

Well Installation and Abandonment (2022-CR-32-W & WA)

Address: 906 Hockett Road Manakin Sabot, VA 23103

Scope of work:

The Richmond Regional Planning District Commission (PlanRVA) is requesting bids for the work described in this Scope of Work (SOW), which addresses the installation and abandonment of a well system at the above-referenced address. The contractor shall furnish all labor, supervision, equipment, tools, parts, supplies and materials, as necessary, to perform the services as described herein:

Cost for Line Item #1 (include total cost for items A-H). These are known factors. Vendors must invoice for actual cost incurred as described herein. The initial bid should be an average cost/foot of depth for 150 feet (add other itemized costs such as mobilization/setup, etc.). Please note: 150 feet is an estimate, once awarded the vendor should request a change order if depth is exceeding 150 feet and vendor should issue invoice/bill based on actual service performed, actual depth drilled (as verified on the GW-2 and VDH's Record of Inspection). Vendor will only be paid for actual well depth drilled, casing depth, grout depth, depth of drop pipe, pump, etc. Vendor must provide a detailed bid for 150 ft.; any additional footage must be listed as additional services at a per foot rate. Vendors who submit bids for over or under 150 feet will not be accepted.

A) Construct a private water well that meets the location, construction specifications, water quantity, and water quality requirements of the Virginia Private Well Regulations (12VAC5-630-10 et seq., the Regulations).

B) Tree Removal and Site Clearing: A pre-bid site visit is recommended to determine what if any tree removal or site clearing that may need to occur. Per the above referenced Permit, remove any trees and wood debris as described in the permit and haul away wood and debris unless notified otherwise. Costs of tree removal and site clearing should be included in initial bids. Any additional site clearing, or tree removal required during installation must be submitted in writing to and approved by VDH in writing including an additional cost estimate.

******Please note - Any personal property items that will prohibit the contractor from accessing the site or installation of the new system is the responsibility of the homeowner to remove and should not be included in the bid.**

C) Construct the above class III(B) well with a minimum of 50' of casing and grout and in compliance with **the Goochland County Health Department Well Construction Permit #23-137-0169, at 906 Hockett Road Manakin Sabot, VA 23103**, in the location shown on the permit. The permit may contain additional conditions, notes, and information needed to construct the well.

D) Provide, or subcontract with a licensed plumber and electrician to provide, the well pump, plumbing, and electrical required to convey the water under sanitary conditions from the well to the home plumbing system in the quantity required by the Regulations and the Virginia Uniform Statewide Building Code. This includes obtaining or assuring that the owner obtains all permits and inspections necessary by the local building authority in compliance with the Virginia Uniform Statewide Building Code.

Well Installation and Abandonment (2022-CR-32-W & WA)

Address: 906 Hockett Road Manakin Sabot, VA 23103

E) Disinfect the well and plumbing as required by the Regulations and provide the required Uniform Water Well Completion Report (GW2). Obtain a final compliance inspection from the health department and a Record of Inspection and assure that the well is tested and complies with the water quality requirements of the Regulations.

F) Appropriately abandon existing private drinking water supply/well. Abandon the well as specified by the Regulations and by the **Goochland County Health Department's Well Abandonment Permit #23-137-0170**. This would include disinfecting the existing well and assessing the well depth, materials, and depth to water. Salvage any materials that can be removed from the well. Additional requirements and conditions may be found on the abandonment permit. Submit the required Uniform Water Well Completion Report GW-5 Well Abandonment Form with all required information filled out.

G) Follow all regulations and permitting pertaining to erosion and sediment control including grading, seeding and strawing the site after construction to return to the original state. Control construction runoff with proper practices so as not to become a nuisance to the owner or to neighboring properties or cause sediment to be discharged into state waters and drainage ditches. Any construction debris must also be removed from the site and disposed of properly.

H) Bidders shall comply with all requirements of the Department of Professional and Occupational Regulations (DPOR) for contracting and executing the contract with the Virginia Department of Health. Operate within the requirements of the DPOR Water Well System Provider Certification and proof of insurance. Bidders contacted by VDH to provide any missing required documents must provide the document within 24 business hours or their bid will be considered non-responsive.

I) Provide to Mbittner@planrva.org the following information by the listed deadline:

- **Project Start and End Dates:** Estimated project start and completion dates to be provided **two (2) weeks prior to the start of the installation/work or within four (4) weeks** after issuance of **PO (issuance of Notice to Proceed)**; whichever is earlier.
- **Name and licensure of subcontractor(s):** The contractor shall within **four (4) weeks after the signing of the contract (or within two weeks of the work starting** or within 1 week after changing subcontractor; whichever is earlier), notify VDH in writing of the names of subcontractors proposed for the principal parts of the work.
- **Request for Change Orders:** All request for changes must be provided in writing per the contract terms and conditions and are not authorized until a response in writing is sent by the SWAP team.
- **Request for Extensions:** If it is determined that the work will not be able to be completed by the contract expiration date listed in the Notice to Proceed and the PO, a request for an extension must be provided, in writing, a minimum of two weeks prior to contract expiration date. Justification for why work could not be performed within original

Well Installation and Abandonment (2022-CR-32-W & WA)

Address: 906 Hockett Road Manakin Sabot, VA 23103

contract term must be provided. Extensions requested on or after the expiration date will not be able to be accommodated.

J) Provide all required documentation (completion report, water tests GW-2 and/or GW-5, etc.) to the **Goochland County Health Department** following completion of construction in order to obtain a Record of Inspection for both the well installation and well abandonment.

K) Submit invoice to **grading, seeding and strawing** once the Local Health Department has inspected the work and has issued the Record of Inspection (ROI) along with a copy of the ROI, GW-2, GW-05, lab results and completion statement.

Additional Services (If needed)

Bidder must contact Mbittner@planrva.org listed on the **Notice to Proceed for approval prior to any additional services performed. PlanRVA will issue a change order for actual additional services rendered.**

- A. Additional depth (beyond 150 ft.): provide a per foot rate for additional depth. If bidder has an estimate of how deep the well may be at this location, please provide. Examples:
 - a. Additional Depth (beyond 150 feet): \$xx/ft, estimated additional depth 250 feet, estimated total well depth 400 feet.
- B. Additional cost for installation of a pump below 150 ft., including per foot cost for drop pipe.
- C. Additional Services beyond what was quoted in A-K above (please list/enumerate and detail).

Breakdown of Total Cost

When responding to solicitation, Bidders must attach a document listing breakdown of total cost for line item 1. Bidders must attach a separate breakdown of cost for additional services.

Additional cost should not be included in line item 1 bid submission.

Optional site visit: If a site visit is needed, please **contact Mark Bittner** to arrange a day/time for a site visit. Do not go on site without prior permission from PlanRVA.

Additional questions:

Contact Mark Bittner via email: mbittner@planrva.org

Notice to Proceed

If Bidder is selected for award, the Bidder shall be required to provide a **signed Notice to proceed** form within 3 business days of notification. PlanRVA will provide a form for signature.



Goochland Health Department
 1800 Sandy Hook Rd, PO Box 178
 Goochland, Virginia 2063
 (804) 556-5842 Voice
 (804) 556-3707 Fax

Private Well Construction Permit

August 24, 2023

Tax Map/ GPIN #: 58-1-0-41-0/7715-72-3445
 HDID #: 23-137-0169
 Owner Name:

Property Address:

906 Hockett Rd
 Manakin Sabot, VA 23103

Mailing Address:

906 Hockett Rd
 Manakin Sabot, VA 23103

The attached drawings and below specifications constitute your permit to install a private well on the property referenced above. This permit is null and void if conditions are changed from those shown on your application or if conditions are changed from those shown on the attached construction drawings and specifications. VDH may revoke or modify any permit if, at a later date, it finds that the site conditions, well location, and/or design do not substantially comply with the Private Well Regulations, 12 VAC 5-630-10 et seq, or if the well would threaten public health or the environment. There may be other local, state, or federal laws or regulations that apply to the proposed construction of this private well. The landowner is responsible at all times for complying with all applicable local, state, and federal laws and regulations, and for ensuring that the water well is properly located on the landowner's property and in the approved area indicated on the attached schematic.

Your private well must be inspected by a representative of the local health department. Your private well may not be placed into operation until you have obtained a Record of this Inspection (ROI) from the Goochland Health Department. This construction permit is transferable until expired or deemed null and void. A permit transfer form may be found on the VDH website at <http://www.vdh.virginia.gov/environmental-health/gmp-2015-01-forms/>.

Before you can obtain your ROI, you must provide the Health Department with a complete Water Well Completion Statement /GW-2 from your well driller and a record of a satisfactory bacteriological sample result.

Well Purpose: Domestic/Drinking Water
 Well Class: IIIB
 Distance from Building Sewer: 50'+
 Distance from Septic/Pretreatment Tank: 50'+
 Distance from Conveyance System: 50'+
 Distance from Absorption Area: 50'+
 Distance from Property Line: 5'+
 Distance from Dwelling: 69'

Minimum Casing Depth: IIIB 50'
 Minimum Grout Depth: IIIB 50'

THIS PERMIT EXPIRES: February 24, 2028.

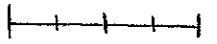
Issued by:



 Gregory DeBoe, Environmental Health Specialist
 Attachments: Construction Drawing

Date: August 24, 2023

1" = 40' Scale



906 Hockett Rd

VDH Well Permit #

VDH Well Abandonment Permit

New Well HDID#: 23-131-0169

Well Abandonment HDID#: 23-131-0170

TM/GPIN: 58-1-0-41-0/7715-72-3445

★ Install:

New III B Well

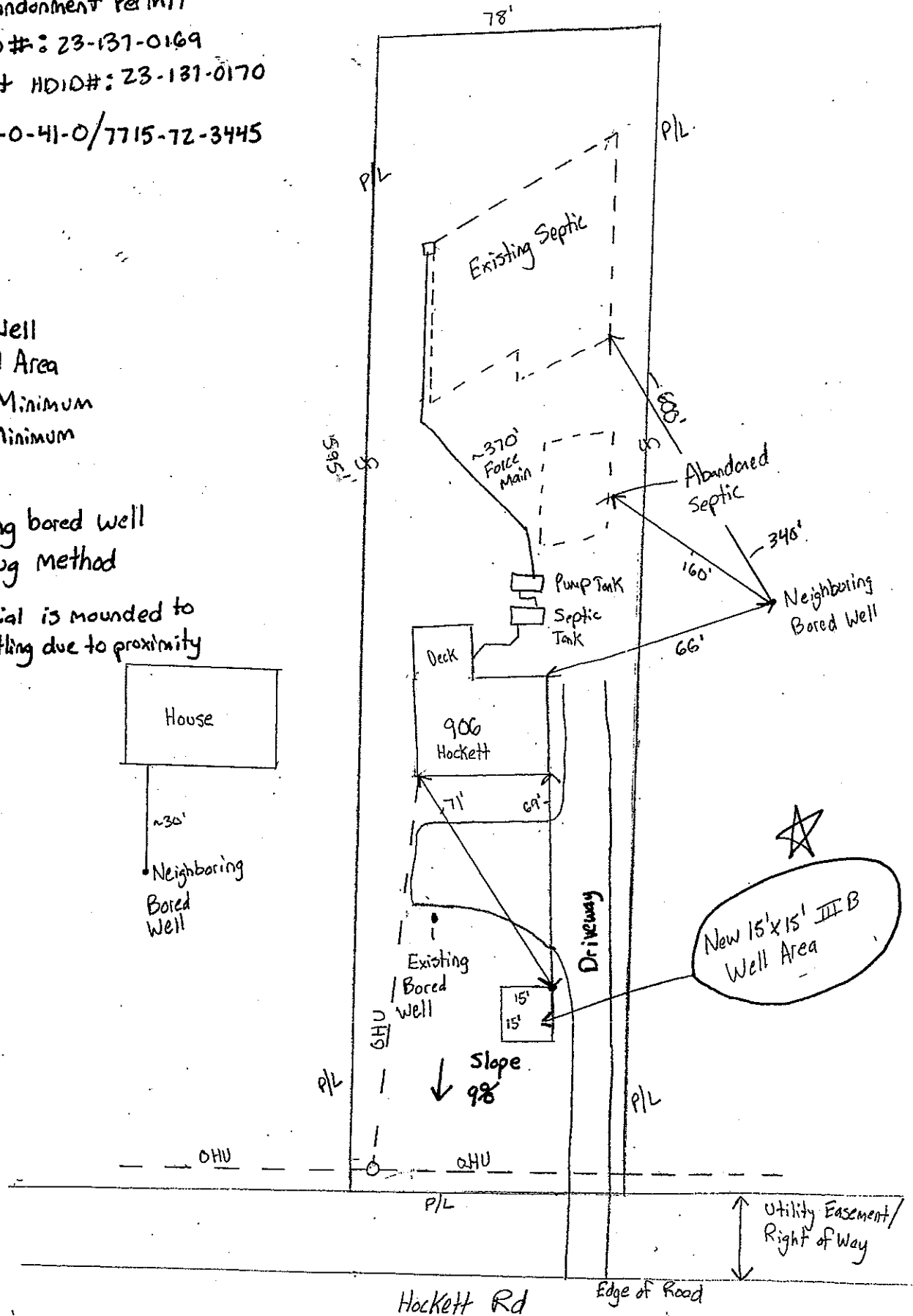
15' x 15' Well Area

50' Casing Minimum

50' Grout Minimum

★ Abandon existing bored well via bentonite plug method

★ Ensure fill material is mounded to accommodate for settling due to proximity to the driveway.





Goochland Health Department
1800 Sandy Hook Rd, PO Box 178
Goochland, Virginia 2063
(804) 556-5842 Voice
(804) 556-3707 Fax

Private Well Abandonment Permit

August 24, 2023

Tax Map/GPIN: 58-1-0-41-0/7715-72-3445
HDID #: 23-137-0170

Property Address:
906 Hockett Rd
Manakin Sabot, VA 23103

Mailing Address:
906 Hockett Rd
Manakin Sabot, VA 23103

The attached drawings and below specifications constitute your permit to abandon a private well on the property referenced above. This permit is null and void if conditions are changed from those shown on your application or if conditions are changed from those shown on the attached construction drawings and specifications. VDH may revoke or modify any permit if, at a later date, it finds that the site conditions, well location, and/or design do not substantially comply with the Private Well Regulations, 12 VAC 5-630-10 et seq, or if the well would threaten public health or the environment. There may be other local, state, or federal laws or regulations that apply to the proposed construction of this private well. The landowner is responsible at all times for complying with all applicable local, state, and federal laws and regulations, and for ensuring that the water well is properly located on the landowner's property and in the approved area indicated on the attached schematic.

Your private well abandonment must be observed by a representative of the local health department. This abandonment permit is transferable until expired or deemed null and void. A permit transfer form may be found on the VDH website at <http://www.vdh.virginia.gov/environmental-health/gmp-2015-01-forms/>.

Please provide the Health Department with a complete Water Well Completion Statement /GW-2 from your well driller.

Well Purpose: Domestic Drinking Water
Existing Well Class: **IIIC**

Other Comments: Abandon using bentonite plug method (Bored). Please contact the Goochland Health Department 24-48 prior to scheduled abandoning.

THIS PERMIT EXPIRES: February 24, 2028

Issued by: 

Gregory DeBoe, Environmental Health Specialist

Date: August 24, 2023

Attachments: Construction Drawing
VDH Regulations
Abandonment Procedures

906 Hockett Rd

VDH Well Permit #

VDH Well Abandonment Permit

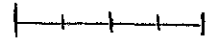
New Well HDID#: 23-137-0169

Well Abandonment HDID#: 23-137-0170

TM/GPIN: 58-1-0-41-0/1715-72-3445



1" = 40' Scale



★ Install:

New III B Well

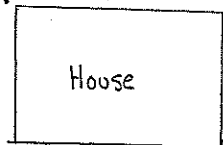
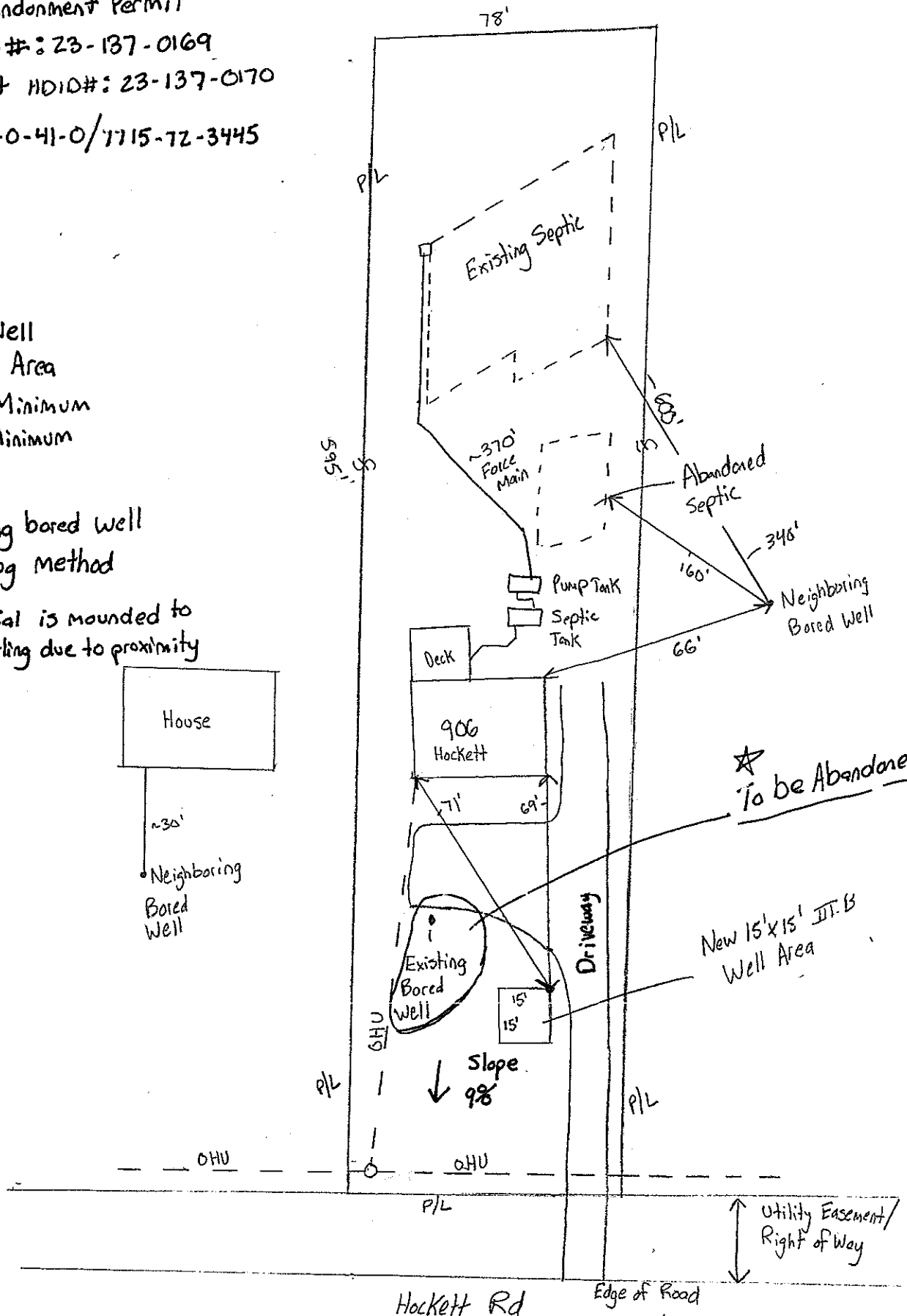
15' x 15' Well Area

50' Casing Minimum

50' Grout Minimum

★ Abandon existing bored well via bentonite plug method

★ Ensure fill material is mounded to accommodate for settling due to proximity to the driveway.



Neighboring Bored Well

New 15' x 15' III B Well Area

★ To be Abandoned

Hockett Rd

Edge of Road

Utility Easement/Right of Way

Private Well Regulations

Virginia Department of Health
July 2000

12 VAC 5-630-450. Well abandonment.

A. Well abandonment is governed jointly by the Department of Environmental Quality and the Department of Health pursuant to ' 62.1-44.92(6) of the Ground Water Act of 1973 (Repealed). In addition, the abandonment of any private well governed by this chapter, or any private well abandoned as a condition of a permit issued under this chapter, shall be administered by the Department of Health in conformance with this section.

B. A temporarily abandoned well shall be sealed with a water-tight cap or well head seal. Such a well shall be maintained so that it will not be a source or channel for contamination to ground water during temporary abandonment.

C. Permanent abandonment. The object of proper permanent abandonment is to prevent contamination from reaching ground water resources via the well. A permanently abandoned well shall be abandoned in the following manner.

1. All casing material may be salvaged.

2. Before the well is plugged, it shall be checked from land surface to the entire depth of the well to ascertain freedom from obstructions that may interfere with plugging (sealing) operations.

3. The well shall be thoroughly chlorinated prior to plugging (sealing).

4. Bored wells and uncased wells shall be backfilled with clean fill to the water level. A two-foot-thick bentonite plug shall be placed immediately above the water level. Clean fill shall be placed on top of the bentonite plug and brought up to at least five feet from the ground surface. The top five feet of the well casing, if present, shall be removed from the bore hole. In an open annular space is present around the well casing, the annular space shall be filled with grout to the maximum depth possible, but less than or equal to 20 feet. A one-foot-thick cement or bentonite grout plug that completely fills the bore void space shall be placed a minimum of five feet from the ground surface. The remaining space shall be filled with clean fill which is mounded a minimum of one foot above the surrounding ground surface. Bored wells or uncased wells abandoned in this manner shall be treated as wells with respect to determining the minimum separation distance to sources of contamination listed in Table 3.1. The location of these wells shall be permanently marked for future location.

5. Wells constructed in collapsing material shall be completely filled with grout or clay slurry by introduction through a pipe initially extending to the bottom of the well. Such pipe shall be raised, but remain submerged in grout, as the well is filled.

6. Wells constructed in consolidated rock formations or which penetrate zones of consolidated rock may be filled with sand or gravel opposite the zones of consolidated rock. The top of the sand or gravel fill shall be at least five feet below the top of the consolidated rock and at least 20 feet below land surface. The remainder of the well shall be filled with grout or clay slurry.

7. Other abandonment procedures may be approved by the division on a case by case basis.

8. Test and exploration wells shall be abandoned in such a manner to prevent the well from being a channel for the vertical movement of water or a source of contamination to ground water.

9. When bored wells are bored and a water source is not found, and the casing has not been placed in the bore hole, the bore hole may be abandoned by backfilling with the bore spoils to at least five feet below the ground surface. A two-foot-thick bentonite grout plug shall be placed at a minimum of five feet from the ground surface. The remainder of the bore hole shall be filled with the bore spoils.

**Table 3.1
Distances (in feet) Between a Well and a Structure or
Topographic Feature**

Structure or Topographic Feature	Class III C or IV	Class III A or B
Building Foundation	10	10
Building Foundation (Termite Treated)	50 ₁	50 ₁
House Sewer Line	50 ₂	50 ₂
Sewer Main including force mains	50 ₃	50 ₃
Sewerage System	50	50
Pretreatment System (e.g. Septic Tank, Aerobic Unit, etc.)	50	50
Sewage Disposal System or other contaminant source (e.g., drainfield underground storage tank, barnyard, hog lot, etc.)	100	50
Cemetery	100	50
Sewage Dump Station	100	50 ₁

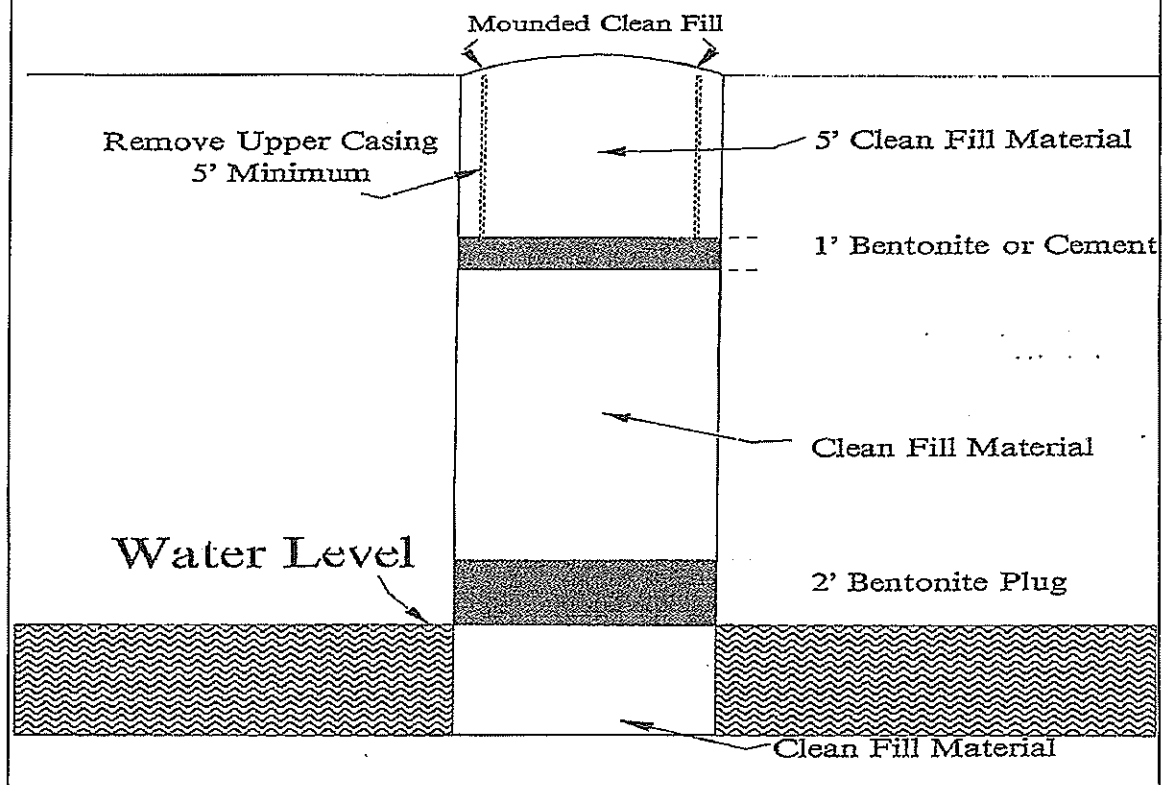
¹ See 12 VAC 5-630-380.F.

² Private Wells shall not be constructed within 50 feet of a house sewer line except as provided below.

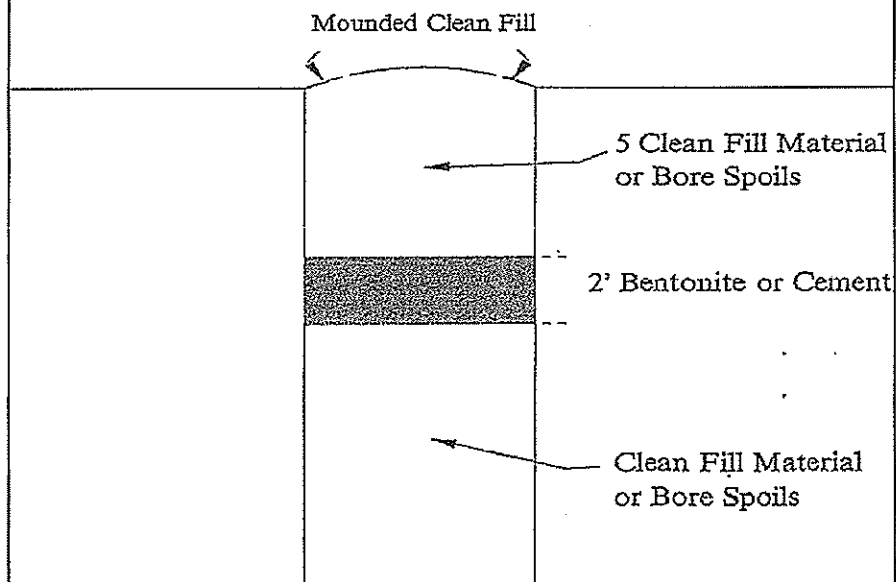
Where special construction and pipe materials are used in a house sewer line to provide adequate protection, and the well is cased and grouted to the water bearing formation, all classes of private wells may be placed as close as 10 feet to the house sewer line. Special construction for house sewer lines constitutes cast iron pipe with water-tight caulked joints or mechanical joints using neoprene gaskets, or solvent welded Schedule 40 or better polyvinyl chloride (PVC) pipe. It is the responsibility of the applicant to provide documentation from the contractor that such construction and pipe materials have been installed. In no case shall a private well be placed within 10 feet of a house sewer line.

³ Private Wells shall not be constructed within 50 feet of a sewer main except as provided below. Where special construction and pipe materials are used in a sewer main to provide adequate protection, and the well is cased and grouted to the water bearing formation, Class III wells may be placed as close as 35 feet to a sewer main and Class IV wells as close as 10 feet. Special construction for sewer mains constitutes ductile iron pipe with water-tight joints, solvent welded Schedule 40 or better polyvinyl chloride (PVC) pipe (SDR-35 plastic PVC with neoprene gaskets). It is the responsibility of the applicant to provide documentation from the local building official or sanitary district that such construction and pipe materials have been installed. In no case shall a Class III well be placed within 35 feet of a sewer main. Likewise, in no case shall a Class IV well be placed within 10 feet of a sewer main.

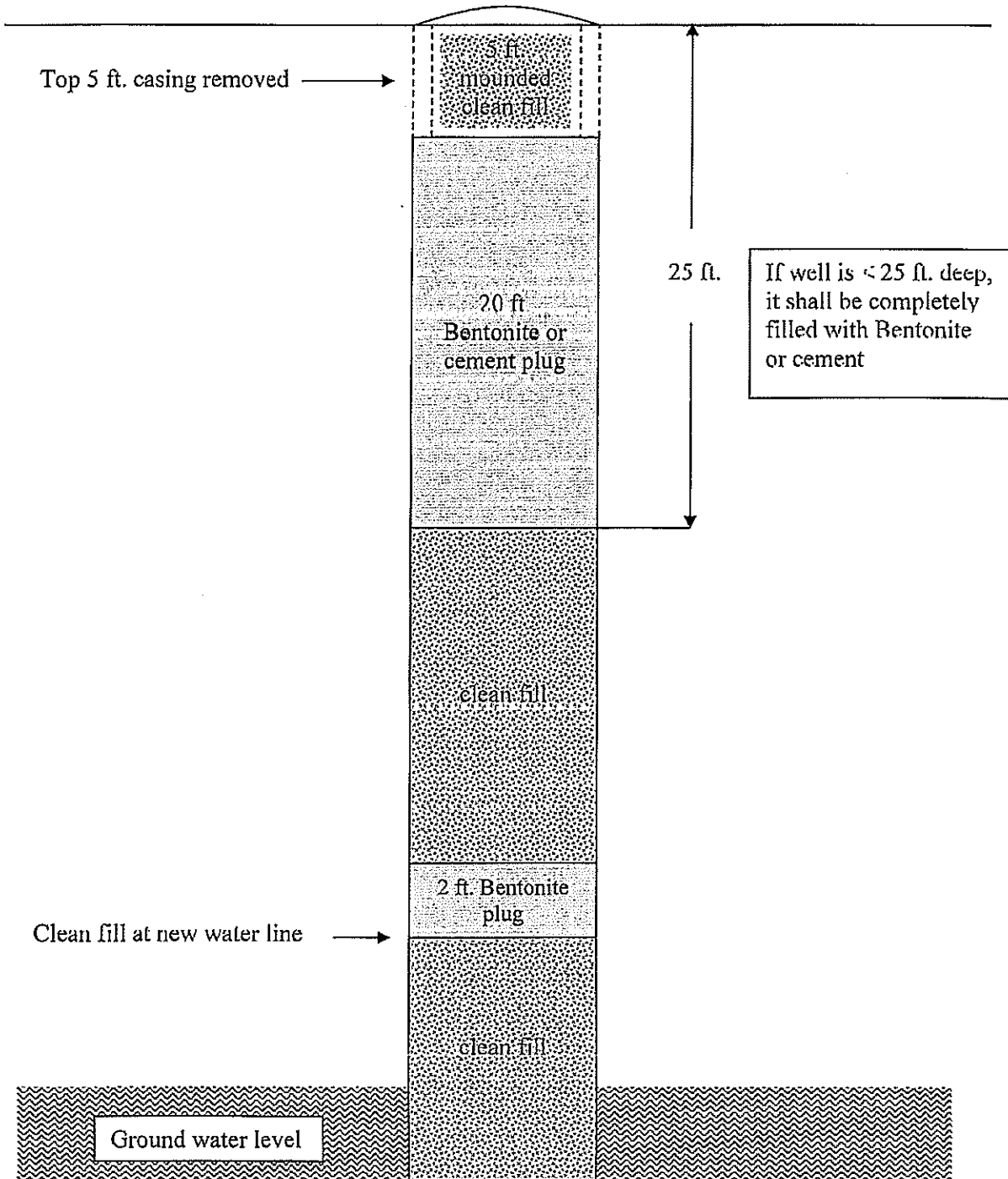
Abandonment of Bored, Cased Wells Containing Water



Abandonment of Bored, Uncased Dry Wells

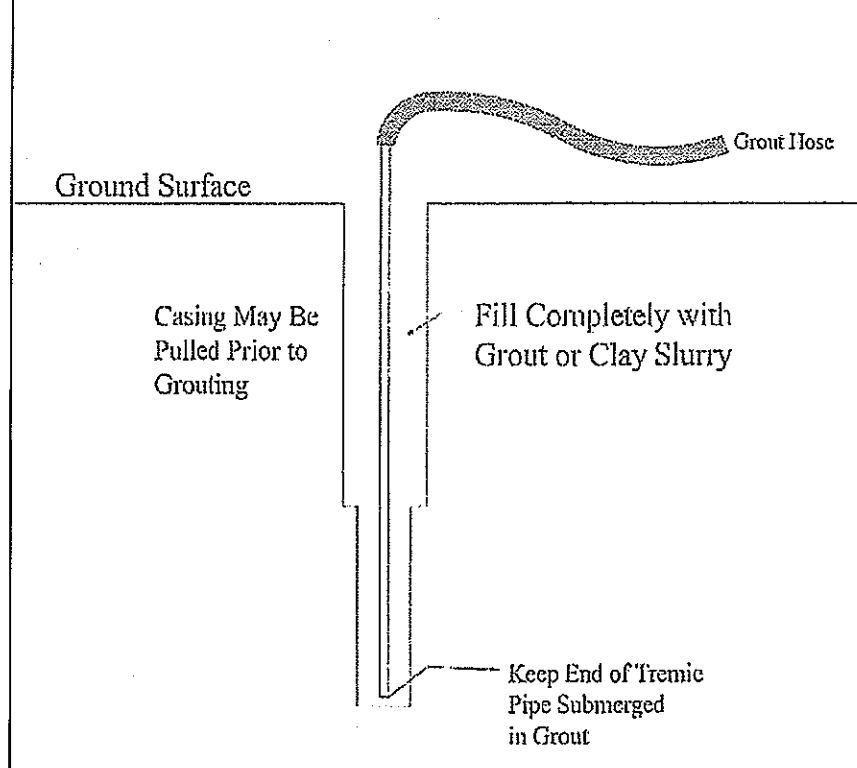


Enhanced Abandonment for Bored Wells



* All pump hardware shall be removed and well shall be thoroughly chlorinated prior to sealing.

Abandonment of Drilled Wells in Collapsing Material



An Environmental Health Specialist **MUST** be present at the time of abandonment. Contact your local health department twenty four (24) hours prior to the abandonment. A Well Completion Report must be filled out and submitted to the local health department following the abandonment. Please contact your local health department if more information or guidance is needed when abandoning a well.

Charles City County Health Department

7501 Adkins Rd
Charles City, VA 23030
Phone: (804) 829-2490
Fax: (804) 829-6702

New Kent County Health Department

7911 Courthouse Way
New Kent, VA 23124
Phone: (804) 966-9640
Fax: (804) 966-5210

Goochland County Health Department

1800 Sandy Hook Rd
PO Box 178
Goochland, VA 23063
Phone: (804) 556-5843
Fax: (804) 556-3707

Hanover County Health Department

12312 Washington Highway
Ashland, VA 23005
Phone: (804) 365-4313
Fax: (804) 365-4355