. One tank detail for 1000 gallon pump pit?
3. Need to adjust orientation of first replacement system to be more similar on contour to initial system.
4. Need to keep 2nd replacement system entirely below contour 632 and the three laterals should all have a similar contour orientation.
5. Need to show and specify/label 10 hole distribution box.
6. Keep calculations on page 1, and put all other necessary details on 2nd page.
7. It is recommended that all systems involving a pump have pipe laying at 2' in the trenches with an adjusted 6.5' gravel (6 feet below and 6 inches above).
 - a. Fix in trench detail.
 - b. Need to show starting effective depth on that detail also.
8. Need to label force main.
9. Need to show existing well with correct tag number.
10. Need to better label profiles and differentiate between house and "agricultural structure."
11. I don't see an existing agricultural structure on GIS, also specify 1-story or 2-story, and use.
 - a. Is this the extra 150 GPD added to all three system calculations? (should specify)
12. Effective depth is wrong in system calculations for two designs. (should be 5' for all)
13. Fix detail for back river 2000 GAL pump tank.

We look forward to your resubmittal. Thank you.

- ZS

Zack Silvast (LEHS)

Plan Review Supervisor - Water & Sewer Division

410-313-1777

Environmental Health Bureau

Howard County Health Department

4196 Ten Oaks Road (Mae Parsley) comments

1. No trenches, 50 feet and under, can be split into center feed distribution.
 - a. Should be end feed.
2. Need to show 3-inch manifold, clearly and distinctly labeled.
3. Shouldn't the 1000 GAL "2 compartment" septic tank in actuality be a one compartment settling tank?
 - a. Two compartment settling tank means one chamber is going to get gunked up quick & it won't settle as nicely. Or you could propose a normal 1500 GAL two compartment if you really wanted that "double settling" but it's almost unnecessary when it'll be connected to a BAT unit for "true" pre-treatment.
4. The plans are currently chaotic with all the tank diagrams. Can we please get good bold labels on these & maybe keep all the figures together for each system?
 - a. Right now it's PUMP DETAIL. Ok pump detail for what? And now I have to read 7 little notes to figure out which one it is.
 - b. And the notes are not accurate. I'm seeing one Norweco BAT septic tank at a pump tank detail on the first page & my Norweco detail is the last thing on the back page.
 - c. Should get all the pump info on the 2nd page, bring the Norweco insert to the front page. And provide me all my trench & lateral details on the first page.
 - d. Missing lateral detail chart. (which appears to be broken up into several sections scattered throughout the plan)
 1. Need end to end elevations, for trench slope requirements. There can be no more than 10% elevation change between all three laterals.
 2. Need perforation spacing. GAL per trench. Perforation diameter, lateral length. Lateral diameter.
5. Each system should be represented in the trench detail chart.
 - a. Initial, replacement 1, replacement 2.

6. Lateral inverts should be closer to two feet depth. Correct stone and earth cover.
 - a. Lateral length should be 47.25 (still 14 perforations)
7. Each selected pump, from the manufacturer pump curves, should be labeled and near their respective pump chamber details & calculations.
8. We are calculating that the dose from the agricultural structure should be around 105 GAL dose based on the run and the friction. Right now under a little bit too much.
9. Need to show sched. 40 PVC sleeve under driveway for agricultural structure force main. (label driveway)
10. Label all housing structures with appropriate addresses.
11. Label SDA and with correct square footage.
12. Label 1500 sq. ft. well box.
13. In the system calculations next to the vicinity map, specify the extra 150 GPD added to each system is for the agricultural structure utilities.
14. Remove note #6, not relevant.
15. Consolidate space by saying that the system specifications for initial and both replacements are the exact same calculations and depths. *Can technically remove replacement 1 & 2 specs since same as initial. Just clarify all three systems will be designed with the specs.
16. The two norweco service sheets could just be provided as a separate supplemental relayed on an 8" x 11" letter-style paper.
17. We will need a signed O&M agreement prior to septic permit release.



Bureau of Environmental Health
8930 Stanford Blvd | Columbia, MD 21045
410.313.2640 - Voice/Relay
410.313.2648 - Fax
1.866.313.6300 - Toll Free

Maura J. Rossman, M.D., Health Officer

OPERATION AND MAINTENANCE AGREEMENT
FOR AN ON-SITE SEWAGE DISPOSAL SYSTEM
HAVING AN ADVANCED PRE-TREATMENT SYSTEM

THIS AGREEMENT is made this 20th day of Dec 2023 among TRUSTEES INNALELLAH
REVOCABLE LIVING TRUST ABDALLA BASHEER TRUSTEE, hereinafter collectively referred to as
"Owner", and the Howard County Health Department hereinafter referred to as the "County".

WHEREAS, Owner is the owner or contract owner of a parcel of land located at
4196 Ten Oaks Road, in the 5th Election District of Howard
County, Maryland, and the deed and subdivision plat of the property is recorded among the Land
Records of Howard County, Maryland, Tax Map # 22, Block # 20, Parcel # 179, Deed
Reference # 21852, 80 and Tax Account # 05-362695 ("the Property").

WHEREAS, The Property is suitable for the installation of a conventional on-site sewage
disposal system with an advanced pre-treatment system, utilizing best available technology to
perform nitrogen reduction, in accordance with the Code of Maryland Regulations 26.04.02.07,
effective November 24, 2016. The pre-treatment device being installed is
Norweco BAT tank

NOW, THEREFORE, the parties hereto agree as follows:

A. Owner hereby grants to the County the right to enter upon the Property at any reasonable time
with prior notice for access to the system to make periodic inspections and the Owner agrees to
provide any information and data in Owner's possession reasonably requested and needed by the
County.

B. Owner acknowledges and agrees that neither the County nor any of its agents or employees,
either officially or individually, underwrites the operation of any system approved by them.

C. The Owner will devote reasonable care and effort to the operation and maintenance of the
system in perpetuity or until a public sewer connection is made so that a system malfunction is
not the result of poor maintenance, faulty operation, or neglect.

D. The Owner agrees to enter into a contract reasonably acceptable to the Owner and the County
with a private entity to operate and maintain on a regularly scheduled basis an approved
advanced pre-treatment system. The owner shall supply a copy of the contract to the County
when it is renewed or altered.

E. This agreement shall run with the land and upon Owner's taking title to the Property, shall
bind the Owner, their heirs, successors, and assigns to the provisions of the agreement as long as

LR - Agreement 20.00
Recording Fee 20.00
Name: Basheer
Ref: 5
LR - Agreement 40.00
Surchar:
SubTotal 00.00
Total: 01:30
04/05/2024 01:30
#18017720503
Howard County/CCS 03-06
City/CCS 03-06
Registrar 03-06
CCS-CH

HOWARD COUNTY CIRCUIT COURT (Land Records) WAR 22311, p. 0257, MSA_CE53_22303. Date available 04/11/2024. Printed 02/24/2025.

the property is in existence and after installation of the system. Owner further agrees that they shall inform in writing any subsequent purchaser or lessee of the Property that the system shall require maintenance or other attention. Upon taking title to the Property, the Owner agrees to cause this agreement to be recorded in the Land Records of Howard County and assure that it becomes part of the Deed for the subject property in order that prospective buyers may be aware of the special conditions affecting this property.

F. This agreement shall not be construed to limit any authority of the County to protect the public health, safety or comfort or to issue any other orders to take any other action which is now or may hereafter be within its authority.

G. This agreement may be voided at any time at the discretion of the County.

H. This agreement contains the entire agreement and understanding between the County and the Owner. There are no additional terms other than as contained in this agreement. This agreement may not be modified, except in writing signed by each of the parties or by their authorized representatives.

I. The laws of the State of Maryland govern the provisions of all transactions pursuant to this agreement.

J. Owner acknowledges and agrees that interior renovations to increase the number of bedrooms or an increase in living space shall not be permitted without approval from the County.

IN WITNESS WHEREOF, the parties have signed this agreement on the date indicated above.

Richard J. Davis 3/12/2024
Howard County Health Department

[Signature] 12/20/23
Owner #1 Signature Date

Bashem Abdallah
Owner #1 Print Name

Owner#2 Signature Date

Owner #2 Print Name

Buyer #1 Signature Date

Buyer #2 Signature Date

Buyer #1 Print Name

Buyer #2 Print Name