

BID NO. PUR-1377
AIP 3-24-0019-058; MAA-GR-18-016
INVITATION TO BID
ISSUED ON BEHALF OF
THE BOARD OF COUNTY COMMISSIONERS
OF WASHINGTON COUNTY, MARYLAND
BY

THE WASHINGTON COUNTY PURCHASING DEPARTMENT
100 WEST WASHINGTON STREET, ROOM 3200
HAGERSTOWN, MD 21740
PHONE: 240-313-2330 / FAX: 240-313-2331

DATE ISSUED: February 28, 2018

BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION

**PRE-BID CONFERENCE DATE/
TIME AND LOCATION:**

Wednesday, March 7, 2018 at 11:00 A.M. (EST)
Hagerstown Regional Airport
Terminal Conference Room
18434 Showalter Road
Hagerstown, MD 21742

DEADLINE FOR QUESTIONS:

No later than **4:00 P.M. (EDST), Wednesday, March 14, 2018**

SUBMIT BIDS TO:

Washington County Purchasing Department
Washington County Administration Complex
100 West Washington Street
Third Floor, Room 3200
Hagerstown, MD 21740

**BID SUBMISSION DEADLINE
AND BID OPENING TIME:**

No later than **2:00 P.M. (EDST), Wednesday, March 28, 2018**

BID OPENING LOCATION:

Washington County Administration Complex
Conference Room 3000
Third Floor, 100 West Washington Street
Hagerstown, MD 21740

If indicated below (✓) and not waived by the County, Bidders shall be required to provide the following:

- A Bid Bond, in the amount of five (5%) percent of the bid on a bid of \$100,000 or more for construction contracts. See "Bid Bonds – Section 2" of the General Conditions and Instructions to Bidders.
- A Performance Bond for a bid award of \$100,000 or more on construction contracts. See "Bid Bonds – Section 2" of the General Conditions and Instructions to Bidders.
- A Labor and Material Bond for a bid award of \$100,000 or more on construction contracts. See "Bid Bonds – Section 2" of the General Conditions and Instructions to Bidders.

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PUR-1377
BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION

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SECTION I
INVITATION TO BID

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100 West Washington Street, Room 3200 | Hagerstown, MD 21740-4748 | P: 240.313.2330 | F: 240.313.2331
www.washco-md.net

PUR-1377
INVITATION TO BID
BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION
AT HAGERSTOWN REGIONAL AIRPORT – RICHARD A. HENSON FIELD

The Board of County Commissioners of Washington County, Maryland will accept sealed bids for **Brumbaugh-Kendle-Grove Farmstead Demolition - at Hagerstown Regional Airport**. Bid documents are available immediately from the Washington County website: www.washco-md.net by accessing “Divisions & Departments / Purchasing Department / Open Bid Invitations” or may be obtained in the Washington County Purchasing Department, Washington County Administration Complex, 100 West Washington Street, Third Floor, Room 3200, Hagerstown, MD 21740. **Direct all inquiries to Brandi Naugle, CPPB, Buyer at telephone 240-313-2330 or fax 240-313-2331.**

All bids must be enclosed in a sealed opaque envelope marked “**SEALED BID – (PUR-1377) BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION – AT HAGERSTOWN REGIONAL AIRPORT**” and be received and time stamped by the Washington County Purchasing Department, Washington County Administration Complex, 100 West Washington Street, Third Floor, Room 3200, Hagerstown, Maryland, 21740, no later than **2:00 P.M. (EDST) on Wednesday, March 28, 2018** after which time they will be publicly opened in Third Floor Conference Room 3000 of the same building complex. All interested parties are invited to be present.

A Pre-Bid Conference will be held on **Wednesday, March 7, 2018 at 11:00 A.M. (EST)** in the Hagerstown Regional Airport Terminal Conference Room, 18434 Showalter Road, Hagerstown, Maryland 21742. All interested bidders are requested to be present. Attendance is not mandatory but is strongly encouraged.

NOTE: All Bidders must enter the Washington County Administration Complex through either the front door at the 100 West Washington Street entrance or through the rear entrance (w/blue canopy roof) which is handicap accessible, and must use the elevator to access the Purchasing Department to submit their proposal and/or to attend the Pre-Proposal Conference. Alternate routes are controlled by a door access system. Washington County Government has announced new security protocols being implemented at the Washington County Administration Complex at 100 West Washington Street, Hagerstown. The new measures took effect Tuesday, February 14, 2017. The general public will be subject to wand search and will be required to remove any unauthorized items from the building prior to entry. Prohibited items include, but are not limited to: Weapons of any type; Firearms, ammunition and explosive devices; Cutting instruments of any type - including knives, scissors, box cutters, work tools, knitting needles, or anything with a cutting edge, etc.; Pepper spray, mace or any other chemical defense sprays; and Illegal substances.

Washington County shall make positive efforts to utilize Disadvantaged Business Enterprises for its supplies and services and shall allow these sources to maximum feasible opportunity to compete for contracts. The Board of County Commissioners does not discriminate on the basis of race, color, national origin, sex, religion, age and disability in employment or the provision of services. Individuals requiring special accommodations are requested to contact the undersigned at 240-313-2330 Voice, TTY Dial 711 to make arrangements no later than five (5) calendar days prior to the Pre-Bid Conference and/or Bid Opening.

The Board of County Commissioners of Washington County, Maryland, reserves the right to accept or reject any or all bids and to waive formalities, informalities and technicalities therein. The Board reserves the right to contact a Bidder for clarifications and may, at its sole discretion, allow a Bidder to correct any and all formalities, informalities and technicalities in the best interest of Washington County.

Bid Security in the form of a Cashier's Check, Certified Check, or Bid Bond payable to the Board of County Commissioners of Washington County Maryland, in an amount equal to five percent (5%) of the Bid Price, shall be submitted by each bidding Contractor for construction bids of \$100,000 or more. The successful bidder is required to furnish satisfactory Payment and Performance Bonds for the full amount of the Contract. Bids shall be properly and completely executed on bid forms (BID FORM) provided with the bid documents in accordance with the "Information for Bidders". All work shall conform to the drawings and specifications. The contractor shall use the Form of Proposal and Schedule of Prices forms from the Bid Documents to submit their pricing.

Contractors shall make a good faith effort to obtain Disadvantaged Business Enterprise (DBE) participation of three and one quarter (3¼%) percent of the dollar value of the Contract in accordance with the Federal Aviation Administration (FAA) DBE Program, 49 CFR 26, and the goals established by the Airport. The Board of County Commissioners does not discriminate on the basis of race, color, national origin, sex, religion, age and disability in employment or the provision of services. Individuals requiring special accommodations are requested to contact the undersigned at 240-313-2330 Voice, TTY Dial 711 to make arrangements no later than five (5) calendar days prior to the Pre-Bid Conference and/or Bid Opening.

This project, in its entirety, utilizes FAA AIP funding. FAA required contract provisions include, but not limited to: Affirmative Action Requirement (below), Buy American Preferences, Civil Rights – Title VI Notices, Civil Rights – Title VI Assurances (below), Davis-Bacon Requirements, Debarment and Suspension, Disadvantaged Business Enterprise, Trade Restriction and Certification, Lobbying and Influencing Federal Employees, and Procurement of Recovered Materials. Additional requirements can be found in Section IV "Federal Provisions for AIP Project Contracts". Compliance to the federal contract provisions of any subcontractor is also the responsibility of the Contractor.

**NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO
ENSURE EQUAL EMPLOYMENT OPPORTUNITY**

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade: 3.25%

Goals for female participation in each trade: 6.9%

- a. These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.
 - b. The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.
3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
 4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is **Hagerstown, MD – Washington County.**

Washington County, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

In addition the Maryland Department of Transportation (MDOT) and Maryland Aviation Administration (MAA) is contributing to this project through the statewide aviation grant program.

The Board of County Commissioners of Washington County, Maryland, reserves the right to accept or reject any or all bids and to waive formalities, informalities and technicalities therein. The Board reserves the right to contact a Bidder for clarifications and may, at its sole discretion, allow a Bidder to correct any and all formalities, informalities and technicalities in the best interest of Washington County.

The CONTRACT DOCUMENTS may be examined at the following location:

Washington County Purchasing Department
Washington County Administration Complex
100 West Washington Street, Room 3200
Hagerstown, MD 21740
Phone 240-313-2330

By Authority of:



Rick F. Curry, CPPO
Director of Purchasing

SECTION II
GENERAL CONDITIONS AND INSTRUCTIONS TO
BIDDERS

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BOARD OF COUNTY COMMISSIONERS
OF WASHINGTON COUNTY, MARYLAND

INTRODUCTION

The general rules and conditions which follow, along with all other documents consisting of this “Bid Document,” apply to all purchases and become a definite part of each formal invitation to bid, purchase order, contract, or other award issued by the Washington County’s Director of Purchasing (hereinafter “Director of Purchasing”), unless otherwise specified. Bidders or their authorized representatives are expected to fully inform themselves as to the conditions, requirements, and specifications before submitting bids; failure to do so will be at the Bidder’s own risk and they cannot secure relief on the plea of error. Bidders are advised that all costs related to preparing and/or submitting a Bid or Proposal shall be borne by the Bidder.

Satisfactory evidence of authority to bind the firm by the person signing the Bid when submitted by partnerships or corporations may be requested by the County prior to making any award. Anyone signing a Bid as an agent shall include evidence of his/her authority to do so.

Subject to Maryland State and Washington County, Maryland (hereinafter “County”) laws and all rules, regulations and limitations imposed by legislation of the Federal Government, bids on all advertisements and invitations issued by the Washington County Purchasing Department shall bind bidders to applicable conditions and requirements set forth herein unless otherwise specified in the Invitation to Bid. Should there be a conflict in laws between states, State of Maryland law shall prevail.

Should there be a conflict between the general bid conditions and the supplemental bid conditions (if any), the supplemental bid conditions shall prevail.

GENERAL CONDITIONS OF BIDDING

- 1. Bids Binding for Ninety (90) Days:** Unless otherwise specified all formal bids submitted shall be binding for ninety (90) calendar days following bid opening date, unless the bidder, upon request of the Purchasing Director, agrees to an extension.
- 2. Bids for All or Part:** Unless otherwise specified by the County or by the Bidder, the County reserves the right to make award on all items, or on any of the items according to the best interests of the County. Bidder may restrict his/her bid to consideration in the aggregate by so stating, but should name a unit price on each item bid upon; any bid in which the bidder names a total price for all the articles without quoting a price on each and every separate item, may be rejected at the option of the County.
- 3. Catalogs:** Each Bidder shall submit where necessary or when requested by the Purchasing Director, catalogs, descriptive literature, and detailed drawings, fully detailing features, designs, construction, finishes and the like necessary to fully describe the materials or work they propose to furnish.

4. **Collusive Bidding:** The Bidder certifies that his/her bid is made without any previous understanding, agreement or connection with any person, firm, or corporation making a bid for the same project, without unlawful prior knowledge of competitive prices, and is in all respects fair, without outside control, collusion, fraud or otherwise illegal action.
5. **Competency of Bidder:** No proposal shall be accepted from or contract awarded to any person, firm or corporation that is in arrears or is in default to Washington County upon any debt or contract, or that is a defaulter, as surety or otherwise, upon any obligation to said County, or had failed to perform faithfully any previous contract with the County. The Bidder, if requested, must present within forty-eight (48) hours evidence satisfactory to the Director of Purchasing of performance ability and possession of necessary facilities, pecuniary resources and adequate insurance to comply with the terms of these specifications and contract documents.

The successful Bidder shall actively cooperate in all matters pertaining to the proper compliance of this contract and shall come to the office of the Director of Purchasing whenever requested in connection with the performance of this contract.

The successful Bidder shall inform the Director of Purchasing of any and all circumstances which may impede the progress of the work or inhibit the performance of the contract including, but not limited to: bankruptcy, dissolution or liquidation, merger, sale of business, assignment, etc.

The County may examine the Bidder's and any first-tier subcontractor's records to determine and verify compliance with the contract. The Bidder and any first-tier subcontractor must grant the County access to these records at all reasonable times during the contract term and for three (3) years after final payment. If the contract is supported to any extent by Federal or State funds, the appropriate Federal or State authorities may also examine these records. The Bidder must include the preceding language of this paragraph in all first-time subcontracts.

6. **Completeness:** All information required by Invitation to Bid must be supplied to constitute a proper bid. The County shall not be responsible for the premature opening of Bids if not properly addressed or identified.
7. **Conditional Bids:** Qualified bids are subject to rejection in whole or in part.
8. **Confidentiality:** Firms shall give specific attention to the identification of those portions of their proposals that they deem to be confidential, proprietary information or trade secrets and provide any justification why such materials, upon request, should not be disclosed by the County under the Access to Public Records Act, State Government Article, Title 10, Sections 10-611 to 10-628, Annotated Code of Maryland.
9. **Errors in Bids:** When an error is made in extending total prices, the written unit bid price shall govern. In the absence of written prices, the unit bid price shall govern. Carelessness in quoting prices, or in preparation of bid, otherwise, will not relieve the Bidder. *Erasures or changes in bids must be initialed.*

10. General Guaranty: Bidder agrees to:

- a. Save the County, its agents and employees harmless from liability of any nature or kind for the use of any copyrighted or un-copyrighted composition, secret process, patented or unpatented, invention, article or appliance furnished or used in the performance of the contract which the Bidder is not the patentee, assignee, licensee or owner.
- b. Protect the County against latent defective material or workmanship and to repair or replace any damages or marring occasioned in transit or delivery.
- c. Furnish adequate protection against damage to all work and to repair damages of any kind, to the building or equipment, to their own work or to the work of other contractors, for which their worker is responsible due to the negligence in the course and scope of the employment.
- d. Pay for all permits, licenses and fees and give all notices and comply with all laws, ordinances, rules and regulations of the County and State of Maryland.

11. Illegal Immigrants:

- a. The Bidder shall comply with the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, the Bidder may hire only persons who may legally work in the United States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The Bidder shall verify the identity and employment eligibility of anyone employed or to be employed, including completion of the Employment Eligibility Verification Form (I-9). The Bidder shall establish appropriate procedures and controls to ensure that no services under this Contract will be performed by any worker who is not legally eligible to perform such services or for employment.
- b. Failure by the Bidder or his/her Sub-Contractors to comply with the provisions of Section 11.a. herein will be grounds for termination of the Contract.

12. Insurance: Liability insurance on all major divisions of coverage for each and every Bidder and subcontractor shall be required for the length of the contract. Bidder and subcontractor must supply evidence of insurance upon request. Each Bidder agrees to assist in every manner possible in the reporting and investigation of any accident, and upon request, agrees to cooperate with all interested insurance carriers in the handling of any claims by securing and giving evidence and obtaining the attendance of witnesses as required for any claim or suit. The Bidder shall be prepared to show evidence of insurance as required under Washington County's *Insurance Requirements for Independent Contractors Policy*, included herein, prior to the execution of any contract. The Bidder, if requested, shall provide the Certificate of Insurance to the Purchasing Department within ten (10) calendar days after receiving a request for it. Failure to provide an acceptable Certificate of Insurance within the time frame stated above shall be cause to terminate the contract(s). The certificate shall state that such insurance is in force and cannot be cancelled or released except upon thirty (30) days prior written notice to the County. If any of the stated coverages expire during the term of this contract, the Bidder shall deliver renewal certificates to the County at least ten (10) calendar days prior to the expiration.

- 13. Interpretations, Discrepancies, and Omissions:** Should any Bidder find discrepancies in, or omissions from the documents or be in doubt of their meaning, he/she should at once request, in writing, an interpretation from:

Rick F. Curry, CPPO – Director of Purchasing
Washington County Purchasing Department
Washington County Administration Complex
100 West Washington Street, Room 3200
Hagerstown, MD 21740
FAX: 240-313-2331; or send questions in MicroSoft Word platform via
e-mail to: purchasingquestions@washco-md.net

All necessary interpretations will be issued to all Bidders in the form of addenda to the specifications, and such addenda shall become part of the contract documents. Exceptions as taken in no way obligates the County to change the specifications. Failure of any Bidder to receive any such addendum or interpretation shall not relieve such Bidder from any obligation under his/her bid as submitted. The County shall assume no responsibility for oral instructions or suggestions. ORAL ANSWERS WILL NOT BE BINDING ON THE COUNTY. Requests received after 4:00 P.M. on the date included in the Supplemental Terms and Conditions (Items 10 and 19) may not be considered.

- 14. Landfill Tipping Fees:** Disposal of items shall be at an approved sanitary landfill and any fees for same must be included in the Bidder's proposal.
- 15. Late Bids:** Formal bids or amendments thereto received by the County after the time specified for bid opening will not be considered. Bids received after the time specified for bid opening will be returned unopened.
- 16. Mailing of Bids:** The County assumes no responsibility for the timely deliverance of mailed bids. Ample time should be allowed for the transmittal of bids by mail, and postmarks indicating the date of mailing will not be considered as evidence of intent to submit bids in proper time for the opening.
- 17. Maryland Buy American Steel Act:** In accordance with the Annotated Code of Maryland - State Finance and Procurement Article, Sections 17-301 – 17-306, Washington County is defined as a Public Body and as such shall require a Bidder or subcontractor to use or supply only American Steel products in the performance of a contract as stated in the above referenced Sections.
- 18. Multiple Bids:** No Bidder shall be allowed to offer more than one (1) price on each item even though he/she may feel that there are two (2) or more types or styles that will meet specifications. Bidders must determine for themselves which to offer. If said Bidder should submit more than one (1) price on any item, all prices for that item may be rejected at the discretion of the Purchasing Director.
- 19. Officers Not to Benefit:** No member of the elected governing body of Washington County, or members of his or her immediate family, including spouse, parents, or children, or any person representing, or purporting to represent any member or members of the elected governing body

shall receive or be promised directly or indirectly, any financial benefit, by way of fee, political contribution, or any other similar form of remuneration and/or on the account of awarding and/or executing the contract and that upon request of the County, as a prerequisite to payment pursuant to the terms of this contract, there will be furnished to the requester, under oath, answers to any interrogatories related to a possible conflict of interest as herein embodied. The Bidder, to the best of his/her knowledge, whether he/she be an officer, director, partner or any of its employees directly involved in obtaining contracts with the State, or any County or other subdivision of the State, has not been convicted of bribery or conspiracy to bribe under the laws of any State or Federal Government. Any contract made or entered into where it is discovered that violation of the intent of this provision exists shall be declared null and void and all monies received by the Bidder shall be returned to the County.

20. **Payment Terms:** Bid prices are to be net thirty (30) calendar days; all discounts are to be deducted and reflected in net prices. Term discounts of less than twenty (20) calendar days will not be considered in connection with any prompt payment discount offered; time will be computed from date of receipt of correct invoice or receipt and acceptance of shipment, whichever is later.
21. **Procurement Policy Manual:** This bid is administered according to Washington County's Procurement Policy Manual adopted by the Board of County Commissioners of Washington County, Maryland on June 25, 2013 and effective July 1, 2013. The contents of the aforementioned Manual may be requested from the Washington County Purchasing Department at 240-313-2330 or may be found on the web site at: <https://www.washco-md.net/wp-content/uploads/2017/07/ProcurementPolicy.pdf>.
22. **Proposal Forms:** Bids shall be submitted only on the forms provided by the County. The Bidder shall submit one (1) original bid on the forms provided with original signature, sealed to the County for that purpose. All bids must be enclosed in a sealed, opaque envelope marked with the title of the bid and be received in the Washington County Purchasing Department promptly on or before, time, date, and place stipulated on the Invitation to Bid. ***NO*** bids received after such stipulated time and date will be considered by the County. ***Facsimile Bids will not be accepted.***
23. **Registration with Maryland Department of Assessments and Taxation:** Prior to contracting, private corporations must either be incorporated in the State of Maryland or registered with the Maryland Department of Assessments and Taxation as a foreign corporation, and must be in good standing. Proof of such standing is required prior to the start of the contracting process and shall remain in good standing during the contract period. The website for the State Department of Assessments and Taxation is: <http://dat.maryland.gov/Pages/sdatforms.aspx#BNE> and the phone numbers for the State Department of Assessments and taxation are: **(410) 767-1340** or **(888) 246-5941**.
24. **Reservations:** The County or its authorized agent reserves the right to reject any or all bids and to waive any informality or deficiency in bids received whenever such rejection or waiver is in the best interest of the County. The County also reserves the right to reject the bid of a Bidder who has previously failed to perform properly or complete on time contracts of a similar nature, or the Bid of a Bidder who investigation shows is not in a position to perform the contract. The County reserves the right to waive minor differences in specifications provided these differences

do not violate the specifications intent nor affect the operation for which the items are being purchased, nor increase estimated maintenance and repair cost to the County. The County reserves the right to award contracts or place orders on a lump sum or individual item basis, or such combination as shall, in its judgment, be in the best interest of the County.

- 25. Response to Invitation:** In the event you cannot submit a bid on our requirements, as set forth in the "Invitation to Bid", please return the Bid with an explanation as to why you are unable to bid on these requirements. Because of the large number of firms listed on the County's lists of Bidders, it is necessary to delete from these lists the names of those persons, firms or corporations who fail to respond after having been invited to bid on a commodity or commodities for three (3) successive bid openings.
- 26. Substitutions:** All equipment is to be supplied in exact accordance with the specifications. Any Bidder who contemplates offering a product that differs from that specified must obtain the County's written approval prior to bid opening. Substitution requests must be received in the Purchasing Department no later than the date/time specified in the Supplemental Terms and Conditions (Items 10 and 19). Requests received after the specified date/time will not be considered. All such decisions will be considered final and not subject to further recourse.
- 27. Taxes-Responsibility for Payment, Exemptions, Forms to be Filed, etc.:**
- a. The County is exempt from State of Maryland Sales Tax. The County's Maryland Sales Tax Exemption Number is 3000129 2. However, the Bidder is responsible for making any necessary inquiries and investigations with regulating state agencies to obtain a determination of tax exemptions in his/her bid.
 - b. The Bidder is responsible for and by submitting a Bid agrees to pay all retail sales, income, real estate, sales and use, transportation and special taxes applicable to and assessable against any materials, equipment, processes and operations incident to or involved in the Project. The Bidder is responsible for ascertaining and acquainting his/herself with such taxes and making all necessary arrangements to pay same.
 - c. The Successful Bidder shall complete a W-9 Vendor Information form (provided by the County) and return it to the Director of Purchasing.
 - d. The County hereby reserves the right to withhold payment under this Contract until the Bidder and any subcontractor performing any duties under this Contract have furnished or caused to be furnished the Comptroller of the State of Maryland with all properly completed forms required by the said Comptroller and until all of said retail sales and/or use taxes due the State of Maryland by the Bidder have been paid and the Bidder exhibits a release or receipt from the Comptroller evidencing such payment.
 - e. The Bidder is hereby advised of Section 1-106(b)(3) of the Code of Public Local Laws of Washington County, MD: "If a bidder has not paid all taxes owed to the County or a municipal corporation in the County, the County Commissioners may reject the bidder's bid."

28. **Withdrawal of Bids:** A written request for the withdrawal of a bid or any part thereof may be granted if the request is received by the County prior to the specified time of opening.

BID BONDS

1. **Bid Deposit - Bid Bond, Certified or Cashier's Check:** When required, each bid shall be accompanied by a bid bond signed by a surety company licensed to do business in the State of Maryland, or by a cashier's check, certified check or Treasurer's check drawn on a responsible bank doing business in the United States in the amount of five (5%) percent of the total Bid and shall be made payable to the Board of County Commissioners of Washington County, Maryland. When computing the amount of Bid for Check purposes, DO NOT deduct for trade-ins. U.S. Postal Money Orders are acceptable in lieu of checks.

2. **Performance/Labor and Material Bonds:** The successful Bidder(s) on this bid must furnish the required bonds as indicated on the bid cover, made out to the Board of County Commissioners of Washington County, Maryland, prepared on forms contained herein, or in his/her absence, on an approved form, as security for the faithful performance of his/her contract, within ten (10) calendar days of his/her notification that his/her bid has been accepted. The surety thereon must be such surety company or companies as are authorized and licensed to transact business in the State of Maryland. Attorneys in fact who sign bonds must file with each bond a certified copy of his/her power of attorney to sign bonds. The successful Bidder or Bidders upon failure or refusal to furnish within ten (10) calendar days after his/her notification the required bonds shall forfeit to the County, as liquidated damages his/her bid deposit. The Performance Bond shall be in the amount of one hundred (100%) percent of the contract price covering faithful performance of the contract; and the Labor and Materials Payment Bond shall be in the amount of one hundred (100%) percent of the contract price as security for payment of all persons performing labor and furnishing materials in connection therewith.

SPECIFICATIONS REFERENCES

1. **Formal Specifications:** The Bidder shall abide by and comply with the true intent of the specifications and not take advantage of any unintentional error or omission, but shall fully complete every part as the true intent and meaning of the specifications and drawings. Whenever mention is made herein, of any article, material, or workmanship to be in accordance with laws, ordinances, building codes, underwriter's codes, A.S.T.M. regulations or similar expressions, the requirements of these laws, ordinances, etc., shall be construed to meet or exceed specification requirements and current established noise levels for specific equipment, materials, and/or services being furnished under this contract. All deviations from the specifications must be noted in detail by the Bidder, in writing, at the time of submittal of the formal bid. The absence of a written list of specification deviations at the time of submittal of the bid will hold the Bidder strictly accountable to the County to the specifications as written. Any deviation from the specifications as written not previously submitted, as required by the above, will be grounds for rejection of the material and/or equipment when delivered.

2. **Samples:** The Purchasing Department reserves the right to retain or destroy the samples submitted for the purpose of evaluation and will be free from any redress or claim on the part of the Bidder if any samples are lost or destroyed. Bidders shall make all arrangements for delivery of samples to the place designated, as well as the removal of samples. Cost of delivery and removal of samples shall be borne by the Bidder. Upon notification by the Purchasing Department that a sample is available for pickup, it shall be removed within thirty (30) calendar days at the Bidder's expense or the Director of Purchasing shall dispose of same at his/her discretion. All sample packages shall be marked "Sample for Purchasing Department" and each sample shall bear the name of the Bidder, item number, bid number, and shall be carefully tagged or marked in a substantial manner. Failure of the Bidder to clearly identify samples as indicated may be considered sufficient reason for rejection of bid.

3. **Trade Names/Substitutions:** In cases where an item is identified by a manufacturer's name, trade name, catalog number, or reference it is understood that the Bidder proposes to furnish the item so identified and does not propose to furnish an "equal/substitution" unless submission of an "equal/substitution" is stated otherwise as permissible. Any Bidder who contemplates offering a product that differs from that specified must obtain the County's written approval by submission of his/her request no later than the deadline for receipt of substitution requests as stated in the Supplemental Terms and Conditions. The reference to the above catalog is intended to be descriptive but not restrictive and only to indicate to the prospective Bidder articles that will be satisfactory. Bids on makes and catalogs will be considered, provided each Bidder clearly states on the face of his/her proposal exactly what he/she proposes to furnish, and forwards with his/her bid, a cut, illustration, or other descriptive matter which will clearly indicate the character of the article covered by his/her bid. The Director of Purchasing hereby reserves the right to approve as an equal, or to reject as not being an equal, any article the Bidder proposes to furnish which contains major or minor variations from specification requirements but may comply substantially therewith. If no particular brand, model, or make is specified, and if no data are required to be submitted with the bid, and after award and before manufacture or shipment, the successful Bidder may be required to submit working drawings or detailed descriptive data sufficient to enable the Director of Purchasing to judge if each requirement of the specifications is being complied with.

AWARD

1. **Award or Rejection of Bids:** For contracts of purchase, the contract shall be awarded to the lowest, responsive and responsible Bidder complying with all the provisions of the Invitation, provided the bid price is reasonable and it is to the best interest of the County to accept it. For contracts of sale, the contract shall be awarded to the highest, responsive and responsible Bidder complying with all the provisions of the Invitation, provided the bid price is to the best interest of the County to accept it.

2. **Notice of Award:** A written award (or Acceptance of Bid) mailed (or otherwise furnished) to the successful Bidder within the time for acceptance as specified herein shall be deemed to result in a binding contract without further action by either party. The bid with respect to all items accepted and all papers accompanying the same, the general conditions and instructions to Bidders, the specifications, and other papers and documents referred to in any of the foregoing shall constitute the formal contract, unless otherwise specified, between the Bidder and the County.

3. **Political Contribution Disclosure:** In accordance with Maryland Code, State Finance and Procurement Article, §17-402, the Bidder shall comply with Maryland Code, Election Law Article, Title 14, which requires that every person that enters into contracts, leases, or other agreements with the State, a county, or any incorporated municipality, or their agencies during a calendar year in which the person receives in the aggregate \$100,000 or more, shall file with the State Administrative Board of Election Laws a statement disclosing contributions in excess of \$500 made during the reporting period to a candidate for elective office in any primary or general election. The statement shall be filed with the State Administrative Board of Election Laws: (1) before a purchase or execution of a lease or contract by the State, a county, an incorporated municipality or their agencies, and shall cover the preceding two (2) calendar years; and (2) if the contribution is made after the execution of a lease or contract, then twice a year, throughout the contract term, on: (a) February 5, to cover the 6-month period ending January 31; and (b) August 5, to cover the 6-month period ending July 31.
4. **“Requirements” Contract Bid Quantities:** On “Requirements” bids, acceptance shall bind the County to pay for, at unit bid prices, only quantities ordered and satisfactorily delivered. All stated quantities are estimated requirements and do not constitute a minimum or maximum.
5. **Responsibility/Qualifications of Bidder:** The County may make such investigations as it deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the County all such information and data for this purpose as the County may request. The County reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligation of the contract and to complete the work contemplated therein. Conditional bids will not be accepted. In determining responsibility, the following qualifications, in addition to price, shall be considered by the Director of Purchasing on contracts of purchase and on contracts of sale (if applicable):
 - a. The ability, capacity and skill of the Bidder to perform the service required.
 - b. The character, integrity, reputation, judgment, experience and efficiency of the Bidder.
 - c. The quality of performance of previous contracts or services.
 - d. The Bidder’s previous and present compliance with laws and ordinances relating to the contract or service.
 - e. The sufficiency of the financial resources and ability of the Bidder to perform the contract or provide the service.
 - f. The quality, availability and adaptability of the supplies, or services, to the particular use required.
 - g. The ability of the Bidder to provide future maintenance and service for the use of the subject of the contract.
 - h. Whether the Bidder is in arrears to the County on a debt or contract or is a defaulter on surety to the County.

- i. Such other information as may be secured having a bearing on the decision to make the award.

In determining a Bidder's responsiveness, the Director of Purchasing shall consider material deviations from the advertised specifications which materially affect price, quantity, quality or limit the Bidder's liability.

6. **Specific Bid Quantities:** Where quantities are specifically stated, acceptance will bind the County to order quantities specified and to pay for, at contract prices, all such supplies or services delivered that meet specifications and conditions of the contract. However, the County will not be required to accept delivery of any balances unordered, as of the contract expiration date; unless Bidder furnishes the Director of Purchasing with a statement of unordered balances not later than ten (10) calendar days after the termination date of the contract.
7. **Tie Bids:** If two (2) or more Bidders shall be tied for the lowest bid on a purchase contract, quality and service being equal, the contract shall be awarded to a local Bidder. If there is no local Bidder, or more than one local Bidder, the County shall award the contract to one (1) of the Bidders by drawing lots in public.

CONTRACT PROVISIONS

1. **Availability of Funds:** A contract shall be deemed executory only to the extent of appropriations available to each County department/agency for the purchase of such articles. The County's extended obligation on those contracts that envision extended funding through successive fiscal periods shall be contingent upon actual appropriations for the succeeding fiscal year.
2. **Contract Alterations:** No alterations or variables in the terms of a contract shall be valid or binding upon the County unless made in writing and signed by the County or its authorized agent.
3. **Default:** The contract may be cancelled or annulled by the County in whole or in part by written notice of default to the Bidder upon non-performance or violation of contract terms. An award may be made to the next low Bidder, or, articles specified may be purchased on the open market similar to those so terminated. In either event, the defaulting Bidder (or their surety) shall be liable to the County for costs to the County in excess of the defaulted contract prices: Provided, that the Bidder shall continue the performance of this contract to the extent not terminated under the provisions of this clause. Failure of the Bidder to deliver materials or services within the time stipulated on his/her bid, unless extended in writing by the Director of Purchasing, shall constitute contract default. In the event that a Bidder exempted from posting a Bid or Performance Guarantee fails to execute and perform any contract awarded to them, they shall forfeit the right to Bid on any future County contract for a period of time determined by the Director of Purchasing and they shall be liable for any costs incurred by the County as a result of his/her default.

4. **Guarantee:** All work, supplies, and/or materials and requirements described in the specifications including any modifications thereto which may be made in accordance with the direction and/or approval of the County Director of Purchasing shall be Guaranteed/Warranted for a period of one (1) year from the date of final acceptance by the County as follows, unless indicated otherwise in this contract:
- a. Against all faulty or imperfect materials and/or equipment and against all imperfect, careless and/or unskilled workmanship.
 - b. Against injury or undue deterioration from proper and usual use of the goods and/or services.
 - c. Removal and replacement with proper materials, equipment, and/or services and re-execute, correct or repair without cost to the County, any materials, equipment, and/or services found to be improper, imperfect, defective or fails to perform as specified.
 - d. Make good all damage caused to other work, materials and/or equipment due to such required removal, replacement and/or re-execution.
 - e. Shall comply with any and all guarantee/warranties of whatever nature referred to in other portions of the contract specifications.

Any warranties whether expressed or implied shall not reduce the risk of the seller's/manufacturer's obligation to the County against latent defect which may be found during the rated life of the supplies and/or materials and requirements described in the specifications including any approved modifications.

5. **Intergovernmental Purchasing:** The following Agencies/Jurisdictions shall be able to purchase, if applicable, directly from contracts resulting from this Invitation to Bid (ITB): Washington County Board of Education and all of its public schools, Hagerstown Community College, Municipalities of Washington County, and public or quasi-public agencies that receive County money and are exempt from taxation under Section 501(c)(3) of the Internal Revenue Code, i.e., Washington County Volunteer Fire and Rescue Companies. While this ITB is prepared on behalf of the County, it is intended to apply for the benefit of the above named agencies/jurisdictions as though they were expressly named throughout the document. Each of these agencies/ jurisdictions may purchase from the successful Bidder under the same terms and conditions of the contract with the County, in accordance with each agencies/jurisdictions respective laws and regulations, or an agency may choose not to procure from the successful Bidder at the agency's sole discretion. If one of the above named agencies/jurisdictions elects to purchase under the contract, the price shall be determined by using unit costs and other pertinent costs provided in the offer. Any special discounts unique to a particular agency/jurisdiction shall be stated. Bidder shall also submit the attached "Provisions for Other Agencies" form, if included in this bid.
6. **New Goods, Fresh Stock:** All contracts, unless otherwise specifically stated, shall produce new commodities, fresh stock, latest model, design or pack.

7. **Non-Discrimination:** No Bidder who is the recipient of County funds or who proposes to perform any work or furnish any goods under this agreement shall discriminate against any worker, employee or applicant or any member of the public because of religion, race, sex, color or national origin, age, marital status, physical or mental handicap, nor otherwise commit an unfair employment practice. Bidder further agrees that this article will be incorporated by Bidder in all contracts entered into with suppliers of materials or services, Bidders and subcontractors and all labor organizations, furnishing skilled, unskilled and craft union skilled labor, or who may perform any such labor or services in connection with this contract.
8. **Non-Liability:** The Bidder shall not be liable in damages for delay in shipment or failure to deliver when such delay or failure is the result of fire, flood, strike, act of God, act of government, act of an alien enemy or by any other circumstances which, in the Purchasing Director's opinion, is beyond the control of the Bidder. Under the circumstances, however, the County may in its discretion, cancel the contract.
9. **Placing of Orders:** Orders against contracts shall be placed with the Bidder on a Purchase Order executed and released by the Purchasing Director.
10. **Subletting of Contract:** It is mutually understood and agreed that the Bidder shall not assign, transfer, convey, sublet, or otherwise dispose of their contract or their rights, title or interest therein, or their power to execute such contract, to any other person, firm or corporation, without the previous written consent of the County Purchasing Director, but in no case shall such consent relieve the Bidder from his/her obligations, or change the terms of the contract.
11. **Termination of Contracts:** Contracts shall remain in force for full periods specified and until all articles ordered before date of termination shall have been satisfactorily delivered and accepted and thereafter until all requirements and conditions shall have been met, unless:
 - a. Terminated prior to expiration date by satisfactory deliveries of entire contract requirements.
 - b. Extended upon written authorization of the Director of Purchasing and accepted by Bidder, to permit ordering of unordered balances or additional quantities at contract prices and in accordance with contract terms.
12. **Termination for Convenience:** The performance of work under this Contract may be terminated by the County in accordance with this clause in whole, or from time to time in part, whenever the County shall determine that such termination is in the best interest of the County. The County shall pay all reasonable expenses associated with this Contract that the Contractor has incurred up to the date of termination, and all reasonable expenses associated with termination of the Contract; provided, however, the Contractor shall not be reimbursed for any anticipatory profits that have not been earned up to the date of termination.

DELIVERY PROVISIONS

1. **Delivery:** Delivery shall be required to the place designated in the specifications or on the proposal form. All prices must be FOB Destination, Inside Delivery. The weight, count, measure, etc. shall be determined at the points of delivery. The Bidder shall be required to furnish proof of delivery in every instance. Bulk materials are to be placed on skids or pallets. No help for unloading shall be provided by the County. Suppliers shall notify their shippers accordingly.
2. **Delivery Failures:** Failure of a Bidder to deliver within the time specified, or within a reasonable time as interpreted by the Director of Purchasing or failure to make replacements of rejected articles when so requested, immediately or as directed by the Director of Purchasing shall constitute authority for the Director of Purchasing to purchase in the open market articles of comparable grade to replace the articles rejected or not delivered. On all such purchases, the Bidder shall reimburse the County, within a reasonable time specified by the Director of Purchasing, for any expense incurred in excess of contract prices or the County may deduct such amount from monies owed the defaulting Bidder. Such purchases shall be deducted from contract quantities.
3. **Inspections:** Inspection and acceptance of materials or supplies shall be made after delivery. Final inspection shall be conclusive except as regards latent defects, fraud, or such gross mistakes as amount to fraud. Final inspection and acceptance or rejection of the materials or supplies shall be made as promptly as practicable, but failure to inspect and accept or reject materials or supplies shall not impose liability on the County for such materials or supplies as are not in accordance with the specifications. All delivered materials shall be accepted subject to inspection and physical count.
4. **Safety Data Sheets (SDS):** Any hazardous substances as defined under the Department of Labor Occupational Safety and Health Standard for General Industry (29-CFR-1910.1200) and State of Maryland Law and Regulations on "Access to Information About Hazardous and Toxic Substances", MDSH Article 89, Section 28-49-D, being delivered to Washington County as a result of this Invitation to Bid shall be accompanied by a current "Safety Data Sheet" or item may not be accepted.
5. **Packing Slips or Delivery Tickets:** All shipments or deliveries shall be accompanied by Packing Slips or Delivery Tickets, and shall contain the following information for each item delivered. Bidders are cautioned that failure to comply with these conditions shall be considered sufficient reason for refusal to accept the goods.

The Purchase Order Number
The Name of the Article and Stock Number (Supplier's)
The Quantity Ordered
The Quantity Back Ordered
The Name of the Contractor

6. **Responsibility for Materials Shipped:** The Bidder shall be responsible for the materials or supplies covered by this contract until they are delivered at the designated point and the Bidder shall bear all risk on rejected materials or supplies after notice of rejection. Rejected materials or supplies must be removed by and at the expense of the Bidder promptly after notification of

rejection, unless public health and safety require immediate destruction or other disposal of rejected delivery. Upon failure of the Bidder to remove materials or supplies within ten (10) calendar days after date of notification, the County may return the rejected materials or supplies to the Bidder at the Bidder's risk and expense, or dispose of them as its own property.

7. **Testing:** The cost of testing a representative sample of an order or shipment for acceptance shall be borne by the County. However, if the order and shipment is rejected for failure to meet the requirements of the specifications or purchase description, the cost of testing shall be charged to the Bidder.
8. **Time of Delivery:** Deliveries shall be accepted between 8:00 A.M. and 3:00 P.M. on weekdays only, unless stated otherwise in the bid document. No deliveries shall be accepted on Saturdays, Sundays or County Holidays, unless otherwise arranged by an individual Department/Agency.

SECTION III
SUPPLEMENTAL TERMS AND CONDITIONS

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PUR-1377
BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION
AT HAGERSTOWN REGIONAL AIRPORT

SUPPLEMENTAL TERMS AND CONDITIONS

1. **Access to Site:** The successful Bidder shall coordinate all efforts of the work and access to the site with the County's authorized representative, Mr. Phil Ridenour, Director, Hagerstown Regional Airport, 240-313-2777.
2. **Award:** It is anticipated that the County shall award a contract to the responsive, responsible Bidder who submits the lowest Total Sum Bid for the **Brumbaugh-Kendle-Grove Farmstead Demolition – Hagerstown Regional Airport**.
3. **Bidders Responsibility:** Each Bidder submitting a proposal for this work shall first examine the site, verify any dimensions pertinent to the work, and thoroughly be satisfied to the conditions under which he/she will operate or that shall in any manner affect any work under this Contract. The Bidder shall accept the site as he/she finds it. All proposals shall take into consideration all conditions that may affect the work. No allowance shall be made to any Bidder for negligence in this respect.
4. **Disputes:** In cases of disputes as to whether or not an item or service quoted or delivered meets specifications, the decision of the County Commissioners or authorized representative shall be final and binding on both parties. The County's Director of Purchasing may request in writing, the recommendation of the head of the County agency using the item or materials, or other objective sources.
5. **Examination of Site:** The County will provide a tour of the site, concluding the Pre-Bid Conference, for the purpose of making a visual survey. Before submitting a bid, each Bidder shall visit the site and shall be responsible for knowledge of the conditions affecting the work. The act of submitting a bid is to be considered acknowledgement of the Bidder that he/she has inspected the site and is familiar with the conditions and requirements and shall submit his/her bid accordingly.
6. **Exceptions:** The submission of a bid shall be considered an agreement to all the items, conditions, and specifications provided herein and in the various bid documents unless specifically noted otherwise in the proposal.
7. **Form of Proposal:** All bids must be submitted on the forms provided herein.
8. **Installation:** Building demolition/removal, concrete removal, electric utility removal, well/cistern sealing, backfill, erosion and sediment control, topsoiling, seeding, sodding, mulching.
9. **Insurance:** Upon request and prior to execution of the contract, the successful Contractor shall show Evidence of Insurance as outlined in the attached copy of *Insurance Requirements for Independent Contractors*.

10. **Interpretations, Discrepancies, and Omissions:** Should any Bidder find discrepancies in or omissions for the documents or be in doubt of their meaning, he/she should at once request, in writing, an interpretation from:

Rick Curry, CPPO – Director of Purchasing
Washington County Purchasing Department
Washington County Administration Complex
100 West Washington Street, Room 3200
Hagerstown, MD 21740
FAX: 240-313-2331; or send questions in Microsoft Word platform via-
email to: purchasingquestions@washco-md.net

All necessary interpretations will be issued to all Bidders in the form of addenda to the specifications, and such addenda shall become part of the contract documents. Exceptions as taken in no way obligate the County to change the specifications. Failure of any Bidder to receive any such addendum or interpretation shall not relieve such Bidder from any obligation under his/her bid as submitted. The County shall assume no responsibility for oral instructions or suggestions. **ORAL ANSWERS WILL NOT BE BINDING ON THE COUNTY.** Requests received after 4:00 P.M. (EDST), Wednesday, March 14, 2018 may not be considered.

11. **Landfill Fees:** Disposal of items shall be at an approved landfill and any fees for same shall be included in the Bidders proposal.
12. **Liquidated Damages:** Liquidated damages shall be applied at the rate of five-hundred (\$500.00) dollars per consecutive calendar day for each day the Contractor fails to complete the work as specified herein. This cost includes the 8-hour presence of a Construction Inspector and Engineering support for each additional day.
13. **Proposal:** This is a lump sum contract. The Total Sum Bid for the work shall include the cost of any and all permits licenses and/or fees, the cost of all applicable seals and other taxes required by Local, State and Federal laws, the cost of required bonds and insurances, the cost of all material, labor, tools, equipment, transportation, landfill user fees, superintending and other services and facilities of every nature whatsoever or as may be necessary to complete the project as described in the specifications.
14. **Payment:** The Contractor shall submit an acceptable breakdown of the lump sum Contract price showing the amount included herein for each principal category of work. This schedule of values shall be in such detail so as to provide a basis for estimating. Final payment will be made after final inspection, approval and acceptance of the work by the County's Representative. Upon final acceptance of the work, the invoice for remainder of payment shall be submitted to the Hagerstown Regional Airport, Richard A. Henson Field, 18434 Showalter Road, Hagerstown, Maryland 21742. Payment will be made within thirty (30) calendar days upon receipt of the invoice, in the amount stipulated on the Form of Proposal.
15. **Qualification:** The County may make such investigations as deemed necessary to determine the ability of the Bidder to perform the work, and the Bidders shall furnish to the County all such information and data for this purpose as the County may request. The County reserves

the right to reject any bid if the evidence submitted by or investigation of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligation of the Contract and to complete the work contemplated therein. Conditional bids will not be accepted.

16. **Responsibility of Contractor:** Each Bidder submitting a bid for this work shall first examine the site(s) and thoroughly satisfy himself/herself to the conditions under which he/she shall operate or that shall in any manner affect any work under his contract. The Contractor shall accept the site(s) as he/she finds it. All proposals shall take into consideration all conditions that may affect the work. No allowance shall be made to any Contractor for negligence in this respect. Prior to contracting, private corporations must either be incorporated in the State of Maryland or registered with the Maryland Department of Assessments and Taxation as a foreign corporation, and must be in good standing. Proof of such standing is required prior to the start of the contracting process and shall remain so throughout this contract. The website for the State Department of Assessments and Taxation is: <http://dat.maryland.gov/Pages/sdatforms.aspx#BNE> the phone numbers for the State Department of Assessments and taxation are: (410) 767-1340 or (888) 246-5941.
17. **Time of Completion:** By submission of proposal, the Bidder agrees to commence work under this Contract upon receipt of the Notice to Proceed (issuance of Purchase Order), prosecute the work diligently, and **substantially complete ready for its intended use within forty-five (45) consecutive calendar days from the date of "Notice to Proceed"/issuance of purchase order.** The time stated for completion shall include material procurement, coordination, removal of salvage materials (if applicable), demolition/removal of debris, site restoration, and final clean-up of the premises ready for occupancy. The successful Bidder shall schedule construction times with Mr. Phil Ridenour, Director, Hagerstown Regional Airport, 240-313-2777.
18. **Working Hours:** The Contractor shall work between the hours of 7:00 A.M. to 5:00 P.M. (EDST).
19. **Project Schedule:** The Contractor shall adhere to the project schedule outlined below:

Pre-Bid: Wednesday, March 7, 2018 at 11:00 AM

Questions: Wednesday, March 14, 2018 at 4:00 PM

Bids Due: Wednesday, March 28, 2018 at 2:00 PM

BOCC Meeting: Tuesday, April 3, 2018

NTP and Pre-Construction Meeting: Monday, April 9, 2018 at 8:00 AM

Salvage NTP: Monday, April 9, 2018 at 8:00 AM

Demo NTP: Tuesday, May 8, 2018 at 8:00 AM

Project Completion: Tuesday, May 23, 2018 at 5:00 PM

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SECTION IV
FEDERAL PROVISIONS FOR AIP PROJECT CONTRACTS

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Contract Provisions for Airport Improvement Program (AIP) Projects

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AIP CONTRACT PROVISIONS

A1 GENERAL

The contractor (including all subcontractors) agrees to insert the following Federal contract provisions in each lower tier contract(s) (e.g. subcontract or sub-agreement) and to incorporate the applicable requirements of these contract provisions by reference for work done under any purchase orders, rental agreements and other agreements for supplies or services. The contractor also agrees to be responsible for compliance with these contract provisions by any subcontractor, lower-tier subcontractor or service provider.

For the Equal Employment Opportunity (EEO) clause, the term **applicant** means an applicant for employment (whether or not the phrase, *for employment*, follows the word applicant or applicants).

For all other clauses, the term **applicant** means a bidder, offeror, or proposer for a contract.

A2 ACCESS TO RECORDS AND REPORTS

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

A3 AFFIRMATIVE ACTION REQUIREMENT (Contracts Exceeding \$10,000)

A3.1 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables

Goals for minority participation for each trade:	3.25%
Goals for female participation in each trade:	6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a

geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is **Hagerstown, MD – Washington County.**

A4 BREACH OF CONTRACT TERMS (Contracts Exceeding \$150,000)

Any violation or breach of terms of this contract on the part of the Contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

A5 BUY AMERICAN PREFERENCE

The Contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

A5.1 Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter "X".

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
- Only installing steel and manufactured products produced in the United States;
 - Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
 - Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
- To faithfully comply with providing U.S. domestic product.
- To furnish U.S. domestic product for any waiver request that the FAA rejects
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

- The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

- To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.
- That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
- To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
- To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

A5.2 Required Documentation

Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “item”. The required documentation for a Type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total “item” component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

- a) Detailed cost information for total project using U.S. domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

A6 CIVIL RIGHTS - GENERAL

A6.1 GENERAL CIVIL RIGHTS PROVISIONS

The Contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

A7 CIVIL RIGHTS – TITLE VI ASSURANCE

A7.1 Title VI Solicitation Notice

Washington County, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

A7.2 Title VI Clauses for Compliance with Nondiscrimination Requirements

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”), agrees as follows:

- 1. Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
- 2. Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
- 3. Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the

contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.

4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

A7.3 Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);

- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §§ 12131 – 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 *et seq.*).

A8 CLEAN AIR AND WATER POLLUTION CONTROL (Contracts Exceeding \$150,000)

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery.

The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceeds \$150,000.

A9 CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS (Contracts Exceeding \$100,000)

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this clause.

4. Subcontractors.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

A10 COPELAND “ANTI-KICKBACK” ACT (Contracts Exceeding \$2,000)

Contractor must comply with the requirements of the Copeland “Anti-Kickback” Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

A11 DAVIS-BACON REQUIREMENTS (Contracts Exceeding \$2,000)

1. Minimum Wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided* that the employer’s payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program: *Provided* that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after

written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b) (2) (B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and that show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (*e.g.* the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at www.dol.gov/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) The payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a) (3) (ii), the appropriate information is being maintained under 29 CFR § 5.5 (a) (3) (i), and that such information is correct and complete;

(2) Each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(3) Each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the “Statement of Compliance” required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing

construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate

instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC 1001.

A12 DEBARMENT AND SUSPENSION (Contracts Exceeding \$25,000)

A12.1 CERTIFICATION OF OFFERER/BIDDER REGARDING DEBARMENT

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

A12.2 CERTIFICATION OF LOWER TIER CONTRACTORS REGARDING DEBARMENT

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a "covered transaction", must verify each lower tier participant of a "covered transaction" under the project is not presently debarred or otherwise disqualified from participation in this federally assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>.

2. Collecting a certification statement similar to the Certification of Offerer /Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

A13 DISADVANTAGED BUSINESS ENTERPRISE

A13.1 Solicitations that include a Project Goal

Information Submitted as a matter of bidder responsiveness:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

As a condition of bid responsiveness, the Bidder or Offeror must submit the following information with its proposal on the forms provided herein:

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

Information submitted as a matter of bidder responsibility:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR §26.53.

The successful Bidder or Offeror must provide written confirmation of participation from each of the DBE firms the Bidder or Offeror lists in its commitment within five days after bid opening.

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1)
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal; and
- 5) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26.

A13.2 Race/Gender Neutral Means

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the Washington County to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

A13.3 Prime Contracts (Projects Covered by a DBE Program)

DISADVANTAGED BUSINESS ENTERPRISES

Contract Assurance (§ 26.13) –

The Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of Department of Transportation-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Owner deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

Prompt Payment (§26.29) – The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than 30 days from the receipt of each payment the prime contractor receives from Washington County. The prime contractor agrees further to return retainage payments to each subcontractor within 30 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the subcontractor. This clause applies to both DBE and non-DBE subcontractors.

A14 DISTRACTED DRIVING (Contracts Exceeding \$3,500)

A14.1 TEXTING WHEN DRIVING

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the

project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

A15 ENERGY CONSERVATION REQUIREMENTS

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201*et seq.*).

A16 EQUAL EMPLOYEMENT OPPORTUNITY (EEO) (Contracts Exceeding \$10,000)

A16.1 EQUAL OPPORTUNITY CLAUSE

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (5) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (6) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as

provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**A 16.2 STANDARD FEDERAL EQUAL EMPLOYMENT
OPPORTUNITY CONSTRUCTION CONTRACT
SPECIFICATIONS**

1. As used in these specifications:

- a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
- b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
- c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- d. "Minority" includes:
 - (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance

with that Plan for those trades which have unions participating in the Plan. Contractors shall be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees shall be employed by the Contractor during the training period and the Contractor shall have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees shall be trained pursuant to training programs approved by the U.S. Department of Labor.

7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

- c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore along with whatever additional actions the Contractor may have taken.
- d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or female sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions, including specific review of these items, with onsite supervisory personnel such superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's workforce.

k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are non-segregated except that separate or single user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor union, contractor community, or other similar groups of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, if the particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally), the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

A17 FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The Contractor has full responsibility to monitor compliance to the referenced statute or regulation. The Contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

A18 LOBBYING AND INFLUENCING FEDERAL EMPLOYEES (Contracts Exceeding \$100,000)

A18.1 CERTIFICATION REGARDING LOBBYING

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

A19 PROHIBITION OF SEGREGATED FACILITIES

(a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.

(b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

A20 OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

A21 PROCUREMENT OF RECOVERED MATERIALS (Contracts Exceeding \$10,000)

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- 1) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year;
or
- 2) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

A22 RIGHTS TO INVENTIONS

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR §401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

A23 SEISMIC SAFETY

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

A24 TAX DELINQUENCY AND FELONY CONVICTIONS

A24.1 CERTIFICATION OF OFFERER/BIDDER REGARDING TAX DELINQUENCY AND FELONY CONVICTIONS

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (✓) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

Certifications

- 1) The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA Airports District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

Term Definitions

Felony conviction: Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

A25 TERMINATION OF CONTRACT (Contracts Exceeding \$10,000)

A25.1 TERMINATION FOR CONVENIENCE (CONSTRUCTION & EQUIPMENT CONTRACTS)

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

1. Contractor must immediately discontinue work as specified in the written notice.
2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
3. Discontinue orders for materials and services except as directed by the written notice.
4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.
5. Complete performance of the work not terminated by the notice.
6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

- 1) Completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
- 2) Documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
- 3) Reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers;
- 4) And reasonable and substantiated expenses to the Contractor directly attributable to Owner's termination action.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

A 25.2 TERMINATION FOR DEFAULT (CONSTRUCTION)

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights, and remedies associated with Owner termination of this contract due to default of the Contractor.

A 25.3 TERMINATION FOR DEFAULT (EQUIPMENT)

The Owner may, by written notice of default to the Contractor, terminate all or part of this Contract if the Contractor:

1. Fails to commence the Work under the Contract within the time specified in the Notice- to- Proceed;
2. Fails to make adequate progress as to endanger performance of this Contract in accordance with its terms;
3. Fails to make delivery of the equipment within the time specified in the Contract, including any Owner approved extensions;
4. Fails to comply with material provisions of the Contract;
5. Submits certifications made under the Contract and as part of their proposal that include false or fraudulent statements; or
6. Becomes insolvent or declares bankruptcy.

If one or more of the stated events occur, the Owner will give notice in writing to the Contractor and Surety of its intent to terminate the contract for cause. At the Owner's discretion, the notice may allow the Contractor and Surety an opportunity to cure the breach or default.

If within [10] days of the receipt of notice, the Contractor or Surety fails to remedy the breach or default to the satisfaction of the Owner, the Owner has authority to acquire equipment by other procurement action. The Contractor will be liable to the Owner for any excess costs the Owner incurs for acquiring such similar equipment.

Payment for completed equipment delivered to and accepted by the Owner shall be at the Contract price. The Owner may withhold from amounts otherwise due the Contractor for such completed equipment, such sum as the Owner determines to be necessary to protect the Owner against loss because of Contractor default.

Owner will not terminate the Contractor's right to proceed with the Work under this clause if the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such acceptable causes include: acts of God, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, and severe weather events that substantially exceed normal conditions for the location.

If, after termination of the Contractor's right to proceed, the Owner determines that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the Owner issued the termination for the convenience the Owner.

The rights and remedies of the Owner in this clause are in addition to any other rights and remedies provided by law or under this contract.

A26 TRADE RESTRICTION CERTIFICATION

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

- 1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and

- 3) Has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) Who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or
- 2) Whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or
- 3) Who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

A27 VETERAN'S PREFERENCE

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

SECTION V
SCOPE OF WORK AND SPECIFICATIONS

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PUR-1377
BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION
AT HAGERSTOWN REGIONAL AIRPORT – RICHARD A. HENSON FIELD
AIP 3-24-0019-058
MAA-GR-18-016

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SCOPE OF WORK AND SPECIFICATIONS

Total Sum Bid:

The scope of work includes, but is not limited to, coordination of salvage material removal with 501(c)(3) organization, remove salvage items (where applicable), building/site demolition and removal, backfill/restoration of site, electric utility removal, erosion and sediment control, topsoiling, seeding, sodding, mulching, well/cistern sealing.

LIST OF DRAWINGS

(found at the END of this document behind Appendices A – D)

<u>Sheet No.</u>	<u>Sheet Title</u>
G.100	Cover Sheet
G.101	General Construction and Safety Notes
C.100	Existing Conditions Plan
C.101	Site Plan
C.200	Erosion and Sediment Control Notes and Details

LIST OF SPECIFICATIONS

PART 1 – GENERAL PROVISIONS

Section 10	Definition of Terms
Section 20	Proposal Requirements and Conditions
Section 30	Award and Execution of Contract
Section 40	Scope of Work
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Section 70	Legal Regulations and Responsibility to Public
Section 80	Execution and Progress
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PART 2 – TECHNICAL SPECIFICATIONS

Section X-5	Mobilization-Demobilization
Section X-100	Residential Lot Clearing
Item MD-203	Borrow Excavation
Item MD-206	Removal of Existing Sidewalk
Item MD-314	Flowable Backfill
Item MD-701	Topsoil
Item MD-705	Turfgrass Establishment

Section 10 Definition of Terms

Whenever the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be interpreted as follows:

- 10-1 AASHTO** - The American Association of State Highway and Transportation Officials, the successor association to AASHO.
- 10-2 Access road** - The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.
- 10-3 Advertisement** – A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.
- 10-4 Airport Improvement Program - (AIP).** A grant-in-aid program, administered by the Federal Aviation Administration (FAA).
- 10-5 Air operations area (AOA)** - For the purpose of these specifications, the term air operations area (AOA) shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.
- 10-6 Airport.** Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; and airport buildings and facilities located in any of these areas, and includes a heliport.
- 10-7 ASTM International (ASTM)** - Formerly known as the American Society for Testing and Materials (ASTM).
- 10-8 Award** - The Owner's notice to the successful bidder of the acceptance of the submitted bid.
- 10-9 Bidder** - Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
- 10-10 Building area** - An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.

- 10-11 Calendar day** - Every day shown on the calendar.
- 10-12 Change order** - A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for the work affected by such changes. The work, covered by a change order, must be within the scope of the contract.
- 10-13 Contract** - The written agreement covering the work to be performed. The awarded contract shall include, but is not limited to: Advertisement, Contract Form, Proposal, Performance Bond, Payment Bond, any required insurance certificates, Specifications, Plans, and any addenda issued to bidders.
- 10-14 Contract item (pay item).** A specific unit of work for which a price is provided in the contract.
- 10-15 Contract time** - The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.
- 10-16 Contractor** - The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.
- 10-17 Contractor's laboratory** - The Contractor's quality control organization in accordance with the Contractor Quality Control Program.
- 10-18 Construction Safety and Phasing Plan (CSPP)** - The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator.
- 10-19 Drainage system** - The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.
- 10-20 Engineer** - The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering and inspection of the contract work and acting directly or through an authorized representative.
- 10-21 Equipment.** All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of the work.
- 10-22 Extra work** - An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Engineer to be necessary to complete the work within the intended scope of the contract as previously modified.

- 10-23 FAA** - The Federal Aviation Administration of the U.S. Department of Transportation. When used to designate a person, FAA shall mean the Administrator or his or her duly authorized representative.
- 10-24 Federal specifications** - The Federal Specifications and Standards, Commercial Item Descriptions, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government.
- 10-25 Force account** - Force account work is planning, engineering, or construction work done by the Contractor.
- 10-26 Inspector** - An authorized representative of the Engineer assigned to make all necessary inspections, observations and/or observation of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
- 10-27 Intention of terms** - Whenever, in these specifications or on the plans, the words “directed,” “required,” “permitted,” “ordered,” “designated,” “prescribed,” or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer is intended; and similarly, the words “approved,” “acceptable,” “satisfactory,” or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer, subject in each case to the final determination of the Owner.
- Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.
- 10-28 Laboratory** - The official testing laboratories of the Owner or such other laboratories as may be designated by the Engineer. Also referred to as “Engineer’s Laboratory” or “quality assurance laboratory.”
- 10-29 Lighting** - A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
- 10-30 Major and minor contract items** - A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered minor contract items.
- 10-31 Materials** - Any substance specified for use in the construction of the contract work.
- 10-32 Notice to Proceed (NTP)** - A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.

- 10-33 Owner** - The term “Owner” shall mean the party of the first part or the contracting agency signatory to the contract. Where the term “Owner” is capitalized in this document, it shall mean airport Sponsor only.
- 10-34 Passenger Facility Charge (PFC)** - Per 14 CFR Part 158 and 49 USC § 40117, a PFC is a charge imposed by a public agency on passengers enplaned at a commercial service airport it controls.”
- 10-35 Pavement** - The combined surface course, base course, and subbase course, if any, considered as a single unit.
- 10-36 Payment bond** - The approved form of security furnished by the Contractor and his or her surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.
- 10-37 Performance bond** - The approved form of security furnished by the Contractor and his or her surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
- 10-38 Plans** - The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications.
- 10-39 Project** - The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
- 10-40 Proposal** - The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
- 10-41 Proposal guaranty** - The security furnished with a proposal to guarantee that the bidder will enter into a contract if his or her proposal is accepted by the Owner.
- 10-42 Runway** - The area on the airport prepared for the landing and takeoff of aircraft.
- 10-43 Specifications** - A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.
- 10-44 Sponsor** - A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a private Owner of a public-use airport that submits to the FAA an application for an AIP grant for the airport.
- 10-45 Structures** - Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; flexible and rigid pavements; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.

- 10-46 Subgrade** - The soil that forms the pavement foundation.
- 10-47 Superintendent** - The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the Engineer, and who shall supervise and direct the construction.
- 10-48 Supplemental agreement** - A written agreement between the Contractor and the Owner covering:
- (1) Work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25%, such increased or decreased work being within the scope of the originally awarded contract; or
 - (2) Work that is not within the scope of the originally awarded contract.
- 10-49 Surety** - The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
- 10-50 Taxiway** - For the purpose of this document, the term taxiway means the portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.
- 10-51 Work** - The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.
- 10-52 Working day.** A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. When work is suspended for causes beyond the Contractor's control, it will not be counted as a working day. Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work will be considered as working days.

END OF SECTION 10

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Section 20 Proposal Requirements and Conditions

20-1 Advertisement (Notice to Bidders).

See Invitation to Bid located at beginning of Bid Book.

20-2 Qualification of bidders - Each bidder shall furnish the Owner satisfactory evidence of his or her competency to perform the proposed work. Such evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, a list of equipment that would be available for the work, and a list of key personnel that would be available. In addition, each bidder shall furnish the Owner satisfactory evidence of his or her financial responsibility. Such evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the bidder's last fiscal year.

Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether his or her financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect the bidder's true financial condition at the time such qualified statement or report is submitted to the Owner.

Each bidder shall submit "evidence of competency" and "evidence of financial responsibility" to the Owner at the time of bid opening.

20-3 Contents of proposal forms - The Owner shall furnish bidders with proposal forms. All papers bound with or attached to the proposal forms are necessary parts and must not be detached.

The plans, specifications, and other documents designated in the proposal form shall be considered a part of the proposal whether attached or not.

20-4 Issuance of proposal forms. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder should such bidder be in default for any of the following reasons:

- a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.
- b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force with the Owner at the time the Owner issues the proposal to a prospective bidder.
- c. Documented record of Contractor default under previous contracts with the Owner.
- d. Documented record of unsatisfactory work on previous contracts with the Owner.

20-5 Interpretation of estimated proposal quantities - An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as hereinafter provided in the subsection 40-02 titled ALTERATION OF WORK AND QUANTITIES of Section 40 without in any way invalidating the unit bid prices.

20-6 Examination of plans, specifications, and site - The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves as to the character, quality, and quantities of work to be performed, materials to be furnished, and as to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed contract, plans, and specifications.

20-7 Preparation of proposal. The bidder shall submit his/her proposal on the forms furnished by the Owner. All blank spaces in the proposal forms must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals for which they propose to do for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall sign the proposal correctly and in ink. If the proposal is made by an individual, his /her name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state under the laws of which the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of his or her authority to do so and that the signature is binding upon the firm or corporation.

20-8 Responsive and responsible bidder. A responsive bid conforms to all significant terms and conditions contained in the Sponsor's invitation for bid. It is the Sponsor's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept.

A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 49 CFR § 18.36(b) (8). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

20-9 Irregular proposals. Proposals shall be considered irregular for the following reasons:

- a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered or if any part of the proposal form is detached.
- b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.
- c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.
- d. If the proposal contains unit prices that are obviously unbalanced.
- e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

20-10 Bid guarantee. Each separate proposal shall be accompanied by a certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such check, or collateral, shall be made payable to the Owner.

20-11 Delivery of proposal. Each proposal submitted shall be placed in a sealed opaque envelope plainly marked with the project number, location of airport, and name and business address of the bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional opaque envelope. No proposal shall be considered unless received at the place specified in the advertisement or as modified by Addendum before the time specified for opening all bids.

Proposals received after the bid opening time shall be returned to the bidder unopened.

20-12 Withdrawal or revision of proposals. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by fax before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

20-13 Public opening of proposals. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

20-14 Disqualification of bidders. A bidder shall be considered disqualified for any of the following reasons:

- a.** Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.
- b.** Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.
- c.** If the bidder is considered to be in “default” for any reason specified in the subsection 20-04 titled ISSUANCE OF PROPOSAL FORMS of this section.

END OF SECTION 20

Section 30 Award and Execution of Contract

30-1 Consideration of proposals. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

- a. If the proposal is irregular as specified in the subsection 20-09 titled IRREGULAR PROPOSALS of Section 20.
- b. If the bidder is disqualified for any of the reasons specified in the subsection 20-14 titled DISQUALIFICATION OF BIDDERS of Section 20.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

30-2 Award of contract. The award of a contract, if it is to be awarded, shall be made within 90 Calendar days of the date specified for publicly opening proposals, unless otherwise specified herein.

Award of the contract shall be made by the Owner to the lowest, qualified bidder whose proposal conforms to the cited requirements of the Owner.

No award shall be made until the FAA has concurred in the Owner's recommendation to make such award and has approved the Owner's proposed contract to the extent that such concurrence and approval are required by 49 CFR Part 18.

30-3 Cancellation of award. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with the subsection 30-07 titled APPROVAL OF CONTRACT of this section.

30-4 Return of proposal guaranty. All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the subsection 30-01 titled CONSIDERATION OF PROPOSALS of this section. Proposal guaranties of the two lowest bidders will be retained by the Owner until the contract is executed, at which time, the unsuccessful bidder's proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in the subsection 30-05 titled REQUIREMENTS OF CONTRACT BONDS of this section.

- 30-5 Requirements of contract bonds.** At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.
- 30-6 Execution of contract.** The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in the subsection 30-05 titled REQUIREMENTS OF CONTRACT BONDS of this section, within 10 calendar days from the date mailed or otherwise delivered to the successful bidder.
- 30-7 Approval of contract.** Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.
- 30-8 Failure to execute contract.** Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the 10-calendar day period specified in the subsection 30-06 titled EXECUTION OF CONTRACT of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidation of damages to the Owner.

END OF SECTION 30

Section 40 Scope of Work

40-1 Intent of contract. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-2 Alteration of work and quantities. The Owner reserves and shall have the right to make such alterations in the work as may be necessary or desirable to complete the work originally intended in an acceptable manner. Unless otherwise specified herein, the Engineer shall be and is hereby authorized to make such alterations in the work as may increase or decrease the originally awarded contract quantities, provided that the aggregate of such alterations does not change the total contract cost or the total cost of any major contract item by more than 25% (total cost being based on the unit prices and estimated quantities in the awarded contract). Alterations that do not exceed the 25% limitation shall not invalidate the contract nor release the surety, and the Contractor agrees to accept payment for such alterations as if the altered work had been a part of the original contract. These alterations that are for work within the general scope of the contract shall be covered by "Change Orders" issued by the Engineer. Change orders for altered work shall include extensions of contract time where, in the Engineer's opinion, such extensions are commensurate with the amount and difficulty of added work.

Should the aggregate amount of altered work exceed the 25% limitation hereinbefore specified, such excess altered work shall be covered by supplemental agreement. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

Supplemental agreements shall be approved by the FAA and shall include all applicable Federal contract provisions for procurement and contracting required under AIP. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds.

40-3 Omitted items. The Engineer may, in the Owner's best interest, omit from the work any contract item, except major contract items. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be non-performed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item.

Payment for work performed shall be in accordance with the subsection 90-04 titled PAYMENT FOR OMITTED ITEMS of Section 90.

40-4 Extra work. Should acceptable completion of the contract require the Contractor to perform an item of work for which no basis of payment has been provided in the original contract or previously issued change orders or supplemental agreements, the same shall be called “Extra Work”. Extra Work that is within the general scope of the contract shall be covered by written change order. Change orders for such Extra Work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the Engineer’s opinion, is necessary for completion of such Extra Work.

When determined by the Engineer to be in the Owner’s best interest, the Engineer may order the Contractor to proceed with Extra Work as provided in the subsection 90-05 titled PAYMENT FOR EXTRA WORK of Section 90. Extra Work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract shall be covered by a Supplemental Agreement as defined in the subsection 10-48 titled SUPPLEMENTAL AGREEMENT of Section 10.

Any claim for payment of Extra Work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

All change orders, supplemental agreements, and contract modifications must be reviewed and approved by the FAA.

40-5 Maintenance of traffic. It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor’s equipment and personnel, is the most important consideration.

a. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas (AOAs) of the airport with respect to his or her own operations and the operations of all subcontractors as specified in the subsection 80-04 titled LIMITATION OF OPERATIONS of Section 80. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in the subsection 70-15 titled CONTRACTOR’S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS in Section 70.

b. With respect to his or her own operations and the operations of all subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying personnel, equipment, vehicles, storage areas, and any work area or condition that may be hazardous to the operation of aircraft, fire- rescue equipment, or maintenance vehicles at the airport.

40-6 When the contract requires the maintenance of vehicular traffic on an existing road, street, or highway during the Contractor’s performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep such road, street, or highway open to all traffic and shall provide such maintenance as may be required to accommodate traffic. The Contractor shall be responsible for the repair of any damage caused by the Contractor’s equipment and personnel. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag person, and other traffic control devices in

reasonable conformity with the Manual on Uniform Traffic Control Devices (MUTCD) (<http://mutcd.fhwa.dot.gov/>), unless otherwise specified. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways.

40-7 Removal of existing structures. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the lump sum price.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Engineer shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the Engineer in accordance with the provisions of the contract.

Except as provided in the subsection 40-07 titled RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK of this section, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be used in the work or as otherwise provided for in the contract and shall remain the property of the Owner when so used in the work.

40-8 Rights in and use of materials found in the work. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be either embankment or waste, the Contractor may at his or her option either:

- a. Use such material in another contract item, providing such use is approved by the Engineer and is in conformance with the contract specifications applicable to such use; or,
- b. Remove such material from the site, upon written approval of the Engineer; or
- c. Use such material for the Contractor's own temporary construction on site; or,
- d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., the Contractor shall request the Engineer's approval in advance of such use.

Should the Engineer approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at his or her own expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for use of such material used in the work or removed from the site.

Should the Engineer approve the Contractor's exercise of option a., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of his or her exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

40-9 Final cleanup. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. The Contractor shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of such property Owner.

END OF SECTION 40

Section 50 Control of Work

50-1 Authority of the Engineer. The Engineer shall decide any and all questions which may arise as to the quality and acceptability of materials furnished, work performed, and as to the manner of performance and rate of progress of the work. The Engineer shall decide all questions that may arise as to the interpretation of the specifications or plans relating to the work. The Engineer shall determine the amount and quality of the several kinds of work performed and materials furnished which are to be paid for the under contract.

The Engineer does not have the authority to accept pavements that do not conform to FAA specification requirements.

50-2 Conformity with plans and specifications. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans or specifications.

If the Engineer finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications but that the portion of the work affected will, in his or her opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the Engineer will advise the Owner of his or her determination that the affected work be accepted and remain in place. In this event, the Engineer will document the determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. The Engineer's determination and recommended contract price adjustments will be based on sound engineering judgment and such tests or retests of the affected work as are, in the Engineer's opinion, needed. Changes in the contract price shall be covered by contract change order or supplemental agreement as applicable.

If the Engineer finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the Engineer's written orders.

For the purpose of this subsection, the term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the Engineer's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the Engineer's opinion, such compliance is essential to provide an acceptable finished portion of the work.

For the purpose of this subsection, the term "reasonably close conformity" is also intended to provide the Engineer with the authority, after consultation with the FAA, to use sound engineering judgment in his or her determinations as to acceptance of work that is not in

strict conformity, but will provide a finished product equal to or better than that intended by the requirements of the contract, plans and specifications.

The Engineer will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

- 50-3 Coordination of contract, plans, and specifications.** The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If any paragraphs contained in the Supplemental Terms and Conditions conflict with General Provisions or Technical Specifications, the Supplemental Terms and Conditions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the Engineer for an interpretation and decision, and such decision shall be final.

- 50-4 Cooperation of Contractor.** The Contractor will be supplied with five copies each of the plans and specifications. The Contractor shall have available on the work at all time's one copy each of the plans and specifications. Additional copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the Engineer and his or her inspectors and with other contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as his or her agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the Engineer or his or her authorized representative.

- 50-5 Cooperation between contractors.** The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each Contractor shall conduct the work so as not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with his or her contract and shall protect and save harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

The Contractor shall arrange his or her work and shall place and dispose of the materials being used so as not to interfere with the operations of the other Contractors within the limits of the same project. The Contractor shall join his or her work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

50-6 Construction layout and stakes. The Contractor must establish all layout required for the construction of the work. Such stakes and markings as the Engineer may set for either their own or the Contractor's guidance shall be preserved by the Contractor. In case of negligence on the part of the Contractor, or their employees, resulting in the destruction of such stakes or markings, an amount equal to the cost of replacing the same may be deducted from subsequent estimates due the Contractor at the discretion of the Engineer.

The Contractor will be required to furnish all lines, grades and measurements from the control points necessary for the proper execution and control of the work contracted for under these specifications.

The Contractor must give copies of survey notes to the Engineer for each area of construction and for each placement of material as specified to allow the Engineer to make periodic checks for conformance with plan grades, alignments and grade tolerances required by the applicable material specifications. All surveys must be provided to the Engineer prior to commencing work items that will cover or disturb the survey staking as set by the Contractor's surveyor. Survey(s) and notes shall be provided in the following format(s): AutoCAD Civil 3D. In the case of error, on the part of the Contractor, their surveyor, employees or subcontractors, resulting in established grades, alignment or grade tolerances that do not concur with those specified or shown on the plans, the Contractor is solely responsible for correction, removal, replacement and all associated costs at no additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses. The cost shall be included in the price of the bid for the various items of the Contract.

Construction Staking and Layout includes but is not limited to:

- a. Clearing and Grubbing perimeter staking
- b. Limit of Disturbance (LOD) staking
- c. Rough Grade slope stakes at 100-foot (30-m) stations
- d. Drainage Swales slope stakes and flow line blue tops at 50-foot (15-m) stations

Subgrade blue tops at 25-foot (7.5-m) stations and 25-foot (7.5-m) offset distance (maximum) for the following section locations: Not applicable for this task

- a. Runway – minimum five (5) per station
- b. Taxiways – minimum three (3) per station
- c. Holding apron areas – minimum three (3) per station
- d. Roadways – minimum three (3) per station

Base Course blue tops at 25-foot (7.5-m) stations and 25-foot (7.5-m) offset distance (maximum) for the following section locations: Not applicable for this task

- a. Runway – minimum five (5) per station
- b. Taxiways – minimum three (3) per station
- c. Holding apron areas – minimum three (3) per station

Pavement areas: Not applicable for this task

- a. Edge of Pavement hubs and tacks (for stringline by Contractor) at 100-foot (30-m) stations.
- b. Between Lifts at 25-foot (7.5-m) stations for the following section locations:
 - (1) Runways – each paving lane width
 - (2) Taxiways – each paving lane width
 - (3) Holding areas – each paving lane width
- c. After finish paving operations at 50-foot (15-m) stations:
 - (1) All paved areas – Edge of each paving lane prior to next paving lot
- d. Shoulder and safety area blue tops at 50-foot (15-m) stations and at all break points with maximum of 50-foot (15-m) offsets
- e. Fence lines at 100-foot (30-m) stations minimum
- f. Electrical and Communications System locations, lines and grades including but not limited to duct runs, connections, fixtures, signs, lights, Visual Approach Slope Indicators (VASIs), Precision Approach Path Indicators (PAPIs), Runway End Identifier Lighting (REIL), Wind Cones, Distance Markers (signs), pull boxes and manholes
- g. Drain lines, cut stakes and alignment on 25-foot (7.5-m) stations, inlet and manholes
- h. Painting and Striping layout (pinned with 1.5 inch PK nails) marked for paint Contractor. (All nails shall be removed after painting)
- i. Laser, or other automatic control devices, shall be checked with temporary control point or grade hub at a minimum of once per 400 feet (120 m) per pass (that is, paving lane

The establishment of Survey Control and/or reestablishment of survey control shall be by a State Licensed Land Surveyor.

Controls and stakes disturbed or suspect of having been disturbed shall be checked and/or reset as directed by the Engineer without additional cost to the Owner.

50-7 Automatically controlled equipment. Whenever batching or mixing plant equipment is required to be operated automatically under the contract and a breakdown or malfunction of the automatic controls occurs, the equipment may be operated manually or by other methods for a period 48 hours following the breakdown or malfunction, provided this

method of operations will produce results which conform to all other requirements of the contract. - Not applicable for this task

50-8 Authority and duties of inspectors. Inspectors shall be authorized to inspect all work done and all material furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. Inspectors are not authorized to revoke, alter, or waive any provision of the contract. Inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

Inspectors are authorized to notify the Contractor or his or her representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the Engineer for a decision.

50-9 Inspection of the work. All materials and each part or detail of the work shall be subject to inspection. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the Engineer requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Any work done or materials used without supervision or inspection by an authorized representative of the Owner may be ordered removed and replaced at the Contractor's expense unless the Owner's representative failed to inspect after having been given reasonable notice in writing that the work was to be performed.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the Owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

50-10 Removal of unacceptable and unauthorized work. All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise determined acceptable by the Engineer as provided in the subsection 50-02 titled CONFORMITY WITH PLANS AND SPECIFICATIONS of this section.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable

manner in accordance with the provisions of the subsection 70-14 titled CONTRACTOR'S RESPONSIBILITY FOR WORK of Section 70.

No removal work made under provision of this subsection shall be done without lines and grades having been established by the Engineer. Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans or as established by the Engineer, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the Engineer made under the provisions of this subsection, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced and unauthorized work to be removed and to deduct the costs incurred by the Owner from any monies due or to become due the Contractor.

50-11 Load restrictions. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage that may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor shall be responsible for all damage done by his or her hauling equipment and shall correct such damage at his or her own expense.

The contractor shall videotape or photograph the proposed haul routes to document existing conditions prior to start of construction. Construction traffic should be kept off airport pavements to the extent possible.

50-12 Maintenance during construction. The Contractor shall maintain the work during construction and until the work is accepted. Maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the lump sum bid.

50-13 Failure to maintain the work. Should the Contractor at any time fail to maintain the work as provided in the subsection 50-12 titled MAINTENANCE DURING CONSTRUCTION of this section, the Engineer shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the Engineer's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be deducted from monies due or to become due the Contractor.

50-14 Partial acceptance. If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the Engineer to make final inspection of that unit. If the Engineer finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, the Engineer may accept it as being complete, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

50-15 Final acceptance. Upon due notice from the Contractor of presumptive completion of the entire project, the Engineer and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The Engineer shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Engineer will give the Contractor the necessary instructions for correction of same and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50-16 Claims for adjustment and disputes. If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the Engineer in writing of his or her intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the Engineer is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the Engineer has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit a written claim to the Engineer who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

50-17 Cost reduction incentive. The provisions of this subsection will apply only to contracts awarded to the lowest bidder pursuant to competitive bidding.

On projects with original contract amounts in excess of \$100,000, the Contractor may submit to the Engineer, in writing, proposals for modifying the plans, specifications or other requirements of the contract for the sole purpose of reducing the cost of construction.

The cost reduction proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, design and safety standards. This provision shall not apply unless the proposal submitted is specifically identified by the Contractor as being presented for consideration as a value engineering proposal.

Not eligible for cost reduction proposals are changes in the basic design of a pavement type, runway and taxiway lighting, visual aids, hydraulic capacity of drainage facilities, or changes in grade or alignment that reduce the geometric standards of the project.

As a minimum, the following information shall be submitted by the Contractor with each proposal:

50-17.1 A description of both existing contract requirements for performing the work and the proposed changes, with a discussion of the comparative advantages and disadvantages of each.

50-17.2 An itemization of the contract requirements that must be changed if the proposal is adopted.

50-17.3 A detailed estimate of the cost of performing the work under the existing contract and under the proposed changes.

50-17.4 A statement of the time by which a change order adopting the proposal must be issued.

50-17.5 A statement of the effect adoption of the proposal will have on the time for completion of the contract.

50-17.6 The contract items of work affected by the proposed changes, including any quantity variation attributable to them.

The Contractor may withdraw, in whole or in part, any cost reduction proposal not accepted by the Engineer, within the period specified in the proposal. The provisions of this subsection shall not be construed to require the Engineer to consider any cost reduction proposal that may be submitted.

The Contractor shall continue to perform the work in accordance with the requirements of the contract until a change order incorporating the cost reduction proposal has been issued. If a change order has not been issued by the date upon which the Contractor's cost reduction proposal specifies that a decision should be made, or such other date as the Contractor may subsequently have requested in writing, such cost reduction proposal shall be deemed rejected.

The Engineer shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings from the adoption of all or any part of such proposal. In

determining the estimated net savings, the Engineer may disregard the contract bid prices if, in the Engineer's judgment such prices do not represent a fair measure of the value of the work to be performed or deleted.

The Owner may require the Contractor to share in the Owner's costs of investigating a cost reduction proposal submitted by the Contractor as a condition of considering such proposal. Where such a condition is imposed, the Contractor shall acknowledge acceptance of it in writing. Such acceptance shall constitute full authority for the Owner to deduct the cost of investigating a cost reduction proposal from amounts payable to the Contractor under the contract.

If the Contractor's cost reduction proposal is accepted in whole or in part, such acceptance will be by a contract change order that shall specifically state that it is executed pursuant to this subsection.

Such change order shall incorporate the changes in the plans and specifications which are necessary to permit the cost reduction proposal or such part of it as has been accepted and shall include any conditions upon which the Engineer's approval is based. The change order shall also set forth the estimated net savings attributable to the cost reduction proposal. The net savings shall be determined as the difference in costs between the original contract costs for the involved work items and the costs occurring as a result of the proposed change. The change order shall also establish the net savings agreed upon and shall provide for adjustment in the contract price that will divide the net savings equally between the Contractor and the Owner.

The Contractor's 50% share of the net savings shall constitute full compensation to the Contractor for the cost reduction proposal and the performance of the work.

Acceptance of the cost-reduction proposal and performance of the cost- reduction work shall not extend the time of completion of the contract unless specifically provided for in the contract change order.

END OF SECTION 50

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Section 60 Control of Materials

60-1 Source of supply and quality requirements. The materials used in the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish complete statements to the Engineer as to the origin, composition, and manufacture of all materials to be used in the work. Such statements shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

For projects funded under the Airport Improvement Program (AIP), Contractor shall supply steel and manufactured products that conform to the Buy American provisions established under 49 USC Section 50101 as follows: “Steel products must be 100% U.S. domestic product Manufactured Products. Preference shall be given to products that are 100% manufactured and assembled in the U.S. Manufactured products not meeting the 100% U.S. domestic preference may only be used on the project if the FAA has officially granted a permissible waiver to Buy American Preferences. Submittals for all manufactured products must include certification of compliance with Buy American requirements as established under 49 USC Section 50101. Submittal must include sufficient information to confirm compliance or submittal will be returned with no action.”

At the Engineer’s option, materials may be approved at the source of supply before delivery is stated. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

60-2 Samples, tests, and cited specifications. Unless otherwise designated, all materials used in the work shall be inspected, tested, and approved by the Engineer before incorporation in the work. Any work in which untested materials are used without approval or written permission of the Engineer shall be performed at the Contractor’s risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the Engineer, shall be removed at the Contractor’s expense.

Unless otherwise designated, quality assurance tests in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), Federal Specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids, will be made by and at the expense of the Engineer.

The testing organizations performing on-site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel, including the Contractor’s representative at his or her request. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the Engineer. All materials being used are subject to inspection, test, or

rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at their request after review and approval of the Engineer.

The Contractor shall employ a testing organization to perform all Contractor required Quality Control tests. The Contractor shall submit to the Engineer resumes on all testing organizations and individual persons who will be performing the tests. The Engineer will determine if such persons are qualified. All the test data shall be reported to the Engineer after the results are known. A legible, handwritten copy of all test data shall be given to the Engineer daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the Engineer showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

60-3 Certification of compliance. The Engineer may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which the lot is clearly identified.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the Engineer.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "brand name," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

- a. Conformance to the specified performance, testing, quality or dimensional requirements; and,
- b. Suitability of the material or assembly for the use intended in the contract work.

Should the Contractor propose to furnish an "or equal" material or assembly, the Contractor shall furnish the manufacturer's certificates of compliance as hereinbefore described for the specified brand name material or assembly. However, the Engineer shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

The Engineer reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

60-4 Plant inspection. The Engineer or his or her authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain

samples required for acceptance of the material or assembly.

Should the Engineer conduct plant inspections, the following conditions shall exist:

- a. The Engineer shall have the cooperation and assistance of the Contractor and the producer with whom the Engineer has contracted for materials.
- b. The Engineer shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.
- c. If required by the Engineer, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Office or working space should be conveniently located with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The Engineer shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

60-5 Storage of materials. Materials shall be so stored as to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the Engineer. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the Engineer. Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the Engineer a copy of the property Owner's permission.

All storage sites on private or airport property shall be restored to their before construction condition by the Contractor at his or her entire expense, except as otherwise agreed to (in writing) by the Owner or lessee of the property.

60-6 Unacceptable materials. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the Engineer.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the Engineer has approved its use in the work.

END OF SECTION 60

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Section 70 Legal Regulations and Responsibility to Public

- 70-1 Laws to be observed.** The Contractor shall keep fully informed of all Federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all his or her officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor’s employees.

- 70-2 Permits, licenses, and taxes.** The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

- 70-3 Patented devices, materials, and processes.** If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the execution or after the completion of the work.

- 70-4 Restoration of surfaces disturbed by others.** The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work. To the extent that such construction, reconstruction, or maintenance has been coordinated with the Owner, such authorized work (by others) is indicated as follows:

UTILITY	OWNER	PLAN SHEET	CONTACT
Power	Potomac Edison	C.101 – Site Plan	

Except as listed above, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the Engineer.

Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain

such utility service or facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the Engineer, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

70-5 Federal aid participation. For Airport Improvement Program (AIP) contracts, the United States Government has agreed to reimburse the Owner for some portion of the contract costs. Such reimbursement is made from time to time upon the Owner's request to the FAA. In consideration of the United States Government's (FAA's) agreement with the Owner, the Owner has included provisions in this contract pursuant to the requirements of Title 49 of the USC and the Rules and Regulations of the FAA that pertain to the work.

As required by the USC, the contract work is subject to the inspection and approval of duly authorized representatives of the FAA Administrator, and is further subject to those provisions of the rules and regulations that are cited in the contract, plans, or specifications.

No requirement of the USC, the rules and regulations implementing the USC, or this contract shall be construed as making the Federal Government a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

70-6 Sanitary, health, and safety provisions. The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of his or her employees as may be necessary to comply with the requirements of the state and local Board of Health, or of other bodies or tribunals having jurisdiction.

Attention is directed to Federal, state, and local laws, rules and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to his or her health or safety.

70-7 Public convenience and safety. The Contractor shall control his or her operations and those of his or her subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to his or her own operations and those of his or her subcontractors and all suppliers in accordance with the subsection 40-05 titled MAINTENANCE OF TRAFFIC of Section 40 hereinbefore specified and shall limit such operations for the convenience and safety of the traveling public as specified in the subsection 80-04 titled LIMITATION OF OPERATIONS of Section 80 hereinafter.

70-8 Barricades, warning signs, and hazard markings. The Contractor shall furnish, erect, and maintain all barricades, warning signs, and markings for hazards necessary to protect the public and the work. When used during periods of darkness, such barricades, warning signs, and hazard markings shall be suitably illuminated. Unless otherwise specified, barricades, warning signs, and markings for hazards that are in the air operations area (AOAs) shall be a maximum of 18 inches (0.5 m) high. Unless otherwise specified, barricades shall be spaced not more than 4 feet (1.2 m) apart. Barricades, warning signs, and markings shall be paid for under subsection 40-05.

For vehicular and pedestrian traffic, the Contractor shall furnish, erect, and maintain barricades, warning signs, lights and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices.

The Contractor shall furnish, erect, and maintain markings and associated lighting of open trenches, excavations, temporary stock piles, and the Contractor's parked construction equipment that may be hazardous to the operation of emergency fire-rescue or maintenance vehicles.

The Contractor shall furnish and erect all barricades, warning signs, and markings for hazards prior to commencing work that requires such erection and shall maintain the barricades, warning signs, and markings for hazards until their removal is directed by the Engineer.

Open-flame type lights shall not be permitted.

70-9 Use of explosives. The use of explosives is not permitted within this task.

70-10 Protection and restoration of property and landscape. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, the Contractor shall restore, at his or her own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

70-11 Responsibility for damage claims. The Contractor shall indemnify and save harmless the Engineer and the Owner and their officers, and employees from all suits, actions, or claims, of any character, brought because of any injuries or damage received or sustained

by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of his or her contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, his or her surety may be held until such suits, actions, or claims for injuries or damages shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he or she is adequately protected by public liability and property damage insurance.

70-12 Third party beneficiary clause. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create for the public or any member thereof, a third party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

70-13 Opening sections of the work to traffic. Should it be necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such "phasing" of the work shall be specified herein and indicated on the plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified. The Contractor shall make his or her own estimate of the difficulties involved in arranging the work to permit such beneficial occupancy by the Owner.

No portion of the work may be opened by the Contractor for public use until ordered by the Engineer in writing. Should it become necessary to open a portion of the work to public traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the Engineer, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at his or her expense.

The Contractor shall make his or her own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

Contractor shall be required to conform to safety standards contained AC 150/5370-2.

70-14 Contractor's responsibility for work. Until the Engineer's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with the subsection 50-14 titled PARTIAL ACCEPTANCE of Section 50, the Contractor shall have the charge and care thereof and shall take every precaution

against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at his or her expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established planting, seeding, and sodding furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

70-15 Contractor’s responsibility for utility service and facilities of others. As provided in the subsection 70-04 titled RESTORATION OF SURFACES DISTURBED BY OTHERS of this section, the Contractor shall cooperate with the Owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the Owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control their operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and the Owners are indicated as follows:

<u>Utility Service or Facility</u>	<u>Person to Contact</u>	<u>Contact Number</u>
Potomac Edison		1-800-686-0011
Miss Utility		1-800-257-7777

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of the responsibility to protect such existing features from damage or unscheduled interruption of service.

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the Owners of all utility services or other facilities of his or her plan of operations. Such notification shall be in writing addressed to THE PERSON TO CONTACT as provided in this subsection and subsection 70-04 titled RESTORATION

OF SURFACES DISTURBED BY OTHERS of this section. A copy of each notification shall be given to the Engineer.

In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.

Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their plan of operation. If, in the Contractor's opinion, the Owner's assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's PERSON TO CONTACT no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the Engineer.

The Contractor's failure to give the two days' notice shall be cause for the Owner to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods within 3 feet (1 m) of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, the Contractor shall immediately notify the proper authority and the Engineer and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the Engineer continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to their operations whether due to negligence or accident. The Owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or his or her surety.

70-15.1 FAA facilities and cable runs. Not applicable for this task.

70-16 Furnishing rights-of-way. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

70-17 Personal liability of public officials. In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the Engineer, his or her authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

70-18 No waiver of legal rights. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any

measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or his or her surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill his or her obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

70-19 Environmental protection. The Contractor shall comply with all Federal, state, and local laws and regulations controlling pollution of the environment. The Contractor shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, bitumens, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

70-20 Archaeological and historical findings. The Brumbaugh-Kendle-Grove Farmstead site contains several historic structures and materials. Most of these materials will be removed by selected 501(c) (3) organizations and potentially removed by the contractor at the request of 501(c) (3) organizations without the resources to do so. Cataloged structures are located within the Appendix section of this document.

END OF SECTION 70

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Section 80 Execution and Progress

80-1 Subletting of contract. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Engineer. The Contractor shall provide copies of all subcontracts to the Engineer.

Should the Contractor elect to assign his or her contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

80-2 Notice to proceed. The notice to proceed shall state the date on which it is expected the Contractor will begin the construction and from which date contract time will be charged. The Contractor shall begin the work to be performed under the contract immediately upon the written notice to proceed, but in any event, the Contractor shall notify the Engineer at least 24 hours in advance of the time actual construction operations will begin. The Contractor shall not commence any actual construction prior to the date on which the notice to proceed is issued by the Owner.

80-3 Execution and progress. Unless otherwise specified, the Contractor shall submit their progress schedule for the Engineer's approval at the award of contract. The Contractor's progress schedule, when approved by the Engineer, may be used to establish major construction operations and to check on the progress of the work. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the Engineer's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the notice to proceed is issued by the Owner.

80-4 Limitation of operations. There is no work within the AOA during this task.

80-5 Operational safety on airport during construction. There is no work within the airfield during this task, thus no need for Construction Safety and Phasing Plan (CSPP).

80-6 Character of workers, methods, and equipment. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the Engineer, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the Engineer.

Should the Contractor fail to remove such persons or person, or fail to furnish suitable and sufficient personnel for the proper execution of the work, the Engineer may suspend the work by written notice until compliance with such orders.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall be such that no injury to previously completed work, adjacent property, or existing airport facilities will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this subsection.

80-7 Temporary suspension of the work. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods as the Owner may deem necessary, due to unsuitable weather, or such other conditions as are considered unfavorable for the execution of the work, or for such time as is necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the Engineer's order to suspend work to the effective date of the Engineer's order to resume the work. Claims for such compensation shall be filed with the Engineer within the time period stated in the Engineer's order to resume work. The Contractor shall submit with his or her claim information substantiating the amount shown on the claim. The Engineer will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather, for suspensions made at the request of the Owner, or for any other delay provided for in the contract, plans, or specifications.

If it should become necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. The Contractor shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

80-8 Determination and extension of contract time. The number of calendar or working days allowed for completion of the work shall be stated in the proposal and contract and shall be known as the CONTRACT TIME.

Should the contract time require extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

- a. CONTRACT TIME based on WORKING DAYS shall be calculated weekly by the Engineer. The Engineer will furnish the Contractor a copy of his or her weekly statement of the number of working days charged against the contract time during the week and the number of working days currently specified for completion of the contract (the original contract time plus the number of working days, if any, that have been included in approved CHANGE ORDERS or SUPPLEMENTAL AGREEMENTS covering EXTRA WORK).

The Engineer shall base his or her weekly statement of contract time charged on the following considerations:

- (1) No time shall be charged for days on which the Contractor is unable to proceed with the principal item of work under construction at the time for at least six (6) hours with the normal work force employed on such principal item. Should the normal work force be on a double-shift, 12 hours shall be used. Should the normal work force be on a triple-shift, 18 hours shall apply. Conditions beyond the Contractor's control such as strikes, lockouts, unusual delays in transportation, and temporary suspension of the principal item of work under construction or temporary suspension of the entire work which have been ordered by the Owner for

reasons not the fault of the Contractor, shall not be charged against the contract time.

- (2) The Engineer will not make charges against the contract time prior to the effective date of the notice to proceed.
- (3) The Engineer will begin charges against the contract time on the first working day after the effective date of the notice to proceed.
- (4) The Engineer will not make charges against the contract time after the date of final acceptance as defined in the subsection 50-15 titled FINAL ACCEPTANCE of Section 50.
- (5) The Contractor will be allowed one (1) week in which to file a written protest setting forth his or her objections to the Engineer's weekly statement. If no objection is filed within such specified time, the weekly statement shall be considered as acceptable to the Contractor.

The contract time (stated in the proposal) is based on the originally estimated quantities as described in the subsection 20-05 titled INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES of Section 20. Should the satisfactory completion of the contract require performance of work in greater quantities than those estimated in the proposal, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in contract time shall not consider either the cost of work or the extension of contract time that has been covered by change order or supplemental agreement and shall be made at the time of final payment.

- b.** Contract Time based on calendar days shall consist of the number of calendar days stated in the contract counting from the effective date of the notice to proceed and including all Saturdays, Sundays, holidays, and non-work days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

- c.** When the contract time is a specified completion date, it shall be the date on which all contract work shall be substantially complete.

If the Contractor finds it impossible for reasons beyond his or her control to complete the work within the contract time as specified, or as extended in accordance with the provisions of this subsection, the Contractor may, at any time prior to the expiration of the contract time as extended, make a written request to the Owner for an extension of time setting forth the reasons which the Contractor believes will justify the granting of his or her request. Requests for extension of

time on calendar day projects, caused by inclement weather, shall be supported with National Weather Bureau data showing the actual amount of inclement weather exceeded what could normally be expected during the contract period. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the supporting documentation justify the work was delayed because of conditions beyond the control and without the fault of the Contractor, the Owner may extend the time for completion by a change order that adjusts the contract time or completion date. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion.

80-9 Failure to complete on time. For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in the subsection 80-08 titled DETERMINATION AND EXTENSION OF CONTRACT TIME of this Section) the sum specified in the contract and proposal as liquidated damages will be deducted from any money due or to become due the Contractor or his or her surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

Schedule	Liquidated Damages Cost	Allowed Construction Time
Overall	\$500/day	45 Calendar days

The maximum construction time allowed shall not be more than 45 calendar days. Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

80-10 Default and termination of contract. The Contractor shall be considered in default of his or her contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons if the Contractor:

- a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or
- b. Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or
- c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- d. Discontinues the execution of the work, or
- e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or

- f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or
- h. Makes an assignment for the benefit of creditors, or
- i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Engineer consider the Contractor in default of the contract for any reason above, the Engineer shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the Engineer of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the Engineer will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-11 Termination for national emergencies. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense. When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the Engineer.

Termination of the contract or a portion thereof shall neither relieve the Contractor of his or her responsibilities for the completed work nor shall it relieve his or her surety of its obligation for and concerning any just claim arising out of the work performed.

80-12 Work area, storage area and sequence of operations. There is no work within the Airport Operations Area (AOA) during this task. Storage shall be within the project site as shown in the plans. Upon Notice to Proceed (NTP), the contractor is to allow thirty (30) days for a 501(3)(c) to access the site to perform material salvage operations but can work concurrently on tasks which do not affect the salvage material removal (i.e. well and cistern sealing).

END OF SECTION 80

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Section 90 Measurement and Payment

90-1 Measurement of quantities. All work completed under the contract will be measured by the Engineer, or his or her authorized representatives, using United States Customary Units of Measurement or the International System of Units.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet (0.8 square meters) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Engineer.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

In computing volumes of excavation the average end area method or other acceptable methods will be used.

The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inch.

The term "ton" will mean the short ton consisting of 2,000 lb. (907 kg) avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, approved scales by competent, qualified personnel at locations designed by the Engineer. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as the Engineer directs, and each truck shall bear a plainly legible identification mark.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.

When requested by the Contractor and approved by the Engineer in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed, and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for

conversion from weight measurement to volume measurement will be determined by the Engineer and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Bituminous materials will be measured by the gallon (liter) or ton (kg). When measured by volume, such volumes will be measured at 60°F (16°C) or will be corrected to the volume at 60°F (16°C) using ASTM D1250 for asphalts or ASTM D633 for tars.

Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when bituminous material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work.

When bituminous materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, may be used for computing quantities.

Cement will be measured by the ton (kg) or hundredweight (km).

Timber will be measured by the thousand feet board measure (MFBM) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.

The term “lump sum” when used as an item of payment will mean complete payment for the work described in the contract.

When a complete structure or structural unit (in effect, “lump sum” work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered by the Engineer in connection with force account work will be measured as agreed in the change order or supplemental agreement authorizing such force account work as provided in the subsection 90-05 titled PAYMENT FOR EXTRA WORK of this section.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.

Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales.

Scales shall be accurate within 1/2% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the inspector before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed one-tenth of 1% of the nominal rated capacity of the scale, but not less than 1 pound (454 grams). The use of spring balances will not be permitted.

Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the inspector can safely and conveniently view them.

Scale installations shall have available ten standard 50-pound (2.3 km) weights for testing the weighing equipment or suitable weights and devices for other approved equipment.

Scales must be tested for accuracy and serviced before use at a new site. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Scales “overweighing” (indicating more than correct weight) will not be permitted to operate, and all materials received subsequent to the last previous correct weighing-accuracy test will be reduced by the percentage of error in excess of one-half of 1%.

In the event inspection reveals the scales have been under weighing (indicating less than correct weight), they shall be adjusted, and no additional payment to the Contractor will be allowed for materials previously weighed and recorded.

All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.

When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the Engineer. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

90-2 Scope of payment. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the execution thereof, subject to the provisions of the subsection 70-18 titled NO WAIVER OF LEGAL RIGHTS of Section 70.

When the “basis of payment” subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-3 Compensation for altered quantities. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in the subsection 40-02 titled ALTERATION OF WORK AND QUANTITIES of Section 40 will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from his or her unbalanced allocation of overhead and profit among the contract items, or from any other cause.

90-4 Payment for omitted items. As specified in the subsection 40-03 titled OMITTED ITEMS of Section 40, the Engineer shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the Engineer omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the Engineer's order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the Engineer's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the Engineer's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

90-5 Payment for extra work. Extra work, performed in accordance with the subsection 40-04 titled EXTRA WORK of Section 40, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work.

90-6 Partial payments. Payments will be made to the Contractor at least once each month work progresses per the submitted Schedule of Values submitted and approved by the engineer. Said payments will be based upon estimates, prepared by the Contractor (and approved by the Project Inspector), of the value of the work performed and materials complete and in place, in accordance with the contract, plans and specifications. The Owner will hold retainage from prime Contractors and provide for prompt and regular incremental acceptances of portions of the prime contract, pay retainage to prime Contractors based on these acceptances, and require a contract clause obligating the prime Contractor to pay all retainage owed to the subcontractor for satisfactory completion of the accepted work within 30 days after the Owner's payment to the prime Contractor.

The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. The Owner must ensure prompt and full payment of retainage from the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

From the total of the amount determined to be payable on a partial payment, 10 percent of such total amount will be deducted and retained by the Owner until the final payment

is made, except as may be provided (at the Contractor's option) in the subsection 90-08 titled PAYMENT OF WITHHELD FUNDS of this section. The balance of the amount payable, less all previous payments, shall be certified for payment. Should the Contractor exercise his or her option, as provided in the subsection 90-08 titled PAYMENT OF WITHHELD FUNDS of this section, no such percent retainage shall be deducted.

When at least 95% of the work has been completed, the Engineer shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done.

The Owner may retain an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the Engineer to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in the subsection 90-09 titled ACCEPTANCE AND FINAL PAYMENT of this section.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

90-7 Payment for materials on hand. Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

- a. The material has been stored or stockpiled in a manner acceptable to the Engineer at or on an approved site.
- b. The Contractor has furnished the Engineer with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
- c. The Contractor has furnished the Engineer with satisfactory evidence that the material and transportation costs have been paid.
- d. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material so stored or stockpiled.

- e. The Contractor has furnished the Owner evidence that the material so stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the work.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of his or her responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials.

The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this subsection.

90-8 Payment of withheld funds. At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in subsection 90-06 PARTIAL PAYMENTS, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

- a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.
- b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the retainage that would otherwise be withheld from partial payment.
- c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.
- d. The Contractor shall obtain the written consent of the surety to such agreement.

90-9 Acceptance and final payment. When the contract work has been accepted in accordance with the requirements of the subsection 50-15 titled FINAL ACCEPTANCE of Section 50, the Engineer will prepare the final estimate of the items of work actually performed. The Contractor shall approve the Engineer's final estimate or advise the Engineer of the Contractor's objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the Engineer shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the Engineer's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the Engineer's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with the subsection 50-16 titled CLAIMS FOR ADJUSTMENT AND DISPUTES of Section 50.

After the Contractor has approved, or approved under protest, the Engineer's final estimate, and after the Engineer's receipt of the project closeout documentation required

in subsection 90-11 Project Closeout, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of the subsection 50- 16 titled CLAIMS FOR ADJUSTMENTS AND DISPUTES of Section 50 or under the provisions of this subsection, such claims will be considered by the Owner in accordance with local laws or ordinances.

Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

90-10 Construction warranty.

- a.** In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.
- b.** This warranty shall continue for a period of one year from the date of final acceptance of the work. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession. However, this will not relieve the Contractor from corrective items required by the final acceptance of the project work.
- c.** The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of:
 - (1)** The Contractor's failure to conform to contract requirements; or
 - (2)** Any defect of equipment, material, workmanship, or design furnished by the Contractor.
- d.** The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.
- e.** The Owner will notify the Contractor, in writing, within seven calendar days after the discovery of any failure, defect, or damage.
- f.** If the Contractor fails to remedy any failure, defect, or damage within fourteen calendar days after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.
- g.** With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing,

for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.

- h.** This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.
- i.** Owner and Engineer will perform a warranty inspection with the Contractor approximately three (3) months before the end of the warranty period.

90-11 Project closeout. Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the Engineer approves the Contractor's final submittal. The Contractor shall:

- a.** Provide two (2) copies of all manufacturers warranties specified for materials, equipment, and installations.
- b.** Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.
- c.** Complete final cleanup in accordance with subsection 40-08, FINAL CLEANUP.
- d.** Complete all punch list items identified during the Final Inspection.
- e.** Provide complete release of all claims for labor and material arising out of the Contract.
- f.** Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.
- g.** When applicable per state requirements, return copies of sales tax completion forms.
- h.** Manufacturer's certifications for all items incorporated in the work.
- i.** All required record drawings, as-built drawings or as-constructed drawings.
- j.** Project Operation and Maintenance (O&M) Manual.
- k.** Security for Construction Warranty.
- l.** Lead Based Paint and Asbestos Containing Material Documentation.

END OF SECTION 90

Section 100 Contractor Quality Control Program

100-1 General. When the specification requires a Contractor Quality Control Program, the Contractor shall establish, provide, and maintain an effective Quality Control Program that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified here and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The intent of this section is to enable the Contractor to establish a necessary level of control that will:

- a. Adequately provide for the production of acceptable quality materials.
- b. Provide sufficient information to assure both the Contractor and the Engineer that the specification requirements can be met.
- c. Allow the Contractor as much latitude as possible to develop his or her own standard of control.

The Contractor shall be prepared to discuss and present, at the preconstruction conference, their understanding of the quality control requirements. The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the Quality Control Program has been reviewed and accepted by the Engineer. No partial payment will be made for materials subject to specific quality control requirements until the Quality Control Program has been reviewed.

The quality control requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the acceptance testing requirements. Acceptance testing requirements are the responsibility of the Engineer.

100-2 Description of program.

- a. **General description.** The Contractor shall establish a Quality Control Program to perform quality control inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. This Quality Control Program shall ensure conformance to applicable specifications and plans with respect to materials, workmanship, construction, finish, and functional performance. The Quality Control Program shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of quality control.

- b. Quality Control Program.** The Contractor shall describe the Quality Control Program in a written document that shall be reviewed and approved by the Engineer prior to the start of any production, construction, or off-site fabrication. The written Quality Control Program shall be submitted to the Engineer for review and approval at least **10** calendar days before the preconstruction meeting. The Contractor's Quality Control Plan and Quality Control testing laboratory must be approved in writing by the Engineer prior to the Notice to Proceed (NTP).

The Quality Control Program shall be organized to address, as a minimum, the following items:

- (1) Quality control organization
- (2) Project progress schedule
- (3) Submittals schedule
- (4) Inspection requirements
- (5) Quality control testing plan
- (6) Documentation of quality control activities
- (7) Requirements for corrective action when quality control and/or acceptance criteria are not met

The Contractor is encouraged to add any additional elements to the Quality Control Program that is deemed necessary to adequately control all production and/or construction processes required by this contract.

100-3 Quality control organization. The Contractor Quality Control Program shall be implemented by the establishment of a separate quality control organization. An organizational chart shall be developed to show all quality control personnel and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all quality control staff by name and function, and shall indicate the total staff required to implement all elements of the Quality Control Program, including inspection and testing for each item of work. If necessary, different technicians can be used for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the Quality Control Program, the personnel assigned shall be subject to the qualification requirements of paragraph 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The quality control organization shall, as a minimum, consist of the following personnel:

- a. Program Administrator.** The Program Administrator shall be a full-time employee of the Contractor, or a consultant engaged by the Contractor. Please note that the Program Administrator must be on-site when quality control observation or testing is required. The Program Administrator shall have a minimum of five (5) years of experience in airport and/or highway construction and shall have had prior quality control experience on a project of comparable size and scope as the contract.

The Program Administrator shall have full authority to institute any and all actions necessary for the successful implementation of the Quality Control Program to ensure compliance with the contract plans and technical specifications. The Program Administrator shall report directly to a responsible officer of the construction firm. The Program Administrator may supervise the Quality Control Program on more than one project provided that person can be at the job site within two (2) hours after being notified of a problem.

- b. Quality control technicians.** A sufficient number of quality control technicians necessary to adequately implement the Quality Control Program shall be provided. These personnel shall be either Engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II or higher construction materials technician or highway construction technician and shall have a minimum of two (2) years of experience in their area of expertise.

The quality control technicians shall report directly to the Program Administrator and shall perform the following functions:

- (1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by subsection 100-06.
- (2) Performance of all quality control tests as required by the technical specifications and subsection 100-07.
- (3) Performance of density tests for the Engineer when required by the technical specifications.

Certification at an equivalent level, by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

- c. Staffing levels.** The Contractor shall provide sufficient qualified quality control personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The Quality Control Program shall state where different technicians will be required for different work elements.

100-4 Project progress schedule. The Contractor shall submit a coordinated construction schedule for all work activities. The schedule shall be prepared as a network diagram in Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), or other format, or as otherwise specified in the contract. As a minimum, it shall provide information on the sequence of work activities, milestone dates, and activity duration.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

100-5 Submittals schedule. The Contractor shall submit a detailed listing of all submittals (for example, mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include:

- a. Specification item number
- b. Item description
- c. Description of submittal
- d. Specification paragraph requiring submittal
- e. Scheduled date of submittal

100-6 Inspection requirements. Quality control inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by subsection 100-07.

Inspections shall be performed daily to ensure continuing compliance with contract requirements until completion of the particular feature of work. These shall include the following minimum requirements:

- a. During plant operation for material production, quality control test results and periodic inspections shall be used to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment used in proportioning and mixing shall be inspected to ensure its proper operating condition. The Quality Control Program shall detail how these and other quality control functions will be accomplished and used.
- b. During field operations, quality control test results and periodic inspections shall be used to ensure the quality of all materials and workmanship. All equipment used in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The Program shall document how these and other quality control functions will be accomplished and used.

100-7 Quality control testing plan. As a part of the overall Quality Control Program, the Contractor shall implement a quality control testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional quality control tests that the Contractor deems necessary to adequately control production and/or construction processes.

The testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

- a. Specification item number (for example, P-401)
- b. Item description (for example, Plant Mix Bituminous Pavements)
- c. Test type (for example, gradation, grade, asphalt content)

- d. Test standard (for example, ASTM or American Association of State Highway and Transportation Officials (AASHTO) test number, as applicable)
- e. Test frequency (for example, as required by technical specifications or minimum frequency when requirements are not stated)
- f. Responsibility (for example, plant technician)
- g. Control requirements (for example, target, permissible deviations)

The testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D3665. The Engineer shall be provided the opportunity to witness quality control sampling and testing.

All quality control test results shall be documented by the Contractor as required by subsection 100-08.

100-8 Documentation. The Contractor shall maintain current quality control records of all inspections and tests performed. These records shall include factual evidence that the required inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the Engineer daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the Contractor's Program Administrator.

Specific Contractor quality control records required for the contract shall include, but are not necessarily limited to, the following records:

- a. **Daily inspection reports.** Each Contractor quality control technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations. These technician's daily reports shall provide factual evidence that continuous quality control inspections have been performed and shall, as a minimum, include the following:
 - (1) Technical specification item number and description
 - (2) Compliance with approved submittals
 - (3) Proper storage of materials and equipment
 - (4) Proper operation of all equipment
 - (5) Adherence to plans and technical specifications
 - (6) Review of quality control tests
 - (7) Safety inspection.
 - (8) The daily inspection reports shall identify inspections conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible quality control technician and the Program Administrator. The Engineer shall be provided at least one copy of each daily inspection report on the work day following the day of record.

b. Daily test reports. The Contractor shall be responsible for establishing a system that will record all quality control test results. Daily test reports shall document the following information:

- (1) Technical specification item number and description
- (2) Test designation
- (3) Location
- (4) Date of test
- (5) Control requirements
- (6) Test results
- (7) Causes for rejection
- (8) Recommended remedial actions
- (9) Retests

Test results from each day's work period shall be submitted to the Engineer prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical quality control charts. The daily test reports shall be signed by the responsible quality control technician and the Program Administrator.

100-9 Corrective action requirements. The Quality Control Program shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the Quality Control Program as a whole, and for individual items of work contained in the technical specifications.

The Quality Control Program shall detail how the results of quality control inspections and tests will be used for determining the need for corrective action and shall contain clear sets of rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and use statistical quality control charts for individual quality control tests. The requirements for corrective action shall be linked to the control charts.

100-10 Surveillance by the Engineer. All items of material and equipment shall be subject to surveillance by the Engineer at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate quality control system in conformance with the requirements detailed here and the applicable technical specifications and plans. In addition, all items of materials,

equipment and work in place shall be subject to surveillance by the Engineer at the site for the same purpose.

Surveillance by the Engineer does not relieve the Contractor of performing quality control inspections of either on-site or off-site Contractor's or subcontractor's work.

100-11 Noncompliance.

- a.** The Engineer will notify the Contractor of any noncompliance with any of the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Any notice, when delivered by the Engineer or his or her authorized representative to the Contractor or his or her authorized representative at the site of the work, shall be considered sufficient notice.
- b.** In cases where quality control activities do not comply with either the Contractor Quality Control Program or the contract provisions, or where the Contractor fails to properly operate and maintain an effective Quality Control Program, as determined by the Engineer, the Engineer may:
 - (1)** Order the Contractor to replace ineffective or unqualified quality control personnel or subcontractors.
 - (2)** Order the Contractor to stop operations until appropriate corrective actions are taken.

END OF SECTION 100

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ITEM X-5 MOBILIZATION/DEMobilIZATION

DESCRIPTION

- 1.1** This work shall consist of the performance of construction preparatory operations, including the movement of personnel, equipment and materials to and from the project site, coordination with 501(3) (C) organizations, layout and survey; payment of bid bond, performance bond, labor and material payment bond, and other insurance premiums.

The Contractor shall submit a detailed Project Schedule to the Engineer within ten (10) calendar days of the date of "Notice to Proceed" specifying all work items and their estimated duration. During the same period, the Contractor shall furnish a breakdown of lump sum bid showing the amounts for each item included therein in order to provide a basis for valuation of the components and in determining progress payments.

- 1.2** All areas disturbed due to stockpiles, parking/staging areas, and similar items shall be restored with suitable materials to substantially original contours and shall be seeded and mulched to the satisfaction of the Engineer and Owner.

METHOD OF MEASUREMENT

- 2.1** Payment for mobilization / demobilization and construction layout surveying will be made on a lump sum basis wherein no measurement will be made.

BASIS OF PAYMENT

- 3.1** No separate payment will be made for work under this section.

Payment will be made under:

Item X-100-5.1 Residential Lot Clearing – Parcel 421 – per lump sum (L.S.)

Costs include the furnishing of all materials, labor, tools, equipment, and incidentals necessary to mobilize and subsequently demobilize the construction preparatory operations.

END OF ITEM X-5

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ITEM X-100 RESIDENTIAL LOT CLEARING

DESCRIPTION

- 1.1** This item shall consist of furnishing all labor, materials, and equipment required for the demolition and removal, clearing, subsequent backfill/grading, topsoiling, seeding, and mulching, well/cistern sealing, electrical service removal, and final stabilization of structures on the Grove Farmstead Lot (all owned by the Washington County Board of County Commissioners (OWNER). This shall also include erosion and sediment control measures shown on the plans required to facilitate the structure demolition. Any off-site material costs, that may be required to backfill the farm house basement or the lower level of the barn, must be included within the lump sum bid.

The lot is located at 14301 Pennsylvania Avenue (Route 11). The lot contains a barn, farm house, and/or other structures to be demolished and removed. The lot is generally described below:

- a.** Parcel 421 – contains one farmhouse (2-story), Summer Kitchen, Stone Smokehouse, Pierced-end Brick Barn, feed house, and silo.

CONSTRUCTION METHODS

- 2.1 GENERAL.** The buildings are currently vacant.

It will be responsibility of the Contractor prior to submitting his proposal, to familiarize himself with all of the details pertaining to the work. He shall have no claim for extra compensation or any other claim because of misunderstandings, misinterpretations, or lack of information relative to these matters.

The County assumes no responsibility for actual condition of buildings to be demolished. It will be the responsibility of the Contractor to see that, upon beginning demolition operations, no building or structure is left in a precarious or dangerous condition at any time. Conditions existing at time of inspection for bidding purpose will be maintained by the Airport as far as practical. The remains of the houses will be razed and disposed of as part of this Contract.

Use of explosives shall not be permitted.

Upon NTP, the Contractor SHALL contact and coordinate with the three (3) 501(c) (3) salvage organizations listed below prior to the anticipated commencement of demolition operations. Thirty (30) days will be provided for salvage operations. The three (3) organizations listed have already been contacted by the County and have all expressed interest in materials from the Brumbaugh-Kendle-Grove Farmstead Site and are the following:

- Brick + Board
2507 N Howard St, Baltimore, MD
Telephone: (443) 840-0444
Point of Contact – Max Pollock
- Community Forklift
4671 Tanglewood Drive, Edmonston, MD
Telephone: (301) 985-5180
Point of Contact – John Zeidler
- Second Chance Inc.
1645 Warner Street, Baltimore, MD
Telephone: (410) 385-1101
Point of Contact – Nick Redfurn

Of the 501(c) (3) organizations listed above, Brick + Board, has responded to the affirmative to procuring the most items listed within the inventory to be salvaged (which is enclosed within the Appendix). As a result, Brick + Board should be granted the first opportunity to perform salvage operations. If any days from the thirty (30) day salvage allotment remain, secondary opportunities shall be extended to the remaining 501(c) (3) organizations. The contractor shall set aside any remaining salvageable items (See Appendix for full list of items) within this thirty (30) day period. The bid price should include any removal work in which the 501(3) (c) organizations cannot perform where assistance from the contractor is needed.

The contractor may work concurrently with the 501(3) (c) organizations during this period on tasks which do not impact the material removal but facilitates meeting the project duration.

The total duration of this project is forty-five (45) consecutive calendar days. This includes:

- 501(c)(3) organization material removal – 30 days
- Demolition, restoration and demobilization – 15 days

Remaining items (not removed by 501(c) (3) organization), shall be demolished and removed by the Contractor. Prior to demolition operations, it shall be the Contractor's responsibility to confirm with the Engineer that the salvage operation has been completed.

Demolition will require mitigation and abatement of Lead Based Paint (LBP) and Asbestos Containing Material (ACM). The Contractor will be required to test and analyze the structure for the presence of LBP and ACM. An ACM survey was completed by Froehling & Robertson, Inc and is included within Appendix B. The survey is provided for the Contractor to reference and does not preclude the need for the Contractor to perform their own testing and identification.

Demolished materials shall be transported off Airport property and disposed of legally and the entire site shall be cleared at the time of completion. The Contractor shall submit landfill receipts for record purposes indicating receipt and acceptance of materials by a landfill facility licensed to accept such materials. Demolished materials (all debris,

rubbish, scrap, etc.) resulting from the operations under this contract shall be promptly disposed of. Do not allow demolished materials to accumulate on site. Demolished materials shall not be burned.

The Contractor shall comply with all applicable state and local regulation codes for all work covered by this specification.

Storage or sale of removed items on site shall not be permitted.

All necessary permits shall be procured by the Contractor at their expense and the Contractor shall comply with all laws and ordinances of Washington County pertaining to the work.

2.2 SUBMITTALS. The Contractor shall submit proposed dust control and noise control measures to the Engineer prior to building demolition. Contractor shall also submit source of backfill material and weigh/load tickets for the backfill material.

2.3 QUALITY ASSURANCE. The Contractor shall engage an experienced firm that has successfully completed demolition work similar to that indicated for this project. The Contractor shall comply with governing EPA notification regulations before starting demolition. Hauling and disposal shall comply with regulations of authorities having jurisdiction.

2.4 EXAMINATION. The Contractor shall visit the lot to estimate the extent of work. The Contractor shall verify that utilities have been disconnected and capped. Survey existing conditions and correlate with requirements indicated to determine extent of demolition required. Survey the condition of the building to determine whether removing any element might result in a structural deficiency or unplanned collapse of any portion of the structures during demolition. Perform surveys as the work progresses to detect hazards resulting from demolition activities.

2.5 UTILITY SERVICES. The Contractor shall remove all subsurface utility items within the footprint of the demolition (with the exception of the well and cistern). The Contractor is cautioned to exercise all care to ascertain that the utility services for the structures to be demolished are disconnected.

For the removal of the electrical distribution service to the barn area, the Contractor shall coordinate with Potomac Edison – A FirstEnergy Company (1-800-686-0011).

The Contractor shall seal the existing cistern per the Contract Drawings.

To seal the existing well (shown on the Contract Drawings), the Contractor shall hire a Well Driller licensed by the State Maryland. The well sealing shall comply with COMAR 26.04.0434-36 and within forty-five (45) days of completion, the driller shall submit Water Well Abandonment-Sealing Report Form to Maryland Department of the Environment, Water Management Administration (410-537-3784).

The scope of known utility work is indicated on the drawings.

2.6 PREPARATION. The Contractor shall drain, purge, or otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials

before proceeding with demolition operations. The Contractor shall employ a certified, licensed exterminator to treat building and to control rodents and vermin before and during demolition operations. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the County and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations. Conduct demolition operations to prevent injury to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around demolition area. Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction. Protect existing site improvements, appurtenances, and landscaping to remain. Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent movement, settlement, or collapse of buildings to be demolished and adjacent buildings to remain. Strengthen or add new supports when required during progress of demolition.

2.7 POLLUTION CONTROLS. The Contractor shall use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Governing environmental protection regulations shall be complied with. Do not create hazardous or objectionable conditions, such as ice, flooding, and pollution, when using water. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level. Clean adjacent buildings and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to condition existing before start of demolition.

2.8 DEMOLITION. The Contractor shall demolish buildings completely and remove from the site. Use methods required to complete work within limitations of governing regulations and as follows:

- a. Locate demolition equipment throughout the building and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- b. Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
- e. Break up and remove concrete slabs on grade, unless otherwise shown to remain.
- f. Remove air-conditioning equipment without releasing refrigerants.
- g. The existing Stone Foundation walls can be used to backfill (or remain in place) after demolition (and removal) of house materials. Other below grade construction shall be completely removed.
- h. Below grade areas and voids resulting from demolition of buildings, utilities, and pavements shall be filled in accordance with Item MD-203-Borrow Excavation (2017 Standard Specifications for Construction and Materials). The engineer shall be given the opportunity to review demolition limits prior to commencing

backfill. Not permitting the engineer review will jeopardize payment for backfill material.

- i. Existing cistern (shown on Contract Drawings) shall be filled in with Item MD 902.16 (Type B).
- j. Existing well shall be sealed in accordance with COMAR 26.04.04.34-36.
- k. Surface preparation will be completed in accordance with Item MD-701 and MD-705.
- l. The Contractor shall clean out all basements, areas, yards, etc., removing all debris and rubbish together with all equipment such as boilers, furnaces, piping, fixtures, etc.

2.9 GENERAL. The Contractor shall become familiar with Lead-in-Paint and expect to find it on site. A Phase 1 Environmental Site Assessment was conducted and the report is located within the Appendix.

- a. **Project/Work Description.** The work of this section consists of handling those building components coated with Lead-Based Paint (LBP) in accordance with the referenced regulations. The work consists of the following five properties located in Hagerstown, Maryland:
- b. All demolition work affecting LBP shall be performed in accordance with 29 CFR 1926.62 (Lead), COMAR26.13 (Hazardous Waste), if applicable, COMAR26.11.07 (Procedures for Abating Lead Containing Substances from Buildings) and all other federal, state and local regulations and landfill requirements, relative to the disposal of waste accumulated as part of the demolition.

2.10 LEAD-BASED PAINT (LBP). Representative painted building component surfaces were not analyzed. If samples are analyzed and found to contain equal to or in excess of 0.7 mg/cm² as measured by x-ray fluorescence analyzer, they should be considered lead-based paint (LBP).

The Contractor should contact the Airport to review all existing structures concerning the identification and analysis of LBP surfaces, and conduct sampling as necessary.

2.11 GENERAL REQUIREMENTS. In addition to meeting all regulatory requirements listed in paragraph 100-2.1, the Contractor shall ensure no LBP debris remains on the site after building demolition is complete. Apprise all workers, supervisory personnel, subcontractors and consultants who will be at the job site of the potential lead hazard and of proper work procedures which must be followed.

- a. Perform testing by the EPA TCLP (toxicity characteristic leaching procedure) of those waste containers in which components coated with LBP is to be disposed. If TCLP tests exceed 5 parts per million (ppm) of leachable lead, defining it as hazardous waste, either apply to MDE for a demolition disposal exemption or dispose as hazardous waste in accordance with COMAR 26.13.

- b. Perform all air monitoring and analysis associated with this project. Air monitoring, testing, analysis of all samples and reporting shall be performed by an independent Testing Laboratory accredited by the American Industrial Hygiene Association (AIHA).

2.12 SUBMITTALS. Project close-out submittals must be provided to Owner prior to approval of final payment. This includes documentation of:

- a. Results, including laboratory certificate(s) of any air monitoring performed for either industrial hygiene or environmental purposes, and results, including laboratory certificate(s) of waste testing (TCLP) performed on waste container(s) containing the components coated with LBP.

b. Products.

(1) Materials and Equipment

- (a) Provide new or used materials and equipment that are undamaged and in serviceable condition.
- (b) Provide only materials and equipment that are recognized as suitable for the intended use, by compliance with appropriate standards.

c. Execution.

(1) Assigned Personnel

- (a) Provide a full-time on-site Supervisor during all lead work, who is qualified to ensure compliance with this Specification. This person is the Contractor's representative responsible for compliance with all applicable federal, state and local regulations.

d. Work Procedures.

- (1) If Contractor does not have an existing initial determination of personal lead exposures on similar demolition projects, monitor airborne exposure to lead during the disturbance of LBP in accordance with 29 CFR 1926.62.
- (2) Provide protective work clothing and equipment and otherwise fully comply with 29 CFR 1926.62, when required based on exposures.

2.13 GENERAL. The Contractor shall become familiar with Asbestos abatement.

- a. **Project/Work Identification.** The project consists of demolition of the houses and adjoining structures of the following one property located in Hagerstown, Maryland:

- (1) Parcel 421.

The work of this section consists of handling, removing and disposing of all Asbestos Containing Materials (ACM) necessary to comply with referenced regulations prior to other work defined in other section(s) of these contract documents.

All ACM removal must be performed in compliance with the Code of Maryland Regulations (COMAR) 09.12.31 (Maryland Occupational Safety and Health Act), 26.11.21 (Control of Asbestos); 29 Code of Federal Regulations (CFR) 1926 (OSHA Safety & Health Standards for the Construction Industry), particularly 29 CFR 1926.110 1 (Asbestos); and 40 CFR 61 (EPA National Emission Standard for Hazardous Air Pollutants {NESHAP}, Asbestos). Specific provisions which must be followed for NESHAP compliance are contained in EP A-340/1-92-013 of September, 1992, A Guide to Normal Demolition Practices under the Asbestos NESHAP, which is fully incorporated into this specification by reference. This document provides interpretation of regulated activities specific to types of ACM and contractor means and methods.

If, in accordance with the provisions of this document, the Contractor chooses to not remove any Category I/II Non-Friable ACM, he shall ensure it is not made friable and that waste transport and disposal are in compliance with the above standards and guidelines. In general, the material may remain in place during demolition activities as long as it remains non-friable (is not pulverized, ground or abraded, etc., to the point where it could release asbestos fibers from the matrix of the product). If the material is to remain in place, the demolition contractor must be informed that asbestos containing products do exist at the property and the contractor must follow all OSHA regulations regarding demolition where non-friable asbestos is to be impacted. The house should be heavily wet down with water during all demolition activities to a point where no visible emissions can be observed. The landfill accepting the waste must also be notified that they are receiving non-friable, asbestos containing waste material. Should the material become friable during the demolition process, this project will fall under the category of a regulated asbestos abatement project subject to all federal, state and local regulations regarding asbestos removals. All debris will then be deemed contaminated and all demolition work must stop until a decontamination project is performed by a licensed abatement contractor.

While the work of this project involves unoccupied buildings, it will be done around other occupied housing. Great care shall be taken to protect the health and safety of people living, working, visiting and passing around the work.

If any materials to be affected by this project are found, which are suspected of containing asbestos, immediately notify the Owner or Engineer.

2.14 GENERAL REQUIREMENTS

- a. The Asbestos Abatement Contractor, hereinafter referred to as the Contractor, must have the technical qualifications, experience, employee training, equipment and manpower to perform the work. ACM removal must be performed in coordination with other trades so as not to cause delay to the overall project.

The Contractor must maintain a current license from the State of Maryland under COMAR 26.11.21.

2.15 SUBMITTALS

- a. **Plan of Action:** Before the start of work, submit a plan of the procedures proposed for use in complying with the requirements of this specification. Do not

begin work until these submittals are approved by the Owner. Any changes to the work plan must be approved by the Owner prior to implementation.

If the plan is to demolish the buildings without removing the Category III non-friable ACM and an asbestos removal contractor will not be utilized, include in the plan a detailed chronological explanation of procedures to be used in each step of the demolition process. If soft strip will precede razing of the building shell, discuss methods which will prevent these ACM from becoming friable. Specifically discuss dust suppression measures and planned methods for getting rubble into waste containers without making the ACM friable. Provide the name of the landfill to be used and a letter from such stating they are approved by MDE & EPA to accept un-bagged, non-friable ACM waste. Verify that no rubble containing non-friable ACM will be recycled.

If the plan is to have an asbestos abatement contractor remove the Category III non-friable ACM prior to the demolition, include in the plan:

- b.** Certificate of Insurance.
- c.** Asbestos removal license.
- d.** Training certificates and medical approval to wear negative pressure respirators for all workers who will be assigned to this project.
- e.** Schedule of activities (notification, mobilization, preparation, removal, cleaning and clearance.
- f.** Specific methods to be used to assure the safety of visitors to the site and those living or passing close to the work.
- g.** A listing of all personal protective equipment to be required in the work area during each phase of work.
- h.** Requests, or anticipated requests, for variances from MDE, if any.
- i.** A disposal plan including location of approved disposal site, and
- j.** An emergency procedures plan which specifically addresses responses to:
 - (1)** Unplanned releases of ACM (e.g. Waste bag broken during transport, waste dumpster vandalized), if separately abated, b) category III non-friable ACM becoming friable during the course of demolition.
 - (2)** Project close-out submittals must be provided to the Owner prior to approval of final payment. This includes documentation of:
 - (a)** Daily supervisors logs, which must clearly indicate all activities on each day of work; a detailed description of any unusual events or non-compliance situations and remedies of such; a complete sign-in/out sheet for all workers, inspectors and visitors to the work site and copies of pressure differential recordings or data logging print out.
 - (b)** Results, including laboratory certificate(s) of any air monitoring performed for either industrial hygiene or environmental purposes, and

(c) Documentation of MDE clearance criteria being met in each abatement area, when performed. Contractor certification that no category I/II non-friable ACM became friable during the demolition process if abatement is not performed.

(d) Documentation of waste disposal, which must include a receipt from the landfill and written certification from the Contractor, stating that all waste from this project was disposed of as part of this receipt(s). The Contractor must comply with waste completion report requirements of the most current NESHAP regulations.

2.16 PROJECT OVERSIGHT. The Owner will not furnish industrial hygiene monitoring services during the course of this project.

2.17 INSPECTIONS. Any monitoring required to comply with any regulation referenced in paragraph 1.01 or the Contractor policies and procedures must be furnished by the Contractor as part of his bid for the abatement work. Compliance with 29 CFR 1926.1101 (c) requires an initial determination of airborne asbestos exposure, even when potential source of exposure is a building material that is not ACM (i.e. contains < 1% asbestos). It is anticipated that interference by cellulose fibers from sheetrock and related materials may preclude the use of standard PCM (phase contrast microscopy) analytical methods to accurately identify actual asbestos exposure and TEM (transmission electron microscopy) analyses may be necessary.

If, for his own purposes, the Contractor should choose to perform any bulk sampling of building materials to determine potential ACM content, he shall first inform the Owners Representative and provide the opportunity to concurrently collect replicate samples.

Final visual inspection and/or air monitoring to ensure regulatory criteria of COMAR 26.11.21 are met shall be performed by the Contractor.

2-18 PRODUCTS

a. General. All tools and equipment brought onto the job site shall be free of any asbestos residues, to ensure that the Contractor does not contaminate any portion of the site with ACM brought from another location. All tools and equipment used must be free of defects and designed for the intended use.

2-19 WASTEWATER FILTRATION. All wastewater shall be filtered through a final 1.0 micron rated filter.

2-20 EXECUTION

a. Temporary Facilities.

(1) The design, location(s) and construction of decontamination unit(s) shall fully comply with COMAR 26.11.21 and 29 CFR 1926.1101.

(2) All power supply must be connected through ground-fault interrupter (GFI) circuits, to be furnished by the Contractor.

- (3) Where critical barriers and/or the entrance to a decontamination unit are in publicly accessible areas, they shall be of sturdily constructed and securely attached plywood, stud framing and a locking door or other equivalent manner to prevent entry by unauthorized personnel.
- (4) In addition to signs and critical barriers required by COMAR 26.11.21, the Contractor shall take whatever site-specific precautions and actions are necessary to ensure security and prevent access by unauthorized persons into the asbestos work area.

2.21 ASBESTOS REMOVAL PROCEDURES

- a. Work practices and personal protective equipment shall be in strict compliance with COMAR 26.11.21 and 29 CFR 1926.1101.
- b. The Contractor shall not allow anyone to enter an asbestos work area without personal protective equipment required by the Work Plan and referenced regulations. Contractor shall provide all required personal protective equipment (PPE) for up to two visitors at a time. Such PPE shall be maintained in a clean, sanitary condition.
- c. The Contractor shall inspect and ensure all clearance criteria required by COMAR 26.11.21 are met prior to proceeding with subsequent phases of work.
- d. ACM shall be handled with care during and after removal to minimize the spread of fibers to the best extent reasonably achievable.
- e. If abated prior to demolition, ACM shall be placed in waste bags immediately after removal and promptly transported to a secure waste container.

2.22 EMERGENCY PROCEDURES

- a. Ensure the submitted emergency procedures plan is site specific, both as to site hazards and emergency services availability.
- b. If, 1) during abatement, the Contractor finds any indication of ACM dust, fibers or residue outside the asbestos work area, or 2) during demolition without abatement, the Contractor finds any indication that category 1111 non-friable ACM has become or is becoming friable, immediately isolate the area to prevent access by unauthorized persons and clean the area to the satisfaction of MDE/EPA. Any such responses shall be at no additional cost to the Owner.

2.23 WASTE DISPOSAL. All waste materials resulting from the asbestos abatement and/or demolition work shall become the property of the Contractor and shall be disposed of by the Contractor in accordance with EPA, State and local ordinances/regulations, both in Baltimore, Maryland and in the region of disposal.

2.24 FINAL ACCEPTANCE. Final acceptance is contingent upon no ACM residues being left on the project site and approval of required close-out submittals.

MATERIAL

- 3.1** Silt fence shall conform to details shown on Drawings.

METHOD OF MEASUREMENT

- 4.1** Clearing of each lot will not be measured.

BASIS OF PAYMENT

- 5.1** The clearing of the farmstead described will be paid for at the Contract lump sum price. This price shall be full compensation for furnishing all materials, all preparation, all permitting, all coordination for 501(c) (3) organization salvage operations, any excavation, foundation demolition, removal of trees/shrubs, removing/sealing existing utilities, any hauling and disposal of demolished items; and for all labor, equipment, tools, and incidentals necessary to complete the lot clearing.

Payment will be made under:

Item X-100-5.1 Residential Lot Clearing – Parcel 421 – per lump sum (L.S.)

END OF ITEM X-100

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ITEM MD-203 – BORROW EXCAVATION

DESCRIPTION

- 1.1** This section shall consist of items required by the Contract Documents for Borrow Excavation for backfilling of residential structures demolition as specified by Section 203 of the Maryland State Highway Administration Standard Specifications for Construction and Materials, July 2017. The engineer shall be given opportunity to review sites prior to commencing backfill. This Section shall apply to all off-site material required to backfill/grade the Parcel 421 as shown on the Drawings.

BASIS OF PAYMENT

- 2.1** No separate payment will be made for work under this section.

Payment will be made under:

Item X-100-5.1 Residential Lot Clearing – Parcel 421 – per lump sum (L.S.)

Costs include all labor, materials, services, and equipment necessary to complete the work in every respect.

END OF ITEM MD-203

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ITEM MD-206 – REMOVAL OF EXISTING SIDEWALK

DESCRIPTION

- 1.1** This section shall consist of items required by the Contract Documents for pavement removal as specified by Section 206 of the Maryland State Highway Administration Standard Specifications for Construction and Materials, July 2017. Material required to backfill the void left from the concrete walkway removal shall be per Item MD-203-01 specifications.

BASIS OF PAYMENT

- 2.1** No separate payment will be made for work under this section.

Payment will be made under:

Item X-100-5.1 Residential Lot Clearing – Parcel 421 – per lump sum (L.S.)

Costs include all labor, materials, services, and equipment necessary to complete the work in every respect.

END OF ITEM MD-206

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ITEM MD-314 – FLOWABLE BACKFILL

DESCRIPTION

- 1.1** This section shall consist of items required by the Contract Documents for Flowable Backfill installation as specified by Section 314 of the Maryland State Highway Administration Standard Specifications for Construction and Materials, July 2017. This will be utilized for sealing of the existing well and cistern.

BASIS OF PAYMENT

- 2.1** No separate payment will be made for work under this section.

Payment will be made under:

Item X-100-5.1 Residential Lot Clearing – Parcel 421 – per lump sum (L.S.)

Costs include all labor, materials, services, and equipment necessary to complete the work in every respect.

END OF ITEM MD-314

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ITEM MD-701 – TOPSOIL

DESCRIPTION

- 1.1** This section shall consist of items required by the Contract Documents for Subsoil and Topsoil placement as specified by Section 701 of the Maryland State Highway Administration Standard Specifications for Construction and Materials, July 2017.

BASIS OF PAYMENT

- 2.1** No separate payment will be made for work under this section.

Payment will be made under:

Item X-100-5.1 Residential Lot Clearing – Parcel 421 – per lump sum (L.S.)

Costs include all labor, materials, services, and equipment necessary to complete the work in every respect.

END OF ITEM MD-701

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ITEM MD-705 – TURFGRASS ESTABLISHMENT

DESCRIPTION

- 1.1** This section shall consist of items required by the Contract Documents for Turf grass Establishment as specified by Section 705 of the Maryland State Highway Administration Standard Specifications for Construction and Materials, July 2017. Permanent seeding shall be accomplished in May 2018 and Re-seed as required in September 2018.

BASIS OF PAYMENT

- 2.1** No separate payment will be made for work under this section.

Payment will be made under:

Item X-100-5.1 Residential Lot Clearing – Parcel 421 – per lump sum (L.S.)

Costs include all labor, materials, services, and equipment necessary to complete the work in every respect.

END OF ITEM MD-705

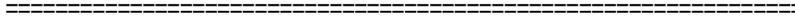
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**SECTION VI
WAGE RATES**

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LABORER: Common or General, Includes Flagger	\$ 18.89	16.35
OPERATOR: Backhoe/Excavator/Trackhoe	\$ 27.72	13.40
OPERATOR: Bobcat/Skid Steer/Skid Loader	\$ 27.72	13.40
OPERATOR: Broom/Sweeper	\$ 23.49	12.15
OPERATOR: Bulldozer	\$ 24.75	12.15
OPERATOR: Crane	\$ 30.30	15.30
OPERATOR: Gradall	\$ 27.45	12.15
OPERATOR: Loader	\$ 26.45	12.15
OPERATOR: Milling Machine	\$ 27.41	13.40
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	\$ 27.72	13.40
OPERATOR: Piledriver	\$ 27.36	10.72
OPERATOR: Roller	\$ 27.72	13.40
OPERATOR: Screed	\$ 18.77	3.56
PAINTER: Bridge	\$ 33.23	9.40
TRUCK DRIVER: Dump Truck	\$ 17.05	0.00
TRUCK DRIVER: Flatbed Truck	\$ 19.68	4.83
TRUCK DRIVER: TackTruck	\$ 22.94	7.87
TRUCK DRIVER: Water Truck	\$ 23.56	6.96

WELDERS-Receiverateprescribedforcraftperforming operationtowhichweldingis incidental.



Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other **health-related needs, including preventive care; or for reasons** resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (i))

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate). Union Rate

Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 **indicates the local union number or district council number** where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union

average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations.
Write to:

Branch of Construction Wage Determinations Wage and Hour
Division
U.S. Department of Labor
200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7) Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board).
Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

General Decision Number: MD170036 11/10/2017 MD36
Superseded General Decision Number: MD20160036
State: Maryland
Construction Type: Heavy

County: Washington County in Maryland.

HEAVY CONSTRUCTION PROJECTS (including sewer/water construction).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.20 for calendar year 2017 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.20 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2017. The EO minimum wage rate will be adjusted annually. Additional **information on contractor requirements and worker protections** under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/06/2017
1	06/23/2017
2	07/14/2017
3	11/10/2017

CARP1024-010 05/01/2016

	Rates	Fringes
CARPENTER (Form Work Only).....	\$ 27.85	16.00

ELEC0307-010 05/28/2017

	Rates	Fringes
ELECTRICIAN	\$ 32.00	17.22

ENGI0037-017 05/01/2016

	Rates	Fringes
POWER EQUIPMENT OPERATOR: (Bobcat/Skid Loader; Bulldozer; Drill; Excavator; Grader/Blade; Loader; Mechanic; Piledriver)	\$ 29.97	13.85+a

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

IRON0016-013 04/01/2016

	Rates	Fringes
IRONWORKER, REINFORCING AND		

https://www.wdol.gov/wdof/scafiles/davisbacon/MD36.dvb?v=3

STRUCTURAL \$ 28.48 19.45

LABD0616-011 05/01/2015

Rates Fringes

LABORER: Mason Tender -
Cement/Concrete \$ 19.66 16.95

* TEAM0453-004 11/01/2017

Rates Fringes

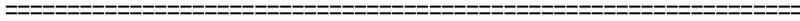
TRUCK DRIVER: Dump Truck
10 to 15 yard capacity \$ 22.34 19.61
9 to 10 yard capacity \$ 22.07 19.61
Over 15 yard capacity \$ 22.67 19.61
Under 5 yard capacity \$ 21.78 19.61
TRUCK DRIVER: Lowboy Truck \$ 22.67 19.61

SUMD2010-075 07/08/2010

Rates Fringes

CARPENTER, Excludes Form Work . . . \$ 19.05 3.77
CEMENT MASON/CONCRETE FINISHER . . \$ 19.88 4.88
LABORER: Common or General \$ 14.64 0.00
LABORER: Flagger \$ 15.71 8.58
LABORER: Grade Checker \$ 14.62 3.08
LABORER: Landscape \$ 22.24 0.00
LABORER: **Mason** Tender - Brick . . . \$ 15.93 7.83
LABORER: Pipelayer \$ 14.27 2.04
OPERATOR: Crane \$ 21.26 7.41
OPERATOR: Gradall \$ 20.50 8.89
OPERATOR: **Paver** (Asphalt,
Aggregate, and Concrete) \$ 17.53 9.07
OPERATOR: Roller \$ 16.66 0.00
OPERATOR: Trackhoe \$ 20.47 10.20
PAINTER: Brush, Roller,
Spray and Steel \$ 24.32 6.91

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.



Note: Executive Order (ED) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the ED, the contractor must provide <https://www.wdol.gov/wdol/scafiles/davisbacon/MD36.dvb?v=3> 215

employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year.

Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including **preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking.** Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1)(i))

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type (s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate). Union Rate

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wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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Union Average Rate Identifiers

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A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CSA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on **a wage determination matter**
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations.

Write to:

Branch of Construction Wage Determinations Wage and Hour
Division
U.S. Department of Labor
200 Constitution Avenue, N.W. Washington, DC
20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 18 and 29 CFR Part 7) Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W. Washington, DC
20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage **payment data, project description, area practice material,** etc.) that the requester considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board).
Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

SECTION VII
WASHINGTON COUNTY'S *INSURANCE REQUIREMENTS*
FOR INDEPENDENT CONTRACTORS POLICY

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POLICY TITLE: Insurance Requirements for Independent Contractors

ADOPTION DATE: August 29, 1989

EFFECTIVE DATE: September 1, 1989

FILING INSTRUCTIONS:

I. PURPOSE

To protect Washington County against liability, loss or expense due to damaged property, injury to or death of any person or persons and for care and loss of services arising in any way, out of, or in connection with or resulting from the work or service performed on behalf of Washington County.

II. ACTION

The following should be inserted in all Independent Contractor Contracts:

"The Contractor shall procure and maintain at his sole expense and until final acceptance of the work by the County, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, have A.M. Best rating of A- or better or its equivalent, and acceptable to the County."

1. **Workers Compensation:** The Contractor agrees to comply with Workers Compensation laws of the State of Maryland and to maintain a Workers Compensation and Employers Liability Policy.

Minimum Limits Required:

Workers Compensation - Statutory
Employers' Liability - \$100,000 (Each Accident)
\$500,000 (Disease - Policy Limit)
\$100,000 (Disease - Each Employee)

2. **Comprehensive General Liability Insurance:** The Contractor shall provide Comprehensive General Liability including Products and Completed Operations.

Minimum Limits Required:

\$1,000,000 combined single limit for Bodily Injury and Property Damage.

Such insurance shall protect the County, its agents, elected and appointed officials, commission members and employees, and name Washington County on the policy as additional insured against liability, loss or expense due to damaged

property (including loss of use), injury to or death of any person or persons and for care and loss of services arising in any way, out of, or in connection with or resulting from the work of service performed on behalf of Washington County.

The Contractor is ultimately responsible that Subcontractors, if subcontracting is authorized, procure and maintain at their sole expense and until final acceptance of the work by the County, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, have A.M. Best rating of A- or better or its equivalent, and acceptable to the County.

3. **Business Automobile Liability:** The Contractor shall provide Business Auto Liability including coverage for all leased, owned, non-owned and hired vehicles.

Minimum Limits Required:

\$1,000,000 combined single limit for Bodily Injury or Property Damage.

Certificate(s) of Insurance: The Contractor shall provide certificates of insurance requiring a 30 day notice of cancellation to the Insurance Department, Board of County Commissioners of Washington County prior to the start of the applicable project.

Approval of the insurance by the County shall not in any way relieve or decrease the liability of the Contractor. It is expressly understood that the County does not in any way represent that the specified limits of liability or coverage or policy forms are sufficient or adequate to protect the interest or liabilities of the Contractor.

All responsibility for payment of any sums resulting from any deductible provisions, corridor, or self-insured retention conditions of the policy or policies shall remain with the Contractor.

General Indemnity: The Contractor shall indemnify, defend and save harmless the Board of County Commissioners of Washington County, its appointed or elected officials, commission members, employees and agents for any and all suits, legal actions, administrative proceedings, claims, demands, damages, liabilities, interest, attorneys fees, costs and expenses of whatsoever kind of nature, whether arising before or after final acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the Contractor, or any one acting under its direction, control or on its behalf in connection with or incident to its performance of the Contract.

Revision Date: August 27, 1991
Effective Date: August 27, 1991
Revision Date: March 4, 1997
Effective Date: March 4, 1997

SECTION VIII
PROVISIONS FOR OTHER AGENCIES

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**BOARD OF COUNTY COMMISSIONERS
OF WASHINGTON COUNTY, MARYLAND
WASHINGTON COUNTY PURCHASING DEPARTMENT**

PROVISIONS FOR OTHER AGENCIES

All items, conditions and pricing shall be made available to the entities listed below if authorized by the Bidder. Authorization is to be indicated by a check mark in the appropriate column. A negative reply will not adversely affect consideration of the bid. Any jurisdiction using this contract shall place its own order with the successful Bidder(s). There is no obligation on the lead jurisdiction for agreements made with other jurisdictions.

<u>YES</u>	<u>NO</u>	<u>JURISDICTION</u>
_____	_____	WASHINGTON COUNTY PUBLIC SCHOOLS
_____	_____	WASHINGTON COUNTY HEALTH DEPARTMENT
_____	_____	OTHER WASHINGTON COUNTY MUNICIPALITIES
_____	_____	HAGERSTOWN COMMUNITY COLLEGE
_____	_____	CITY OF HAGERSTOWN
_____	_____	FREDERICK COUNTY COMMISSIONERS
_____	_____	OTHER FREDERICK COUNTY MUNICIPALITIES
_____	_____	ALLEGANY COUNTY COMMISSIONERS
_____	_____	BOARD OF EDUCATION OF ALLEGANY COUNTY
_____	_____	OTHER ALLEGANY COUNTY MUNICIPALITIES
_____	_____	ALLEGANY COMMUNITY COLLEGE
_____	_____	CITY OF FROSTBURG
_____	_____	CITY OF CUMBERLAND
_____	_____	GARRETT COUNTY - GENERAL SERVICES
_____	_____	BOARD OF EDUCATION OF GARRETT COUNTY
_____	_____	OTHER GARRETT COUNTY MUNICIPALITIES
_____	_____	GARRETT COUNTY COMMUNITY COLLEGE
_____	_____	WASHINGTON COUNTY VOLUNTEER FIRE & RESCUE COMPANIES

Bidder's Name

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SECTION IX
SIGNATURE TO BIDS

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SIGNATURE TO BIDS

NOTE: Bidders shall use this page as a cover page when submitting his/her bid.

Each bid must show the full business address and telephone number of the Bidder and be signed by the person legally authorized to sign contracts. All correspondence concerning the bid and contract, including notice of award, copy of contract and purchase order, will be mailed or delivered to the address shown on the bid in the absence of written instructions from the Bidder to the contrary. Bids by partnerships must be signed in the partnership name by one of the members of the partnership or by an authorized representative, followed by the signature and designation of the person signing, who shall also state the names of the individuals composing the partnership. Bids by corporations must be signed with the name of the corporation, followed by the signature and designation of the officer having authority to sign. When requested, satisfactory evidence of authority of the officer signing in behalf of the corporation shall be furnished. Anyone signing the bid as agent shall file satisfactory evidence of his/her authority to do so.

All documents, materials, or data developed as a result of this contract are the County’s property. The County has the right to use and reproduce any documents, materials, and data, including confidential information, used in or developed as a result of this contract. The County may use this information for its own purposes or use it for reporting to Federal agencies. The Bidder warrants that it has title to or right of use of all documents, materials, or data used or developed in connection with this contract. The Bidder must keep confidential all documents, materials, and data prepared or developed by the Bidder or supplied by the County. All erasures and/or changes shall be initialed by the individual making modifications to the proposal.

BIDDER MUST SIGN HERE AND RETURN THIS PAGE AND THE PROPOSAL FORM IN ADDITION TO SUBMITTING ANY DOCUMENTS CALLED FOR BY THE GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS, SPECIFICATIONS, AND ANY OTHER DOCUMENTS HEREIN CONTAINED.

By signing here, Bidder does hereby attest that he/she has read fully the general conditions and instructions, specifications, and any other documents herein contained, and does understand them and will furnish and deliver all labor and materials in accordance with the specifications for the price as listed on the proposal form.

Bidder acknowledges receipt of Addenda by initialing the following:

Addendum No. 1 _____ Addendum No. 2 _____ Addendum No. 3 _____
Addendum No. 4 _____ Addendum No. 5 _____ Addendum No. 6 _____

Bidder’s Name

AFFIRMATION REGARDING COLLUSION

I AFFIRM THAT:

Neither I nor, to the best of my knowledge, information, and belief, the below stated business has:

Agreed, conspired, connived, or colluded to produce a deceptive show of competition in the compilation of the accompanying bid or offer that is being submitted;

- (a) In any manner, directly or indirectly, entered into any agreement of any kind to fix the bid price or price proposal of the Bidder or Offeror or of any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for which the accompanying bid or offer is submitted.

AFFIRMATION REGARDING BRIBERY CONVICTIONS

I FURTHER AFFIRM:

Neither I nor, to the best of my knowledge, information, and belief, the below business (as is defined in Section 16-101 (b) of the State Finance and Procurement Article of the Annotated Code of Maryland), or any of its officers, directors, partners, or any of its employees directly involved in obtaining or performing contracts with public bodies (as is defined in Section 16-101(f) of the State Finance and Procurement Article of the Annotated Code of Maryland), has been convicted of, or has had probation before judgment imposed pursuant to Criminal Procedure Article, Section 6-220 of the Annotated Code of Maryland, or has pleaded nolo contendere to a charge of, bribery, attempted bribery, or conspiracy to bribe in violation of Maryland law, or of the law of any other State or federal law, **except as follows** (indicate the reasons why the affirmation cannot be given and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of person(s) involved, and their current positions and responsibilities with the business):

Bidder's Name

Bidder's Company/Firm: _____

Address: _____

Authorized Signature _____

Name & Title Printed: _____

Telephone & Fax Number: _____ / _____

E-Mail Address: _____

Date: _____ Federal Employer's Identification No. _____

For Informational Purposes Only: Has your company/firm been certified by the State of Maryland as a Minority Business Enterprise? (Please check below.)

_____ Yes _____ No

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SECTION X
FORM OF PROPOSAL AND SCHEDULE OF PRICES

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PUR-1377
FORM OF PROPOSAL / SCHEDULE OF PRICES

(Submit Form of Proposal & Schedule of Prices)

**Board of County Commissioners
of Washington County, Maryland
(hereinafter called "Owner")
c/o Washington County Purchasing Department
100 West Washington Street, Room 3200
Hagerstown, MD 21740**

**BIDS DUE:
Date: Wednesday, March 28, 2018
Time: No later than 2:00 P.M., (EDST)**

Project Name: **Brumbaugh-Kendle-Grove Farmstead Demolition**
Washington County Bid No.: **PUR-1377**

Proposal of _____ (hereinafter called "Bidder"), *a corporation, organized and existing under the laws of the State of _____, *a partnership, or an individual doing business as _____.

Telephone No. (____) _____ Fax :) _____

Contact: Name & Title Printed: _____
Address: _____
E-Mail Address: _____

*Insert corporation, partnership or individual as applicable.

Gentlemen/Ladies:

The Bidder, in compliance with your Invitation for Bids for the abovementioned project has examined the plans and specifications with related documents and the size of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials, equipment, plant and services, and to construct the project in accordance with the Contract Documents and Addenda within the time set forth therein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this proposal is a part.

We hereby submit our proposal for the **Brumbaugh-Kendle-Grove Farmstead Demolition – Hagerstown Regional Airport - Richard A. Henson Field.**

Having carefully examined the Contract Documents for the subject construction project -

Specifications Dated December 2017
Drawings Dated December 2017

Addenda No. ____ Date _____, No. ____ Date _____, No. ____ Date _____
Addenda No. ____ Date _____, No. ____ Date _____, No. ____ Date _____

and having received clarification on all items of conflict or upon which any doubt arose, the undersigned proposes to properly complete the work, in strict accordance with the Contract Documents, for the stipulated sum of, based on the unit prices set forth in the attached Schedule of Prices:

1. TOTAL SUM BID:

To furnish labor, materials, equipment, plant and services necessary to properly complete the work required under the TOTAL LUMP SUM BID, based on the price set forth in the attached Schedule of Prices in strict accordance with the aforesaid documents, and to be substantially completed within forty-five (45) consecutive calendar days of Notice to Proceed.

Dollars
\$

(Written) (Figures)

(Amount shall be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.)

It is understood that the bid price will be firm for a time period of ninety (90) calendar days from the bid opening date and that if the undersigned is notified of acceptance of this proposal within this time period, the firm shall complete the total work within forty-five (45) consecutive calendar days from the date of "Notice to Proceed" for construction and to complete the work in accordance with the provisions of the Contract Documents. If this work is not completed within the time period specified, the Contractor will be liable for liquidated damages of one thousand five-hundred (\$1,500.00) dollars per consecutive calendar day will be applied.

2. SUBCONTRACTORS:

- A. All Bidders shall submit their list of subcontractors list as part of their bid packet.
- B. No change or deviation from this list shall be allowed except as determined by the Owner or the Owner's Representative.

3. AWARD: Award of the bid can be made by the Owner to the responsive, responsible low bidder based on the Total Sum Bid.

4. BIDDER'S STATE OF MARYLAND REGISTRATION NUMBER:

Construction Firm License No. Date Issued Place of Issuance

Federal Employer Identification Number (FEIN) or Social Security No. if no FEIN

Bid Security Bonds shall be submitted with each proposal in the amount of five percent (5%) of the Total Sum Bid.

Bid Bonds, except those of the two (2) low bidders will be returned after the bid opening. Other bid bonds will be returned after the related contract has been executed. If no bid has been accepted within ninety (90) calendar days after the bid opening, then any bond may be returned upon demand of the bidder.

Bidder's Name

Upon receipt of written notice of the acceptance of this bid, bidder will execute the formal contract within ten (10) calendar days. The Bid Security attached, in the sum of:

_____	Dollars	_____
(Written)	\$	(Figures)

Is to become the property of the Owner in the event the Contract and Bond are not executed within the time set forth above, as liquidated damages for the delay and additional expense to the Owner caused thereby.

Failure to properly and completely fill in all blanks may be cause for rejection of this proposal. All alternates and unit prices called for in the Contract Documents must be submitted herewith.

AFFIRMATION/AFFIDAVIT REGARDING COLLUSION

I AFFIRM THAT:

Neither I nor, to the best of my knowledge, information, and belief, the below stated business has:

- (b) Agreed, conspired, connived, or colluded to produce a deceptive show of competition in the compilation of the accompanying bid or offer that is being submitted;
- (c) In any manner, directly or indirectly, entered into any agreement of any kind to fix the bid price or price proposal of the Bidder or Offeror or of any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for which the accompanying bid or offer is submitted.

Bidder's Name

AFFIRMATION/AFFIDAVIT REGARDING BRIBERY CONVICTIONS

I FURTHER AFFIRM:

Neither I nor, to the best of my knowledge, information, and belief, the below business (as is defined in Section 16-101 (b) of the State Finance and Procurement Article of the Annotated Code of Maryland), or any of its officers, directors, partners, or any of its employees directly involved in obtaining or performing contracts with public bodies (as is defined in Section 16-101(f) of the State Finance and Procurement Article of the Annotated Code of Maryland), has been convicted of, or has had probation before judgment imposed pursuant to Criminal Procedure Article, Section 6-220 of the Annotated Code of Maryland, or has pleaded nolo contendere to a charge of, bribery, attempted bribery, or conspiracy to bribe in violation of Maryland law, or of the law of any other State or federal law, except as follows (indicate the reasons why the affirmation cannot be given and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of person(s) involved, and their current positions and responsibilities with the business):

Bidder's Name

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE CONTENTS OF THE ABOVE-REFERENCED AFFIDAVITS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF AND THAT I AM THE DULY AUTHORIZED REPRESENTATIVE OF THE BELOW BUSINESS AND THAT I PROCESS THE LEGAL AUTHORITY TO MAKE THE AFFIDAVITS ON BEHALF OF MYSELF AND THE BUSINESS FOR WHICH I AM ACTING.

BY: _____
(Signature of Authorized Representative and Affiant)

(Name & Title Printed)

(Business Address)

_____ / _____
(Phone Number) (Fax Number)

(Federal Employer Identification Number)

(SEAL) If bid is by corporation.

For Informational Purposes Only: Has your company/firm been certified by the State of Maryland as a Minority Business Enterprise? (Please check below.)

_____ Yes _____ No

PUR-1377
BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION

FORM OF PROPOSAL / SCHEDULE OF PRICES

Item No.	Description / (Unit Price Written)	Unit	Approx. Qty.	Unit Price (Figures)	Total Price (Figures)
X-100-5.1	Residential Lot Clearing – Parcel 421 @ _____ Dollars (Written) _____ Cents per (Written)	LS	1	\$ _____	\$ _____
Total LUMP SUM Bid Item <u>X-100-5.1</u>					
_____ Dollars (Written)					
_____ Cents (Written)				\$ _____ (Figures)	

Bidder's Name

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SECTION XI
BID BOND

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BID BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned

as Principal, and _____ as Surety, are hereby held and firmly bound unto the Board of County Commissioners of Washington County, Maryland as OWNER in the penal sum of _____ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____ day of _____, 2018. The Condition of the above obligation is such that whereas the Principal has submitted to the Board of County Commissioners of Washington County, Maryland a certain BID, attached hereto and hereby made a part hereof to enter into a contract in writing, for **Contract No. (PUR-1377) Brumbaugh-Kendle-Grove Farmstead Demolition – Hagerstown Regional Airport - Richard A. Henson Field.**

NOW, THEREFORE,

- (a) If said BID shall be rejected, or
- (b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attachment hereto (Properly completed in accordance with said BID) and shall furnish a BOND for **faithful** performance of said contract, and for the payment of all persons performing labor furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

_____ (L.S.)

Principal

Surety

By: _____

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and authorized to transact business in the State where the project is located.

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SECTION XII
FEDERAL FORMS

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**BIDDER'S EQUAL EMPLOYMENT
OPPORTUNITY CERTIFICATION (EEOC)**

Section 151.54(d) (1) of the FAA Regulations requires each bidder of prospective Contractor or any of their proposed subcontractors, to state as an initial part of the bid whether it has participated in any previous contract or subcontract subject to the equal employment opportunity clause; and, if so, whether it has filed with the Committee or agency all compliance reports due under applicable instructions. In any case in which a bidder or prospective Contractor or proposed Contractor which has participated in a previous contract or subcontract subject to the equal employment opportunity clause has not filed a compliance report due under applicable instructions, such bidder, prospective Contractor, or proposed subcontractor shall be required to submit a compliance report prior to the award of the proposed contract or subcontract [41 CFR 60-1.6(b) (1)].

The bidder shall complete the following statement by checking the appropriate spaces. Failure to complete will result in a non-responsive bid.

The bidder has ____, has not ____, participated in a previous contract subject to the discrimination clause prescribed by Executive Order 10925 dated March 6, 1961, or Executive Order 11114 dated June 22, 1963, or Executive Order 11246 dated September 24, 1965.

The bidder has _____, has not _____, submitted compliance reports as required by applicable instructions, the successful bidder will be required to submit a Standard Form 100 (for Federally-Assisted Construction Contracts) before award.

Certification: The information above is true and complete to the best of my knowledge and belief.

Name and Title of Signer

Signature

Date

CERTIFICATION OF NON-SEGREGATED FACILITIES

The federally assisted construction contractor certifies that it does not maintain or provide, for its employees, any segregated facilities at any of its establishments and that it does not permit employees to perform services where segregated facilities are maintained. The federally assisted construction contractor certifies further that it will not maintain or provide, for its employees, segregated facilities at any of its establishments, and that it will not permit its employees to perform services at any location, under its control, where segregated facilities are maintained. The federally assisted construction contractor agrees that a breach of this certification is a violation of the equal opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating area, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities pro-vided for employees which are segregated by explicit directives or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The federally assisted construction contractor agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the equal opportunity clause and that he will retain such certifications in his files.

NOTICE TO PROSPECTIVE CONTRACTORS OF REQUIREMENT FOR CERTIFICATION FOR NON-SEGREGATED FACILITIES:

A Certification of Non-segregated Facilities must be submitted prior to the award of a contract or subcontract exceeding \$10,000 which is not exempt from the provisions of the equal opportunity clause.

Certification - The information above is true and complete to the best of my knowledge and belief.

Name and Title of Signer (Please Type)

Signature Date

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

BIDDERS NAME: _____

ADDRESS: _____

INTERNAL REVENUE SERVICE EMPLOYER IDENTIFICATION NUMBER _____

HAGERSTOWN REGIONAL AIRPORT

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

In accordance with Federal Regulations (49 CFR Part 23) and Department of Transportation guidelines, it is the policy of the Hagerstown Regional Airport to utilize Disadvantaged Business Enterprises (DBE) in all aspects of contracting.

The percentage of dollar awards on each Airport Improvement Program or Planning Grant Program project has been established at 3 ¼ %.

It is the position of the Washington County and Hagerstown Regional Airport that DBE's be afforded the opportunity to actively participate in the economic mainstream of architectural, engineering, construction and other service activities involving the use of Federal funds. The participation goal is a percentage of the dollar amount of each grant based on a project to project basis.

Selection will be based on the determination of whether or not the competitor offering the lowest responsible price has also met the established DBE goals, unless said bidder submits, in writing, an acceptable explanation as to why the DBE involvement is at a lower percentage or absent entirely from the project bid. This written explanation must show that the Contractor has made every effort to identify and solicit DBE involvement.

BIDDER'S DBE CERTIFICATION

To meet the requirements of Department of Transportation, Regulation 49 CFR Part 23, all bidders will provide evidence of the methods they have used to meet the Disadvantaged Business Enterprise goal as published in the Sponsor's Disadvantaged Business Enterprise Plan and approved by the Department of Transportation. The DBE participation goal for this project is 3 ¼ %.

All bidders must submit an assurance stating the percentage of Disadvantaged Businesses they intend to employ on this project.

WITHIN 48 HOURS AFTER THE OPENING OF BIDS AND BEFORE THE AWARD OF A CONTRACT, ALL BIDDERS OR PROPOSERS WISHING TO REMAIN IN COMPETITION FOR THE CONTRACT SHALL SUBMIT:

1. Names of the DBE subcontractors they intend to use.
2. Description of work each DBE subcontractor is to perform.
3. Approximate dollar value of each of the subcontracts.

REQUIRED ASSURANCE TO BE INCLUDED IN ALL BID PROPOSALS.

This firm assures that it will utilize not less than ___ % of Disadvantaged Business participation.

CERTIFICATION OF BIDDER FOR THE ABOVE:

AUTHORIZED REPRESENTATIVE

DATE

NAME

TITLE

COMPANY

(SEAL)

SECTION XIII
CONTRACT AGREEMENT

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PUR-1377
CONTRACT AGREEMENT BY AND BETWEEN THE
BOARD OF COUNTY COMMISSIONERS OF
WASHINGTON COUNTY, MARYLAND

AND

THIS CONTRACT AGREEMENT (hereinafter the “Contract”), is made this _____ day of _____, 2018, by and between (hereinafter the “Contractor”) and the **BOARD OF COUNTY COMMISSIONERS OF WASHINGTON COUNTY, MARYLAND**, a body corporate and politic and a political subdivision of the State of Maryland, (hereinafter the “County”).

RECITALS

This Contract for the construction of **Contract No. PUR-1377**, Brumbaugh-Kendle-Grove Farmstead Demolition – Hagerstown Regional Airport - Richard A. Henson Field, near Hagerstown, Washington County, Maryland, as shown on the drawings identified in the same manner, with a final approval date of December, 2017, on file at the Hagerstown Regional Airport, Maryland, subject to all the conditions, covenants, stipulations, terms and provisions contained in the Specifications, the Specifications being in all respects incorporated herein by reference and made a part hereof as if attached or entirely stated herein, has recently been awarded to the Contractor by the County, at and for a sum equal to the prices and rates respectively named therefore in the bid.

One of the conditions of said award is that a formal contract be executed by and between the Contractor and the County evidencing the terms of said award.

NOW, THEREFORE, in consideration of the mutual covenants, conditions and agreements herein contained, the parties hereby agree as follows:

1. The “Contract Documents,” except for modifications issued after the execution of this Contract, are enumerated as follows and are incorporated herein by reference and made a part hereof as if attached or entirely stated herein:

The executed Contract Agreement between the County and the Contractor,
Invitation to Bid,
General Conditions and Instructions to Bidder
Supplemental Terms and Conditions
Federal Requirements for AIP Projects Contracts
Scope of Work and Specifications
Wage Rates
The Insurance Requirements for Independent Contractors
Provisions for Other Agencies
Signature to Bids

The Completed Project Bid Forms
Form of Proposal and Schedule of Prices
Bid Bond
Federal Forms
Contract Agreement
Labor and Material Payment Bond
Performance Bond
Subcontractors List
Notice of Award
Notice to Proceed

The Contract Drawings

<u><i>Sheet No.</i></u>	<u><i>Sheet Title</i></u>
<i>G.100</i>	<i>Cover Sheet</i>
<i>G.101</i>	<i>General Construction and Safety Notes</i>
<i>C.100</i>	<i>Existing Conditions Plan</i>
<i>C.101</i>	<i>Site Plan</i>
<i>C.200</i>	<i>Erosion and Sediment Control Notes and Details</i>

Appendices

<u><i>Appendix.</i></u>	<u><i>Title</i></u>
<i>A</i>	<i>Salvage Inventory</i>
<i>B</i>	<i>Phase I Environmental Site Assessment</i>
<i>C</i>	<i>Washington County Health Department – Temporary Sewage Permit</i>
<i>D</i>	<i>MDE – Well Abandonment-Sealing Report Form</i>

2. The date of commencement and substantial completion of the project contemplated herein shall be as set forth in the Instructions to Bidders and stipulated by the Notice to Proceed or an authorized extension thereof.

3. The Contractor shall complete **Contract No. PUR-1377**, Brumbaugh-Kendle-Grove Farmstead Demolition – Hagerstown Regional Airport - Richard A. Henson Field, near Hagerstown, Washington County, Maryland, in accordance with each and every one of the conditions, covenants, stipulations, terms and provisions contained in the aforementioned Specifications, which in all respects are incorporated herein by reference and made a part hereof as if attached or entirely stated herein, and as shown on the aforementioned drawings, which are also incorporated herein by reference and made a part hereof as if attached or entirely stated herein, at and for a sum equal to the prices and rates respectively named therefore in the bid attached hereto, and shall comply with and perform each and every obligation imposed upon it by the said Specifications or by the terms of said award.

4. The County shall comply with and perform each and every obligation imposed upon it by the said Specifications or by the terms of the said award.

5. The County shall pay the Contractor for the Contractor's performance of the Contract the sum of _____ Dollars and _____ Cents (\$_____) (hereinafter the "Contract Sum"), when due and payable under the terms of the said Specifications and the terms of said award and shall be subject to additions and deductions as provided for in the Contract Documents.

6. Payments shall be made on account of the Contract Sum to the Contractor as set forth in the Contract Documents.

7. The Contractor hereby certifies that it is a corporation authorized and registered to do business in the State of Maryland with the Maryland State Department of Assessments and Taxation.

8. The Contractor hereby certifies that it has read and understood the provisions of the Washington County Purchasing guidelines dealing with conflicts of interest, and that it further certifies, represents and warrants to the County that there is no current conflict of interest and that the Contractor shall refrain from any such conflict of interest for the duration of this Contract.

9. This Contract was made and entered into in the State of Maryland and shall be governed and construed in accordance with the laws of the State of Maryland. As to the Contractor, this Contract is intended to be a contract under seal and speciality.

10. The Recitals are incorporated into this Contract as substantive provisions.

IN WITNESS WHEREOF, the parties have caused this Contract to be duly executed and delivered, the day and year first above written.

APPROVED AND AGREED TO:

ATTEST:

BY: _____
(Signature)

APPROVED AND AGREED TO:

ATTEST:

**BOARD OF COUNTY COMMISSIONERS
OF WASHINGTON COUNTY, MARYLAND**

Vicki C. Lumm, Clerk

_____ (SEAL)
Terry L. Baker, President

Recommended for approval:

Phillip Ridenour, Director
Hagerstown Regional Airport

Approved for Legal Sufficiency:

John M. Martirano
County Attorney

END OF DOCUMENT

SECTION XIV
LABOR AND MATERIAL PAYMENT BOND

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LABOR AND MATERIAL PAYMENT BOND

Board of County Commissioners of Washington County, Maryland

BOND NO. _____

CONTRACT NO. PUR-1377

Date Bond Executed: _____, 2018

KNOW ALL MEN BY THESE PRESENTS, that we _____,

(Here insert full name and address or legal title of Contractor, including zip code)

a corporation organized and existing under the laws of the State of Maryland and authorized to do business in the State of Maryland, hereinafter called the **“Principal”** and

(Here insert full name and address or legal title of Surety, including zip code)

a corporation organized and existing under the laws of the State of _____, and authorized to do business in the State of Maryland, hereinafter called the **“Surety”**, are held and firmly bound unto the Board of County Commissioners of Washington County, Maryland, a body corporate and politic, and a political subdivision of the State of Maryland, hereinafter called the **“County”**, for the use and benefit of claimants as hereinafter defined, in the Penal Sum _____ Dollars and _____ Cents (\$ _____) lawful money, for the payment of which Penal Sum we bind ourselves, our heirs, executors, administrators, personal representatives, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into or will enter into a contract with the County, for the Brumbaugh-Kendle-Grove Farmstead Demolition – Hagerstown Regional Airport - Richard A. Henson Field (*Contract No. PUR-1377*), in Washington County, Maryland. The contract and all items incorporated into the contract, together with any and all changes, extensions of time, alterations, modifications, or additions to the contract or to the work to be performed there under or to the Plans, Specifications, and Special Provisions, or any of them, or to any other items incorporated into the contract shall hereinafter be referred to as the **“Contract”**.

WHEREAS, it is one of the conditions precedent to the final award of the Contract that these presents be executed.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and materials furnished, supplied and reasonably required for use in the performance of the Contract, then this obligation shall be null and void, otherwise it shall remain in full force and effect, subject to the following conditions:

1. A **Claimant** is defined to be any and all of those persons supplying labor and materials (including lessors of the equipment to the extent of the fair market value thereof) to the Principal or its subcontractors and sub-subcontractors in the prosecution of the work provided for the

Contract, entitled to the protection provided by Md. Code Ann., State Finance and Procurement Article, §17-101, *et seq.*, as from time to time amended.

- 2. The above-named Principal and Surety hereby jointly and severally agree with the County that every claimant as herein defined, who has not been paid in full may, pursuant to and when in compliance with the provisions of the aforesaid State Finance and Procurement Article, §17-101, *et seq.*, sue on this Bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant and have execution thereon. The County shall not be liable for the payment of any costs or expenses of any such suit.

The Surety hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder of the Specifications accompanying the same shall in any way affect its obligations on this Payment Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or the Specifications.

This Payment Bond shall be governed and construed in accordance with the laws of the State of Maryland and any reference herein to the Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

IN WITNESS WHEREOF, the Principal and Surety have set their hands and seals to this Payment Bond this _____ day of _____, 2018.

WITNESS:

(Typed Name of Principal)
BY: _____
(SEAL)

(Typed Name and Title)

WITNESS:

(Typed Name of Surety)
BY: _____(SEAL)

(Typed Name and Title)

(Name of Local Agent)
(_____) _____
(Telephone Number of Local Agent)

SECTION XV
PERFORMANCE BOND

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PERFORMANCE BOND

Board of County Commissioners of Washington County, Maryland

BOND NO. _____

CONTRACT NO. PUR-1377

Date Bond Executed: _____, 2018

KNOW ALL MEN BY THESE PRESENTS, that we _____

(Here insert full name and address or legal title of Contractor, including zip code)

a corporation organized and existing under the laws of the State of _____ and authorized to do business in the State of Maryland, hereinafter called the **“Principal”** and _____

(Here insert full name and address or legal title of Surety, including zip code)

a corporation organized and existing under the laws of the State of _____ and authorized to do business in the State of Maryland, hereinafter called the **“Surety”**, are held and firmly bound unto the Board of County Commissioners of Washington County, Maryland, hereinafter called the **“County”**, the sum of Sum _____ Dollars and _____ Cents (\$ _____) lawful money of the United States for the payment of which sum well and truly to be made, the Principal and the Surety bind themselves, their heirs, personal representatives, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into or will enter into a contract with the County for the Brumbaugh-Kendle-Grove Farmstead Demolition – Hagerstown Regional Airport - Richard A. Henson Field (*Contract No. PUR-1377, hereinafter the “Contract”*), in Washington County, Maryland, which Contract and all work to be done thereunder and all the plans, drawings, and specifications accompanying the same shall be deemed a part hereof and shall be incorporated by reference herein to the same extent as if fully set forth.

NOW, THEREFORE, during the original term of said Contract, during any extensions thereto that may be granted by the County, and during the guarantee and warranty period, if any, required under the Contract, unless otherwise stated therein, this Performance Bond shall remain in full force and effect unless and until the following terms and conditions are met:

1. Principal shall well and truly perform the Contract; and
2. Principal and Surety shall comply with the terms and conditions in this Performance Bond.

Whenever Principal shall be declared by the County to be in default under the Contract, the Surety may, within ten (10) days after notice of default from the County, notify the County of its election to either promptly proceed to remedy the default or promptly proceed to complete the Contract in accordance with and subject to its terms and conditions. In the event the Surety does not elect to exercise either of the above stated options, then the County thereupon shall have the remaining contract work completed, Surety to remain liable hereunder for all expenses of completion up to but not exceeding the penal sum stated above.

The Surety for value received hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the Contract or to the work to be performed thereunder of the Specifications accompanying the same shall in any way affect its obligations on this Performance Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder of the specifications accompanying the same.

This Performance Bond shall be governed by and construed in accordance with the laws of the State of Maryland and any reference herein to Principal or Surety in the singular shall include all entities in the plural who or which are signatories under the Principal or Surety heading below.

IN WITNESS WHEREOF, Principal and Surety have set their hands and seals to this Performance Bond. If any individual is a signatory under the Principal heading below, then each such individual has signed below on his or her own behalf, has set forth below the name of the firm, if any, in whose name he or she is doing business, and has set forth below his or her title as a sole proprietor. If any partnership or joint venture is a signatory under the Principal heading below, then all members of each such partnership or joint venture, and each member has set forth below his or her title as a general partner, limited partner, or member of joint venture, whichever is applicable. If any corporation is a signatory under the Principal or Surety heading below, then each such corporation has caused the following: the corporation's name to be set forth below, a duly authorized representative of the corporation to affix below the corporation's seal and to attach hereto a notarized corporate resolution or power of attorney authorizing such action, and each such duly authorized representative to sign below and to set forth below his or her title as a representative of the corporation. If any individual acts as a witness to any signature below, then each such individual has signed below and has set forth below his or her title as a witness. All of the above has been done as of the Date of Bond shown above.

Signed, and sealed this _____ day of _____, 2018.

WITNESS:

(Typed Name of Principal)

BY: _____
(SEAL)

(Typed Name and Title)

WITNESS:

(Typed Name of Surety)

BY: _____ (SEAL)

(Typed Name and Title)

(Name of Local Agent)

(_____) _____
(Telephone Number of Local Agent)

SECTION XVI
APPENDIX A – SALVAGE INVENTORY

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Brumbaugh-Kendle-Grove Farmstead, Hagerstown MD--MHT Inventory Number WA-I-480

Salvage Inventory

	Item Number	Building	Interior/ Exterior	Item Description/ Material	Location for Salvage	Photograph	Interested? Y/N
1	BKG-H-1	House	Exterior	Brick/ Masonry	All elevations		
2	BKG-H-2	House	Exterior	Posts, turned/ Wood	East (front) porch		
3	BKG-H-3	House	Exterior	Posts, chamfered/ Wood	North ell porch, south ell porch		
4	BKG-H-4	House	Exterior	Brackets/ Wood	East porch, north ell porch, south ell porch		
5	BKG-H-5	House	Exterior	Balusters, shaped flat/ Wood	North ell porch, south ell porch		
6	BKG-H-6	House	Exterior	Lintels, incised	All elevations		
7	BKG-H-7	House	Exterior	Window grates/ Metal	Basement level		
8	BKG-H-8	House	Interior	Wood molding including baseboards, newel post, stair railings, and stair trim/ Wood	First floor, second floor, attic (attic not accessible at time of survey)		
9	BKG-H-9	House	Interior	Panelling, beaded/ Wood	First floor		

Brumbaugh-Kendle-Grove Farmstead, Hagerstown MD--MHT Inventory Number WA-I-480

Salvage Inventory

	Item Number	Building	Interior/ Exterior	Item Description/ Material	Location for Salvage	Photograph	Interested? Y/N
10	BKG-H-10	House	Interior	Door trim and doors/ Wood	First floor, second floor, attic (attic not accessible at time of survey)		
11	BKG-H-11	House	Exterior	Window trim, sash, and transoms/ Wood, glass	First floor, second floor, attic (attic not accessible at time of survey)		
12	BKG-H-12	House	Interior	Mantel/ Wood	First floor		
13	BKG-H-13	House	Interior	Hardware, window/ Metal	First floor, second floor, attic (attic not accessible at time of survey)		
14	BKG-H-14	House	Interior	Hardware, door, including knobs, hinges, locksets/ Metal	First floor, second floor, attic (attic not accessible at time of survey)		
15	BKG-H-15	House	Interior	Light fixtures including ceiling plates, stem and socket covers/ Metal	First floor, second floor, attic (attic not accessible at time of survey)		
16	BKG-H-16	House	Interior	Joists, sills, posts/ Wood	Basement. Includes both rough hewn and circular sawn members		
17	BKG-H-17	House	Interior	Roofing system-posts, rafters, purlins, plates/ Wood	Attic (not accessible at time of survey)	No photo available	
18	BKG-H-18	House	Exterior	Wood partition/Wood	Between farmhouse and summer kitchen		

Brumbaugh-Kendle-Grove Farmstead, Hagerstown MD--MHT Inventory Number WA-I-480

Salvage Inventory

	Item Number	Building	Interior/ Exterior	Item Description/ Material	Location for Salvage	Photograph	Interested? Y/N
19	BKG-H-19	House	Interior	Shutters and shutter hardware/ Wood, metal	Located in Storage Shed and Shop/ Wagon Shed		
20	BKG-H-20	House	Interior	Toilet, sink, plumbing fixtures and pipes/ Ceramic, metal			
21	BKG-SK-1	Summer Kitchen	Exterior	Brick/ Masonry	All elevations		
22	BKG-SK-2	Summer Kitchen	Exterior	Window trim and sash/ Wood, glass	All spaces		
23	BKG-SK-3	Summer Kitchen	Exterior and Interior	Door trim and doors/ Wood	All spaces		
24	BKG-SK-4	Summer Kitchen	Exterior and Interior	Hardware, door: including knobs, hinges, locksets/ Metal			
25	BKG-SK-5	Summer Kitchen	Interior	Panelling, beaded/ Wood	First floor walls and ceiling		
26	BKG-SK-6	Summer Kitchen	Interior	Cabinets, built-in/ Wood	First floor		
27	BKG-SK-7	Summer Kitchen	Interior	Flooring/ Wood	Attic		

Brumbaugh-Kendle-Grove Farmstead, Hagerstown MD--MHT Inventory Number WA-I-480

Salvage Inventory

	Item Number	Building	Interior/ Exterior	Item Description/ Material	Location for Salvage	Photograph	Interested? Y/N
28	BKG-SK-8	Summer Kitchen	Interior	Roofing system-posts, rafters, purlins, plates/ Wood	First floor, attic		
29	BKG-S-1	Smokehouse	Exterior	Stone/ Masonry	All elevations		
30	BKG-CH-1	Chicken House	Exterior	Siding/ Wood	All elevations		
31	BKG-CH-2	Chicken House	Interior	Framing members--posts, joists, sills, rafters, plates, purlins/ Wood	Interior walls and roofing system		
32	BKG-CH-3	Chicken House	Exterior and Interior	Hardware, door/ Metal	All spaces		
33	BKG-SSWS-1	Storage Shed and Shop/ Wagon Shed	Exterior	Siding/ Wood	Exterior elevations, interior walls		
34	BKG-SSWS-2	Storage Shed and Shop/ Wagon Shed	Interior	Framing members--posts, joists, rafters, plates, and purlins/ Wood	Storage Shed and Shop spaces		
35	BKG-SSWS-3	Storage Shed and Shop/ Wagon Shed	Exterior and Interior	Door trim and doors/ Wood	All elevations		
36	BKG-SSWS-4	Storage Shed and Shop/ Wagon Shed	Exterior	Window trim and sash/ Wood, glass	All elevations		

Brumbaugh-Kendle-Grove Farmstead, Hagerstown MD--MHT Inventory Number WA-I-480

Salvage Inventory

	Item Number	Building	Interior/ Exterior	Item Description/ Material	Location for Salvage	Photograph	Interested? Y/N
37	BKG-SSWS-5	Storage Shed and Shop/ Wagon Shed	Exterior and Interior	Hardware, door/ Metal	All spaces		
38	BKG-SSWS-6	Storage Shed and Shop/ Wagon Shed	Interior	Panelling/ Wood	All spaces		
39	BKG-SSWS-7	Storage Shed and Shop/ Wagon Shed	Interior	Framing members--posts, joists, rafters, plates, and purlins/ Wood	Wagon Shed interior space		
40	BKG-FH-1	Feed House	Interior	Framing members--posts, joists, rafters, plates, and purlins/ Wood	Lower level, upper level		
41	BKG-FH-2	Feed House	Exterior	Siding/ Wood	All elevations		
42	BKG-FH-3	Feed House	Exterior and Interior	Doors/ Wood	All elevations		
43	BKG-FH-4	Feed House	Exterior and Interior	Hardware, door/ Metal	Lower level		
44	BKG-FH-5	Feed House	Interior	Planking/ Wood	Lower level, upper level walls and floors		
45	BKG-S-1	Silo	Exterior	Concrete staves/ Masonry	East elevation		

Brumbaugh-Kendle-Grove Farmstead, Hagerstown MD--MHT Inventory Number WA-I-480

Salvage Inventory

	Item Number	Building	Interior/ Exterior	Item Description/ Material	Location for Salvage	Photograph	Interested? Y/N
46	BKG-S-2	Silo	Exterior	Metal banding and ladder/ Metal	Sides		
47	BKG-S-3	Silo	Exterior	Metal roof/ Metal	Upper level		
48	BKG-B-1	Barn	Exterior	Brick/ Masonry	Lower level, main level, loft		
49	BKG-B-2	Barn	Exterior	Limestone/ Masonry	Lower level		
50	BKG-B-3	Barn	Interior	Framing members--posts, beams, joists, trusses, pins/ Wood	Lower level, main level, loft		
51	BKG-B-4	Barn	Interior	Roofing system-posts, rafters, purlins, plates/ Wood	Loft level		
52	BKG-B-5	Barn	Exterior and Interior	Doors and door trim/ Wood	Lower level, main level, loft		
53	BKG-B-6	Barn	Exterior and Interior	Window sash and trim/ Wood	Lower level		
54	BKG-B-7	Barn	Exterior and Interior	Hardware, door/ Metal	Lower level, main level, loft		

Brumbaugh-Kendle-Grove Farmstead, Hagerstown MD--MHT Inventory Number WA-I-480

Salvage Inventory

	Item Number	Building	Interior/ Exterior	Item Description/ Material	Location for Salvage	Photograph	Interested? Y/N
55	BKG-B-8	Barn	Interior	Planking/ Wood	Lower level, main level, loft		
56	BKG-B-9	Barn	Interior	Flooring/ Wood	Main level	 <small>(View from below)</small>	
57	BKG-B-10	Barn	Exterior	Siding/ Wood	East elevation		

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SECTION XVII
APPENDIX B – PHASE I ENVIRONMENTAL SITE
ASSESSMENT

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Phase I Environmental Site Assessment

BKG Farmstead Phase I
14301 Pennsylvania Avenue
Hagerstown, MD



Prepared For:

Mr. Keith Fritz - ADCI, Inc.
6031 University Blvd, #330, Ellicott City, MD 21043
Grant Numbers 18-013, 18-014, 18-015, 18-016

Issue Date: November 14, 2017

F&R Project Number: 72V-0140





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Phase I Environmental Site Assessment
Grant Numbers 18-013, 18-014, 18-015, 18-016
Brumbaugh-Kendle-Grove Farmstead
14301 Pennsylvania Avenue
Hagerstown, MD

1.0 EXECUTIVE SUMMARY

Froehling & Robertson, Inc. (F&R) performed a Phase I Environmental Site Assessment (ESA) of the Brumbaugh-Kendle-Grove Farmstead located at 14301 Pennsylvania Avenue in Hagerstown, MD. The following is a summary of our findings and is not intended to replace more detailed information contained elsewhere in this report.

The Property, Brumbaugh-Kendle-Grove Farmstead, consists of a 1.6-acre, irregular-shaped parcel developed with six separate farmstead structures situated within a rural land use area in Hagerstown, MD. The buildings were constructed in the late 19th and early 20th century and currently operate as a cattle livestock/pasture area. The Property also contains gravel paved access roadways, a former well, landscaped areas and grazing land for cattle. The Property is bound to the north by pasture, beyond which is Air View Road and airport property; to the east by pasture/undeveloped land, beyond which is residential development; to the south by undeveloped land; and to the west by row crops/corn fields, beyond which is Pennsylvania Avenue and residential and commercial development.

Based upon F&R's review of historical sources and interviews, the Property appears to have been developed with the stone Smokehouse and brick Barn since the 1860s; and the Farmhouse since 1895. Since then, the facility has been utilized as a farmstead (1860-1997) for agricultural purposes. The Property has been vacant since at least 1999, with the exception of livestock grazing operations. Prior to the 1860s, the Property was likely undeveloped land.

Based upon F&R's review of the federal, state and tribal environmental database report prepared by Environmental Data Resources, Inc. (EDR), environmental incidents or listed facilities were not identified for the Property. The EDR Radius Map report identified numerous facilities listed on the federal and state databases within the ASTM search distance. Please see Section 5.1 of this report for additional information regarding listed facilities.

F&R has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-13 of the Brumbaugh-Kendle-Grove Farmstead located at 14301 Pennsylvania Avenue in Hagerstown, MD, the Property. Any exceptions to, or deletions from, this practice are described in Section 9.0 of this report. This assessment has revealed evidence of RECs and non-scope environmental considerations, including the following:

Two RECs are associated with the Property:

- Aerial imagery between 1938 and 1959 and historical topographic maps between 1949 and 1999 depicts use of the Property, and the area immediately east of the Property, as an orchard. Historic cultivation of orchards is associated with potentially high arsenic and lead levels from the use of pesticides. Therefore, the former use of the Property and immediately adjacent land is considered a REC with respect to the Property. F&R recommends testing soils in the former orchard area to determine if any soils contain high levels of arsenic or lead.



- A fill and vent port, and the associated approximately 1,000-gallon heating oil AST were observed in the basement of the Farmhouse. There was no indication as to when the AST was installed however heating oil was observed leaking below the tank. Based upon the condition, the leaking heating oil and the presumed out-of-use status of this AST, it is considered a REC with respect to the Property. F&R recommends removal of the AST and associated stained soil prior to or during demolition of the Farmhouse due to the location of the AST.

Three non-scope environmental considerations were identified on the Property:

- Obvious evidence of damaged friable asbestos insulation and non-friable vinyl floor tile was identified. Prior to renovation/demolition of a structure an asbestos survey is required regardless of the date of construction in accordance with US Environmental Protection Agency (EPA) Regulations 40 CFR 61. Results of the asbestos survey are available in Appendix F.
- Lead-based paint was identified on interior and exterior building components of the Smokehouse, Chicken House, Farmhouse, and Washhouse. Based on the years of construction of the Barn, Hog Pen/Corn Crib and the Chicken House/Corn Crib/Wagonhouse (1890s-early 20th century) and positive lead-based paint results from other buildings, painted areas on these buildings should be assumed to contain lead-based paint as well.
- Obvious evidence of water infiltration, visual mold and/or olfactory indications of mold was observed during the site reconnaissance, primarily in the Farmhouse.

2.0 INTRODUCTION

2.1 Purpose

The purpose of our assessment is to determine whether activities are occurring, or may have occurred on or near the site, that may be considered:

- Recognized environmental conditions - the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions.
- Controlled recognized environmental conditions - a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).
- Historical recognized environmental conditions - a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).
- De minimis conditions - a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate



governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions.

2.2 Detailed Scope of Services

F&R has performed a Phase I Environmental Site Assessment in general accordance with ASTM E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Any deletions and/or additional services which deviate from this standard are described within Section 9.0. This standard does not include investigation into all areas of local, state and federal environmental requirements. These requirements were not addressed within this report and F&R is not responsible for other legal obligations for non-compliance with regulations not addressed specifically herein.

2.3 Significant Assumptions

Our findings and opinions are based upon information provided to us by others and our site observations, and are subject to and limited by the terms and conditions of F&R's Agreement for Environmental Services. We have not verified the completeness or accuracy of the information provided by others, unless noted otherwise. Our observations were based upon conditions readily visible at the site at the time of our visit, and did not include services typically performed during an Environmental Compliance Audit or a Phase II Environmental Site Assessment. If additional information becomes available which may affect our conclusions and recommendations, we request the opportunity to review the information, and reserve the right to modify our report, as warranted.

2.4 Limitations and Exceptions

F&R, by virtue of providing the services described herein, does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies any conditions at the site which may present a potential concern to public health, safety, or the environment. It is F&R's understanding that the client will notify appropriate regulatory agencies as required.

F&R has made appropriate inquiry and conducted a visual investigation in general accordance with the standard to determine the existence of underground storage tank usage (past and present) at the Property. F&R cannot entirely preclude the possibility that underground tanks, associated piping, and/or undetected releases may be present and/or may have existed at the site without a subsurface investigation, which is not a part of the scope of work for this project.

2.5 Special Terms and Conditions

Special terms and conditions in relation to this project have been addressed throughout various sections detailing the specifications for which the assessment has been completed.



2.6 User Reliance

This report has been prepared for the exclusive use of ADCI, Inc. for this specific project. These services have been provided in accordance with generally accepted environmental practices. No other warranty, expressed, or implied, is made. The contents of this report should not be construed in any way to indicate F&R's recommendation to purchase, sell, or develop the Property.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The Property is located at 14301 Pennsylvania Avenue, approximately 500 feet southeast of the intersection of Pennsylvania Avenue and Air View Road in Hagerstown, Washington County, MD. According to the Washington County Real Estate Assessor's Office, the Property is located within parcel number is 27006523. In addition, according to the Washington County Zoning Office, the Property is zoned AP - Airport District. Please see Appendix A for the Site Vicinity Map.

3.2 Site and Vicinity Characteristics

The Property consists of an irregular-shaped parcel of land totaling approximately 1.6 acres in size that is developed for residential and agricultural purposes. The Property is located within a rural area of agricultural development. Residential properties are located in the vicinity of the Property. Please see Appendix A for the Property Observation Map.

3.3 Current Use of the Property

The Property is currently occupied by a residential home and agricultural structures. There is also a former washhouse, smokehouse and chicken coop on the southern portion of the Property and a barn, storage shed and former hog pen on the northern portion of the Property. The Property is currently used as cattle pasture.

3.4 Description of Structures, Roads, Other Improvements

The Property consists of a 1.6 acre, irregular-shaped parcel and is developed for residential and agricultural purposes. The Property is currently developed with eight different structures (farmhouse, washhouse, smokehouse, two chicken houses, a barn, silo and hog pen), located on the southern and northern portions of the Property that were constructed in the late 19th century and early 20th century. The Property is currently used as cattle pasture; however the residential portion is vacant. A description of the structures on the Property is included below:

Farmhouse. The farmhouse, located on the southern portion of the Property was constructed in approximately 1895 and is a 2 story, 2,000 square foot building which is estimated to have last been occupied in 1997. The farmhouse is a wood framed structure built on a stone foundation with a brick exterior and a shingle roof. The interior finishes consist of plaster walls and ceiling, carpet, vinyl floor tile and wooden floors. It also includes a basement and attic area. The farmhouse was formerly heated via heating oil from an aboveground tank observed in the basement and was later likely heated via natural gas provided by Columbia Gas. Similarly, the farmhouse was provided domestic water via a water well located southeast of the home



however is now provided water and sewer service via the City of Hagerstown and Washington County, respectively.

Washhouse. The washhouse is connected to the Farmhouse via an exterior porch with a shingle roof. The washhouse is a vacant, two story, 350 square foot structure that was likely constructed around the same time as the farmhouse. The washhouse is a wood framed structure built on a stone foundation, shingle roof and a brick exterior. Interior finishes consisted of a concrete and wooden floors and plaster walls. Electricity to the washhouse was observed during the site reconnaissance; however no additional utility connections were observed during the site reconnaissance.

Smokehouse. The smokehouse is a vacant, 50 square foot, single story structure located on the southern portion of the Property. It was likely constructed in the 1860s or 1870s. The smokehouse is constructed on a stone foundation with a stone exterior and a metal roof. Interior finishes consist of dirt flooring, wood ceiling and stone walls. No utility connections were observed at the smokehouse during the site reconnaissance.

Chicken House. The chicken house is a vacant, 50 square foot, single story structure located on the southern portion of the Property, adjacent to the smokehouse. It was likely constructed in the early 20th century. The chicken house is constructed on a stone foundation, with wood siding and a metal roof. Interior finishes consist of wood interior and an unfinished floor. The roof in the northern portion of the structure is caved in. No utility connections were observed at the chicken house during the site reconnaissance.

Chicken House/Corn Crib/Wagonhouse. The chicken house/corn crib/wagonhouse is a vacant, 700 square foot, single story structure located on the northern portion of the Property, immediately south of and attached to the barn. It was likely constructed in the early 20th century. Exterior finishes consist of a concrete foundation, wood siding and a metal roof. Interior finishes consist of wood interior and a concrete floor and currently stores miscellaneous debris. No utility connections were observed at the chicken house/corn crib/wagonhouse during the site reconnaissance, except for electricity which is likely provided by Potomac Edison.

Barn. The barn is a 5,500 square foot, two-story structure located on the northern portion of the Property, immediately north of the chicken house/corn crib/wagonhouse. The barn was likely constructed in the 1870s or 1880s. Exterior finishes consist of a stone foundation, stone and brick walls, and a metal roof. Interior finishes consist of painted wood. Overhead electrical lines were connected to the barn however no other utilities were observed.

Silo. The silo is a 300 square foot structure located on the northeastern portion of the Property, east of the barn. The silo was likely constructed in the early 20th century. The silo is constructed of metal with a metal roof. The interior portion of the silo was not observed due to access limitations. Electricity connections to the silo were observed during the site reconnaissance; however no additional utility connections were observed during the site reconnaissance.

Hog Pen/Corn Crib. The hog pen/corn crib is a single story, 700 square foot structure located on the eastern portion of the property, east of the barn. The structure was likely constructed in the early 20th century. Exterior finishes consist of wood siding and a metal roof. Interior finishes consisted of wood. Electricity was observed at the structure however no other utilities were observed during the site reconnaissance.



See Appendix A for the Property Structure Map of the above structures on the Property.

3.5 Current Uses of Adjacent Properties

The Property is bound to the north by pasture, beyond which is Air View Road and airport property; to the east by pasture/undeveloped land, beyond which is residential development; to the south by undeveloped land; and to the west by row crops/corn fields, beyond which is Pennsylvania Avenue and residential and commercial development. Please reference Appendix A for the Property Observation Map.

4.0 USER PROVIDED INFORMATION

In accordance with the ASTM Standard, the Client is responsible for providing the following information. Mr. Keith Fritz of ADCI, Inc provided F&R personnel with the site location and site contact information. F&R also requested information within the following sections.

4.1 Title Records

Current and/or prior ownership information was not provided by the Client and a review of Chain of Title Information was not performed as a part of this assessment.

4.2 Environmental Liens, Activity, and/or Use Limitations

Identification of activity use limitations and/or environmental conditions at the site was not provided.

4.3 Specialized Knowledge

Specialized knowledge of environmental issues was not provided to F&R.

4.4 Valuation Reduction for Environmental Issues

Information concerning valuation reduction for environmental issues was not provided by the Client.

4.5 Owner, Property Manager, and Occupant Information

The current property owner was identified as Board of County Commissioners of Washington County, Maryland. Additional information concerning the property manager and occupant was not provided to F&R.

4.6 Reason for Performing Phase I Environmental Site Assessment

The Phase I Environmental Site Assessment is being performed to satisfy environmental inquiry into the site.



4.7 Other

Additional information was not provided by the user.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

Federal, state and tribal environmental databases and records were reviewed in an effort to determine whether environmental incidents have been reported at the site and to locate properties with environmental liabilities in the vicinity of the site. A detailed summary of federal, state and tribal databases prepared by Environmental Data Resources, Inc. (EDR) is presented in Appendix E. Federal and state regulatory databases have been researched and reported in accordance with the approximate minimum search distances specified by ASTM E 1527-13. The table below depicts the listed facilities and/or incidents identified in the database search:

Database	Target Property (TP)	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RCRA - Large Quantity Generators (RCRA-LQG)		0.25	0	1	NR	NR	NR	1
Superfund Enterprise Management System (SEMS)		0.5	0	1	0	NR	NR	1
Notice of Potential Hazardous Waste Sites (MD SHWS)		1	0	0	0	1	NR	1
Registered Underground Storage Tank List (MD UST)		0.25	0	3	NR	NR	NR	3
Oil Control Program Cases (MD OCPCASES)		0.5	0	3	3	NR	NR	6

5.1.1 Federal Regulatory Agencies

One RCRA Large Quantity Generator (LQG) and one SEMs facility were identified in the ASTM search radius on the federal databases reviewed by EDR. The Property or adjacent properties were not identified on the federal databases. However, one federally listed site was identified in the vicinity of the Property. A detailed summary of the facilities mapped in the immediate vicinity is included below:

Site Name: HAGERSTOWN AIRCRAFT SERVICES, INC
Databases: RCRA-LQG, SEMS
Address: 14235 OAK SPRING RD
Distance: 988
Direction: WNW
Elevation: Higher
Comments: The Hagerstown Aircraft Services, Inc. was mapped 988 feet west-northwest and topographically up-gradient of the Property. Hagerstown Aircraft Services, Inc. was identified on the RCRA-LQG database listed with ignitable waste, arsenic, barium, cadmium, chromium and lead. There were no violations associated with the facility. This facility was also identified in the SEMS database as a SUPERFUND (Non-NPL) site. The non-NPL status for this facility is Removal Only Site (No Site Assessment Work Needed). Based on the location, regulatory status, and that no violations at the facility were received, this facility is not considered a REC with respect to the Property.



5.1.2 State and Tribal Regulatory Agencies

One Financial Assurance facility and one UST facility were identified in the ASTM search radius on the state databases reviewed by EDR. The Property or adjacent properties were not identified on the state databases. However, one state listed site was identified in the vicinity of the Property. A detailed summary of the facilities mapped in the immediate vicinity is included below:

Site Name: AIRPORT PUMP STATION
Databases: Financial Assurance 1, UST
Address: U.S. RT. 11 @ EDEN ROAD
Distance: 742
Direction: Northwest
Elevation: Higher
Comments: This facility was mapped 742 feet northwest and topographically up-gradient from the Property. This facility was identified on the UST database for a 280 gallon diesel UST. The tank was reportedly removed in June 1997 and no groundwater or soil contamination was observed during or after removal. Additionally, the liquid had been removed from the tank and the tank had been purged of all explosive or combustible vapors. According to the Maryland Financial Assurance database, the UST was not insured. Based a lack of contamination from the tank, that the tank was properly removed, and the distance from the Property, this facility would not represent a REC with respect to the Property.

5.1.3 Additional Environmental Record Sources

Local records lists are not documented within Washington County and therefore additional environmental record sources were not used in this assessment. F&R contacted the local fire, health, and building departments for additional information on the Property. Information obtained is included within Section 7.2 of this report.

5.1.4 Vapor Encroachment Screening

Incidents involving chemicals of concern (COC) were not identified in the EDR Environmental Database Report within the critical distance (up to 100 feet cross gradient from the nearest property line) of the Property. Based on this information, a VEC is not likely to exist at the Property.

5.2 Physical Setting Sources

The United States Geological Survey (USGS), Hagerstown, Maryland Quadrangle 7.5 minute series topographic map was reviewed during the preparation of this report. This map was published by the USGS in 2016. According to the contour lines on the topographic map, the Property is located at approximately 640 feet above mean sea level (AMSL). The contour lines in the area of the Property indicate the ground surface generally slopes to the south and east. The area of the Property is depicted with a white area, which indicates the Property was developed as agricultural or cleared land.

An unnamed stream is depicted along the eastern boundary of the Property. These surface waters appear to flow to the east into West Branch Marsh Run. Based upon regional topography, as depicted on the USGS topographic map, the direction of shallow groundwater flow in the vicinity of the site is inferred to be to the south and east toward an unnamed tributary of West Branch Marsh Run. However, without



performing a hydrogeologic evaluation, the actual direction of groundwater flow cannot be determined.

5.3 Historical Use Information

Based upon F&R's review of historical sources and interviews, the Property appears to have been developed with the stone Smokehouse and brick Barn since the 1860s; and the Farmhouse since 1895. Since then, the facility has been utilized as a farmstead (1860-1997) for agricultural purposes. The Property has been vacant since at least 1999, with the exception of livestock grazing operations. Prior to the 1860s, the Property was likely undeveloped land.

5.3.1 Aerial Photographs

F&R reviewed aerial photographs provided by EDR to determine the historical usage of the Property. Aerial photographs from 1938, 1943, 1959, 1968, 1970, 1977, 1980, 1989, 1994, 1999, 2002, 2005, 2006, 2007, 2008, 2009, 2010, and 2011 were reviewed. The findings are presented in the following table.

Aerial imagery between 1938 and 1959 depicts use of the Property, and the area immediately east of the Property, as an orchard. Historic cultivation of orchards is associated with potentially high levels of arsenic and lead from the use of pesticides. Therefore, the former use of the Property and immediately adjacent land as an orchard, is considered a REC with respect to the Property.

Year(s)	Property	Adjoining Properties
1938	Two structures on the Property.	N- Agricultural/undeveloped land S- Agricultural land E- Agricultural land W- Agricultural land, and beyond is undeveloped land
1943	Two structures on the Property.	N- Agricultural land S- Agricultural land E- Agricultural land W- Agricultural land, and beyond is undeveloped land
1959	Two structures on the Property.	N- Agricultural land S- Undeveloped and agricultural land E- Undeveloped land, and beyond is agricultural land W- Agricultural land, and beyond is undeveloped land
1968	Two structures on the Property.	N- Agricultural land S- Undeveloped and agricultural land E- Undeveloped land, and beyond is agricultural land W- Agricultural land
1970	Two structures on the Property.	N- Undeveloped land S- Undeveloped land, and beyond is agricultural land E- Undeveloped land W- Agricultural land
1977	Two structures on the Property.	N- Undeveloped land S- Undeveloped land E- Undeveloped land W- Undeveloped land
1980	Two structures on the Property.	N- Undeveloped land S- Undeveloped/agricultural land E- Undeveloped land W- Agricultural land



Year(s)	Property	Adjoining Properties
1989	Two structures on the Property.	N- Undeveloped land S- Undeveloped land, and beyond is agricultural land E- Undeveloped land W- Undeveloped land
1994	Two structures on the Property.	N- Undeveloped land S- Undeveloped land E- Undeveloped land W- Undeveloped land
1999	Two structures on the Property.	N- Undeveloped land, and beyond is agricultural land S- Undeveloped/agricultural land E- Undeveloped land W- Agricultural land, and beyond is developed land
2002	Two structures on the Property.	N- Undeveloped land S- Undeveloped land E- Undeveloped land W- Agricultural land, and beyond is developed land
2005	Two structures on the Property.	N- Undeveloped land S- Undeveloped/agricultural land E- Roadway, and beyond is undeveloped and agricultural land W- Agricultural land
2006	Two structures on the Property.	N- Undeveloped land S- Undeveloped land, and beyond is agricultural land E- Roadway, and beyond is undeveloped land W- Agricultural land
2007	Two structures on the Property.	N- Undeveloped land S- Agricultural/undeveloped land E- Roadway, and beyond is undeveloped land W- Agricultural land
2008	Two structures on the Property.	N- Undeveloped land S- Agricultural/undeveloped land E- Roadway, and beyond is undeveloped land W- Agricultural land
2009	Two structures on the Property.	N- Undeveloped land S- Agricultural/undeveloped land E- Roadway, and beyond is undeveloped land W- Agricultural land
2010	Two structures on the Property.	N- Undeveloped land S- Agricultural/undeveloped land E- Roadway, and beyond is undeveloped land W- Agricultural land
2011	Two structures on the Property.	N- Undeveloped land S- Agricultural/undeveloped land E- Roadway, and beyond is undeveloped land W- Agricultural land

5.3.2 City Directories

F&R reviewed a historical city directory abstract provided by EDR to determine the historical usage of the Property. The findings are presented in the following table:



Year(s)	Property	Adjoining Properties
1964	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Not listed) S- 14102 Zinnia Lane (Not listed) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Not listed)
1967	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Not listed) S- 14102 Zinnia Lane (Not listed) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Not listed)
1971	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Not listed) S- 14102 Zinnia Lane (Not listed) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Not listed)
1975	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Not listed) S- 14102 Zinnia Lane (Not listed) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Not listed)
1980	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Not listed) S- 14102 Zinnia Lane (Not listed) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Not listed)
1985	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Not listed) S- 14102 Zinnia Lane (Not listed) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Not listed)
1990	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Not listed) S- 14102 Zinnia Lane (Not listed) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Not listed)
1995	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Multiple Business Listings, Washington County Regional Airport) S- 14102 Zinnia Lane (Not listed) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Not listed)
2000	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Hagerstown Regional Airport, Multiple Business Listings) S- 14102 Zinnia Lane (Residential) E- 18851 Air View Road (Not listed) W- 14320 Pennsylvania Avenue (Residential)
2005	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Hagerstown Regional Airport, Multiple Business Listings) S- 14102 Zinnia Lane (Residential) E- 18851 Air View Road (Horst Livestock Inc livestock dlrs) W- 14320 Pennsylvania Avenue (No return)
2010	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Hagerstown Regional Airport, Multiple Business Listings) S- 14102 Zinnia Lane (Residential) E- 18851 Air View Road (Horst Livestock Inc livestock auction markets) W- 14320 Pennsylvania Avenue (Residential)
2012	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Hagerstown Regional Airport, Multiple Business Listings) S- 14102 Zinnia Lane (Residential) E- 18851 Air View Road (Horst Livestock Inc livestock



Year(s)	Property	Adjoining Properties
		auction markets) W- 14320 Pennsylvania Avenue (Residential)
2017	14301 Pennsylvania Avenue - Not listed	N- 18434 Showalter Road (Hagerstown Regional Airport, Multiple Business Listings) S- 14102 Zinnia Lane (Residential) E- 18851 Air View Road (Horst Livestock Inc livestock auction markets) W- 14320 Pennsylvania Avenue (Residential)

5.3.3 Chain of Title

Based upon the Scope of Work for this project, F&R was not contracted to provide a chain of title for this project. Under the requirements of ASTM 1527-13 it is the User's responsibility to provide a title search or negotiate a contract for the title search through F&R.

5.3.4 Sanborn Fire Insurance Maps

According to EDR, Sanborn Fire Insurance Maps were not available for the Property. The EDR Sanborn Map "No Coverage Letter" is included in Appendix C of this report.

5.3.5 Historical Topographic Maps

Historical topographic maps were provided by EDR and reviewed for information concerning the previous usage of the Property. The following table depicts the information obtained during the review.

Historical topographic maps between 1949 and 1999 depicts use of the Property, and the area immediately east of the Property, as an orchard. Historic cultivation of orchards is associated with potentially high levels of arsenic and lead from the use of pesticides. Therefore, the former use of the Property and immediately adjacent land as an orchard, is considered a REC with respect to the Property.

Year(s)	Quad	Property	Adjoining Properties
1909	Hagerstown	Property is mostly undeveloped with one structure present in the southern portion.	N- Undeveloped land, and roadway beyond that S- Roadway, and undeveloped land beyond that E- Undeveloped land W- Undeveloped land, and roadway beyond that
1912	Hagerstown	Property is mostly undeveloped with one structure present in the southern portion.	N- Undeveloped land, and roadway beyond that S- Roadway, and undeveloped land beyond that E- Undeveloped land W- Undeveloped land, and roadway beyond that
1942	Hagerstown	Property is mostly undeveloped with one structure present in the southern portion.	N- Undeveloped land, and roadway beyond that S- Undeveloped land E- Undeveloped land, and roadway beyond that



			W- Undeveloped land, and roadway beyond that
1943	Hagerstown	Property is mostly undeveloped with one structure present in the southern portion.	N- Undeveloped land, and roadway beyond that S- Roadway, and undeveloped land beyond that E- Undeveloped land W- Undeveloped land, and roadway beyond that
1944	Hagerstown	Property is mostly undeveloped with a stream transecting the Property and a structure in the southern portion.	N- Undeveloped land, and roadway beyond that S- Roadway, and undeveloped land beyond that E- Stream, and undeveloped land beyond that W- Undeveloped land
1949	Hagerstown	Property is mostly undeveloped with a stream transecting the Property, a structure in the southern portion and an orchard along the eastern boundary.	N- Undeveloped land, and roadway beyond that S- Roadway, orchard, and undeveloped land beyond that E- Orchard, and undeveloped land beyond that W- Stream, undeveloped land, and forested area beyond that
1953	Hagerstown	Property is mostly undeveloped with a stream transecting the Property, a structure in the southern portion and an orchard along the eastern boundary.	N- Undeveloped land, and roadway beyond that S- Roadway, orchard, and undeveloped land beyond that E- Orchard, and undeveloped land beyond that W- Stream, undeveloped land, and forested area beyond that
1971	Hagerstown	Property is mostly undeveloped with a stream transecting the Property, a structure in the southern portion and an orchard along the eastern boundary.	N- Undeveloped land, and roadway beyond that S- Roadway, orchard, and undeveloped land beyond that E- Orchard, and undeveloped land beyond that W- Undeveloped land, and roadway beyond that
1985	Hagerstown	Property is mostly undeveloped with a stream transecting the Property, a structure in the southern portion and an orchard along the eastern boundary.	N- Undeveloped land, and roadway beyond that S- Roadway, orchard, and undeveloped land beyond that E- Orchard, and undeveloped land beyond that W- Undeveloped land, and roadway beyond that
1999	Hagerstown	Property is developed with 2 structures and an orchard along the eastern boundary.	N- Undeveloped land, and roadway beyond that S- Roadway, orchard, and undeveloped land beyond that E- Orchard, and undeveloped land beyond that W- Undeveloped land, and roadway beyond that



2014	Hagerstown	Developed land.	N- Undeveloped land, and roadway beyond that S- Undeveloped land E- Stream, and undeveloped land W- Undeveloped land, and roadway beyond that
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5.3.6 Additional Historical Sources

Additional historical sources were not utilized during the course of this assessment.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

Mr. Stephen Armstrong and Ms. Stephanie Santiago of F&R performed a site reconnaissance on October 23, 2017 to review current site conditions. F&R personnel walked the Property and boundaries as well as viewed the interior of the structures on-site and viewed adjacent parcels.

6.2 General Site Setting/Characteristics

The Property consists of a portion of tax parcel 27006523 totaling approximately 1.6-acres in size that are developed for agricultural and residential use. The Property is located within a rural area of agricultural and residential development south of the Hagerstown Regional Airport. Agricultural and residential development are located in the immediate vicinity of the Property. Please see Appendix A for the Property Observation Map.

6.3 Potential Environmental Conditions

6.3.1 Hazardous Materials Storage

Hazardous material storage was not observed on the Property. Additionally, obvious evidence of hazardous materials or regulated substances being improperly stored, dumped, or spilled on the Property (e.g., surface staining, stressed or dead vegetation, unusual odors, etc.) was not observed.

6.3.2 Polychlorinated Biphenyls (PCBs)

Electrical equipment manufactured prior to 1979 has the potential for containing PCBs and therefore subject to regulation by the United States Environmental Protection Agency (EPA). If a transformer is labeled with a blue or black dot, this indicates that the transformer has been tested for the presence of PCBs and contained concentrations of PCBs less than 50 parts per million (ppm), or it was manufactured after 1978.

One pole-mounted electrical transformer was observed on-site and appeared to be in good condition. The transformer was not labeled with the PCB content or a blue dot; and the date of installation could not be determined. Obvious evidence of leaking or staining associated with the transformer was not observed.



6.3.3 Storage Tanks or Pipelines

F&R observed one, 1,000-gallon heating oil AST on the Property. The single-walled, steel tank is located in the basement of the Farmhouse. The AST is not placed within secondary containment, and is situated on concrete blocks above exposed soil. F&R observed obvious evidence of spilling and/or leaking associated with the AST, including stained soil under the tank. Based on this information, the AST is considered a REC.

6.3.4 Drinking Water/Sewer System

The Property receives its drinking water from the City of Hagerstown, which is serviced by the R.C Willson Water Plant. The source of the water is the Potomac River. The Property relies upon municipal sanitary sewer service provided by Washington County.

A water well was observed on the southern portion of the Property. A well pump was observed in the basement of the Farmhouse however it did not appear operational. The well did not appear to currently be used for drinking water.

6.3.5 Wastewater

F&R did not observe an industrial wastewater system on the Property.

6.3.6 Pits, Ponds, And Lagoons

F&R did not observe pits, ponds, or lagoons on site.

6.3.7 Additional Observations

F&R observed miscellaneous trash and household debris on various portions of the Property. Observed debris also included tires and other pieces of debris. This waste material did not appear to be of an environmentally sensitive nature and is not considered a de minimis condition on the Property.

7.0 INTERVIEWS

F&R personnel interviewed various persons familiar with the Property and surrounding properties. Details are as follows.

7.1 Interview with Site Owner/Manager

F&R interviewed Mr. Phil Ridenour, the Hagerstown Regional Airport Director. Mr. Ridenour explained that prior to 1999, the farmstead and land surrounding it were still used as residential and agricultural land, respectively. Mr. Ridenour was unsure how domestic water and sanitary sewer was provided to the Property. Mr. Ridenour also mentioned that it was possible that there is a heating oil tank in the basement as radiators had been removed from the Property at some point in time. Mr. Ridenour also recommended using respiratory protection for the survey due to a potential mold problem in the Farmhouse.



7.2 Interviews with Local Government Officials

Fire Officials

F&R contacted the Hagerstown Fire Department to request information regarding responses of the respective departments to emergency situations that include fires, chemical spills, hazardous material releases (HAZMAT team responses), and incidents of environmental concern on or in the immediate vicinity of the Property. F&R has not received a response as of the issuance of this report; however, if pertinent information is received, F&R will forward it to the client.

Building Department

F&R contacted the Washington County Planning Department to request information on USTs or environmental concerns on the Property. F&R has not received a response as of the issuance of this report; however, if pertinent information is received, F&R will forward it to the client.

Health Department

F&R contacted the Washington County Health Department to request information on groundwater or drinking water well contamination in the vicinity of the Property. &R has not received a response as of the issuance of this report; however, if pertinent information is received, F&R will forward it to the client.

7.3 Interview with Others

Additional interviews were not conducted during the course of this assessment.

8.0 FINDINGS AND CONCLUSIONS

8.1 Findings

During the course of this Phase I ESA, two recognized environmental conditions (RECs), and three items of environmental concern were identified in association with the Property.

8.1.1 Recognized Environmental Conditions

This assessment has revealed evidence of two RECs associated with the Property:

- Aerial imagery between 1938 and 1959 and historical topographic maps between 1949 and 1999 depicts use of the Property, and the area immediately east of the Property, as an orchard. Historic cultivation of orchards is associated with potentially high arsenic and lead levels from the use of pesticides. Therefore, the former use of the Property and immediately adjacent land is considered a REC with respect to the Property.
- A fill and vent port, and the associated approximate 1,000-gallon heating oil AST were observed in the basement of the Farmhouse. There was no indication as to when the AST was installed however heating oil was observed leaking below the tank. Based upon the condition, the leaking heating oil and the presumed out-of-use status of this AST, it is considered a REC with respect to the Property.



8.1.2 Controlled Recognized Environmental Conditions

This assessment did not identify CRECs.

8.1.3 Historical Recognized Environmental Conditions

This assessment did not identify HRECs associated with the Property.

8.1.4 De Minimis Conditions or Non-Scope Considerations

This assessment identified three non-scope environmental considerations, including the following:

- Obvious evidence of damaged friable asbestos insulation and non-friable vinyl floor tile was identified. Prior to renovation/demolition of a structure an asbestos survey is required regardless of the date of construction in accordance with US Environmental Protection Agency (EPA) Regulations 40 CFR 61. The results of the asbestos survey are available in Appendix F.
- Lead-based paint was identified on interior and exterior building components of the Smokehouse, Chicken House, Farmhouse, and Washhouse. Based on the years of construction of the Barn, Hog Pen/Corn Crib and the Chicken House/Corn Crib/Wagonhouse (1890s-early 20th century) and positive lead-based paint results from other buildings, painted areas on these buildings should be assumed to contain lead-based paint as well.
- Obvious evidence of water infiltration, visual mold and/or olfactory indications of mold was observed during the site reconnaissance, primarily in the Farmhouse.

8.2 Opinion

It is F&R's opinion that on-site conditions, observations, and research revealed evidence of two RECs and three non-scope environmental considerations. Evidence of CRECs or HRECs were not observed.

8.3 Conclusions and Recommendations

F&R has performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM Practice E 1527-13 of the Brumbaugh-Kendle-Grove Farmstead located at 14301 Pennsylvania Avenue in Hagerstown, MD, the Property. Any exceptions to, or deletions from, this practice are described in Section 9.0 of this report. This assessment has revealed evidence of RECs and non-scope environmental considerations, including the following:

Two RECs are associated with the Property:

- Aerial imagery between 1938 and 1959 and historical topographic maps between 1949 and 1999 depicts use of the Property, and the area immediately east of the Property, as an orchard. Historic cultivation of orchards is associated with potentially high arsenic and lead levels from the use of pesticides. Therefore, the former use of the Property and immediately adjacent land is considered a REC with respect to the Property. F&R recommends testing soils in the former orchard area to determine if any soils contain high levels of arsenic or lead.
- A fill and vent port, and the associated approximately 1,000-gallon heating oil AST were observed in the basement of the Farmhouse. There was no indication



as to when the AST was installed however heating oil was observed leaking below the tank. Based upon the condition, the leaking heating oil and the presumed out-of-use status of this AST, it is considered a REC with respect to the Property. F&R recommends removal of the AST and associated stained soil prior to or during demolition of the Farmhouse due to the location of the AST.

Three non-scope environmental considerations were identified on the Property:

- Obvious evidence of damaged friable asbestos insulation and non-friable vinyl floor tile was identified. Prior to renovation/demolition of a structure an asbestos survey is required regardless of the date of construction in accordance with US Environmental Protection Agency (EPA) Regulations 40 CFR 61. Results of the asbestos survey are available in Appendix F.
- Lead-based paint was identified on interior and exterior building components of the Smokehouse, Chicken House, Farmhouse, and Washhouse. Based on the years of construction of the Barn, Hog Pen/Corn Crib and the Chicken House/Corn Crib/Wagonhouse (1890s-early 20th century) and positive lead-based paint results from other buildings, painted areas on these buildings should be assumed to contain lead-based paint as well.
- Obvious evidence of water infiltration, visual mold and/or olfactory indications of mold was observed during the site reconnaissance, primarily in the Farmhouse.

9.0 DEVIATIONS

There were no significant deviations from the proposed scope of work.

10.0 ADDITIONAL SERVICES

At the request of the Client, F&R evaluated the following ASTM non-scope items of environmental concern:

Asbestos

One friable asbestos containing materials was identified at the Farmstead as containing greater than 1% asbestos. The white insulation observed on the wood beam that was located in the basement portion of the Farmhouse was found to contain 70% chrysotile asbestos. There is approximately 15 linear feet of the insulation in the basement. It is in poor condition and some pieces may be present on the ground.

One non-friable asbestos containing materials was identified at the Farmstead as containing greater than 1% asbestos. The brown 1x1 vinyl floor tile in the kitchen of the Farmhouse was found to contain 15% chrysotile asbestos. There is approximately 160 square feet of vinyl floor tile in the Kitchen.

For further information, see the attached Hazardous Materials report in Appendix F.

Radon

F&R reviewed the EPA Map of Radon Zones which assigns each of the 3,141 counties in the U.S. to one of three zones based on radon potential:



- Zone 1 counties have a predicted average indoor radon screening level greater than 4 pCi/L (pico curies per liter). Zone 1 has the highest potential for elevated indoor radon levels.
- Zone 2 counties have a predicted average indoor radon screening level between 2 and 4 pCi/L. Zone 2 has a moderate potential for elevated indoor radon levels.
- Zone 3 counties have a predicted average indoor radon screening level less than 2 pCi/L. Zone 3 has a low potential for elevated indoor radon levels.

According to the EPA Map of Radon Zones, the Property lies in Zone 1. However, based upon the current non-residential usage of the Property elevated indoor radon levels are not anticipated to be a concern.

Lead-Based Paint

Lead based paint building components were detected on either the interior, exterior, or both for the following structures located on the Farmstead; Smokehouse, Chicken House, Farmhouse, and Washhouse. Based on the years of construction of the Barn, Hog Pen/Corn Crib and the Chicken House/Corn Crib/Wagonhouse (1890s-early 20th century) and positive lead-based paint results from other buildings, painted areas on these buildings should be assumed to contain lead-based paint as well.

For further information, see the attached Hazardous Materials report in Appendix F.

Mold

F&R performed a limited visual evaluation of the interior areas of the Property. Obvious evidence of water infiltration, visual mold and/or olfactory indications of mold was observed during the site reconnaissance. Further identification efforts are warranted and detailed within Section 8.0 of this report.

11.0 REFERENCES

F&R utilized the following references in preparation of this report:

- Environmental Data Resources (EDR) Radius Map Report with Geocheck
- EDR Aerial Photo Decade Package EDR City Directory Abstract
- EDR Certified Sanborn Map Report
- EDR Historical Topographic Map Report
- Environmental Protection Agency (EPA) Radon Map of Maryland available from the EPA website (<http://www.epa.gov/radon/zonemap/maryland.htm>)
- Washington County Parcel Maps and Building Summaries available at the County Assessor's Office Website
- City of Hagerstown Water Division (<http://www.hagerstownmd.org/109/Water-Division>)
- USGS 7.5 minute Quadrangle "Hagerstown, MD" dated 2016
- Maryland Historical Trust NR-Eligibility Review Form "Brumbaugh-Kendle-Grove Farmstead"



12.0 SIGNATURES

We declare that, to the best of our professional knowledge and belief, at least one of the signatures listed below meets the definition of environmental professional as defined in Section 312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the Property. We have developed and performed the all appropriate inquiries in accordance with the standards and practices set forth in 40 CFR Part 312.

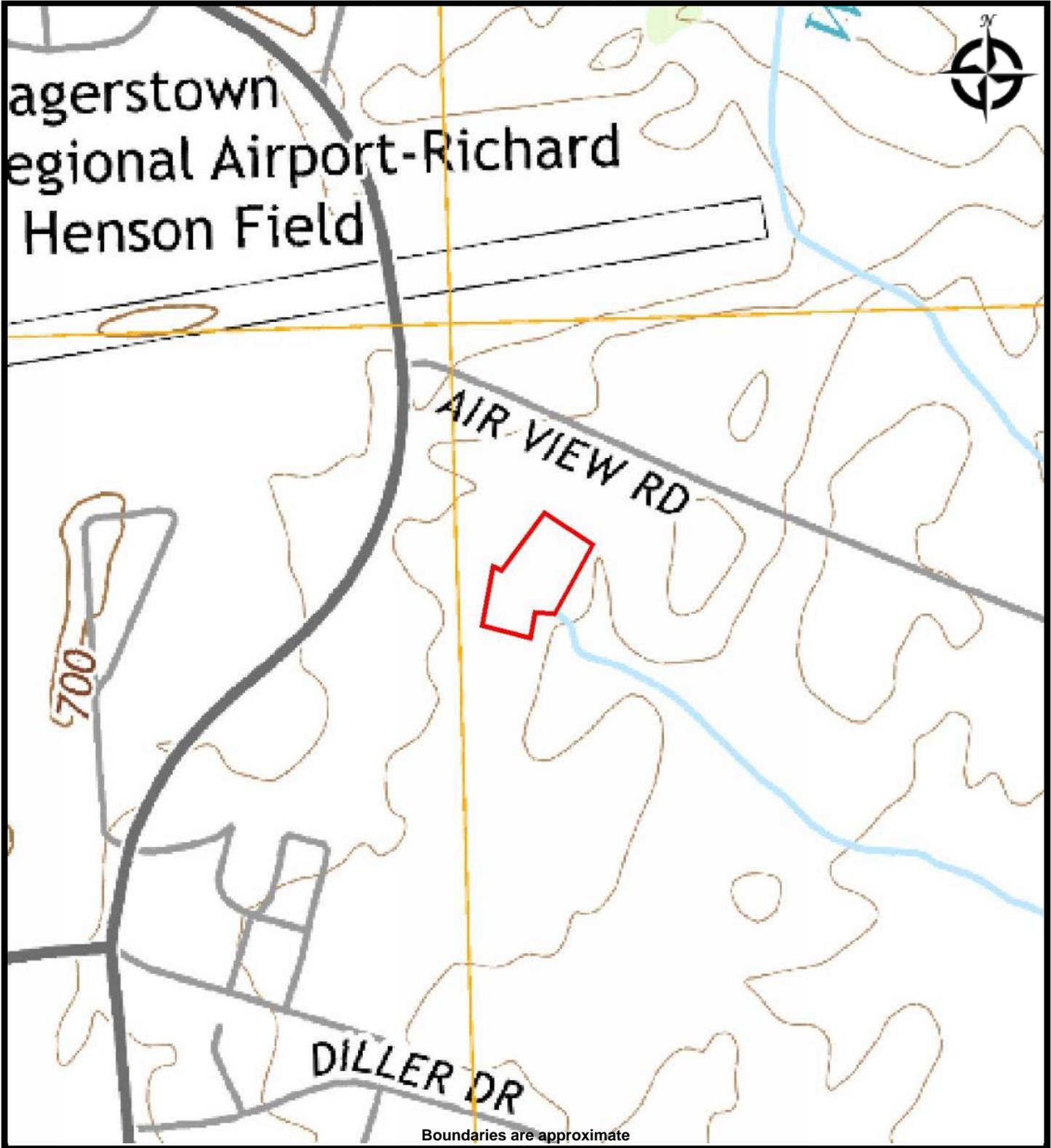
Site Assessor:

Stephen Armstrong
Environmental Scientist/Planner

Senior Reviewer:

Zachary C. Parker
Senior Environmental Professional

Appendix A: Site Vicinity Map, Site Observation Map



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 2014
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

**AERIAL - 2015
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742**

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Google Earth



FROEHLING & ROBERTSON, INC.
 Engineering • Environmental • Geotechnical
 22923 Quicksilver Drive Sterling, Virginia 20166-2012 | USA
 T 703.996.0123 | F 703.996.0124

Property Observation Map
Brumbaugh-Kendle-Grove Farmstead
14301 Pennsylvania Avenue
Hagerstown, Maryland

Project No.:	72V-0140	Scale:	NTS
Date:	13-Nov-17	Drawn:	SA
Drawing No.:	1	Checked:	SA



Subject Property



FROEHLING & ROBERTSON, INC.
 Engineering • Environmental • Geotechnical
 22923 Quicksilver Drive Sterling, Virginia 20166-2012 | USA
 T 703.996.0123 | F 703.996.0124

Property Structure Map
Brumbaugh-Kendle-Grove Farmstead
14301 Pennsylvania Avenue
Hagerstown, Maryland

Project No.:	72V-0140	Scale:	NTS
Date:	10-Nov-17	Drawn:	SA
Drawing No.:	1	Checked:	SA

Appendix B: Site Photographs



View of east-facing exterior of the Farmhouse.



View of north-facing exterior of the Farmhouse.



View of north-facing exterior of the Farmhouse.



View of north-facing exterior of the Farmhouse.



View of east- and south facing exterior of the Farmhouse.



View of the south-facing exterior of the Farmhouse.



View of south-facing exterior of the Farmhouse.



View of west-facing exterior of the Farmhouse.



View of AST vent and fill pipes on the north-facing exterior of the Farmhouse.



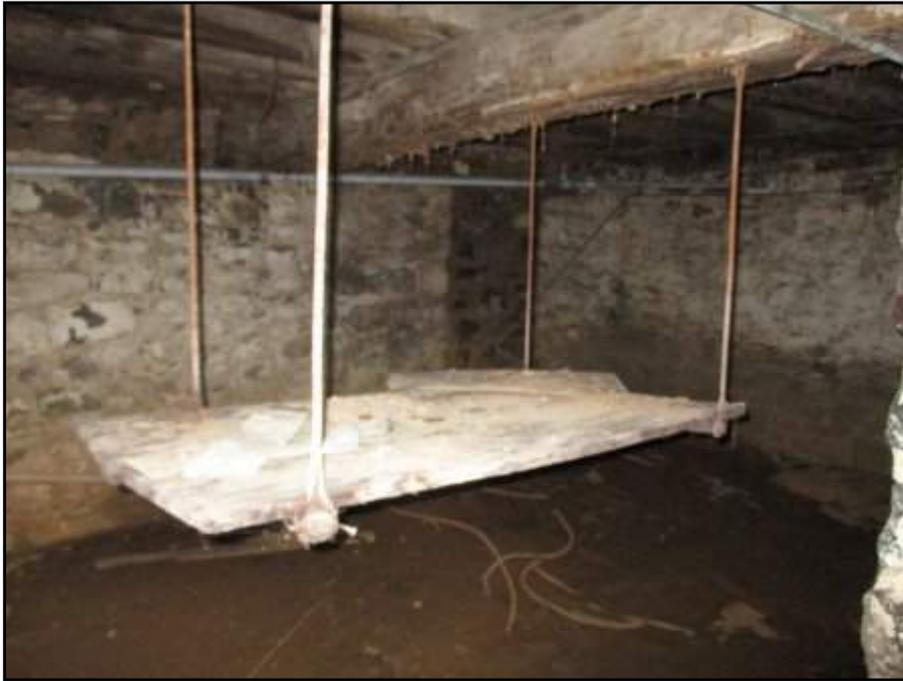
View of the basement entrance on the north-facing side of the Farmhouse.



View of basement stairs.



View of water heater in the basement of the Farmhouse.



View of the basement in the Farmhouse.



View of basement ceiling in the Farmhouse.



View of the basement floor in the Farmhouse.



View of the utility systems in the basement in the Farmhouse.



View of a water pump in the basement of the Farmhouse.



View of a suspected heater in the basement of the Farmhouse.



View of the heating oil AST in the basement of the Farmhouse.



View of soil staining under the heating oil AST in the basement of the Farmhouse.



View of storage area in the basement of the Farmhouse.



View of the main entryway on the first floor of the Farmhouse.



View of a room on the first floor of the Farmhouse.



View of a room on the first floor of the Farmhouse.



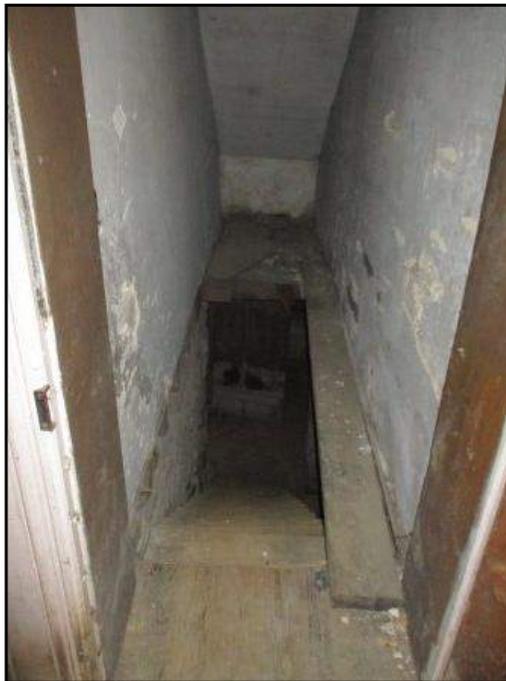
View of the laundry room and bathroom on the first floor of the Farmhouse.



View of the bathroom on the first floor of the Farmhouse.



View of the kitchen on the first floor of the Farmhouse.



View of the stairs to the basement on the first floor of the Farmhouse.



View of second floor hallway in the Farmhouse.



View of a second floor bedroom in the Farmhouse.



View of a second floor bedroom in the Farmhouse.



View of the stairs to the attic of the Farmhouse.



View of the attic area of the Farmhouse.



View of the attic area of the Farmhouse.



View of the well northeast of the Farmhouse.



View of the interior of the well.



View of the underground cistern adjacent to the Washhouse.



View of the interior of the cistern.



View of the north- and east-facing exterior of the Washhouse.



View of the south- and west-facing exterior of the Washhouse.



View of the west-facing exterior of the Washhouse.



View of the interior of the Washhouse.



View of the interior of the Washhouse.



View of the interior of the Washhouse.



View of the attic area of the Washhouse.



View of the east-facing exterior of the smokehouse (left) and Chicken House (right).



View of the interior of the Smokehouse.



View of the interior of the Smokehouse.



View of the south- and east-facing exterior of the Chicken House.



View of the interior of the Chicken House.



View of the interior of the Chicken House.



View of the interior of the Chicken House.



View of the south-facing exterior of the Chicken House/Corn Crib/Wagonhouse and the Barn.



View of the south-facing exterior of the Chicken House/Corn Crib/Wagonhouse.



View of the south-facing exterior of the Chicken House/Corn Crib/Wagonhouse.



View of the interior of the Chicken House/Corn Crib/Wagonhouse.



View of the interior of the Chicken House/Corn Crib/Wagonhouse.



View of the southeast-facing exterior of the Chicken House/Corn Crib/Wagonhouse tool storage and Barn.



View of the interior of the tool storage on the southern portion of the Chicken House/Corn Crib/Wagonhouse.



View of the interior of the tool storage on the southern portion of the Chicken House/Corn Crib/Wagonhouse.



View of the cover portion of the Barn looking northwest.



View of the Barn area looking northwest.



View of the southeast-facing exterior of the Barn looking north.



View of the southeast-facing exterior of the Barn looking north.



View of the southeast-facing exterior of the Barn looking north.



View of the southeast-facing exterior of the Barn looking northwest.



View of the interior portion of the Barn looking northwest.



View of the interior portion of the Barn looking northwest.



View of the interior portion of the Barn looking northwest.



View of the cattle area of the Barn looking northeast.



View of the Silo looking east.



View of the north-facing exterior of the Barn.



View of the north-facing exterior of the Barn.



View of the northwest-facing exterior of the Barn.



View of the northwest-facing exterior of the Barn.



View of the northwest-facing exterior of the Barn.



View of the northwest-facing exterior of the Barn.



View of the north-west facing exterior facing southeast.



View of the upper interior portion of the Barn.



View of the upper interior portion of the Barn.



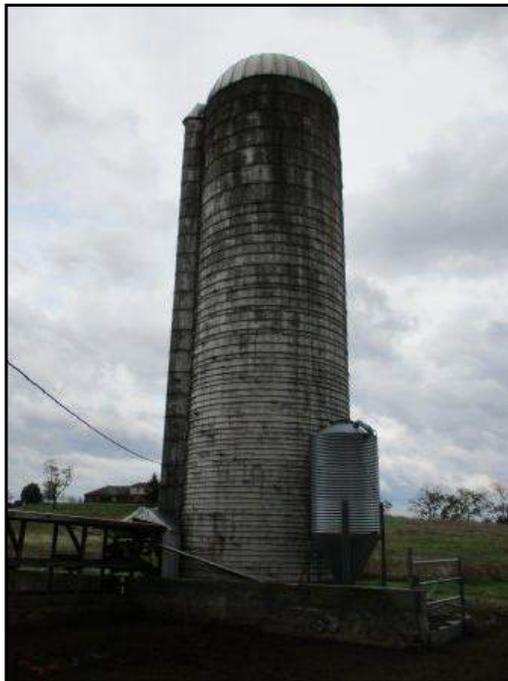
View of the upper interior portion of the Barn.



View of the upper interior portion of the Barn.



View of the Silo facing south.



View of the Silo facing north.



View of the southwest-facing exterior of the Hog Pen/Corn Crib



View of the north-facing exterior of the Hog Pen/Corn Crib.



View of the interior of the Hog Pen/Corn Crib.



View of the interior of the Hog Pen/Corn Crib.



View of the interior of the Hog Pen/Corn Crib.

Appendix C: Historical Research Documents



Boundaries are approximate



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AERIAL - 1938
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1943
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

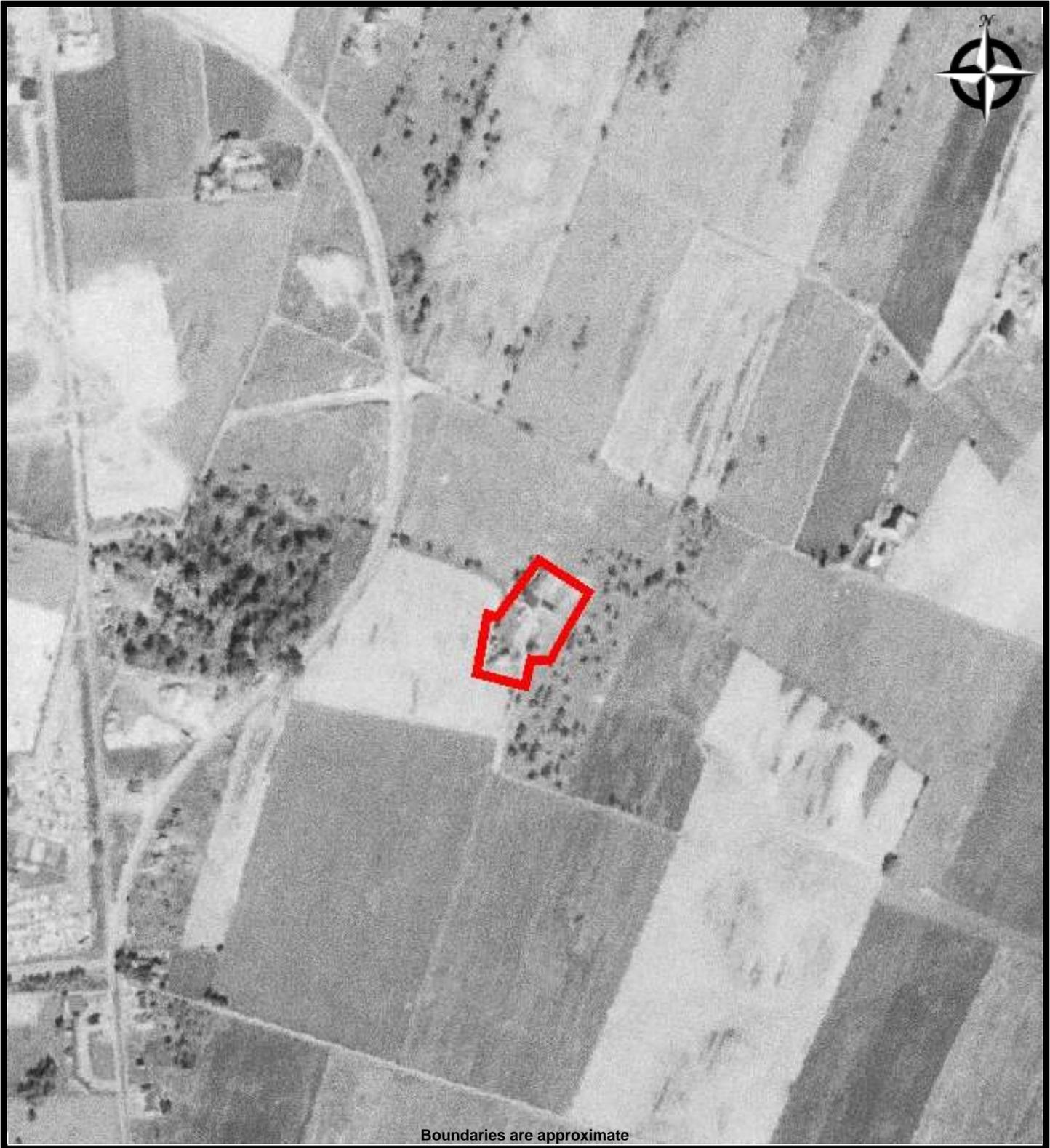
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1959
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1968
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1970
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1977
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

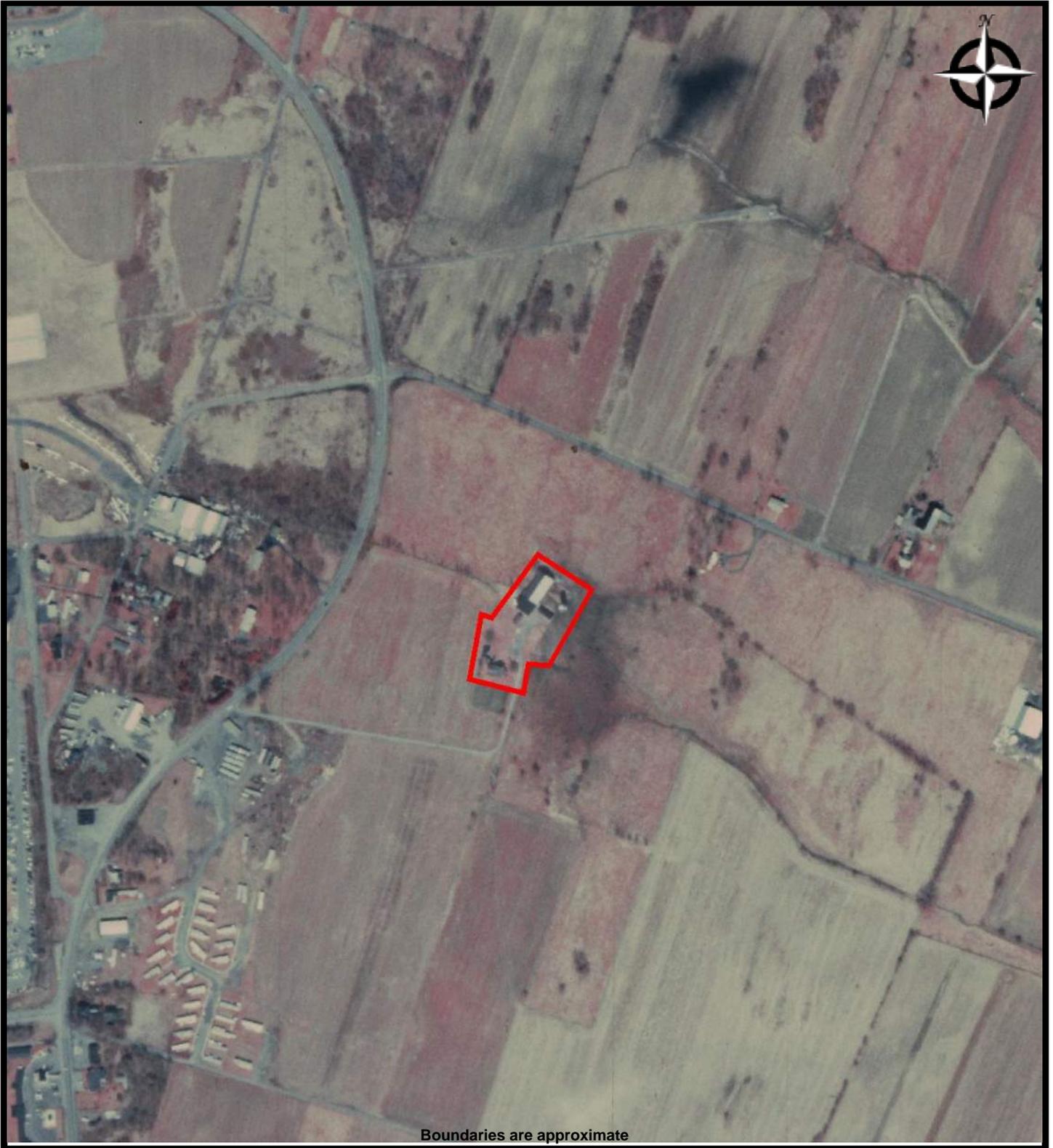
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1980
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1989
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1994
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 1999
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 2002
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

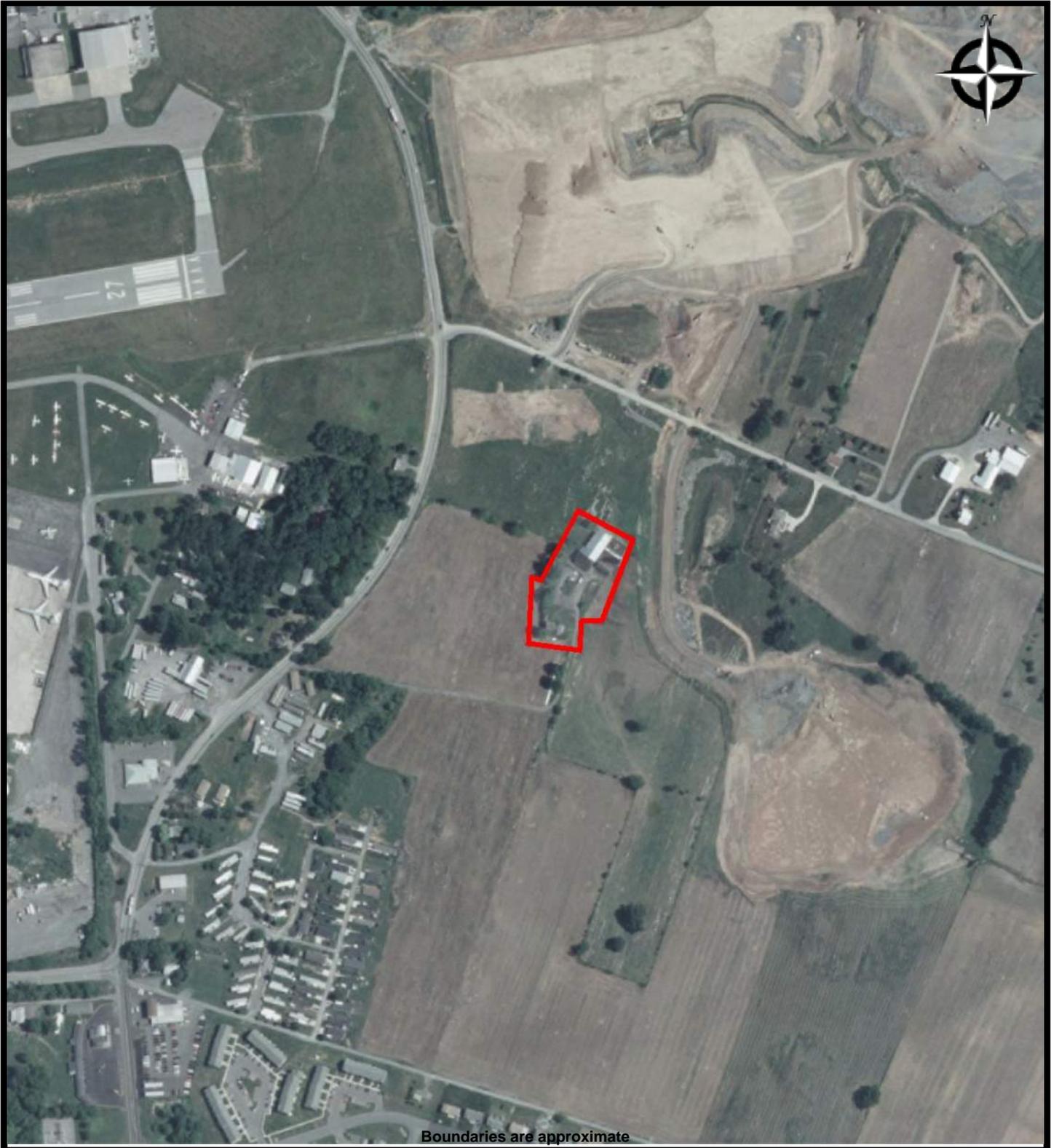
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 2005
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 2006
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

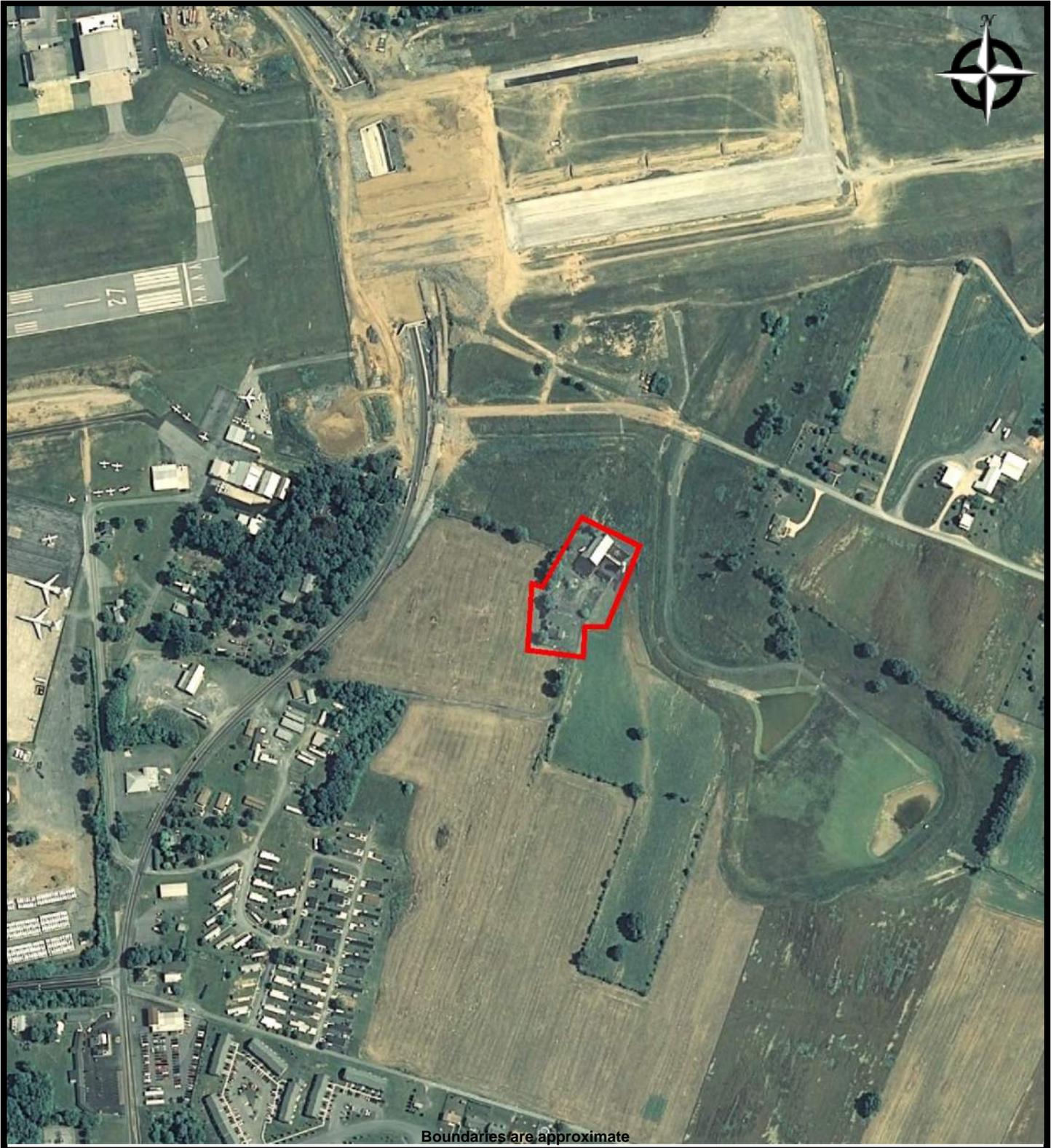
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 2007
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 2008
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

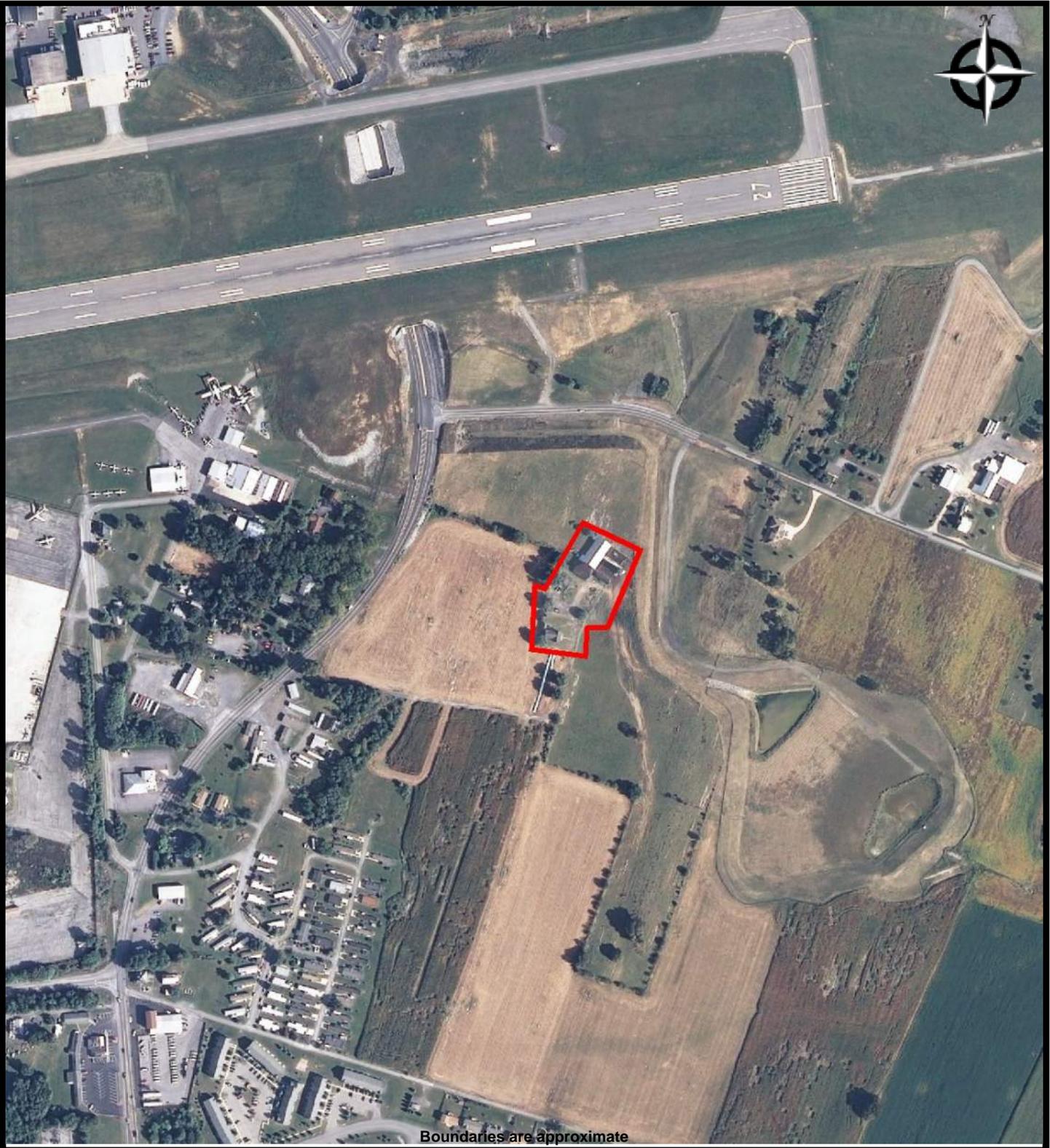
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

AERIAL - 2009
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

**AERIAL - 2010
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742**

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

**AERIAL - 2011
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742**

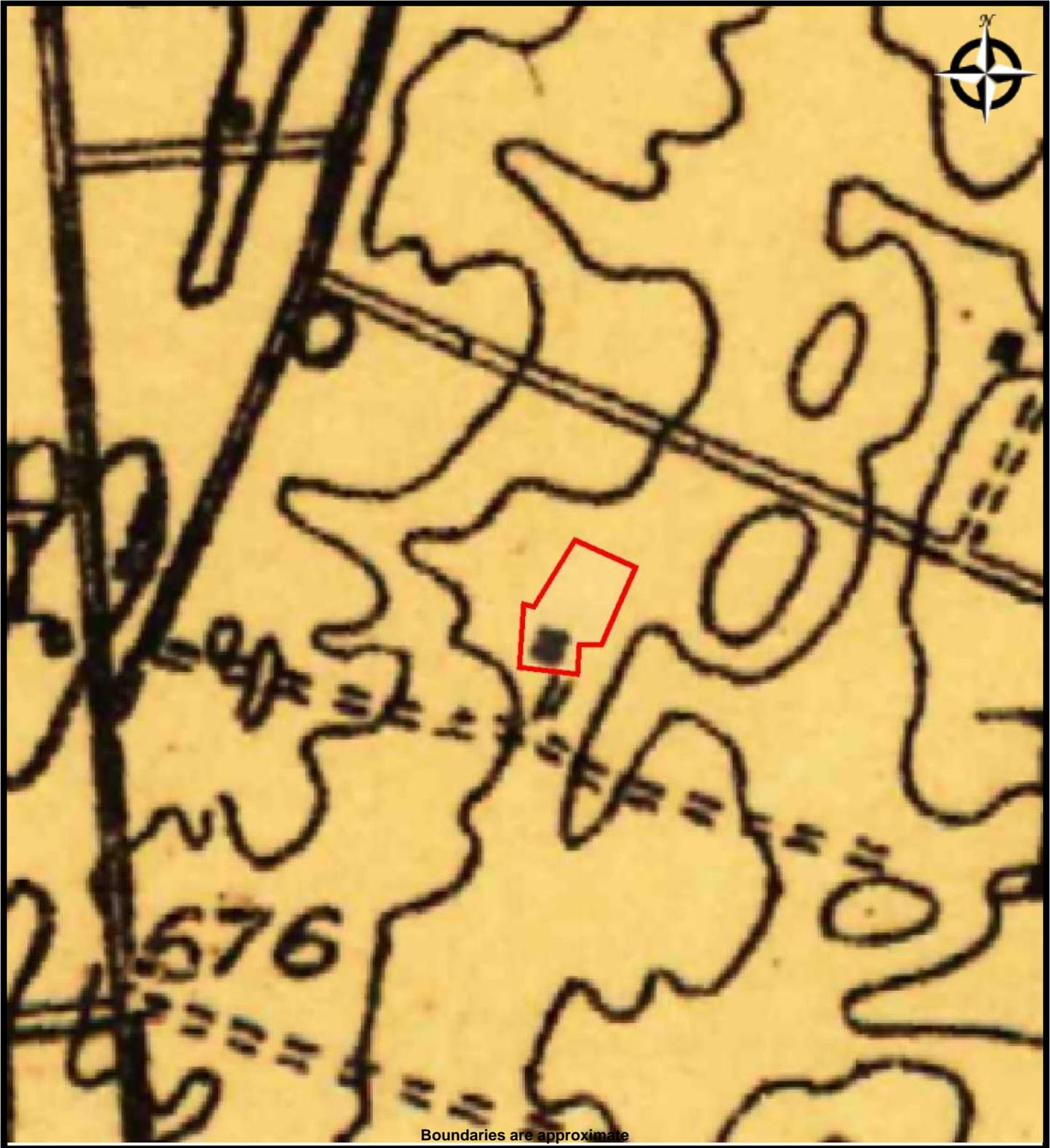
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1909
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

**TOPO MAP - 1912
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742**

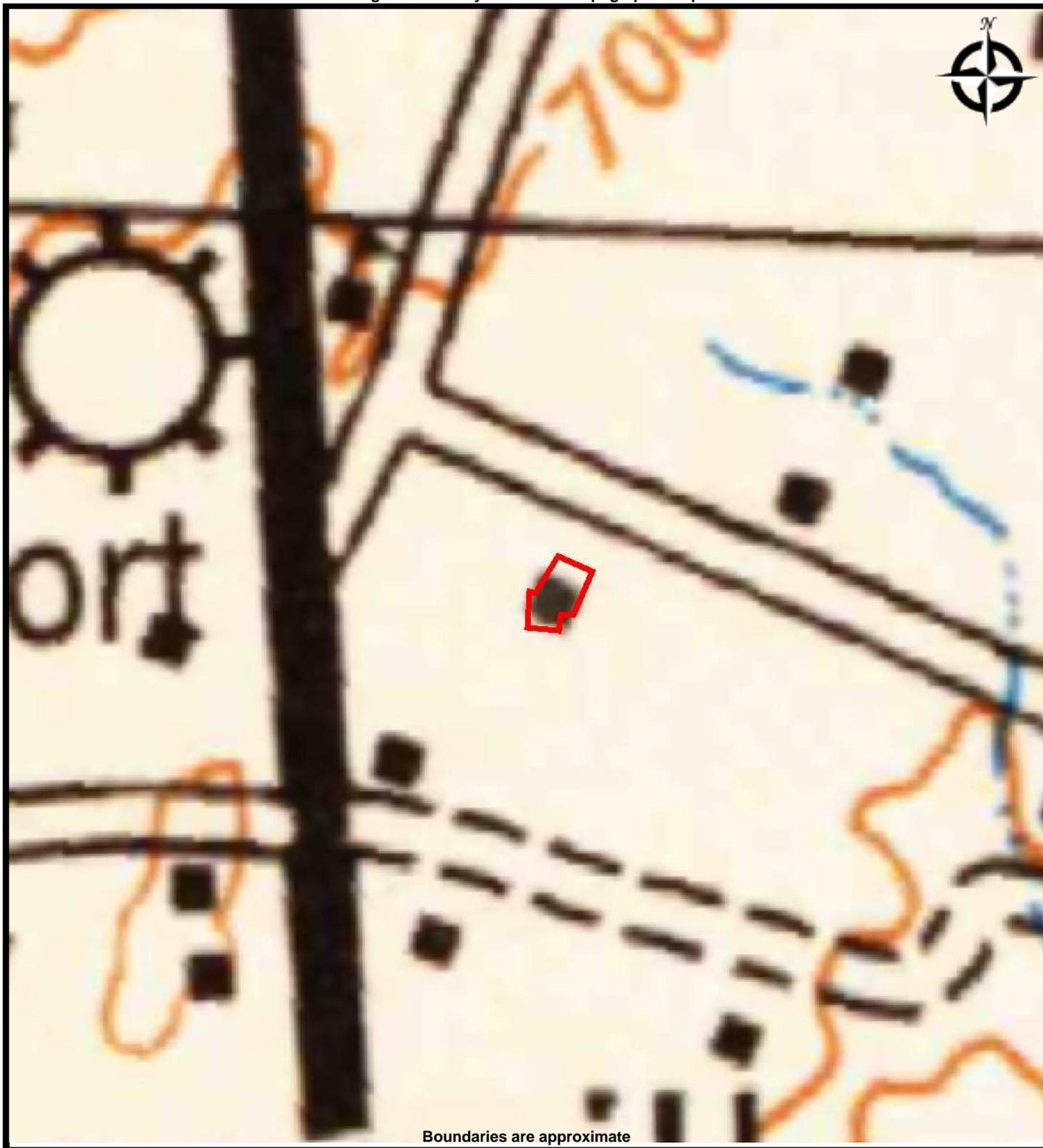
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1942
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

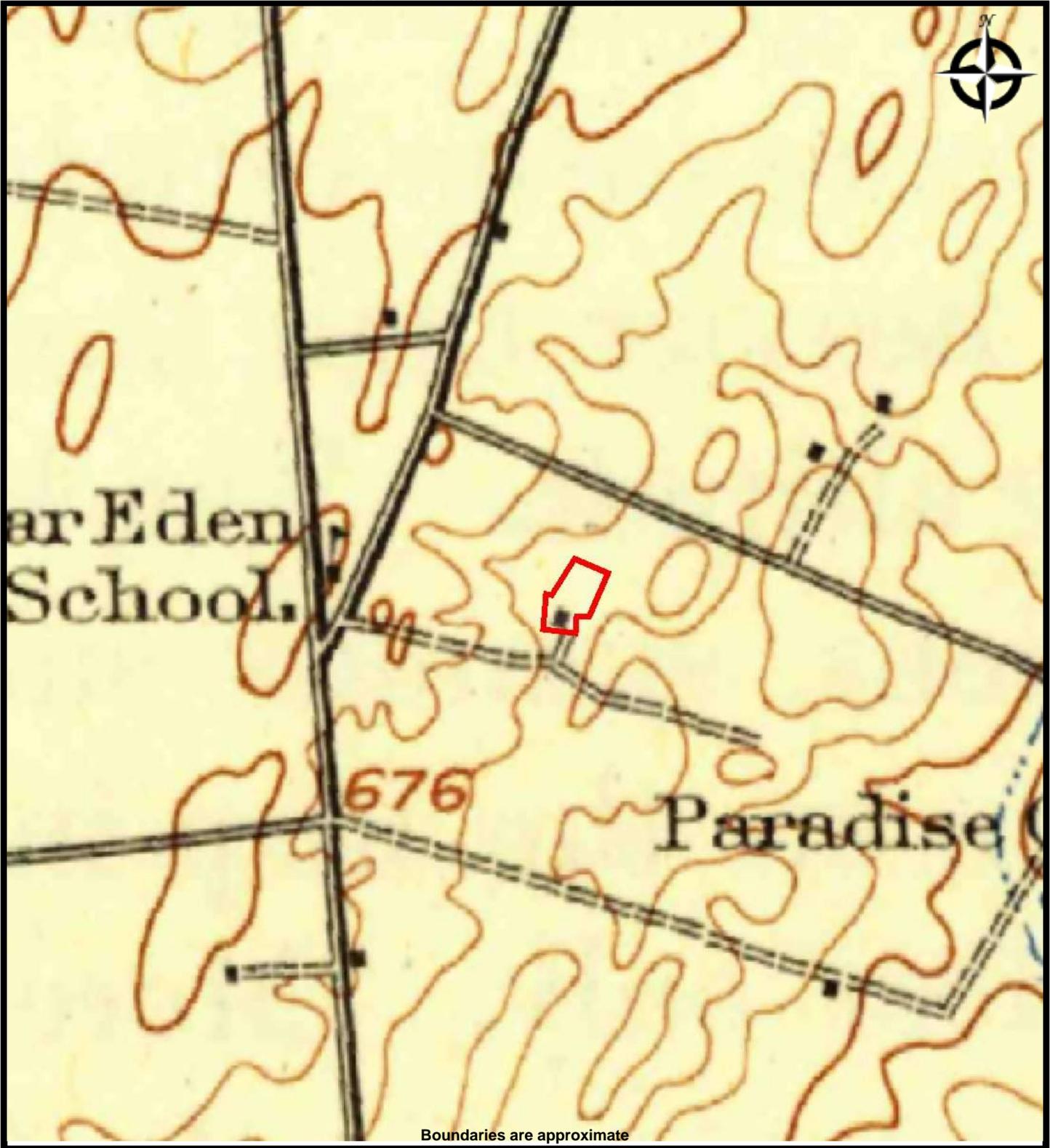
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1943
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

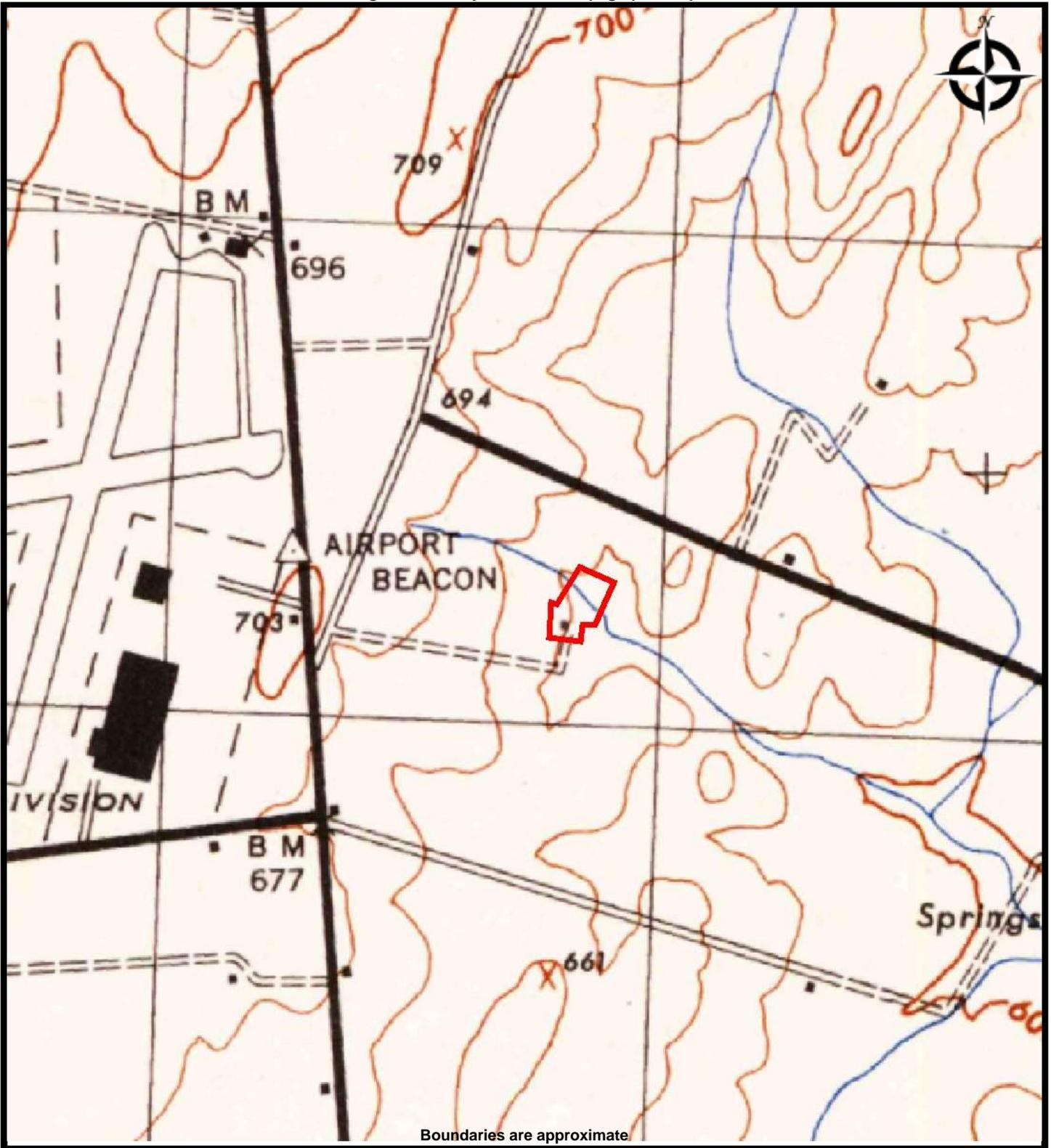
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1944
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

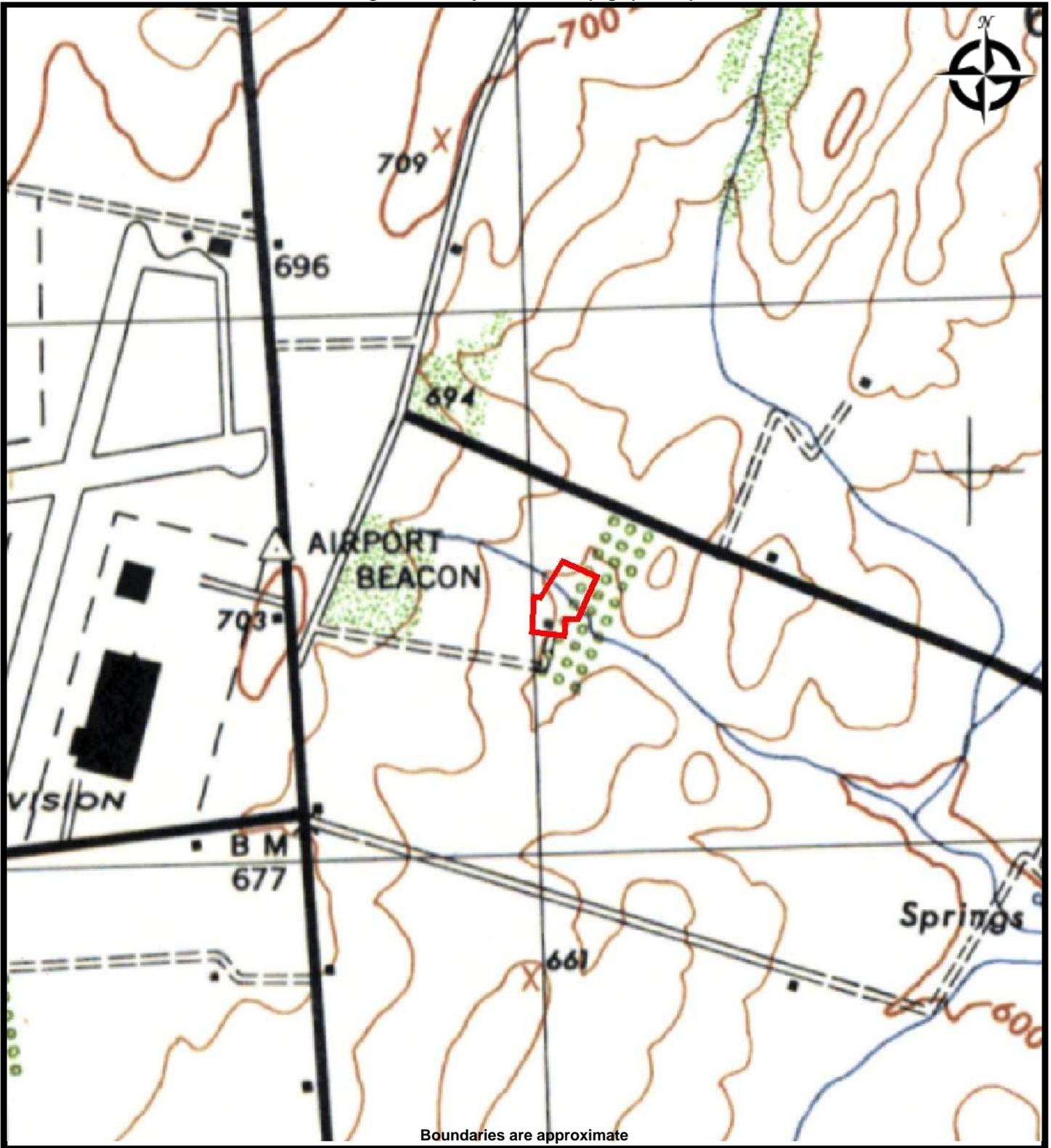
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1949
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

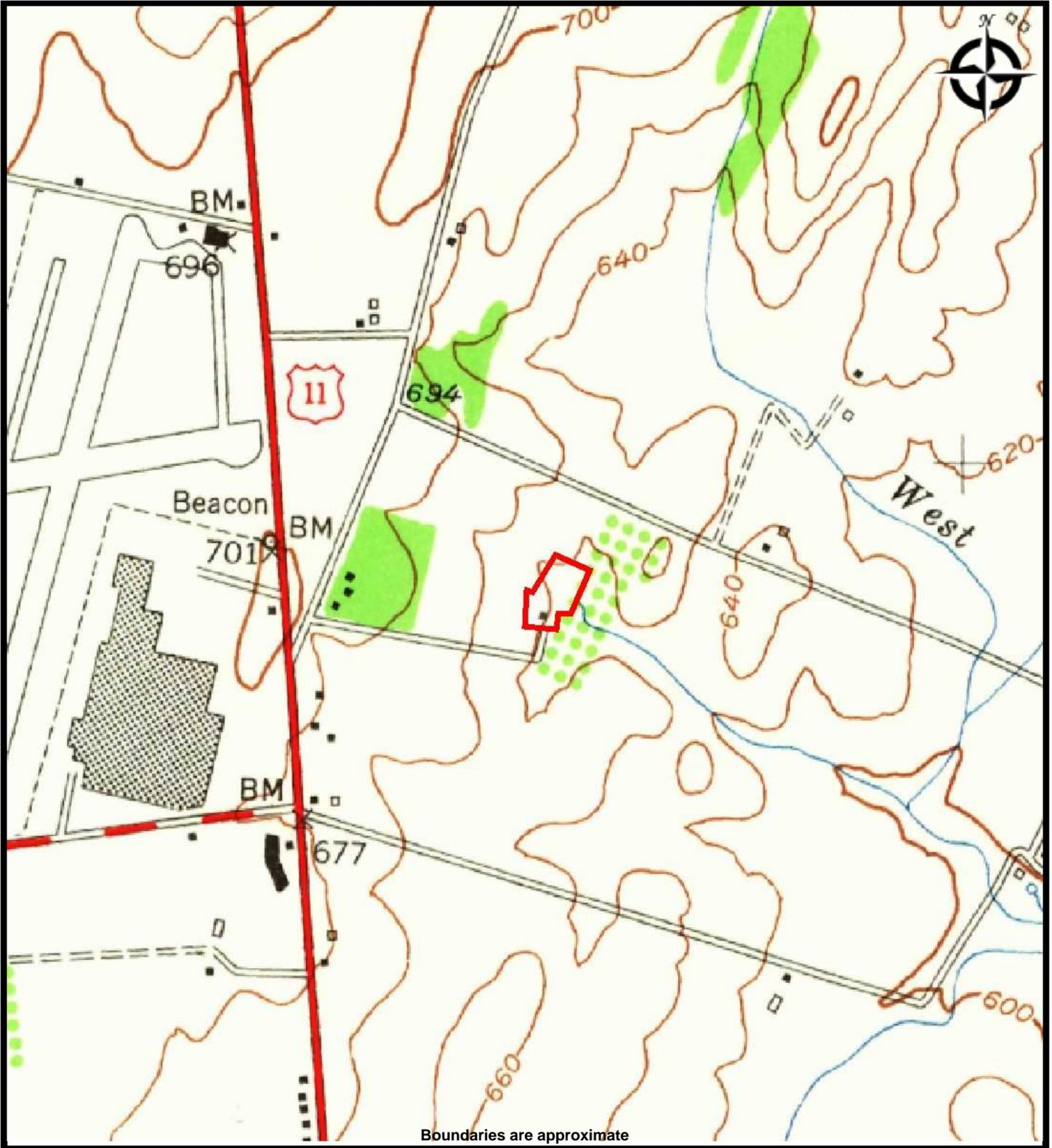
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1953
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

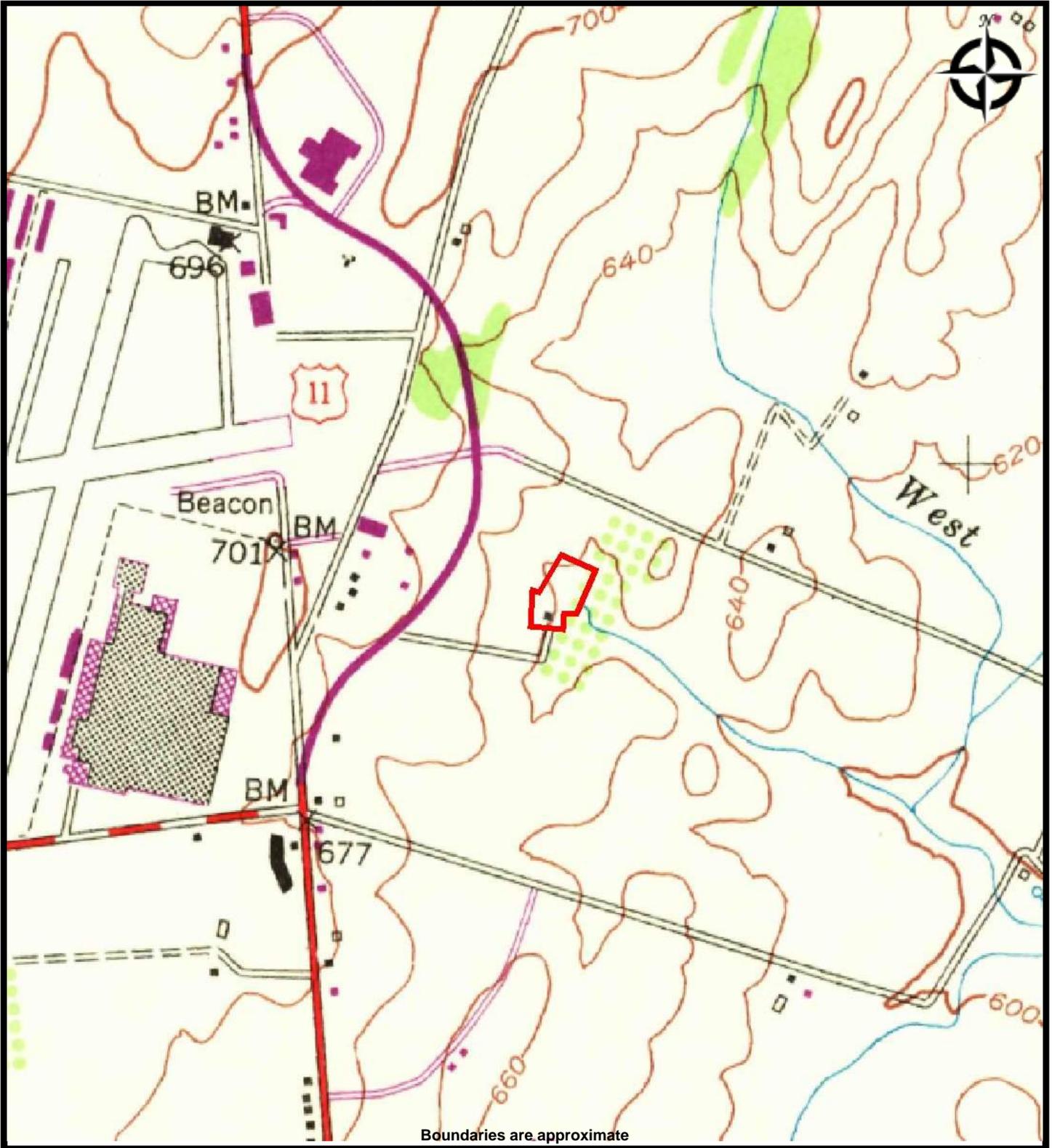
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1971
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

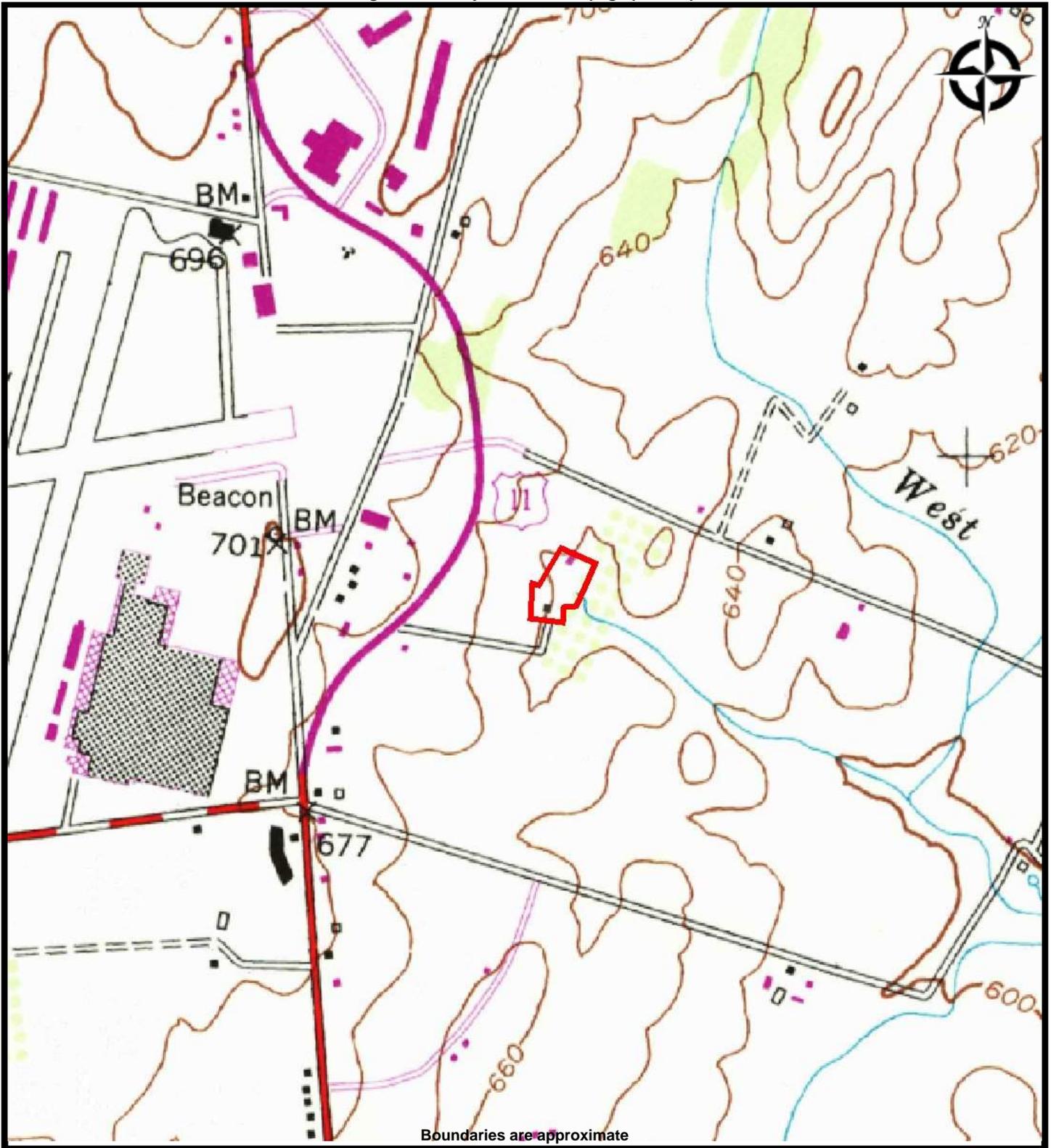
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1985
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

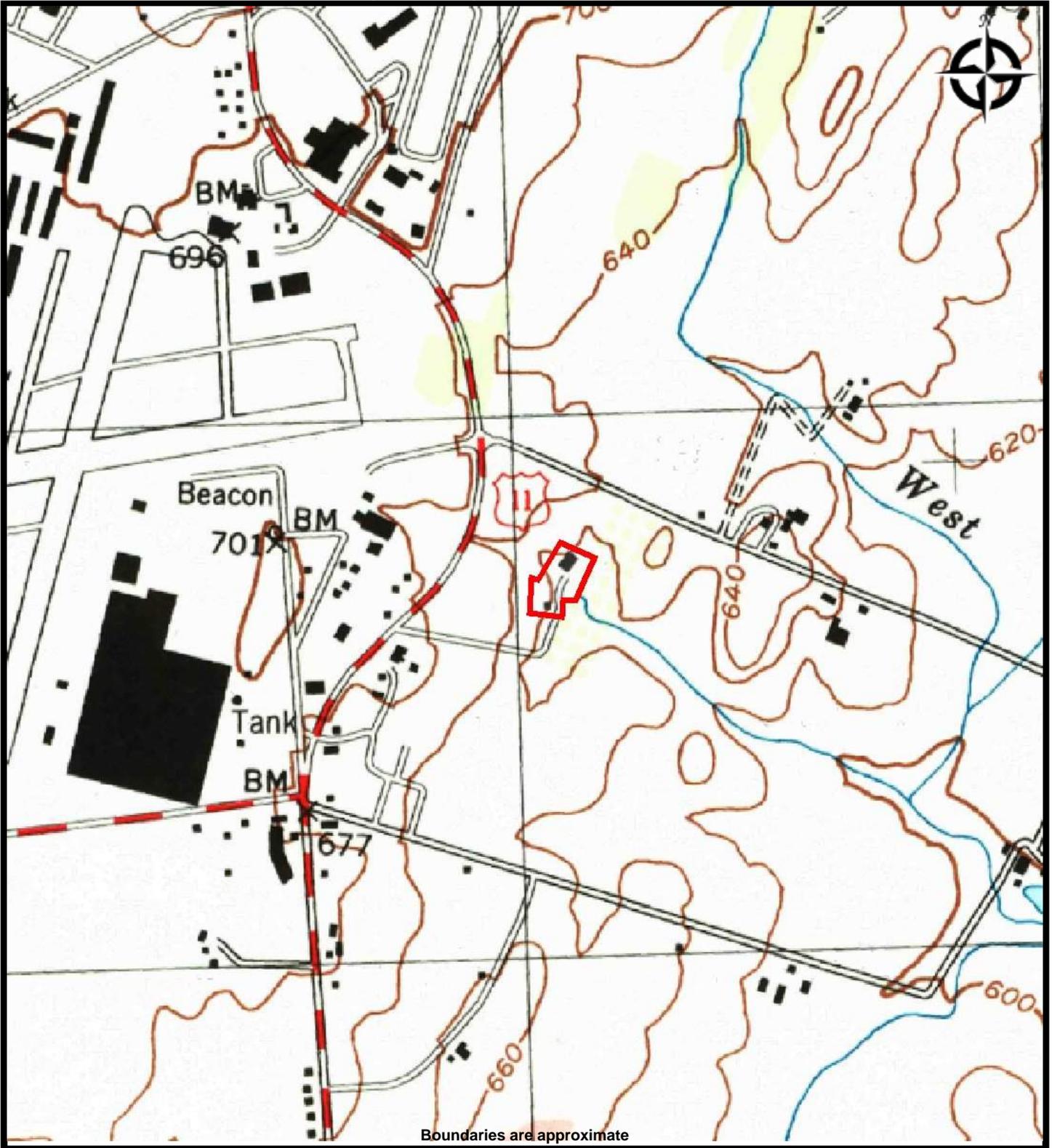
PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140



Boundaries are approximate



FROEHLING & ROBERTSON, INC.
Engineering Stability Since 1881

TOPO MAP - 1999
BKG FARMSTEAD PHASE I
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742

PREPARED FOR:

PROJ. MGR: John Love

DRAWN BY: Stephen Armstrong

DATE: 10/18/2017

PROJ. #: 72V-0140

Brumbaugh-Kendle-Grove Farmstead

14301 Pennsylvania Avenue

Hagerstown, MD 21742

Inquiry Number: 5079427.3

October 17, 2017

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

10/17/17

Site Name:

Brumbaugh-Kendle-Grove Farr
14301 Pennsylvania Avenue
Hagerstown, MD 21742
EDR Inquiry # 5079427.3

Client Name:

Froehling & Robertson, Inc.
3015 Dumbarton Road
Richmond, VA 23261
Contact: Stephen Armstrong



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Froehling & Robertson, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 4842-4752-AB3E

PO # NA

Project 72V-0140

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 4842-4752-AB3E

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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Brumbaugh-Kendle-Grove Farmstead

14301 Pennsylvania Avenue
Hagerstown, MD 21742

Inquiry Number: 5079427.5
October 19, 2017

The EDR-City Directory Abstract

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Executive Summary

Findings

City Directory Images

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with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Abstract includes a search and abstract of available city directory data. For each address, the directory lists the name of the corresponding occupant at five year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. An "X" indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Source</u>	<u>TP</u>	<u>Adjoining</u>	<u>Text Abstract</u>	<u>Source Image</u>
2017	R.L.Polk & Co.	-	X	X	-
2012	R.L.Polk & Co.	-	X	X	-
2010	R.L.Polk & Co.	-	X	X	-
2005	R.L.Polk & Co.	-	X	X	-
2000	R.L.Polk & Co.	-	X	X	-
1995	R.L.Polk & Co.	-	X	X	-
1990	R.L.Polk & Co.	-	-	-	-
1985	R.L.Polk & Co.	-	-	-	-
1980	R.L.Polk & Co.	-	-	-	-
1975	R.L.Polk & Co.	-	-	-	-
1971	R.L.Polk & Co.	-	-	-	-
1967	R.L.Polk & Co.	-	-	-	-
1964	R.L.Polk & Co.	-	-	-	-

EXECUTIVE SUMMARY

SELECTED ADDRESSES

The following addresses were selected by the client, for EDR to research. An "X" indicates where information was identified.

<u>Address</u>	<u>Type</u>	<u>Findings</u>
18851 Air View Rd	Client Entered	X
18860 Air View Rd	Client Entered	
14137 Pennsylvania Avenue	Client Entered	X
14318 Pennsylvania Avenue	Client Entered	X
14320 Pennsylvania Avenue	Client Entered	X
18434 Showalter Road	Client Entered	X
14102 Zinnia Lane	Client Entered	X

FINDINGS

TARGET PROPERTY INFORMATION

ADDRESS

14301 Pennsylvania Avenue
Hagerstown, MD 21742

FINDINGS DETAIL

Target Property research detail.

FINDINGS

ADJOINING PROPERTY DETAIL

The following Adjoining Property addresses were researched for this report. Detailed findings are provided for each address.

Air View Rd

18851 Air View Rd

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	Horst Livestock Inc livestock auction markets	R.L.Polk & Co.
2012	Horst Livestock Inc livestock auction markets	R.L.Polk & Co.
2010	Horst Livestock Inc livestock auction markets	R.L.Polk & Co.
2005	Horst Livestock Inc livestock dlrs	R.L.Polk & Co.

Pennsylvania Avenue

14137 Pennsylvania Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	Residential	R.L.Polk & Co.
2012	Interstate Dairy Equipment dairy equip suppl	R.L.Polk & Co.
2010	Interstate Dairy Equipment dairy equip suppl	R.L.Polk & Co.
2000	Residential	R.L.Polk & Co.
1995	Residential	R.L.Polk & Co.

14302 Pennsylvania Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	Allegany Contracting Inc excavating contrs	R.L.Polk & Co.
	Cumberland Valley Cntrctng Inc excavating contrs	R.L.Polk & Co.
2012	Allegany Contracting Inc excavating contrs	R.L.Polk & Co.
	Cumberland Valley Cntrctng Inc excavating contrs	R.L.Polk & Co.
2010	Allegany Contracting Inc excavating contrs	R.L.Polk & Co.
	Cumberland Valley Cntrctng Inc excavating contrs	R.L.Polk & Co.
2005	No Return	R.L.Polk & Co.
2000	Residential	R.L.Polk & Co.

FINDINGS

14318 Pennsylvania Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	No Return	R.L.Polk & Co.
2012	No Return	R.L.Polk & Co.
2005	Residential	R.L.Polk & Co.
2000	Residential	R.L.Polk & Co.

14320 Pennsylvania Avenue

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	Residential	R.L.Polk & Co.
2012	Residential	R.L.Polk & Co.
2010	Residential	R.L.Polk & Co.
2005	No Return	R.L.Polk & Co.
2000	Residential	R.L.Polk & Co.

Showalter Road

18434 Showalter Road

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	Hagerstown Regional Airport	R.L.Polk & Co.
	Multiple Business Listings	R.L.Polk & Co.
2012	Hagerstown Regional Airport	R.L.Polk & Co.
	Multiple Business Listings	R.L.Polk & Co.
2010	Hagerstown Regional Airport	R.L.Polk & Co.
	Multiple Business Listings	R.L.Polk & Co.
2005	Hagerstown Regional Airport	R.L.Polk & Co.
	Multiple Business Listings	R.L.Polk & Co.
2000	Hagerstown Regional Airport	R.L.Polk & Co.
	Multiple Business Listings	R.L.Polk & Co.
1995	Multiple Business Listings	R.L.Polk & Co.
	Washington County Regional Airport	R.L.Polk & Co.

Zinnia Lane

14102 Zinnia Lane

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2017	Residential	R.L.Polk & Co.
2012	Residential	R.L.Polk & Co.
2010	Residential	R.L.Polk & Co.
2005	Residential	R.L.Polk & Co.

FINDINGS

<u>Year</u>	<u>Uses</u>	<u>Source</u>
2000	Residential	R.L.Polk & Co.

FINDINGS

STREET NOT IDENTIFIED IN RESEARCH SOURCE

The following Streets were researched for this report, and the Streets were not identified in the research source.

Street Researched

Air View Rd

Zinnia Lane

Street Not Identified in Research Source

1995, 1990, 1985, 1980, 1975, 1971, 1967, 1964

1995, 1990, 1985, 1980, 1975, 1971, 1967, 1964

TARGET PROPERTY: ADDRESS NOT IDENTIFIED IN RESEARCH SOURCE

The following Target Property addresses were researched for this report, and the addresses were not identified in the research source.

Address Researched

14301 Pennsylvania Avenue

Address Not Identified in Research Source

2017, 2012, 2010, 2005, 2000, 1995, 1990, 1985, 1980, 1975, 1971, 1967, 1964

ADJOINING PROPERTY: ADDRESSES NOT IDENTIFIED IN RESEARCH SOURCE

The following Adjoining Property addresses were researched for this report, and the addresses were not identified in research source.

Address Researched

14102 Zinnia Lane

14137 Pennsylvania Avenue

14302 Pennsylvania Avenue

14318 Pennsylvania Avenue

14320 Pennsylvania Avenue

18434 Showalter Road

18851 Air View Rd

18860 Air View Rd

Address Not Identified in Research Source

No Years Found

2005, 1990, 1985, 1980, 1975, 1971, 1967, 1964

1995, 1990, 1985, 1980, 1975, 1971, 1967, 1964

2010, 1995, 1990, 1985, 1980, 1975, 1971, 1967, 1964

1995, 1990, 1985, 1980, 1975, 1971, 1967, 1964

1990, 1985, 1980, 1975, 1971, 1967, 1964

2000

2017, 2012, 2010, 2005, 2000

Brumbaugh-Kendle-Grove Farmstead

14301 Pennsylvania Avenue

Hagerstown, MD 21742

Inquiry Number: 05079427.6r

October 17, 2017

EDR Vapor Encroachment Screen

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

	Maximum Search Distance*	Summary		
		property	1/10	1/10 - 1/3
ENVIRONMENTAL RECORDS				
Federal NPL site list	0.333	0	0	0
Federal CERCLIS list	0.333	0	0	1
Federal RCRA CORRACTS facilities list	0.333	0	0	0
Federal RCRA TSD facilities list	0.333	0	0	0
Federal RCRA generators list	property	0	-	-
Federal institutional controls / engineering controls registries	0.333	0	0	0
Federal ERNS list	property	0	-	-
State and tribal - equivalent NPL	0.333	0	0	0
State and tribal - equivalent CERCLIS	0.333	0	0	0
State and tribal landfill / solid waste disposal	0.333	0	0	0
State and tribal leaking storage tank lists	0.333	0	0	3
State and tribal registered storage tank lists	property	0	-	-
State and tribal institutional control / engineering control registries	property	0	-	-
State and tribal voluntary cleanup sites	0.333	0	0	0
State and tribal Brownfields sites	0.333	0	0	0
Other Records	0.333	0	0	0
HISTORICAL USE RECORDS				
Former Manufactured Gas Plants	0.333	0	0	0
Historical Gas Stations	0.125	0	0	0
Historical Dry Cleaners	0.125	0	0	0
Exclusive Recovered Govt. Archives	property	0	-	-

*Each category may include several separate databases, each having a different search distance. For each category, the table reports the maximum search distance applied. See the section 'Record Sources and Currency' for information on individual databases.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

BRUMBAUGH-KENDLE-GROVE FARMSTEAD
14301 PENNSYLVANIA AVENUE
HAGERSTOWN, MD 21742

COORDINATES

Latitude (North):	39.706343 - 39° 42' 22.840576"
Longitude (West):	77.716865 - 77° 43' 0.7159424"
Elevation:	639 ft. above sea level

EXECUTIVE SUMMARY

PHYSICAL SETTING INFORMATION

Flood Zone: Available
 NWI Wetlands: Available

AQUIFLOW®

Search Radius: 0.333 Mile.

No Aquiflow sites reported.

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Hagerstown
 Soil Surface Texture: silt loam
 Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.
 Soil Drainage Class: Well drained
 Hydric Status: Not hydric
 Corrosion Potential - Uncoated Steel: Moderate
 Depth to Bedrock Min: > 178 inches
 Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 42 Min: 4	Max: 7.3 Min: 5.1

EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	9 inches	16 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	16 inches	70 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 2

Soil Component Name: Hagerstown

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 178 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 42 Min: 4	Max: 7.3 Min: 5.1
2	9 inches	16 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	16 inches	70 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 3

Soil Component Name: Hagerstown

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

EXECUTIVE SUMMARY

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silty clay loam	Not reported	Not reported	Max: 42 Min: 4	Max: 6.5 Min: 4.5
2	5 inches	9 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	9 inches	64 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 4

Soil Component Name: Hagerstown

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 178 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Not reported	Not reported	Max: 42 Min: 4	Max: 7.3 Min: 5.1

EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	7 inches	18 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	18 inches	64 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 5

Soil Component Name: Hagerstown

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silty clay loam	Not reported	Not reported	Max: 42 Min: 4	Max: 6.5 Min: 4.5
2	5 inches	9 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	9 inches	64 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 6

Soil Component Name: Hagerstown

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

EXECUTIVE SUMMARY

Hydric Status: Not hydric
 Corrosion Potential - Uncoated Steel: Moderate
 Depth to Bedrock Min: > 202 inches
 Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Not reported	Not reported	Max: 42 Min: 4	Max: 6.5 Min: 4.5
2	7 inches	18 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	18 inches	64 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 7

Soil Component Name: Fairplay
 Soil Surface Texture: marly silt loam
 Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.
 Soil Drainage Class: Very poorly drained
 Hydric Status: All hydric
 Corrosion Potential - Uncoated Steel: Moderate
 Depth to Bedrock Min: > 0 inches
 Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	marly silt loam	Not reported	Not reported	Max: 141 Min: 4	Max: 8.4 Min: 6.6
2	14 inches	26 inches	Not Reported	Not reported	Not reported	Max: 141 Min: 4	Max: 8.4 Min: 7.4

EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
3	26 inches	46 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 0.42	Max: 8.4 Min: 7.4
4	46 inches	79 inches	Not Reported	Not reported	Not reported	Max: 42 Min: 0.42	Max: 8.4 Min: 7.4

Soil Map ID: 8

Soil Component Name: Swanpond

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.8 Min: 5.1
2	7 inches	31 inches	Not Reported	Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 7.8 Min: 5.1
3	31 inches	64 inches	Not Reported	Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 7.8 Min: 5.1

Soil Map ID: 9

Soil Component Name: Funkstown

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

EXECUTIVE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 84 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.6
2	11 inches	29 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
3	29 inches	44 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
4	44 inches	79 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1

Soil Map ID: 10

Soil Component Name: Urban land

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

EXECUTIVE SUMMARY

Soil Map ID: 11

Soil Component Name: Duffield

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 186 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	7 inches	53 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
3	53 inches	64 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 5.1

Soil Map ID: 12

Soil Component Name: Duffield

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

EXECUTIVE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
2	5 inches	53 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
3	53 inches	64 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 5.1

Soil Map ID: 13

Soil Component Name: Duffield

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 186 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	9 inches	53 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1
3	53 inches	64 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 6.5 Min: 5.1

EXECUTIVE SUMMARY

Soil Map ID: 14

Soil Component Name: Hagerstown

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 178 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silty clay loam	Not reported	Not reported	Max: 42 Min: 4	Max: 7.3 Min: 5.1
2	9 inches	16 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	16 inches	70 inches	Not Reported	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

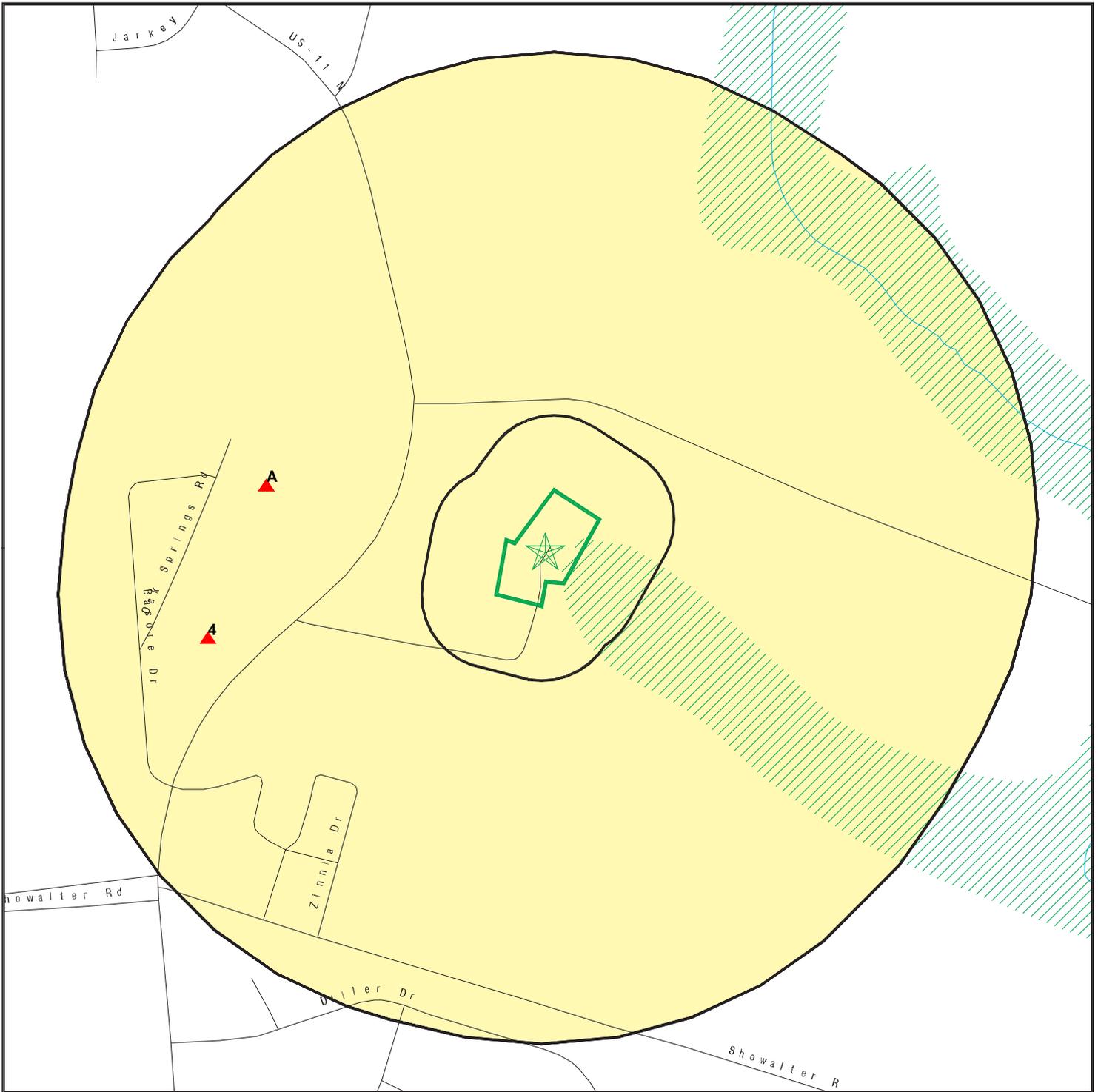
ENVIRONMENTAL RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
HAGERSTOWN AIRCRAFT SERVICE INC OCPCASES: State and tribal leaking storage tank lists	14235 OAK SPRINGS RD	1/10 - 1/3 WNW	▲ A1	18
ALPHIN AIRCRAFT INC OCPCASES: State and tribal leaking storage tank lists	14235 OAK SPRINGS RD	1/10 - 1/3 WNW	▲ A2	19
HAGERSTOWN AIRCRAFT SERVICES SEMS: Federal CERCLIS	14235 OAK SPRINGS ROAD	1/10 - 1/3 WNW	▲ A3	20
US II TERMINAL UST: State and tribal registered storage tank lists OCPCASES: State and tribal leaking storage tank lists	14240 PENNSYLVANIA AVENUE	1/10 - 1/3 WSW	▲ 4	21

HISTORICAL USE RECORDS

<u>Name</u>	<u>Address</u>	<u>Dist/Dir</u>	<u>Map ID</u>	<u>Page</u>
Not Reported				

PRIMARY MAP - 05079427.6R



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites

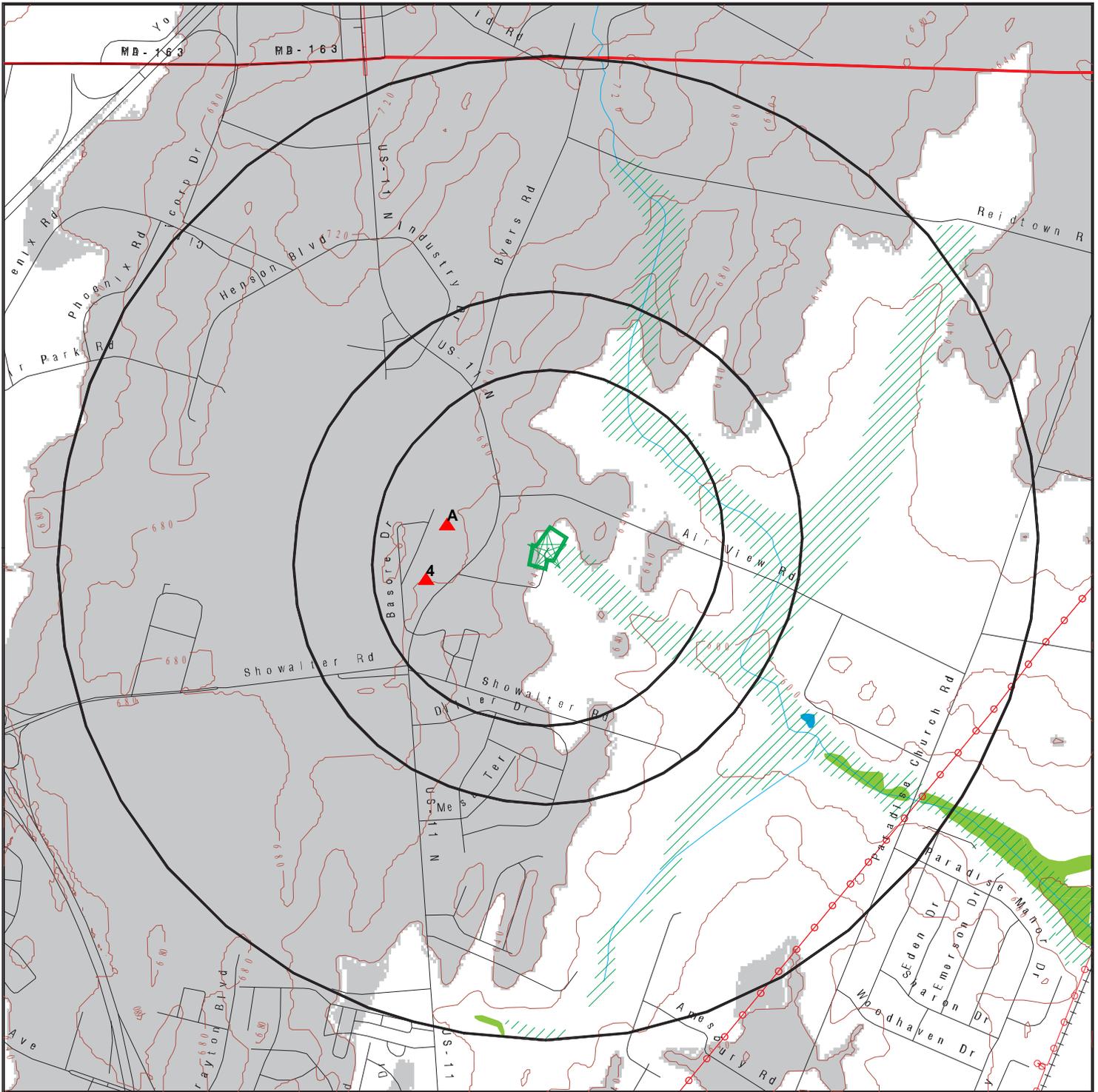
-  Indian Reservations BIA
-  100-year flood zone
-  500-year flood zone



SITE NAME: Brumbaugh-Kendle-Grove Farmstead
 ADDRESS: 14301 Pennsylvania Avenue
 Hagerstown MD 21742
 LAT/LONG: 39.706343 / 77.716865

CLIENT: Froehling & Robertson, Inc.
 CONTACT: Stephen Armstrong
 INQUIRY #: 05079427.6r
 DATE: October 17, 2017 5:30 pm

SECONDARY MAP - 05079427.6R



 Target Property

 Sites at elevations higher than or equal to the target property

 Sites at elevations lower than the target property

 Manufactured Gas Plants

 National Priority List Sites

 Dept. Defense Sites

 Indian Reservations BIA

 Contour Lines

 County Boundary

 Power transmission lines

 Pipelines

 100-year flood zone

 500-year flood zone

 National Wetland Inventory

 Upgradient Area

SITE NAME: Brumbaugh-Kendle-Grove Farmstead
 ADDRESS: 14301 Pennsylvania Avenue
 Hagerstown MD 21742
 LAT/LONG: 39.706343 / 77.716865

CLIENT: Froehling & Robertson, Inc.
 CONTACT: Stephen Armstrong
 INQUIRY #: 05079427.6r
 DATE: October 17, 2017 5:29 pm

AERIAL PHOTOGRAPHY - 05079427.6r



SITE NAME: Brumbaugh-Kendle-Grove Farmstead
ADDRESS: 14301 Pennsylvania Avenue
Hagerstown MD 21742
LAT/LONG: 39.706343 / 77.716865

CLIENT: Froehling & Robertson, Inc.
CONTACT: Stephen Armstrong
INQUIRY #: 05079427.6r
DATE: October 17, 2017 5:31 pm

MAP FINDINGS

LEGEND

FACILITY NAME FACILITY ADDRESS, CITY, ST, ZIP		EDR SITE ID NUMBER
▼ MAP ID#	Direction Distance Range (Distance feet / miles)	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.
	Relative Elevation Feet Above Sea Level	
Worksheet:		
Comments: Comments may be added on the online Vapor Encroachment Worksheet.		

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

HAGERSTOWN AIRCRAFT SERVICE INC 14235 OAK SPRINGS RD, HAGERSTOWN, MD, 21742		S113767571
▲ A1	WNW 1/10 - 1/3 (988 ft. / 0.187 mi.)	State and tribal leaking storage tank lists
	45 ft. Higher Elevation 684 ft. Above Sea Level	

Worksheet:

OCPCASES: State and tribal leaking storage tank lists 

Facility ID: 03-1833WA
 Facility Status/Code: CLOSED/Other (Specify)
 Date Open: 05/19/2003
 Date Closed: 05/26/2004
 Release: NO
 Cleanup: NO
 Registration Number: 907

MAP FINDINGS

ALPHIN AIRCRAFT INC 14235 OAK SPRINGS RD, HAGERSTOWN, MD, 21742			S104601705
▲ A2	WNW 1/10 - 1/3	(988 ft. / 0.187 mi.)	State and tribal leaking storage tank lists
	45 ft. Higher Elevation	684 ft. Above Sea Level	

Worksheet:

OCPCASES: State and tribal leaking storage tank lists 

Facility ID: 97-2138WA
 Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
 Date Open: 05/21/1997
 Date Closed: 05/21/1997
 Release: NO
 Cleanup: Not Reported
 Registration Number: 907

MAP FINDINGS

HAGERSTOWN AIRCRAFT SERVICES 14235 OAK SPRINGS ROAD, HAGERSTOWN, MD, 21742			1018148911
▲ A3	WNW 1/10 - 1/3	(988 ft. / 0.187 mi.)	Federal CERCLIS list
	45 ft. Higher Elevation	684 ft. Above Sea Level	

Worksheet:

SEMS: Federal CERCLIS list



Site ID:	302984
EPA ID:	MDN000302984
Federal Facility:	N
NPL:	Not on the NPL
Non NPL Status:	Removal Only Site (No Site Assessment Work Needed)

MAP FINDINGS

US II TERMINAL 14240 PENNSYLVANIA AVENUE, HAGERSTOWN, MD, 21740		U004013509
▲ 4	WSW 1/10 - 1/3 (1173 ft. / 0.222 mi.)	State and tribal leaking storage tank lists
	41 ft. Higher Elevation 680 ft. Above Sea Level	State and tribal registered storage tank lists

Worksheet:

UST: State and tribal registered storage tank lists



Facility Id: 8040
 Oper Name: Russel Fritz
 Form Name: Robert Mourlas
 Form Title: Agent
 Form Date: 08/27/1998
 Owner Id: 4750

Owner:

Owner Name: Bowmna Development Corporation
 Owner Address: 10417 Ferguson Lane
 Owner City: Williamsport
 Owner State: MD
 Owner Zip: 21795
 Owner Phone: (301) 582-1555
 Owner Contact: Irvin Gish

Tanks:

Tank ID: 1
Tank Status: Permanently Out of Use
 Tank Capacity: 1000
 Substance Description: Diesel
 Tank Compartment: False
 Compartment Compartment: A
 Date Installed: Not Reported
 Tank Material Desc: Asphalt Coated or Bare Steel
 Pipe Material Desc: Bare or Galvanized Steel

Tank ID: 2
Tank Status: Permanently Out of Use
 Tank Capacity: 10000
 Substance Description: Diesel
 Tank Compartment: False
 Compartment Compartment: A
 Date Installed: Not Reported
 Tank Material Desc: Asphalt Coated or Bare Steel
 Pipe Material Desc: Bare or Galvanized Steel

OCPCASES: State and tribal leaking storage tank lists



Facility ID: 96-0800WA
 Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil

MAP FINDINGS

US II TERMINAL, 14240 PENNSYLVANIA AVENUE, HAGERSTOWN, MD 21740 (Continued)

Date Open:	10/31/1995
Date Closed:	11/28/1995
Release:	Not Reported
Cleanup:	Not Reported
Registration Number:	8040 / 10040

RECORD SOURCES AND CURRENCY

To maintain currency of the following databases, EDR contacts the appropriate agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

ENVIRONMENTAL RECORDS

PRP: Potentially Responsible Parties

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013

Source: EPA

Number of Days to Update: 3

Telephone: 202-564-6023

Last EDR Contact :08/08/2017

RMP: Risk Management Plans

Standard Environmental Record Source: Other Records

Search Distance: Property

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017

Source: Environmental Protection Agency

Number of Days to Update: 57

Telephone: 202-564-8600

Last EDR Contact :07/24/2017

AIRS: Permit and Facility Information Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of permitted facilities and emissions information.

Date of Government Version: 12/31/2015

Source: Department of the Environment

Number of Days to Update: 140

Telephone: 410-537-3220

Last EDR Contact :09/25/2017

AST: Permitted Aboveground Storage Tanks

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

Registered Aboveground Storage Tanks.

Date of Government Version: 09/26/2017

Source: Department of The Environment

Number of Days to Update: 10

Telephone: 410-537-3000

Last EDR Contact :09/07/2017

BROWNFIELDS: Eligible Brownfields Properties

Standard Environmental Record Source: State and tribal Brownfields sites

RECORD SOURCES AND CURRENCY

Search Distance: 0.333 Mile

The Site Assessment Section of the State Superfund Division is responsible for conducting federally funded assessments of eligible brownfields properties. These assessments are undertaken to determine whether there are environmental cleanup requirements at these sites.

Date of Government Version: 07/03/2017

Source: Department of Environment

Number of Days to Update: 13

Telephone: 410-537-3000

Last EDR Contact :09/05/2017

COAL ASH: Coal Ash Disposal Site Listing

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

Coal combustion byproduct site locations.

Date of Government Version: 08/13/2010

Source: Department of the Environment

Number of Days to Update: 26

Telephone: 410-537-3507

Last EDR Contact :09/22/2017

DRYCLEANERS: Registered Drycleaning Facilities

Standard Environmental Record Source: Other Records

Search Distance: 0.25 Mile

A listing of registered drycleaning facilities.

Date of Government Version: 10/04/2017

Source: Department of the Environmental

Number of Days to Update: 11

Telephone: 410-537-3220

Last EDR Contact :10/03/2017

ENG CONTROLS: Engineering Controls Site listing

Standard Environmental Record Source: State and tribal institutional control / engineering control registries

Search Distance: Property

Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/10/2008

Source: Department of the Environment

Number of Days to Update: 26

Telephone: 410-537-3422

Last EDR Contact :09/07/2017

HIST LUST: Recovery Sites

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

In 1999, the Department of the Environment stopped adding new sites to its Recovery Sites Database. Current leaking underground storage tank information maybe found in the OCPCASES database.

Date of Government Version: 03/01/1999

Source: Department of the Environment

Number of Days to Update: 25

Telephone: 410-537-3433

Last EDR Contact :02/19/2001

Historical UST: Historical UST Registered Database

Standard Environmental Record Source: Other Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

In 1997 the Department of the Environment sent out registration forms to all the owner's listed in the UST database. Once they got the registration forms back they entered the information into a new UST database, we call this database UST. Because not all owners returned their forms, we kept the old UST database and labeled it HIST UST so that we would not be missing any past UST records. This listing is no longer updated or maintained by the agency. It is current through November 1996.

Date of Government Version: 11/21/1996
Number of Days to Update: 42
Last EDR Contact :05/15/2000

Source: Department of Environment
Telephone: 410-537-3433

INST CONTROL: Voluntary Cleanup Program Applicants/Participants

Standard Environmental Record Source: State and tribal institutional control / engineering control registries
Search Distance: Property

Sites included in the Voluntary Cleanup Program Applicants/Participants listing that have Deed Restrictions.

Date of Government Version: 09/11/2017
Number of Days to Update: 10
Last EDR Contact :09/07/2017

Source: Department of the Environment
Telephone: 410-537-3493

LEAD: Lead Inspection Database

Standard Environmental Record Source: Other Records
Search Distance: Property

The Childhood Lead Poisoning Prevention Program data of lead inspection for the state.

Date of Government Version: 09/28/2016
Number of Days to Update: 64
Last EDR Contact :09/25/2017

Source: Department of Environment, Lead Poisoning Prevention Program
Telephone: 410-537-3000

LRP: Land Restoration Program

Standard Environmental Record Source: Other Records
Search Distance: 0.333 Mile

A listing of Land Restoration Program sites. Site types included in the database are: Voluntary Cleanup Program, National Priority List, Brownfields, Site Assessment, Formerly Used Defense Site, State Master List, Non Master List, Groundwater Investigation and Federal Facility.

Date of Government Version: 06/05/2017
Number of Days to Update: 41
Last EDR Contact :09/07/2017

Source: Department of the Environment
Telephone: 410-537-3000

NPDES: Wastewater Permit Listing

Standard Environmental Record Source: Other Records
Search Distance: Property

A listing of wastewater permit locations.

Date of Government Version: 08/21/2017
Number of Days to Update: 54
Last EDR Contact :08/23/2017

Source: Department of the Environment
Telephone: 410-537-3507

OCPCASES: Oil Control Program Cases

Standard Environmental Record Source: State and tribal leaking storage tank lists
Search Distance: 0.333 Mile

RECORD SOURCES AND CURRENCY

Cases monitored by the Oil Control Program. these cases can be leaking underground storage tanks and other belowground releases, leaking aboveground storage tanks, spills and inspections.

Date of Government Version: 07/03/2017

Source: Department of Environment

Number of Days to Update: 81

Telephone: 410-537-3433

Last EDR Contact :09/07/2017

SHWS: Notice of Potential Hazardous Waste Sites

Standard Environmental Record Source: State and tribal - equivalent CERCLIS

Search Distance: 0.333 Mile

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 10/01/2009

Source: Department of the Environment

Number of Days to Update: 3

Telephone: 410-537-3000

Last EDR Contact :08/07/2017

SPILLS 90: SPILLS90 data from FirstSearch

Standard Environmental Record Source: Other Records

Search Distance: Property

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/15/2012

Source: FirstSearch

Number of Days to Update: 62

Telephone: Not Reported

Last EDR Contact :01/03/2013

SWF/LF: Permitted Solid Waste Disposal Facilities

Standard Environmental Record Source: State and tribal landfill / solid waste disposal

Search Distance: 0.333 Mile

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/02/2017

Source: Department of the Environment

Number of Days to Update: 62

Telephone: 410-537-3375

Last EDR Contact :07/31/2017

SWRCY: Recycling Directory

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

A listing of recycling facilities.

Date of Government Version: 03/13/2017

Source: Department of the Environment

Number of Days to Update: 124

Telephone: 410-631-3314

Last EDR Contact :09/18/2017

UIC: Underground Injection Wells Database

Standard Environmental Record Source: Other Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 05/04/2015

Source: Department of the Environment

Number of Days to Update: 39

Telephone: 410-537-3507

Last EDR Contact :07/24/2017

UST: Registered Underground Storage Tank List

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/30/2017

Source: Department of the Environment

Number of Days to Update: 62

Telephone: 410-537-3433

Last EDR Contact :09/21/2017

VCP: Voluntary Cleanup Program Applicants/Participants

Standard Environmental Record Source: State and tribal voluntary cleanup sites

Search Distance: 0.333 Mile

The Voluntary Cleanup Program, administrated by the Dept. of the Environment, streamlines the environmental cleanup process for sites, usually industrial or commercial properties, that are contaminated, or perceived to be contaminated, by hazardous substances. Developers and lenders are provided with certain limitations on liability and participants in the program are provided certainty in the process by knowing exactly what will be required.

Date of Government Version: 09/11/2017

Source: Dept. of the Environment

Number of Days to Update: 10

Telephone: 410-537-3000

Last EDR Contact :09/07/2017

2020 COR ACTION: 2020 Corrective Action Program List

Standard Environmental Record Source: Other Records

Search Distance: Property

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013

Source: Environmental Protection Agency

Number of Days to Update: 6

Telephone: 703-308-4044

Last EDR Contact :08/24/2017

ABANDONED MINES: Abandoned Mines

Standard Environmental Record Source: Other Records

Search Distance: Property

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017

Source: Department of Interior

Number of Days to Update: 21

Telephone: 202-208-2609

Last EDR Contact :09/25/2017

RECORD SOURCES AND CURRENCY

COAL ASH DOE: Steam-Electric Plant Operation Data

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005

Source: Department of Energy

Number of Days to Update: 76

Telephone: 202-586-8719

Last EDR Contact :10/03/2017

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014

Source: Environmental Protection Agency

Number of Days to Update: 40

Telephone: Not Reported

Last EDR Contact :09/08/2017

CONSENT: Superfund (CERCLA) Consent Decrees

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 09/30/2016

Source: Department of Justice, Consent Decree Library

Number of Days to Update: 77

Telephone: Varies

Last EDR Contact :09/25/2017

CORRACTS: Corrective Action Report

Standard Environmental Record Source: Federal RCRA CORRACTS facilities list

Search Distance: 0.333 Mile

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017

Source: EPA

Number of Days to Update: 10

Telephone: 800-424-9346

Last EDR Contact :09/26/2017

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009

Source: EPA, Region 9

Number of Days to Update: 137

Telephone: 415-947-4219

Last EDR Contact :07/24/2017

DOCKET HWC: Hazardous Waste Compliance Docket Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016

Source: Environmental Protection Agency

Number of Days to Update: 91

Telephone: 202-564-0527

Last EDR Contact :09/21/2017

DOT OPS: Incident and Accident Data

Standard Environmental Record Source: Other Records

Search Distance: Property

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012

Source: Department of Transportation, Office of Pipeline Safety

Number of Days to Update: 42

Telephone: 202-366-4595

Last EDR Contact :08/01/2017

Delisted NPL: National Priority List Deletions

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 05/30/2017

Source: EPA

Number of Days to Update: 98

Telephone: Not Reported

Last EDR Contact :10/05/2017

ECHO: Enforcement & Compliance History Information

Standard Environmental Record Source: Other Records

Search Distance: Property

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017

Source: Environmental Protection Agency

Number of Days to Update: 52

Telephone: 202-564-2280

Last EDR Contact :09/06/2017

EPA WATCH LIST: EPA WATCH LIST

Standard Environmental Record Source: Other Records

Search Distance: Property

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013

Source: Environmental Protection Agency

Number of Days to Update: 88

Telephone: 617-520-3000

Last EDR Contact :08/07/2017

ERNS: Emergency Response Notification System

Standard Environmental Record Source: Federal ERNS list

Search Distance: Property

RECORD SOURCES AND CURRENCY

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/18/2017

Source: National Response Center, United States Coast Guard

Number of Days to Update: 22

Telephone: 202-267-2180

Last EDR Contact :09/21/2017

FEMA UST: Underground Storage Tank Listing

Standard Environmental Record Source: State and tribal registered storage tank lists

Search Distance: Property

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017

Source: FEMA

Number of Days to Update: 136

Telephone: 202-646-5797

Last EDR Contact :10/13/2017

FINDS: Facility Index System/Facility Registry System

Standard Environmental Record Source: Other Records

Search Distance: Property

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017

Source: EPA

Number of Days to Update: 9

Telephone: Not Reported

Last EDR Contact :09/06/2017

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Records

Search Distance: Property

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Number of Days to Update: 25

Telephone: 202-566-1667

Last EDR Contact :08/18/2017

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Standard Environmental Record Source: Other Records

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009

Source: EPA

Number of Days to Update: 25

Telephone: 202-566-1667

Last EDR Contact :08/18/2017

FUDS: Formerly Used Defense Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

RECORD SOURCES AND CURRENCY

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015

Source: U.S. Army Corps of Engineers

Number of Days to Update: 97

Telephone: 202-528-4285

Last EDR Contact :08/25/2017

FUELS PROGRAM: EPA Fuels Program Registered Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 08/17/2017

Source: EPA

Number of Days to Update: 29

Telephone: 800-385-6164

Last EDR Contact :08/17/2017

FUSRAP: Formerly Utilized Sites Remedial Action Program

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016

Source: Department of Energy

Number of Days to Update: 52

Telephone: 202-586-3559

Last EDR Contact :08/03/2017

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

Standard Environmental Record Source: Other Records

Search Distance: Property

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006

Source: Environmental Protection Agency

Number of Days to Update: 40

Telephone: 202-564-2501

Last EDR Contact :12/17/2007

HMIRS: Hazardous Materials Information Reporting System

Standard Environmental Record Source: Other Records

Search Distance: Property

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/21/2017

Source: U.S. Department of Transportation

Number of Days to Update: 22

Telephone: 202-366-4555

Last EDR Contact :09/21/2017

ICIS: Integrated Compliance Information System

Standard Environmental Record Source: Other Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016

Source: Environmental Protection Agency

Number of Days to Update: 79

Telephone: 202-564-2501

Last EDR Contact :10/11/2017

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists

Search Distance: 0.333 Mile

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/14/2017

Source: EPA Region 1

Number of Days to Update: 71

Telephone: 617-918-1313

Last EDR Contact :07/27/2017

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016

Source: EPA Region 10

Number of Days to Update: 99

Telephone: 206-553-2857

Last EDR Contact :07/27/2017

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016

Source: EPA Region 4

Number of Days to Update: 98

Telephone: 404-562-8677

Last EDR Contact :07/28/2017

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/26/2017

Source: EPA, Region 5

Number of Days to Update: 78

Telephone: 312-886-7439

Last EDR Contact :07/27/2017

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/24/2017

Source: EPA Region 6

Number of Days to Update: 71

Telephone: 214-665-6597

Last EDR Contact :07/27/2017

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2017

Source: EPA Region 7

RECORD SOURCES AND CURRENCY

Number of Days to Update: 71
Last EDR Contact :07/27/2017

Telephone: 913-551-7003

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/01/2017
Number of Days to Update: 78
Last EDR Contact :07/27/2017

Source: EPA Region 8
Telephone: 303-312-6271

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal leaking storage tank lists
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/13/2017
Number of Days to Update: 78
Last EDR Contact :07/27/2017

Source: Environmental Protection Agency
Telephone: 415-972-3372

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Standard Environmental Record Source: Other Records
Search Distance: 0.333 Mile

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Number of Days to Update: 52
Last EDR Contact :08/01/2017

Source: Environmental Protection Agency
Telephone: 703-308-8245

INDIAN UST R1: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists
Search Distance: Property

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/14/2017
Number of Days to Update: 71
Last EDR Contact :07/27/2017

Source: EPA, Region 1
Telephone: 617-918-1313

INDIAN UST R10: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/25/2017
Number of Days to Update: 78
Last EDR Contact :07/27/2017

Source: EPA Region 10
Telephone: 206-553-2857

INDIAN UST R4: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016

Source: EPA Region 4

RECORD SOURCES AND CURRENCY

Number of Days to Update: 98
Last EDR Contact :07/28/2017

Telephone: 404-562-9424

INDIAN UST R5: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/26/2017
Number of Days to Update: 71
Last EDR Contact :07/27/2017

Source: EPA Region 5
Telephone: 312-886-6136

INDIAN UST R6: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/01/2016
Number of Days to Update: 99
Last EDR Contact :07/27/2017

Source: EPA Region 6
Telephone: 214-665-7591

INDIAN UST R7: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2017
Number of Days to Update: 71
Last EDR Contact :07/27/2017

Source: EPA Region 7
Telephone: 913-551-7003

INDIAN UST R8: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/01/2017
Number of Days to Update: 78
Last EDR Contact :07/27/2017

Source: EPA Region 8
Telephone: 303-312-6137

INDIAN UST R9: Underground Storage Tanks on Indian Land

Standard Environmental Record Source: State and tribal registered storage tank lists

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/13/2017
Number of Days to Update: 78
Last EDR Contact :07/27/2017

Source: EPA Region 9
Telephone: 415-972-3368

INDIAN VCP R1: Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

Search Distance: 0.333 Mile

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102

RECORD SOURCES AND CURRENCY

Last EDR Contact :09/25/2017

INDIAN VCP R7: Voluntary Cleanup Priority Listing

Standard Environmental Record Source: State and tribal voluntary cleanup sites

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008

Source: EPA, Region 7

Number of Days to Update: 27

Telephone: 913-551-7365

Last EDR Contact :04/20/2009

LEAD SMELTER 1: Lead Smelter Sites

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of former lead smelter site locations.

Date of Government Version: 05/30/2017

Source: Environmental Protection Agency

Number of Days to Update: 98

Telephone: 703-603-8787

Last EDR Contact :10/05/2017

LEAD SMELTER 2: Lead Smelter Sites

Standard Environmental Record Source: Other Records

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001

Source: American Journal of Public Health

Number of Days to Update: 36

Telephone: 703-305-6451

Last EDR Contact :12/02/2009

LIENS 2: CERCLA Lien Information

Standard Environmental Record Source: Other Records

Search Distance: Property

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/11/2017

Source: Environmental Protection Agency

Number of Days to Update: 79

Telephone: 202-564-6023

Last EDR Contact :07/26/2017

LUCIS: Land Use Control Information System

Standard Environmental Record Source: Federal institutional controls / engineering controls registries

Search Distance: 0.333 Mile

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017

Source: Department of the Navy

Number of Days to Update: 94

Telephone: 843-820-7326

Last EDR Contact :08/10/2017

MLTS: Material Licensing Tracking System

Standard Environmental Record Source: Other Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016

Source: Nuclear Regulatory Commission

Number of Days to Update: 43

Telephone: 301-415-7169

Last EDR Contact :08/01/2017

NPL: National Priority List

Standard Environmental Record Source: Federal NPL site list

Search Distance: 0.333 Mile

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 05/30/2017

Source: EPA

Number of Days to Update: 99

Telephone: Not Reported

Last EDR Contact :10/05/2017

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-566-0690

EPA Region 1
Telephone: 617-918-1102

EPA Region 2
Telephone: 212-637-4293

EPA Region 3
Telephone: 215-814-5418

EPA Region 4
Telephone: 404-562-8681

EPA Region 5
Telephone: 312-353-1063

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6118

EPA Region 9
Telephone: 415-947-4579

EPA Region 10
Telephone: 206-553-4479

NPL LIENS: Federal Superfund Liens

Standard Environmental Record Source: Federal NPL site list

Search Distance: Property

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991

Source: EPA

Number of Days to Update: 56

Telephone: 202-564-4267

RECORD SOURCES AND CURRENCY

Last EDR Contact :08/15/2011

ODI: Open Dump Inventory

Standard Environmental Record Source: Other Records
Search Distance: 0.333 Mile

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Number of Days to Update: 39
Last EDR Contact :06/09/2004

Source: Environmental Protection Agency
Telephone: 800-424-9346

PADS: PCB Activity Database System

Standard Environmental Record Source: Other Records
Search Distance: Property

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Number of Days to Update: 126
Last EDR Contact :10/13/2017

Source: EPA
Telephone: 202-566-0500

PCB TRANSFORMER: PCB Transformer Registration Database

Standard Environmental Record Source: Other Records
Search Distance: Property

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Number of Days to Update: 83
Last EDR Contact :07/28/2017

Source: Environmental Protection Agency
Telephone: 202-566-0517

Proposed NPL: Proposed National Priority List Sites

Standard Environmental Record Source: Federal NPL site list
Search Distance: 0.333 Mile

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet their requirements for listing.

Date of Government Version: 05/30/2017
Number of Days to Update: 98
Last EDR Contact :10/05/2017

Source: EPA
Telephone: Not Reported

RAATS: RCRA Administrative Action Tracking System

Standard Environmental Record Source: Other Records
Search Distance: Property

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104

RECORD SOURCES AND CURRENCY

Last EDR Contact :06/02/2008

RADINFO: Radiation Information Database

Standard Environmental Record Source: Other Records

Search Distance: Property

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2017

Source: Environmental Protection Agency

Number of Days to Update: 8

Telephone: 202-343-9775

Last EDR Contact :10/05/2017

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

Standard Environmental Record Source: Other Records

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 09/13/2017

Source: Environmental Protection Agency

Number of Days to Update: 10

Telephone: 703-308-8895

Last EDR Contact :09/26/2017

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017

Source: Environmental Protection Agency

Number of Days to Update: 10

Telephone: 703-308-8895

Last EDR Contact :09/26/2017

RCRA-LQG: RCRA - Large Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017

Source: Environmental Protection Agency

Number of Days to Update: 10

Telephone: 703-308-8895

Last EDR Contact :09/26/2017

RCRA-SQG: RCRA - Small Quantity Generators

Standard Environmental Record Source: Federal RCRA generators list

Search Distance: Property

RECORD SOURCES AND CURRENCY

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2017

Source: Environmental Protection Agency

Number of Days to Update: 10

Telephone: 703-308-8895

Last EDR Contact :09/26/2017

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

Standard Environmental Record Source: Federal RCRA TSD facilities list

Search Distance: 0.333 Mile

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2017

Source: Environmental Protection Agency

Number of Days to Update: 10

Telephone: 703-308-8895

Last EDR Contact :09/26/2017

ROD: Records Of Decision

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013

Source: EPA

Number of Days to Update: 74

Telephone: 703-416-0223

Last EDR Contact :09/08/2017

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017

Source: Environmental Protection Agency

Number of Days to Update: 63

Telephone: 615-532-8599

Last EDR Contact :08/18/2017

SEMS: Superfund Enterprise Management System

Standard Environmental Record Source: Federal CERCLIS list

Search Distance: 0.333 Mile

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

RECORD SOURCES AND CURRENCY

Date of Government Version: 07/11/2017

Source: EPA

Number of Days to Update: 77

Telephone: 800-424-9346

Last EDR Contact :07/21/2017

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/11/2017

Source: EPA

Number of Days to Update: 70

Telephone: 800-424-9346

Last EDR Contact :07/28/2017

SSTS: Section 7 Tracking Systems

Standard Environmental Record Source: Other Records

Search Distance: Property

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009

Source: EPA

Number of Days to Update: 77

Telephone: 202-564-4203

Last EDR Contact :07/28/2017

TRIS: Toxic Chemical Release Inventory System

Standard Environmental Record Source: Other Records

Search Distance: Property

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014

Source: EPA

Number of Days to Update: 133

Telephone: 202-566-0250

Last EDR Contact :08/23/2017

TSCA: Toxic Substances Control Act

Standard Environmental Record Source: Other Records

Search Distance: Property

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012

Source: EPA

Number of Days to Update: 14

Telephone: 202-260-5521

Last EDR Contact :09/22/2017

UMTRA: Uranium Mill Tailings Sites

Standard Environmental Record Source: Other Records

RECORD SOURCES AND CURRENCY

Search Distance: 0.333 Mile

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010

Source: Department of Energy

Number of Days to Update: 146

Telephone: 505-845-0011

Last EDR Contact :10/10/2017

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

Standard Environmental Record Source: Other Records

Search Distance: Property

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016

Source: EPA

Number of Days to Update: 100

Telephone: 202-564-2496

Last EDR Contact :09/26/2017

US AIRS MINOR: Air Facility System Data

Standard Environmental Record Source: Other Records

A listing of minor source facilities.

Date of Government Version: 10/12/2016

Source: EPA

Number of Days to Update: 100

Telephone: 202-564-2496

Last EDR Contact :09/26/2017

US BROWNFIELDS: A Listing of Brownfields Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/19/2017

Source: Environmental Protection Agency

Number of Days to Update: 87

Telephone: 202-566-2777

Last EDR Contact :09/20/2017

US CDL: Clandestine Drug Labs

Standard Environmental Record Source: Other Records

Search Distance: Property

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/13/2017

Source: Drug Enforcement Administration

RECORD SOURCES AND CURRENCY

Number of Days to Update: 30
Last EDR Contact :08/30/2017

Telephone: 202-307-1000

US ENG CONTROLS: Engineering Controls Sites List

Standard Environmental Record Source: Federal institutional controls / engineering controls registries
Search Distance: Property

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/10/2017
Number of Days to Update: 44
Last EDR Contact :08/30/2017

Source: Environmental Protection Agency
Telephone: 703-603-0695

US FIN ASSUR: Financial Assurance Information

Standard Environmental Record Source: Other Records
Search Distance: Property

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/10/2017
Number of Days to Update: 121
Last EDR Contact :09/26/2017

Source: Environmental Protection Agency
Telephone: 202-566-1917

US HIST CDL: National Clandestine Laboratory Register

Standard Environmental Record Source: Other Records
Search Distance: Property

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/13/2017
Number of Days to Update: 30
Last EDR Contact :08/30/2017

Source: Drug Enforcement Administration
Telephone: 202-307-1000

US INST CONTROL: Sites with Institutional Controls

Standard Environmental Record Source: Federal institutional controls / engineering controls registries
Search Distance: Property

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/10/2017
Number of Days to Update: 44
Last EDR Contact :08/30/2017

Source: Environmental Protection Agency
Telephone: 703-603-0695

US MINES: Mines Master Index File

Standard Environmental Record Source: Other Records
Search Distance: Property

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 07/31/2017
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

RECORD SOURCES AND CURRENCY

Last EDR Contact :08/30/2017

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

Standard Environmental Record Source: Other Records

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005

Source: USGS

Number of Days to Update: 49

Telephone: 703-648-7709

Last EDR Contact :09/01/2017

US MINES 3: Active Mines & Mineral Plants Database Listing

Standard Environmental Record Source: Other Records

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011

Source: USGS

Number of Days to Update: 97

Telephone: 703-648-7709

Last EDR Contact :09/01/2017

UXO: Unexploded Ordnance Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2016

Source: Department of Defense

Number of Days to Update: 133

Telephone: 571-373-0407

Last EDR Contact :10/16/2017

DOD: Department of Defense Sites

Standard Environmental Record Source: Other Records

Search Distance: 0.333 Mile

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005

Source: USGS

Number of Days to Update: 62

Telephone: 888-275-8747

Last EDR Contact :10/13/2017

INDIAN RESERV: Indian Reservations

Standard Environmental Record Source: Other Records

Search Distance: Property

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014

Source: USGS

Number of Days to Update: N/A

Telephone: 202-208-3710

Last EDR Contact :10/11/2017

PWS: Public Water System Data

Standard Environmental Record Source: Other Records

Search Distance: Property

RECORD SOURCES AND CURRENCY

This Safe Drinking Water Information System (SDWIS) file contains public water systems name and address, population served and the primary source of water

Date of Government Version: 12/17/2013

Source: EPA

Number of Days to Update: 279

Telephone: Not Reported

Last EDR Contact :08/25/2017

RECORD SOURCES AND CURRENCY

HISTORICAL USE RECORDS

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland.

Date of Government Version: Not Reported

Source: Department of the Environment

Number of Days to Update: 186

Telephone: Not Reported

Last EDR Contact :06/01/2012

RGA LF: Recovered Government Archive Solid Waste Facilities List

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland.

Date of Government Version: Not Reported

Source: Department of the Environment

Number of Days to Update: 199

Telephone: Not Reported

Last EDR Contact :06/01/2012

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

Standard Environmental Record Source: Exclusive Recovered Govt. Archives

Search Distance: Property

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland from 1995-1999..

Date of Government Version: Not Reported

Source: Department of the Environment

Number of Days to Update: 186

Telephone: Not Reported

Last EDR Contact :06/01/2012

EDR Hist Auto: EDR Exclusive Historic Gas Stations

Standard Environmental Record Source: Historical Gas Stations

Search Distance: 0.125 Mile

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007

Source: EDR, Inc.

Number of Days to Update: 42

Telephone: Not Reported

Last EDR Contact :02/21/2007

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

Standard Environmental Record Source: Historical Dry Cleaners

Search Distance: 0.125 Mile

RECORD SOURCES AND CURRENCY

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: 02/20/2007

Source: EDR, Inc.

Number of Days to Update: 42

Telephone: Not Reported

Last EDR Contact :02/21/2007

EDR MGP: EDR Proprietary Manufactured Gas Plants

Standard Environmental Record Source: Former Manufactured Gas Plants

Search Distance: 0.333 Mile

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: 08/28/2009

Source: EDR, Inc.

Number of Days to Update: 55

Telephone: Not Reported

Last EDR Contact :11/30/2012

RECORD SOURCES AND CURRENCY

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5' minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 and 2005 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW® Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW® Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services. The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Services (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Services, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

STREET AND ADDRESS INFORMATION

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Appendix D: Interview Records

Record of Communication

Name: Mr. Philip Ridenour

Affiliation: Other

Telephone #: 240-313-2764

Conversation Date: 10/19/2017

RE:

Comments: F&R interviewed Mr. Phil Ridenour, the Hagerstown Regional Airport Director. Mr. Ridenour explained that prior to 1999, the farmstead and land surrounding it were still used as residential and agricultural land, respectively. Mr. Ridenour was unsure how domestic water and sanitary sewer was provided to the Property. Mr. Ridenour also mentioned that it was possible that there is a heating oil tank in the basement as radiators had been removed from the Property at some point in time. Mr. Ridenour also recommended using respiratory protection for the survey due to a mold problem in the home.

Appendix E: Regulatory Report

Brumbaugh-Kendle-Grove Farmstead

14301 Pennsylvania Avenue
Hagerstown, MD 21742

Inquiry Number: 05079427.2r
October 17, 2017

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

14301 PENNSYLVANIA AVENUE
HAGERSTOWN, MD 21742

COORDINATES

Latitude (North): 39.7063430 - 39° 42' 22.83"
Longitude (West): 77.7168650 - 77° 43' 0.71"
Universal Transverse Mercator: Zone 18
UTM X (Meters): 267076.6
UTM Y (Meters): 4398485.0
Elevation: 639 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 6049727 HAGERSTOWN, MD
Version Date: 2014

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20150725
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 14301 PENNSYLVANIA AVENUE
 HAGERSTOWN, MD 21742

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	AIRPORT PUMP STATION	U.S. RT. 11 @ EDEN R	MD UST, MD Financial Assurance	Higher	742, 0.141, NW
A2	ALPHIN AIRCRAFT INC	14235 OAK SPRINGS RD	MD OCPCASES	Higher	988, 0.187, WNW
A3	HAGERSTOWN AIRCRAFT	14235 OAK SPRINGS RD	MD OCPCASES	Higher	988, 0.187, WNW
A4	ALPHIN AIRCRAFT INC.	14235 OAK SPRINGS RO	MD UST, MD Financial Assurance	Higher	988, 0.187, WNW
A5	HAGERSTOWN AIRCRAFT	14235 OAK SPRING RD	RCRA-LQG	Higher	988, 0.187, WNW
A6	HAGERSTOWN AIRCRAFT	14235 OAK SPRINGS RO	SEMS	Higher	988, 0.187, WNW
7	US II TERMINAL	14240 PENNSYLVANIA A	MD OCPCASES, MD UST, MD Financial Assurance	Higher	1173, 0.222, WSW
8	CUSTOMIZERS	14133 PENNSYLVANIA A	MD OCPCASES	Higher	1775, 0.336, SW
9	WPS INC	14500 BYERS RD	MD OCPCASES	Higher	2140, 0.405, NNW
10	WA CO REGIONAL AIRPO	18635 JARKEY DR	MD OCPCASES	Higher	2514, 0.476, NW
11	FAIRCHILD REPUBLIC C	SHOWALTER RD	MD SHWS	Higher	3820, 0.723, WSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System
US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

EXECUTIVE SUMMARY

State- and tribal - equivalent NPL

PA SHWS..... Hazardous Sites Cleanup Act Site List

State and tribal landfill and/or solid waste disposal site lists

MD SWF/LF..... Permitted Solid Waste Disposal Facilities

PA SWF/LF..... Operating Facilities

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

MD HIST LUST..... Recovery Sites

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing

PA UST..... Listing of Pennsylvania Regulated Underground Storage Tanks

MD AST..... Permitted Aboveground Storage Tanks

PA AST..... Listing of Pennsylvania Regulated Aboveground Storage Tanks

INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

MD ENG CONTROLS..... Engineering Controls Site listing

PA ENG CONTROLS..... Engineering Controls Site Listing

MD INST CONTROL..... Voluntary Cleanup Program Applicants/Participants

PA INST CONTROL..... Institutional Controls Site Listing

State and tribal voluntary cleanup sites

MD VCP..... Voluntary Cleanup Program Applicants/Participants

INDIAN VCP..... Voluntary Cleanup Priority Listing

PA VCP..... Voluntary Cleanup Program Listing

State and tribal Brownfields sites

MD BROWNFIELDS..... Eligible Brownfields Properties

PA BROWNFIELDS..... Brownfields Sites

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

MD SWRCY..... Recycling Directory

INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

ODI..... Open Dump Inventory

IHS OPEN DUMPS..... Open Dumps on Indian Land

EXECUTIVE SUMMARY

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
US CDL..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

MD HIST UST..... Historical UST Registered Database

Local Land Records

LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
MD SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines
FINDS..... Facility Index System/Facility Registry System

EXECUTIVE SUMMARY

ECHO.....	Enforcement & Compliance History Information
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
MD AIRS.....	Permit and Facility Information Listing
PA AIRS.....	Permit and Emissions Inventory Data
MD COAL ASH.....	Coal Ash Disposal Site Listing
MD DRYCLEANERS.....	Registered Drycleaning Facilities
PA DRYCLEANERS.....	Drycleaner Facility Locations
MD LEAD.....	Lead Inspection Database
MD LRP.....	Land Restoration Program
PA MANIFEST.....	Manifest Information
MD NPDES.....	Wastewater Permit Listing
PA NPDES.....	NPDES Permit Listing
MD UIC.....	Underground Injection Wells Database
PA UIC.....	Underground Injection Wells

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historic Gas Stations
EDR Hist Cleaner.....	EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

MD RGA HWS.....	Recovered Government Archive State Hazardous Waste Facilities List
PA RGA HWS.....	Recovered Government Archive State Hazardous Waste Facilities List
MD RGA LF.....	Recovered Government Archive Solid Waste Facilities List
PA RGA LF.....	Recovered Government Archive Solid Waste Facilities List
MD RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank
PA RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 07/11/2017 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HAGERSTOWN AIRCRAFT	14235 OAK SPRINGS RO	WNW 1/8 - 1/4 (0.187 mi.)	A6	12

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 09/13/2017 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HAGERSTOWN AIRCRAFT	14235 OAK SPRING RD	WNW 1/8 - 1/4 (0.187 mi.)	A5	10

State- and tribal - equivalent CERCLIS

MD SHWS: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of the Environment's Notice of Potential Hazardous Waste Sites list.

A review of the MD SHWS list, as provided by EDR, and dated 10/01/2009 has revealed that there is 1 MD SHWS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FAIRCHILD REPUBLIC C Facility Id: (MD-056)	SHOWALTER RD	WSW 1/2 - 1 (0.723 mi.)	11	15

EXECUTIVE SUMMARY

Facility Status: No Further Remedial Action

State and tribal leaking storage tank lists

MD OCPCASES: Cases monitored by the Oil Control Program.

A review of the MD OCPCASES list, as provided by EDR, and dated 07/03/2017 has revealed that there are 6 MD OCPCASES sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ALPHIN AIRCRAFT INC Date Closed: 05/21/1997 Facility Status: CLOSED Facility Id: 97-2138WA	14235 OAK SPRINGS RD	WNW 1/8 - 1/4 (0.187 mi.)	A2	8
HAGERSTOWN AIRCRAFT Date Closed: 05/26/2004 Facility Status: CLOSED Facility Id: 03-1833WA	14235 OAK SPRINGS RD	WNW 1/8 - 1/4 (0.187 mi.)	A3	9
US II TERMINAL Date Closed: 11/28/1995 Facility Status: CLOSED Facility Id: 96-0800WA	14240 PENNSYLVANIA A	WSW 1/8 - 1/4 (0.222 mi.)	7	12
CUSTOMIZERS Date Closed: 12/10/2013 Facility Status: CLOSED Facility Id: 14-0188WA	14133 PENNSYLVANIA A	SW 1/4 - 1/2 (0.336 mi.)	8	14
WPS INC Date Closed: 07/08/2010 Facility Status: CLOSED Facility Id: 10-0508WA	14500 BYERS RD	NNW 1/4 - 1/2 (0.405 mi.)	9	14
WA CO REGIONAL AIRPO Date Closed: 07/07/1999 Date Closed: 06/26/2006 Facility Status: CLOSED Facility Id: 99-2974WA Facility Id: 05-1250WA	18635 JARKEY DR	NW 1/4 - 1/2 (0.476 mi.)	10	14

State and tribal registered storage tank lists

MD UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of the Environment's Listing of Underground Storage Tanks Reported in Maryland.

A review of the MD UST list, as provided by EDR, and dated 06/30/2017 has revealed that there are 3 MD UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
AIRPORT PUMP STATION	U.S. RT. 11 @ EDEN R	NW 1/8 - 1/4 (0.141 mi.)	1	8

EXECUTIVE SUMMARY

Facility Id: 7477

Tank Status: Permanently Out of Use

ALPHIN AIRCRAFT INC.

14235 OAK SPRINGS RO

WNW 1/8 - 1/4 (0.187 mi.) A4

9

Facility Id: 907

Tank Status: Permanently Out of Use

US II TERMINAL

14240 PENNSYLVANIA A

WSW 1/8 - 1/4 (0.222 mi.) 7

12

Facility Id: 8040

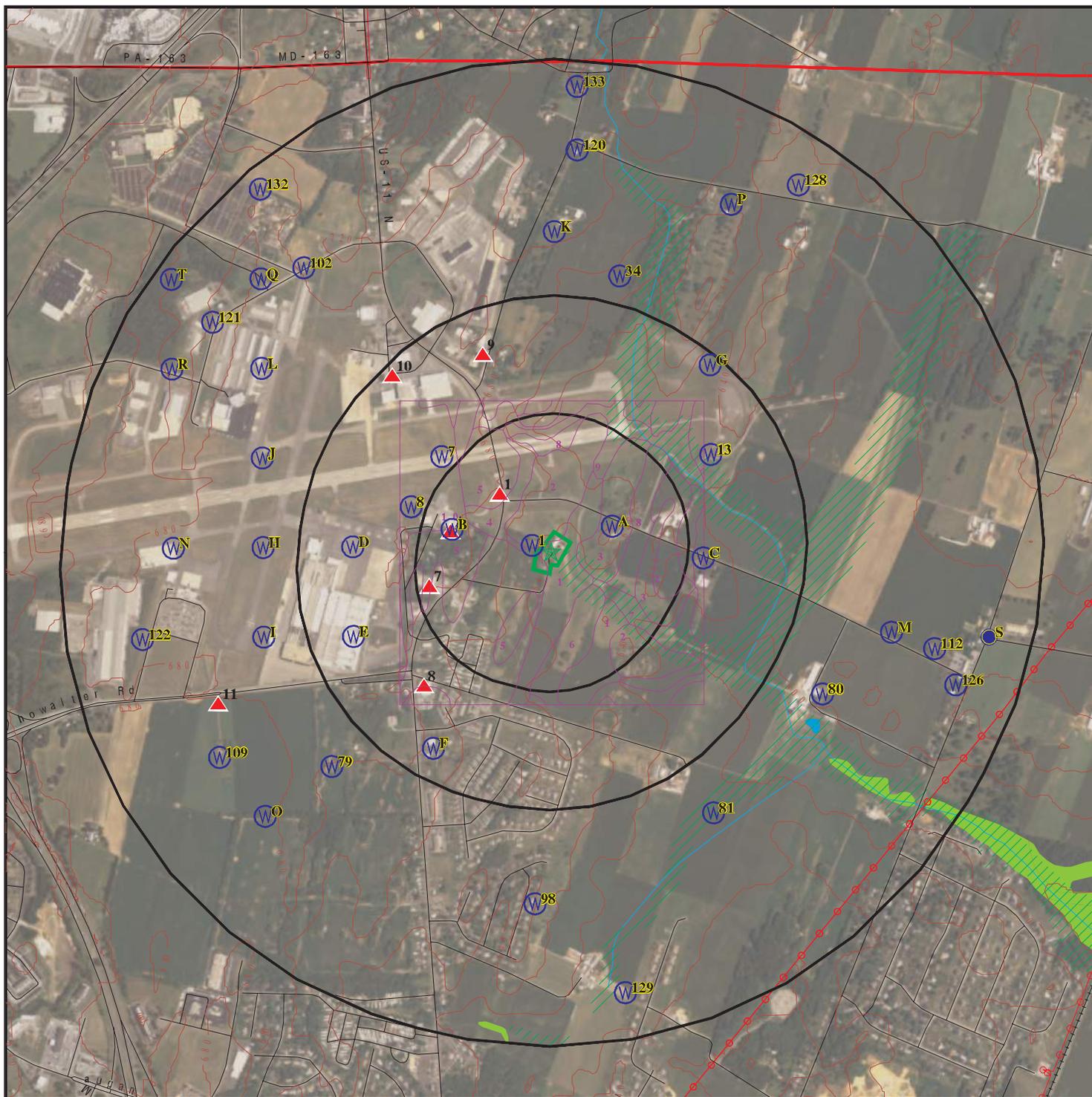
Tank Status: Permanently Out of Use

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 3 records.

<u>Site Name</u>	<u>Database(s)</u>
NU-LOOK ONE HOUR CLEANERS	MD DRYCLEANERS
PARADISE MENONITE SCHOOL	MD OCPCASES
WASHINGTON CO GOVT (OLD SUNSHINE C	MD OCPCASES

OVERVIEW MAP - 05079427.2R



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

County Boundary

Power transmission lines

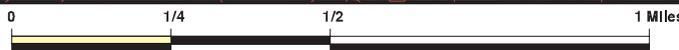
Pipelines

100-year flood zone

500-year flood zone

National Wetland Inventory

Upgradient Area

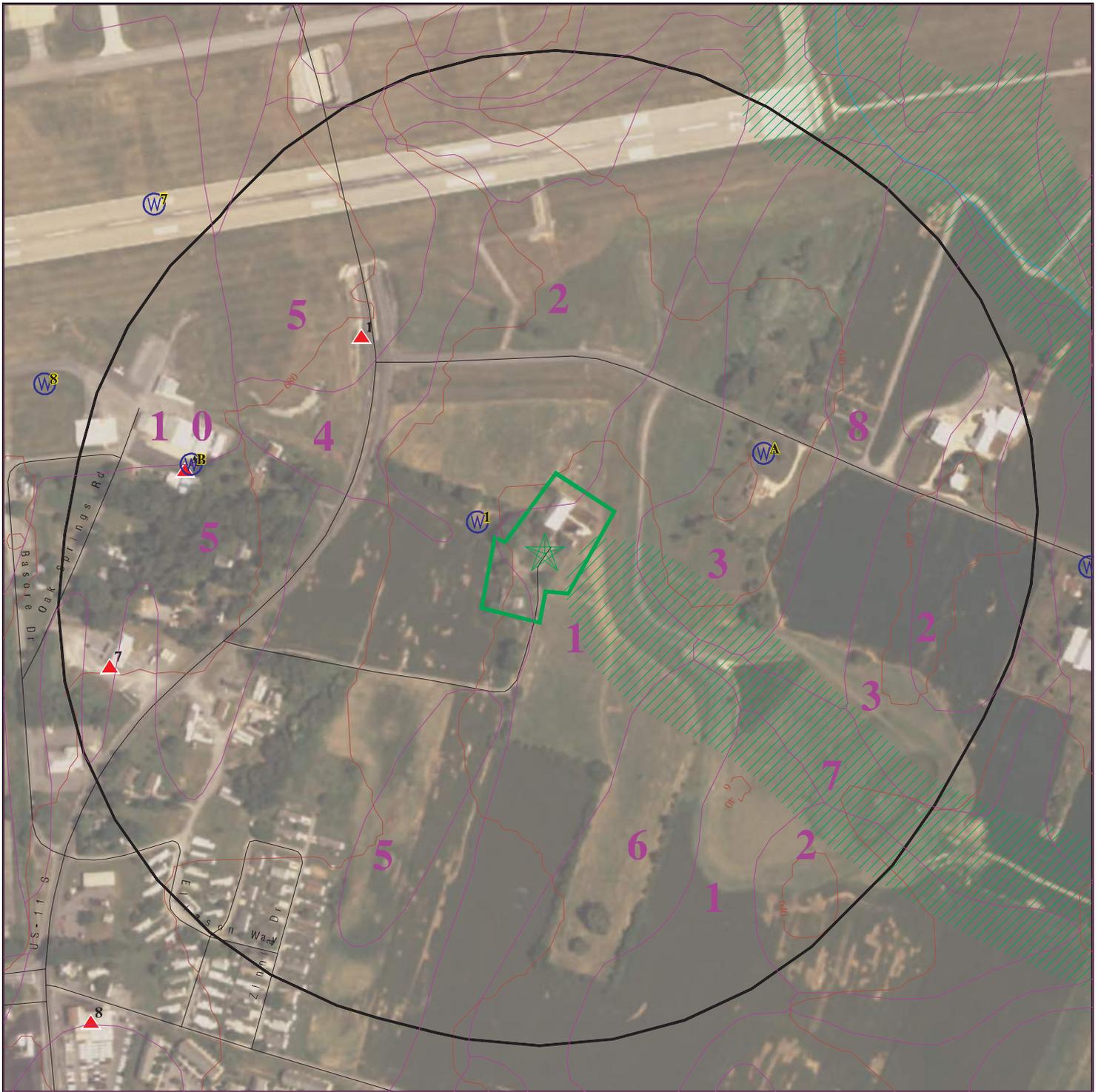


This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Brumbaugh-Kendle-Grove Farmstead
 ADDRESS: 14301 Pennsylvania Avenue
 Hagerstown MD 21742
 LAT/LONG: 39.706343 / 77.716865

CLIENT: Froehling & Robertson, Inc.
 CONTACT: Stephen Armstrong
 INQUIRY #: 05079427.2r
 DATE: October 17, 2017 2:56 pm

DETAIL MAP - 05079427.2R



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  100-year flood zone
-  500-year flood zone



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Brumbaugh-Kendle-Grove Farmstead
 ADDRESS: 14301 Pennsylvania Avenue
 Hagerstown MD 21742
 LAT/LONG: 39.706343 / 77.716865

CLIENT: Froehling & Robertson, Inc.
 CONTACT: Stephen Armstrong
 INQUIRY #: 05079427.2r
 DATE: October 17, 2017 2:57 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	1	0	NR	NR	1
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	1	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL</i>								
PA SHWS	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS</i>								
MD SHWS	1.000		0	0	0	1	NR	1
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
MD SWF/LF	0.500		0	0	0	NR	NR	0
PA SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
INDIAN LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MD OCPCASES	0.500		0	3	3	NR	NR	6
MD HIST LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
MD UST	0.250		0	3	NR	NR	NR	3
PA UST	0.250		0	0	NR	NR	NR	0
MD AST	0.250		0	0	NR	NR	NR	0
PA AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
MD ENG CONTROLS	0.500		0	0	0	NR	NR	0
PA ENG CONTROLS	0.500		0	0	0	NR	NR	0
MD INST CONTROL	0.500		0	0	0	NR	NR	0
PA INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
MD VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
PA VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
MD BROWNFIELDS	0.500		0	0	0	NR	NR	0
PA BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
MD SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
MD HIST UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
MD SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
MD AIRS	TP		NR	NR	NR	NR	NR	0
PA AIRS	TP		NR	NR	NR	NR	NR	0
MD COAL ASH	0.500		0	0	0	NR	NR	0
MD DRYCLEANERS	0.250		0	0	NR	NR	NR	0
PA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
MD Financial Assurance	TP		NR	NR	NR	NR	NR	0
MD LEAD	TP		NR	NR	NR	NR	NR	0
MD LRP	0.500		0	0	0	NR	NR	0

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

1
NW
1/8-1/4
0.141 mi.
742 ft.

AIRPORT PUMP STATION
U.S. RT. 11 @ EDEN ROAD
HAGERSTOWN, MD 21740

MD UST **U003737714**
MD Financial Assurance **N/A**

Relative:
Higher

UST:

Facility Id: 7477
Oper Name: Brian Brandt
Form Name: Cynthia Glessner
Form Title: Facilities Manager
Form Date: 05/21/1998
Owner Id: 4438

Actual:
677 ft.

Owner:

Owner Name: Washington County Water & Sewer
Owner Address: 16232 Elliott Parkway
Owner City: Williamsport
Owner State: MD
Owner Zip: 21795
Owner Phone: (301) 791-3083
Owner Contact: Cynthia C . Glessner

Tanks:

Tank ID: 1
Tank Status: Permanently Out of Use
Tank Capacity: 280
Substance Description: Heating Oil
Tank Compartment: False
Compartment Compartment: A
Date Intalled: 01/01/1984
Tank Material Desc: Asphalt Coated or Bare Steel
Pipe Material Desc: Bare or Galvanized Steel

MD Financial Assurance 2:

Region: 2
Facility ID: 7477
Self Insured: False
Insurance: False
Risk Retention Group: False
Guarantee: False
Surety Bonds: False
Letter of Credit: False
State Fund: False
Other Finance: False
Finacnce Comments: Not reported
FR Not Listed: False

A2
WNW
1/8-1/4
0.187 mi.
988 ft.

ALPHIN AIRCRAFT INC
14235 OAK SPRINGS RD
HAGERSTOWN, MD 21742

MD OCPCASES **S104601705**
N/A

Site 1 of 5 in cluster A

Relative:
Higher

OCPCASES:

Facility ID: 97-2138WA
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 05/21/1997

Actual:
684 ft.

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ALPHIN AIRCRAFT INC (Continued)

S104601705

Date Closed: 05/21/1997
Release: NO
Cleanup: Not reported
Registration Number: 907

A3
WNW
1/8-1/4
0.187 mi.
988 ft.

HAGERSTOWN AIRCRAFT SERVICE INC
14235 OAK SPRINGS RD
HAGERSTOWN, MD 21742

MD OCPCASES **S113767571**
N/A

Site 2 of 5 in cluster A

Relative:
Higher

OCPCASES:
Facility ID: 03-1833WA
Facility Status/Code: CLOSED/Other (Specify)
Date Open: 05/19/2003
Date Closed: 05/26/2004
Release: NO
Cleanup: NO
Registration Number: 907

Actual:
684 ft.

A4
WNW
1/8-1/4
0.187 mi.
988 ft.

ALPHIN AIRCRAFT INC.
14235 OAK SPRINGS ROAD
HAGERSTOWN, MD 21742

MD UST **U004013714**
MD Financial Assurance **N/A**

Site 3 of 5 in cluster A

Relative:
Higher

UST:
Facility Id: 907
Oper Name: T.S. Alphin
Form Name: T.S. Alphin
Form Title: President
Form Date: 03/26/1997
Owner Id: 682

Actual:
684 ft.

Owner:

Owner Name: Alphin Aircraft, Inc.
Owner Address: 14235 Oak Springs Road
Owner City: Hagerstown
Owner State: MD
Owner Zip: 21742
Owner Phone: (301) 733-7604
Owner Contact: T.S. Alphin

Tanks:

Tank ID: 1
Tank Status: Permanently Out of Use
Tank Capacity: 10000
Substance Description: Gasoline
Tank Compartment: False
Compartment Compartment: A
Date Installed: 06/01/1979
Tank Material Desc: Asphalt Coated or Bare Steel
Pipe Material Desc: Bare or Galvanized Steel

Tank ID: 2
Tank Status: Permanently Out of Use

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

ALPHIN AIRCRAFT INC. (Continued)

U004013714

Tank Capacity: 1000
Substance Description: Gasoline
Tank Compartment: False
Compartment Compartment: A
Date Installed: 04/01/1986
Tank Material Desc: Cathodically Protected Steel (Coating w/CP - Galvanic)
Pipe Material Desc: Bare or Galvanized Steel

Tank ID: 3
Tank Status: Permanently Out of Use
Tank Capacity: 1000
Substance Description: Gasoline
Tank Compartment: False
Compartment Compartment: A
Date Installed: 05/01/1972
Tank Material Desc: Asphalt Coated or Bare Steel
Pipe Material Desc: Bare or Galvanized Steel

MD Financial Assurance 2:

Region: 2
Facility ID: 907
Self Insured: False
Insurance: False
Risk Retention Group: False
Guarantee: False
Surety Bonds: False
Letter of Credit: False
State Fund: False
Other Finance: False
Finance Comments: Not reported
FR Not Listed: False

**A5
WNW
1/8-1/4
0.187 mi.
988 ft.**

**HAGERSTOWN AIRCRAFT SERVICES, INC
14235 OAK SPRING RD
HAGERSTOWN, MD 21742**

**RCRA-LQG 1016957546
MDD042682398**

Site 4 of 5 in cluster A

**Relative:
Higher**

RCRA-LQG:

Date form received by agency: 05/13/2013
Facility name: HAGERSTOWN AIRCRAFT SERVICES, INC
Facility address: 14235 OAK SPRING RD
HAGERSTOWN, MD 21742
EPA ID: MDD042682398
Contact: KIMBERLY POTTER
Contact address: 14235 OAK SPRINGS RD
HAGERSTOWN, MD 21742

**Actual:
684 ft.**

Contact country: US
Contact telephone: 301-733-7604
Contact email: KIM@HGRAIR.COM
EPA Region: 03
Land type: Private
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HAGERSTOWN AIRCRAFT SERVICES, INC (Continued)

1016957546

residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name: HAGERSTOWN AIRCRAFT SERVICES, INC
Owner/operator address: 14235 OAK SPRINGS RD
HAGERSTOWN, MD 21742
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 09/01/1997
Owner/Op end date: Not reported

Owner/operator name: KIMBERLY POTTER
Owner/operator address: 14235 OAK SPRINGS RD
HAGERSTOWN, MD 21742
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/05/2013
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE WASTE

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

HAGERSTOWN AIRCRAFT SERVICES, INC (Continued)

1016957546

- . Waste code: D004
- . Waste name: ARSENIC

- . Waste code: D005
- . Waste name: BARIUM

- . Waste code: D006
- . Waste name: CADMIUM

- . Waste code: D007
- . Waste name: CHROMIUM

- . Waste code: D008
- . Waste name: LEAD

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 01/29/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

A6
WNW
1/8-1/4
0.187 mi.
988 ft.

HAGERSTOWN AIRCRAFT SERVICES
14235 OAK SPRINGS ROAD
HAGERSTOWN, MD 21742
Site 5 of 5 in cluster A

SEMS 1018148911
MDN000302984

Relative:
Higher

SEMS:
Site ID: 302984
EPA ID: MDN000302984
Federal Facility: N
NPL: Not on the NPL
Non NPL Status: Removal Only Site (No Site Assessment Work Needed)

Actual:
684 ft.

7
WSW
1/8-1/4
0.222 mi.
1173 ft.

US II TERMINAL
14240 PENNSYLVANIA AVENUE
HAGERSTOWN, MD 21740

MD OCPCASES U004013509
MD UST N/A
MD Financial Assurance

Relative:
Higher

OCPCASES:
Facility ID: 96-0800WA
Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil
Date Open: 10/31/1995
Date Closed: 11/28/1995
Release: Not reported
Cleanup: Not reported
Registration Number: 8040 / 10040

Actual:
680 ft.

UST:

Facility Id: 8040
Oper Name: Russel Fritz
Form Name: Robert Mourlas

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

US II TERMINAL (Continued)

U004013509

Form Title: Agent
Form Date: 08/27/1998
Owner Id: 4750

Owner:

Owner Name: Bowmna Development Corporation
Owner Address: 10417 Ferguson Lane
Owner City: Williamsport
Owner State: MD
Owner Zip: 21795
Owner Phone: (301) 582-1555
Owner Contact: Irvin Gish

Tanks:

Tank ID: 1
Tank Status: Permanently Out of Use
Tank Capacity: 1000
Substance Description: Diesel
Tank Compartment: False
Compartment Compartment: A
Date Installed: Not reported
Tank Material Desc: Asphalt Coated or Bare Steel
Pipe Material Desc: Bare or Galvanized Steel

Tank ID: 2
Tank Status: Permanently Out of Use
Tank Capacity: 10000
Substance Description: Diesel
Tank Compartment: False
Compartment Compartment: A
Date Installed: Not reported
Tank Material Desc: Asphalt Coated or Bare Steel
Pipe Material Desc: Bare or Galvanized Steel

MD Financial Assurance 2:

Region: 2
Facility ID: 8040
Self Insured: False
Insurance: False
Risk Retention Group: False
Guarantee: False
Surety Bonds: False
Letter of Credit: False
State Fund: False
Other Finance: False
Finacnce Comments: Not reported
FR Not Listed: False

MAP FINDINGS

Map ID			EDR ID Number
Direction			EPA ID Number
Distance		Database(s)	
Elevation	Site		

8 SW 1/4-1/2 0.336 mi. 1775 ft.	CUSTOMIZERS 14133 PENNSYLVANIA AVE HAGERSTOWN, MD 21742	MD OCPCASES	S116235067 N/A
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Relative: Higher	OCPCASES: Facility ID: 14-0188WA Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil Date Open: 09/18/2013 Date Closed: 12/10/2013 Release: YES Cleanup: YES Registration Number: 20391
Actual: 676 ft.	

9 NNW 1/4-1/2 0.405 mi. 2140 ft.	WPS INC 14500 BYERS RD HAGERSTOWN, MD 21742	MD OCPCASES	S110295230 N/A
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Relative: Higher	OCPCASES: Facility ID: 10-0508WA Facility Status/Code: CLOSED/Tank Closure - Commercial Heating Oil Date Open: 03/29/2010 Date Closed: 07/08/2010 Release: NO Cleanup: NO Registration Number: 19961
Actual: 692 ft.	

10 NW 1/4-1/2 0.476 mi. 2514 ft.	WA CO REGIONAL AIRPORT/OLD GROVE HANGAR 18635 JARKEY DR HAGERSTOWN, MD 21742	MD OCPCASES	S106463392 N/A
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Relative: Higher	OCPCASES: Facility ID: 99-2974WA Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil Date Open: 06/15/1999 Date Closed: 07/07/1999 Release: NO Cleanup: Not reported Registration Number: 16011
Actual: 696 ft.	
Relative: Higher	OCPCASES: Facility ID: 05-1250WA Facility Status/Code: CLOSED/Tank Closure - Motor/Lube Oil Date Open: 06/24/2005 Date Closed: 06/26/2006 Release: NO Cleanup: Not reported Registration Number: 16011

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

11
 WSW
 1/2-1
 0.723 mi.
 3820 ft.

FAIRCHILD REPUBLIC CO PLANT 11
SHOWALTER RD
HAGERSTOWN, MD 21740

MD SHWS S102519349
N/A

Relative:
Higher

SHWS:

Facility ID: (MD-056)
 Alias Name: FAIRCHILD LAND DISPOSAL, FAIRCHILD REPUBLIC CO. - PLANT 12

Actual:
679 ft.

Status: No Further Remedial Action
 Facility Type: State Master List

Count: 3 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
HAGERSTOWN	S116600792	PARADISE MENONITE SCHOOL	19308 AIR VIEW RD & PARADISE C	21742	MD OCPCASES
HAGERSTOWN	S104606768	WASHINGTON CO GOVT (OLD SUNSHINE C	BASORE DR	21742	MD OCPCASES
HAGERSTOWN	S107544632	NU-LOOK ONE HOUR CLEANERS	2349 PENNSYLVANIA AVENUE	21742	MD DRYCLEANERS

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/08/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 10/05/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 10/05/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 05/30/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: N/A
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 10/05/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2017	Telephone: 703-603-8704
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 10/06/2017
Number of Days to Update: 92	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 07/11/2017	Source: EPA
Date Data Arrived at EDR: 07/21/2017	Telephone: 800-424-9346
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 07/21/2017
Number of Days to Update: 77	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 07/11/2017	Source: EPA
Date Data Arrived at EDR: 07/28/2017	Telephone: 800-424-9346
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 07/28/2017
Number of Days to Update: 70	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 09/13/2017	Source: EPA
Date Data Arrived at EDR: 09/26/2017	Telephone: 800-424-9346
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 800-438-2474
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 800-438-2474
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 800-438-2474
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 09/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/26/2017	Telephone: 800-438-2474
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 09/26/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/22/2017	Source: Department of the Navy
Date Data Arrived at EDR: 06/13/2017	Telephone: 843-820-7326
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 08/10/2017
Number of Days to Update: 94	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 08/10/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/30/2017	Telephone: 703-603-0695
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 08/30/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 08/10/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/30/2017	Telephone: 703-603-0695
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 08/30/2017
Number of Days to Update: 44	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 09/18/2017
Date Data Arrived at EDR: 09/21/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 22

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

PA SHWS: Hazardous Sites Cleanup Act Site List

The Hazardous Sites Cleanup Act Site List includes sites listed on PA Priority List, sites delisted from PA Priority List, Interim Response Completed sites, and Sites Being Studied or Response Being Planned.

Date of Government Version: 07/18/2017
Date Data Arrived at EDR: 07/19/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 68

Source: Department Environmental Protection
Telephone: 717-783-7816
Last EDR Contact: 07/19/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Semi-Annually

State- and tribal - equivalent CERCLIS

MD SHWS: Notice of Potential Hazardous Waste Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 10/01/2009
Date Data Arrived at EDR: 12/11/2009
Date Made Active in Reports: 12/14/2009
Number of Days to Update: 3

Source: Department of the Environment
Telephone: 410-537-3000
Last EDR Contact: 08/07/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Semi-Annually

State and tribal landfill and/or solid waste disposal site lists

MD SWF/LF: Permitted Solid Waste Disposal Facilities

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 08/02/2017
Date Data Arrived at EDR: 08/08/2017
Date Made Active in Reports: 10/09/2017
Number of Days to Update: 62

Source: Department of the Environment
Telephone: 410-537-3375
Last EDR Contact: 07/31/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Annually

PA SWF/LF: Operating Facilities

The listing includes Municipal Waste Landfills, Construction/Demolition Waste Landfills and Waste-to-Energy Facilities.

Date of Government Version: 09/25/2017
Date Data Arrived at EDR: 09/27/2017
Date Made Active in Reports: 10/09/2017
Number of Days to Update: 12

Source: Department of Environmental Protection
Telephone: 717-787-7564
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

State and tribal leaking storage tank lists

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/13/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/27/2017	Telephone: 415-972-3372
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/26/2017	Source: EPA, Region 5
Date Data Arrived at EDR: 07/27/2017	Telephone: 312-886-7439
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/24/2017	Source: EPA Region 6
Date Data Arrived at EDR: 07/27/2017	Telephone: 214-665-6597
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-8677
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/28/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Semi-Annually

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/14/2017	Source: EPA Region 1
Date Data Arrived at EDR: 07/27/2017	Telephone: 617-918-1313
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/26/2017	Telephone: 206-553-2857
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 05/01/2017	Source: EPA Region 8
Date Data Arrived at EDR: 07/27/2017	Telephone: 303-312-6271
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 78	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/14/2017	Source: EPA Region 7
Date Data Arrived at EDR: 07/27/2017	Telephone: 913-551-7003
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

MD OCPCASES: Oil Control Program Cases

Cases monitored by the Oil Control Program. these cases can be leaking underground storage tanks and other belowground releases, leaking aboveground storage tanks, spills and inspections.

Date of Government Version: 07/03/2017	Source: Department of Environment
Date Data Arrived at EDR: 07/06/2017	Telephone: 410-537-3433
Date Made Active in Reports: 09/25/2017	Last EDR Contact: 09/07/2017
Number of Days to Update: 81	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Semi-Annually

MD HIST LUST: Recovery Sites

In 1999, the Department of the Environment stopped adding new sites to its Recovery Sites Database. Current leaking underground storage tank information maybe found in the OCPCASES database.

Date of Government Version: 03/01/1999	Source: Department of the Environment
Date Data Arrived at EDR: 03/22/1999	Telephone: 410-537-3433
Date Made Active in Reports: 04/16/1999	Last EDR Contact: 02/19/2001
Number of Days to Update: 25	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017	Source: FEMA
Date Data Arrived at EDR: 05/30/2017	Telephone: 202-646-5797
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/13/2017
Number of Days to Update: 136	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Varies

MD UST: Registered Underground Storage Tank List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/30/2017	Source: Department of the Environment
Date Data Arrived at EDR: 07/25/2017	Telephone: 410-537-3433
Date Made Active in Reports: 09/25/2017	Last EDR Contact: 09/21/2017
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Varies

PA UST: Listing of Pennsylvania Regulated Underground Storage Tanks

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 09/01/2017	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/13/2017	Telephone: 717-772-5599
Date Made Active in Reports: 10/09/2017	Last EDR Contact: 09/13/2017
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MD AST: Permitted Aboveground Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 09/26/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Department of The Environment
Telephone: 410-537-3000
Last EDR Contact: 09/07/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Semi-Annually

PA AST: Listing of Pennsylvania Regulated Aboveground Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 09/01/2017
Date Data Arrived at EDR: 09/13/2017
Date Made Active in Reports: 10/09/2017
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: 717-772-5599
Last EDR Contact: 09/13/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 05/01/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/13/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/25/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 78

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 05/02/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 71

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/01/2016	Source: EPA Region 6
Date Data Arrived at EDR: 01/26/2017	Telephone: 214-665-7591
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 99	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/14/2017	Source: EPA, Region 1
Date Data Arrived at EDR: 07/27/2017	Telephone: 617-918-1313
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2016	Source: EPA Region 4
Date Data Arrived at EDR: 01/27/2017	Telephone: 404-562-9424
Date Made Active in Reports: 05/05/2017	Last EDR Contact: 07/28/2017
Number of Days to Update: 98	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/26/2017	Source: EPA Region 5
Date Data Arrived at EDR: 07/27/2017	Telephone: 312-886-6136
Date Made Active in Reports: 10/06/2017	Last EDR Contact: 07/27/2017
Number of Days to Update: 71	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

MD ENG CONTROLS: Engineering Controls Site listing

Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/10/2008	Source: Department of the Environment
Date Data Arrived at EDR: 11/21/2008	Telephone: 410-537-3422
Date Made Active in Reports: 12/17/2008	Last EDR Contact: 09/07/2017
Number of Days to Update: 26	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Varies

PA ENG CONTROLS: Engineering Controls Site Listing

Under the Land Recycling Act (Act 2) persons who perform a site cleanup using the site-specific standard or the special industrial area standard may use engineering or institutional controls as part of the response action. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/15/2008	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/16/2008	Telephone: 717-783-9470
Date Made Active in Reports: 06/12/2008	Last EDR Contact: 07/18/2017
Number of Days to Update: 27	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MD INST CONTROL: Voluntary Cleanup Program Applicants/Participants

Sites included in the Voluntary Cleanup Program Applicants/Participants listing that have Deed Restrictions.

Date of Government Version: 09/11/2017	Source: Department of the Environment
Date Data Arrived at EDR: 09/15/2017	Telephone: 410-537-3493
Date Made Active in Reports: 09/25/2017	Last EDR Contact: 09/07/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Semi-Annually

PA INST CONTROL: Institutional Controls Site Listing

Under the Land Recycling Act (Act 2) persons who perform a site cleanup using the site-specific standard or the special industrial area standard may use engineering or institutional controls as part of the response action. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/15/2008	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/16/2008	Telephone: 717-783-9470
Date Made Active in Reports: 06/12/2008	Last EDR Contact: 07/18/2017
Number of Days to Update: 27	Next Scheduled EDR Contact: 10/30/2017
	Data Release Frequency: No Update Planned

State and tribal voluntary cleanup sites

MD VCP: Voluntary Cleanup Program Applicants/Participants

The Voluntary Cleanup Program, administrated by the Dept. of the Environment, streamlines the environmental cleanup process for sites, usually industrial or commercial properties, that are contaminated, or perceived to be contaminated, by hazardous substances. Developers and lenders are provided with certain limitations on liability and participants in the program are provided certainty in the process by knowing exactly what will be required.

Date of Government Version: 09/11/2017	Source: Dept. of the Environment
Date Data Arrived at EDR: 09/15/2017	Telephone: 410-537-3000
Date Made Active in Reports: 09/25/2017	Last EDR Contact: 09/07/2017
Number of Days to Update: 10	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Semi-Annually

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 09/25/2017
Number of Days to Update: 142	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

PA VCP: Voluntary Cleanup Program Sites

The VCP listings included Completed Sites, Sites in Progress and Act 2 Non-Use Aquifer Determinations Sites. Formerly known as the Act 2, the Land Recycling Program encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/11/2017
Date Data Arrived at EDR: 07/13/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 74

Source: Department of Environmental Protection
Telephone: 717-783-2388
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

State and tribal Brownfields sites

MD BROWNFIELDS: Eligible Brownfields Properties

The Site Assessment Section of the State Superfund Division is responsible for conducting federally funded assessments of eligible brownfields properties. These assessments are undertaken to determine whether there are environmental cleanup requirements at these sites.

Date of Government Version: 07/03/2017
Date Data Arrived at EDR: 09/12/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 13

Source: Department of Environment
Telephone: 410-537-3000
Last EDR Contact: 09/05/2017
Next Scheduled EDR Contact: 12/18/2017
Data Release Frequency: Quarterly

PA BROWNFIELDS: Brownfields Sites

Brownfields are generally defined as abandoned or underused industrial or commercial properties where redevelopment is complicated by actual or perceived environmental contamination. Brownfields vary in size, location, age and past use. They can range from a small, abandoned corner gas station to a large, multi-acre former manufacturing plant that has been closed for years.

Date of Government Version: 07/18/2017
Date Data Arrived at EDR: 07/19/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 68

Source: Department of Environmental Protection
Telephone: 717-783-1566
Last EDR Contact: 07/19/2017
Next Scheduled EDR Contact: 10/30/2017
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/19/2017
Date Data Arrived at EDR: 06/20/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 09/20/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

MD SWRCY: Recycling Directory A listing of recycling facilities.

Date of Government Version: 03/13/2017
Date Data Arrived at EDR: 03/16/2017
Date Made Active in Reports: 07/18/2017
Number of Days to Update: 124

Source: Department of the Environment
Telephone: 410-631-3314
Last EDR Contact: 09/18/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/01/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 08/29/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 07/13/2017
Date Data Arrived at EDR: 09/06/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 30

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Registered Storage Tanks

MD Historical UST: Historical UST Registered Database

In 1997 the Department of the Environment sent out registration forms to all the owner's listed in the UST database. Once they got the registration forms back they entered the information into a new UST database. we call this database UST. Because not all owners returned their forms, we kept the old UST database and labeled it HIST UST so that we would not be missing any past UST records. This listing is no longer updated or maintained by the agency. It is current through November 1996.

Date of Government Version: 11/21/1996	Source: Department of Environment
Date Data Arrived at EDR: 09/10/1997	Telephone: 410-537-3433
Date Made Active in Reports: 10/22/1997	Last EDR Contact: 05/15/2000
Number of Days to Update: 42	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 07/11/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2017	Telephone: 202-564-6023
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 07/26/2017
Number of Days to Update: 79	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 09/21/2017	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 09/21/2017	Telephone: 202-366-4555
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 09/21/2017
Number of Days to Update: 22	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Quarterly

MD SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/15/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 03/06/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 62	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/13/2017
Date Data Arrived at EDR: 09/26/2017
Date Made Active in Reports: 10/06/2017
Number of Days to Update: 10

Source: Environmental Protection Agency
Telephone: 800-438-2474
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 08/25/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 10/13/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 11/27/2017
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/10/2017
Date Data Arrived at EDR: 05/17/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 121

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 08/07/2017
Number of Days to Update: 88	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/03/2015	Telephone: 703-308-4044
Date Made Active in Reports: 03/09/2015	Last EDR Contact: 08/24/2017
Number of Days to Update: 6	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012	Source: EPA
Date Data Arrived at EDR: 01/15/2015	Telephone: 202-260-5521
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 09/22/2017
Number of Days to Update: 14	Next Scheduled EDR Contact: 01/01/2018
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014	Source: EPA
Date Data Arrived at EDR: 11/24/2015	Telephone: 202-566-0250
Date Made Active in Reports: 04/05/2016	Last EDR Contact: 08/23/2017
Number of Days to Update: 133	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 07/28/2017
Number of Days to Update: 77	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013	Source: EPA
Date Data Arrived at EDR: 12/12/2013	Telephone: 703-416-0223
Date Made Active in Reports: 02/24/2014	Last EDR Contact: 09/08/2017
Number of Days to Update: 74	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/09/2017	Telephone: 202-564-8600
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 07/24/2017
Number of Days to Update: 57	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013	Source: EPA
Date Data Arrived at EDR: 10/17/2014	Telephone: 202-564-6023
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 08/08/2017
Number of Days to Update: 3	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017	Source: EPA
Date Data Arrived at EDR: 06/09/2017	Telephone: 202-566-0500
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/13/2017
Number of Days to Update: 126	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 10/11/2017
Number of Days to Update: 79	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 09/08/2016	Telephone: 301-415-7169
Date Made Active in Reports: 10/21/2016	Last EDR Contact: 08/01/2017
Number of Days to Update: 43	Next Scheduled EDR Contact: 11/20/2017
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: 202-586-8719
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 10/03/2017
Number of Days to Update: 76	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 09/08/2017
Number of Days to Update: 40	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: 202-566-0517
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 07/28/2017
Number of Days to Update: 83	Next Scheduled EDR Contact: 11/08/2017
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 10/02/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/05/2017	Telephone: 202-343-9775
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/05/2017
Number of Days to Update: 8	Next Scheduled EDR Contact: 01/15/2018
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 08/01/2017
Number of Days to Update: 42	Next Scheduled EDR Contact: 11/13/2017
	Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 11/18/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 77

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 09/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 10/11/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 08/03/2017
Next Scheduled EDR Contact: 11/20/2017
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 10/10/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 05/30/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 98

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 10/05/2017
Next Scheduled EDR Contact: 01/15/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 07/31/2017
Date Data Arrived at EDR: 08/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 08/30/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/01/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/01/2017
Next Scheduled EDR Contact: 12/11/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/14/2017	Source: Department of Interior
Date Data Arrived at EDR: 03/17/2017	Telephone: 202-208-2609
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 09/25/2017
Number of Days to Update: 21	Next Scheduled EDR Contact: 12/25/2017
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/23/2017	Source: EPA
Date Data Arrived at EDR: 09/06/2017	Telephone: (215) 814-5000
Date Made Active in Reports: 09/15/2017	Last EDR Contact: 09/06/2017
Number of Days to Update: 9	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/19/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2017	Telephone: 202-564-2280
Date Made Active in Reports: 05/12/2017	Last EDR Contact: 09/06/2017
Number of Days to Update: 52	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 06/03/2016	Telephone: 202-564-0527
Date Made Active in Reports: 09/02/2016	Last EDR Contact: 09/21/2017
Number of Days to Update: 91	Next Scheduled EDR Contact: 12/11/2017
	Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2016	Source: Department of Defense
Date Data Arrived at EDR: 06/02/2017	Telephone: 571-373-0407
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 10/16/2017
Number of Days to Update: 133	Next Scheduled EDR Contact: 01/29/2018
	Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/17/2017
Date Data Arrived at EDR: 08/17/2017
Date Made Active in Reports: 09/15/2017
Number of Days to Update: 29

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/17/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MD AIRS: Permit and Facility Information Listing
A listing of permitted facilities and emissions information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 10/14/2016
Date Made Active in Reports: 03/03/2017
Number of Days to Update: 140

Source: Department of the Environment
Telephone: 410-537-3220
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Varies

PA AIRS: Permit and Emissions Inventory Data
Permit and emissions inventory data.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/14/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 73

Source: Department of Environmental Protection
Telephone: 717-787-9702
Last EDR Contact: 09/25/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MD COAL ASH: Coal Ash Disposal Site Listing
Coal combustion byproduct site locations.

Date of Government Version: 08/13/2010
Date Data Arrived at EDR: 01/05/2011
Date Made Active in Reports: 01/31/2011
Number of Days to Update: 26

Source: Department of the Environment
Telephone: 410-537-3507
Last EDR Contact: 09/22/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Varies

MD DRYCLEANERS: Registered Drycleaning Facilities
A listing of registered drycleaning facilities.

Date of Government Version: 10/04/2017
Date Data Arrived at EDR: 10/05/2017
Date Made Active in Reports: 10/16/2017
Number of Days to Update: 11

Source: Department of the Environmental
Telephone: 410-537-3220
Last EDR Contact: 10/03/2017
Next Scheduled EDR Contact: 01/22/2018
Data Release Frequency: Varies

PA DRYCLEANERS: Drycleaner Facility Locations
A listing of drycleaner facility locations.

Date of Government Version: 11/23/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 01/26/2017
Number of Days to Update: 64

Source: Department of Environmental Protection
Telephone: 717-787-9702
Last EDR Contact: 09/18/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Varies

MD Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information.

Date of Government Version: 12/14/2016
Date Data Arrived at EDR: 06/02/2017
Date Made Active in Reports: 06/30/2017
Number of Days to Update: 28

Source: Department of the Environment
Telephone: 410-537-3345
Last EDR Contact: 07/31/2017
Next Scheduled EDR Contact: 11/13/2017
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MD Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for storage tank sites.

Date of Government Version: 06/30/2017	Source: Department of the Environment
Date Data Arrived at EDR: 07/25/2017	Telephone: 410-537-3461
Date Made Active in Reports: 09/25/2017	Last EDR Contact: 09/21/2017
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Quarterly

MD LEAD: Lead Inspection Database

The Childhood Lead Poisoning Prevention Program data of lead inspection for the state.

Date of Government Version: 09/28/2016	Source: Department of Environment, Lead Poisoning Prevention Program
Date Data Arrived at EDR: 09/29/2016	Telephone: 410-537-3000
Date Made Active in Reports: 12/02/2016	Last EDR Contact: 09/25/2017
Number of Days to Update: 64	Next Scheduled EDR Contact: 01/08/2018
	Data Release Frequency: Varies

MD LRP: Land Restoration Program

A listing of Land Restoration Program sites. Site types included in the database are: Voluntary Cleanup Program, National Priority List, Brownfields, Site Assessment, Formerly Used Defense Site, State Master List, Non Master List, Groundwater Investigation and Federal Facility.

Date of Government Version: 06/05/2017	Source: Department of the Environment
Date Data Arrived at EDR: 06/07/2017	Telephone: 410-537-3000
Date Made Active in Reports: 07/18/2017	Last EDR Contact: 09/07/2017
Number of Days to Update: 41	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/25/2017	Telephone: 717-783-8990
Date Made Active in Reports: 09/25/2017	Last EDR Contact: 10/16/2017
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/29/2018
	Data Release Frequency: Annually

MD NPDES: Wastewater Permit Listing

A listing of wastewater permit locations.

Date of Government Version: 08/21/2017	Source: Department of the Environment
Date Data Arrived at EDR: 08/23/2017	Telephone: 410-537-3507
Date Made Active in Reports: 10/16/2017	Last EDR Contact: 08/23/2017
Number of Days to Update: 54	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: Semi-Annually

PA NPDES: NPDES Permit Listing

A listing of facilities with an NPDES permit.

Date of Government Version: 09/19/2017	Source: Department of Environmental Protection
Date Data Arrived at EDR: 09/21/2017	Telephone: 717-787-9642
Date Made Active in Reports: 10/09/2017	Last EDR Contact: 09/21/2017
Number of Days to Update: 18	Next Scheduled EDR Contact: 12/18/2017
	Data Release Frequency: Varies

MD UIC: Underground Injection Wells Database

A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/04/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 07/07/2015
Number of Days to Update: 39

Source: Department of the Environment
Telephone: 410-537-3507
Last EDR Contact: 07/24/2017
Next Scheduled EDR Contact: 11/08/2017
Data Release Frequency: Varies

PA UIC: Underground Injection Wells

A listing of underground injection well locations.

Date of Government Version: 09/19/2017
Date Data Arrived at EDR: 09/20/2017
Date Made Active in Reports: 10/09/2017
Number of Days to Update: 19

Source: Department of Environmental Protection
Telephone: 717-783-7209
Last EDR Contact: 09/20/2017
Next Scheduled EDR Contact: 01/01/2018
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

MD RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

PA RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department Environmental Protection in Pennsylvania.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

MD RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/16/2014
Number of Days to Update: 199

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

PA RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department Environmental Protection in Pennsylvania.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Department Environmental Protection
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

MD RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of the Environment in Maryland from 1995-1999..

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of the Environment
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PA RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department Environmental Protection in Pennsylvania.

Date of Government Version: N/A	Source: Department Environmental Protection
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 12/30/2013	Last EDR Contact: 06/01/2012
Number of Days to Update: 182	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 08/19/2013	Telephone: 860-424-3375
Date Made Active in Reports: 10/03/2013	Last EDR Contact: 08/18/2017
Number of Days to Update: 45	Next Scheduled EDR Contact: 11/27/2017
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/11/2017	Telephone: N/A
Date Made Active in Reports: 07/27/2017	Last EDR Contact: 10/05/2017
Number of Days to Update: 107	Next Scheduled EDR Contact: 01/22/2018
	Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 07/31/2017	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 08/03/2017	Telephone: 518-402-8651
Date Made Active in Reports: 10/12/2017	Last EDR Contact: 08/03/2017
Number of Days to Update: 70	Next Scheduled EDR Contact: 11/13/2017
	Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016	Source: Department of Environmental Protection
Date Data Arrived at EDR: 07/25/2017	Telephone: 717-783-8990
Date Made Active in Reports: 09/25/2017	Last EDR Contact: 10/16/2017
Number of Days to Update: 62	Next Scheduled EDR Contact: 01/29/2018
	Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/21/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 09/11/2017
Next Scheduled EDR Contact: 12/25/2017
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health
Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Providers

Source: Department of Human Resources
Telephone: 410-767-7805

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

BRUMBAUGH-KENDLE-GROVE FARMSTEAD
14301 PENNSYLVANIA AVENUE
HAGERSTOWN, MD 21742

TARGET PROPERTY COORDINATES

Latitude (North):	39.706343 - 39° 42' 22.83"
Longitude (West):	77.716865 - 77° 43' 0.71"
Universal Transverse Mercator:	Zone 18
UTM X (Meters):	267076.6
UTM Y (Meters):	4398485.0
Elevation:	639 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	6049727 HAGERSTOWN, MD
Version Date:	2014

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

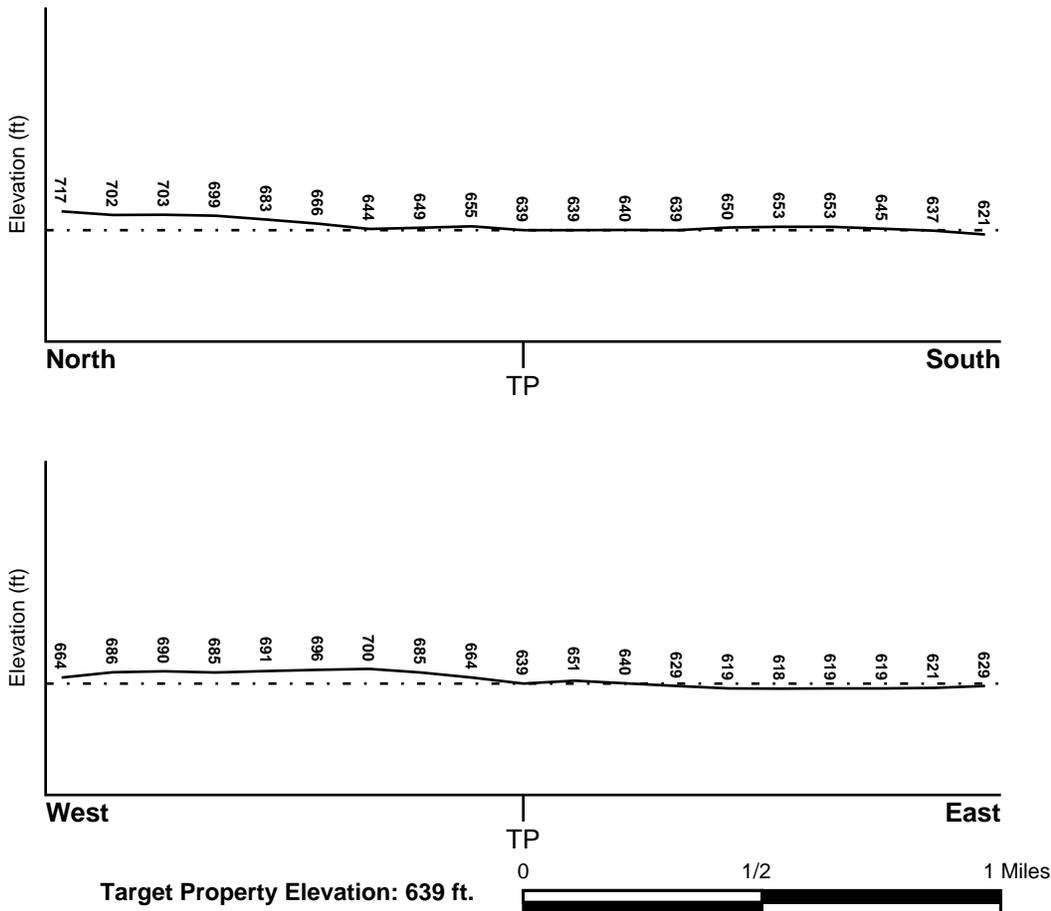
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
42055C0580E	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
Not Reported	

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
HAGERSTOWN	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

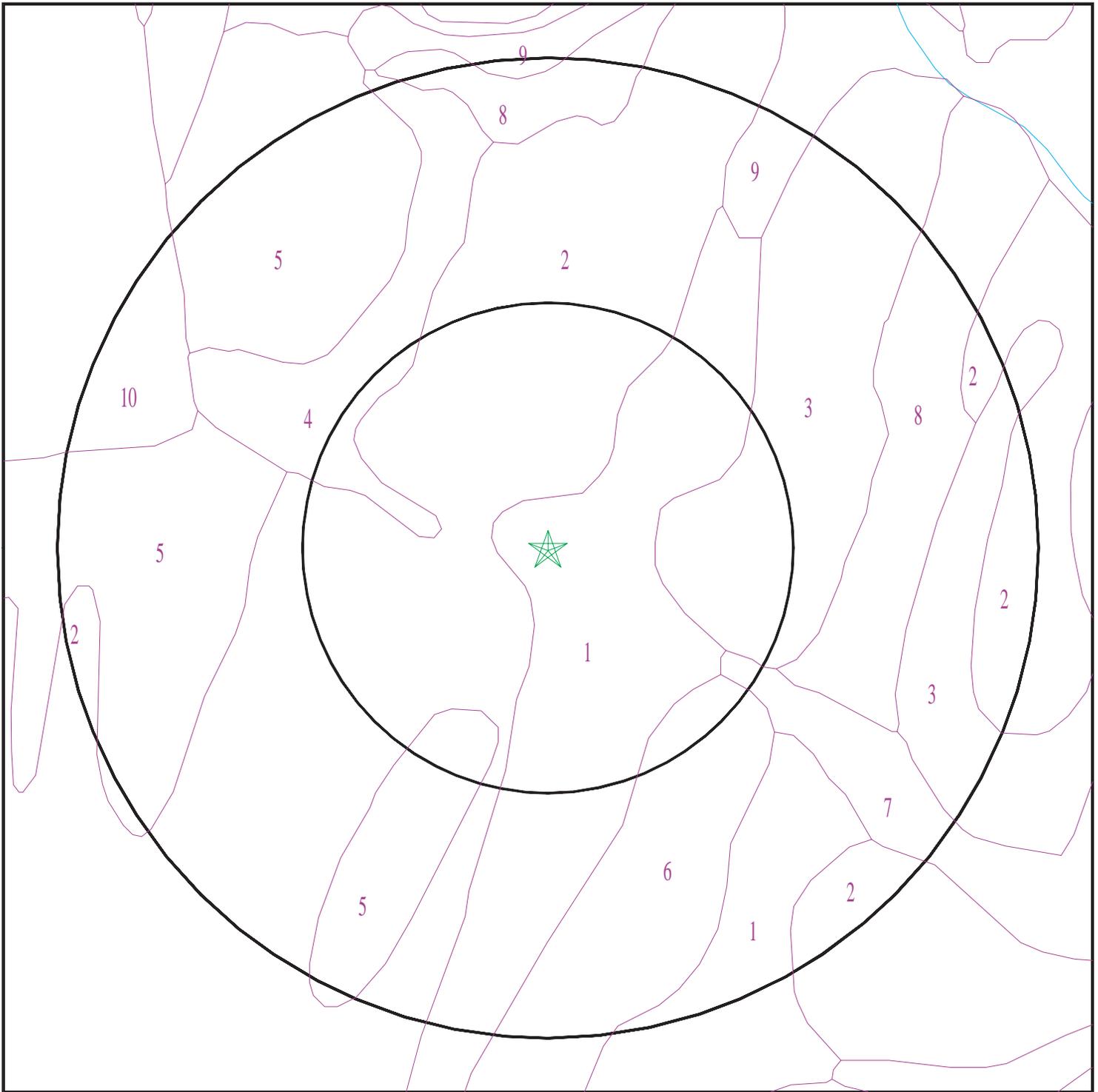
Era:	Paleozoic
System:	Ordovician
Series:	Ordovician
Code:	O (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 05079427.2r



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Brumbaugh-Kendle-Grove Farmstead
ADDRESS: 14301 Pennsylvania Avenue
Hagerstown MD 21742
LAT/LONG: 39.706343 / 77.716865

CLIENT: Froehling & Robertson, Inc.
CONTACT: Stephen Armstrong
INQUIRY #: 05079427.2r
DATE: October 17, 2017 2:58 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Hagerstown

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 178 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 42 Min: 4	Max: 7.3 Min: 5.1
2	9 inches	16 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	16 inches	70 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 2

Soil Component Name: Hagerstown

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 178 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 42 Min: 4	Max: 7.3 Min: 5.1
2	9 inches	16 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	16 inches	70 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 3

Soil Component Name: Hagerstown

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silty clay loam	Not reported	Not reported	Max: 42 Min: 4	Max: 6.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	5 inches	9 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	9 inches	64 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 4

Soil Component Name: Hagerstown

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 178 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Not reported	Not reported	Max: 42 Min: 4	Max: 7.3 Min: 5.1
2	7 inches	18 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	18 inches	64 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 5

Soil Component Name: Hagerstown

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	silty clay loam	Not reported	Not reported	Max: 42 Min: 4	Max: 6.5 Min: 4.5
2	5 inches	9 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	9 inches	64 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 6

Soil Component Name: Hagerstown

Soil Surface Texture: silty clay loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 202 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silty clay loam	Not reported	Not reported	Max: 42 Min: 4	Max: 6.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
2	7 inches	18 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 4.5
3	18 inches	64 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 7

Soil Component Name: Fairplay

Soil Surface Texture: marly silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	marly silt loam	Not reported	Not reported	Max: 141 Min: 4	Max: 8.4 Min: 6.6
2	14 inches	26 inches		Not reported	Not reported	Max: 141 Min: 4	Max: 8.4 Min: 7.4
3	26 inches	46 inches		Not reported	Not reported	Max: 14 Min: 0.42	Max: 8.4 Min: 7.4
4	46 inches	79 inches		Not reported	Not reported	Max: 42 Min: 0.42	Max: 8.4 Min: 7.4

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 8

Soil Component Name: Swanpond

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 92 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.8 Min: 5.1
2	7 inches	31 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 7.8 Min: 5.1
3	31 inches	64 inches		Not reported	Not reported	Max: 1.4 Min: 0.42	Max: 7.8 Min: 5.1

Soil Map ID: 9

Soil Component Name: Funkstown

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 84 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.6
2	11 inches	29 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
3	29 inches	44 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1
4	44 inches	79 inches		Not reported	Not reported	Max: 14 Min: 4	Max: 7.3 Min: 6.1

Soil Map ID: 10

Soil Component Name: Urban land

Soil Surface Texture: variable

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	variable	Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	USGS40000452654	0 - 1/8 Mile ENE
A3	USGS40000452671	1/8 - 1/4 Mile ENE
C9	USGS40000452638	1/4 - 1/2 Mile East
C10	USGS40000452635	1/4 - 1/2 Mile East
C11	USGS40000452636	1/4 - 1/2 Mile East
C12	USGS40000452637	1/4 - 1/2 Mile East
F23	USGS40000452447	1/4 - 1/2 Mile SSW
F24	USGS40000452420	1/2 - 1 Mile SSW
79	USGS40000452407	1/2 - 1 Mile SW
80	USGS40000452501	1/2 - 1 Mile ESE
K82	USGS40000452961	1/2 - 1 Mile North
K83	USGS40000452958	1/2 - 1 Mile North
K84	USGS40000452959	1/2 - 1 Mile North
K85	USGS40000452960	1/2 - 1 Mile North
102	USGS40000452920	1/2 - 1 Mile NW
109	USGS40000452421	1/2 - 1 Mile WSW
P110	USGS40000453002	1/2 - 1 Mile NNE
P111	USGS40000453003	1/2 - 1 Mile NNE
112	USGS40000452559	1/2 - 1 Mile ESE
120	USGS40000453076	1/2 - 1 Mile North
121	USGS40000452865	1/2 - 1 Mile NW
122	USGS40000452566	1/2 - 1 Mile WSW
126	USGS40000452514	1/2 - 1 Mile ESE
S127	USGS40000452558	1/2 - 1 Mile ESE
S130	USGS40000452574	1/2 - 1 Mile East
133	USGS40000453138	1/2 - 1 Mile North

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	MD7000000304024	0 - 1/8 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
B4	MD7000000550880	1/8 - 1/4 Mile WNW
B5	MD7000000550879	1/8 - 1/4 Mile WNW
B6	MD7000000450304	1/8 - 1/4 Mile West
7	MD7000000396445	1/4 - 1/2 Mile NW
8	MD7000000550896	1/4 - 1/2 Mile WNW
13	MD7000000304796	1/4 - 1/2 Mile ENE
D14	MD7000000378144	1/4 - 1/2 Mile West
D15	MD7000000378145	1/4 - 1/2 Mile West
D16	MD7000000396446	1/4 - 1/2 Mile West
E17	MD7000000304791	1/4 - 1/2 Mile WSW
E18	MD7000000304790	1/4 - 1/2 Mile WSW
E19	MD7000000304789	1/4 - 1/2 Mile WSW
E20	MD7000000305264	1/4 - 1/2 Mile WSW
E21	MD7000000304793	1/4 - 1/2 Mile WSW
E22	MD7000000304792	1/4 - 1/2 Mile WSW
G25	MD7000000179090	1/2 - 1 Mile NE
G26	MD7000000300354	1/2 - 1 Mile NE
G27	MD7000000172313	1/2 - 1 Mile NE
G28	MD7000000177496	1/2 - 1 Mile NE
G29	MD7000000301566	1/2 - 1 Mile NE
G30	MD7000000302972	1/2 - 1 Mile NE
G31	MD7000000303039	1/2 - 1 Mile NE
G32	MD7000000302188	1/2 - 1 Mile NE
G33	MD7000000302706	1/2 - 1 Mile NE
34	MD7000000303984	1/2 - 1 Mile NNE
H35	MD7000000396449	1/2 - 1 Mile West
H36	MD7000000396451	1/2 - 1 Mile West
H37	MD7000000379111	1/2 - 1 Mile West
H38	MD7000000384151	1/2 - 1 Mile West
H39	MD7000000378143	1/2 - 1 Mile West
H40	MD7000000076992	1/2 - 1 Mile West
H41	MD7000000378045	1/2 - 1 Mile West
H42	MD7000000396447	1/2 - 1 Mile West
H43	MD7000000396448	1/2 - 1 Mile West
H44	MD7000000384154	1/2 - 1 Mile West
H45	MD7000000384152	1/2 - 1 Mile West
H46	MD7000000384153	1/2 - 1 Mile West
I47	MD7000000374092	1/2 - 1 Mile WSW
I48	MD7000000374091	1/2 - 1 Mile WSW
I49	MD7000000350712	1/2 - 1 Mile WSW
I50	MD7000000374093	1/2 - 1 Mile WSW
I51	MD7000000374096	1/2 - 1 Mile WSW
I52	MD7000000374095	1/2 - 1 Mile WSW
I53	MD7000000374094	1/2 - 1 Mile WSW
I54	MD7000000344024	1/2 - 1 Mile WSW
I55	MD7000000344023	1/2 - 1 Mile WSW
I56	MD7000000344022	1/2 - 1 Mile WSW
I57	MD7000000344025	1/2 - 1 Mile WSW
I58	MD7000000344028	1/2 - 1 Mile WSW
I59	MD7000000344027	1/2 - 1 Mile WSW
I60	MD7000000344026	1/2 - 1 Mile WSW
I61	MD7000000384155	1/2 - 1 Mile WSW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

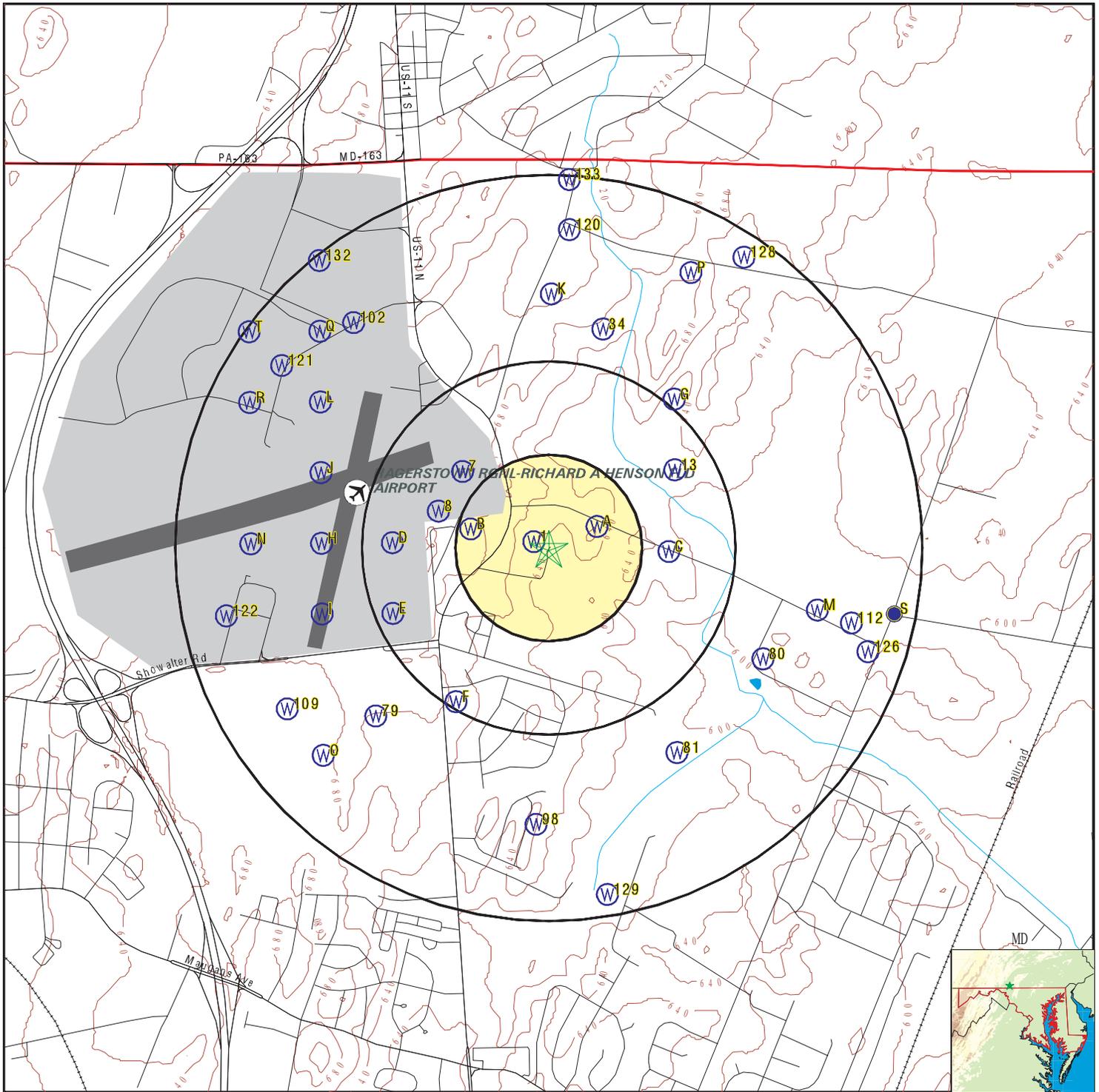
MAP ID	WELL ID	LOCATION FROM TP
I62	MD7000000378046	1/2 - 1 Mile WSW
I63	MD7000000378044	1/2 - 1 Mile WSW
I64	MD7000000384156	1/2 - 1 Mile WSW
I65	MD7000000384189	1/2 - 1 Mile WSW
I66	MD7000000384158	1/2 - 1 Mile WSW
I67	MD7000000384157	1/2 - 1 Mile WSW
I68	MD7000000374099	1/2 - 1 Mile WSW
I69	MD7000000374098	1/2 - 1 Mile WSW
I70	MD7000000374097	1/2 - 1 Mile WSW
I71	MD7000000374100	1/2 - 1 Mile WSW
I72	MD7000000378043	1/2 - 1 Mile WSW
I73	MD7000000374103	1/2 - 1 Mile WSW
I74	MD7000000374101	1/2 - 1 Mile WSW
J75	MD7000000384148	1/2 - 1 Mile WNW
J76	MD7000000384147	1/2 - 1 Mile WNW
J77	MD7000000384150	1/2 - 1 Mile WNW
J78	MD7000000384149	1/2 - 1 Mile WNW
81	MD7000000299710	1/2 - 1 Mile SSE
L86	MD7000000302190	1/2 - 1 Mile WNW
L87	MD7000000303101	1/2 - 1 Mile WNW
L88	MD7000000300791	1/2 - 1 Mile WNW
L89	MD7000000301862	1/2 - 1 Mile WNW
L90	MD7000000397572	1/2 - 1 Mile WNW
L91	MD7000000397576	1/2 - 1 Mile WNW
L92	MD7000000397579	1/2 - 1 Mile WNW
L93	MD7000000397574	1/2 - 1 Mile WNW
L94	MD7000000397575	1/2 - 1 Mile WNW
M95	MD7000000304879	1/2 - 1 Mile ESE
M96	MD7000000306046	1/2 - 1 Mile ESE
M97	MD7000000338485	1/2 - 1 Mile ESE
98	MD7000000185597	1/2 - 1 Mile South
N99	MD7000000378147	1/2 - 1 Mile West
N100	MD7000000379110	1/2 - 1 Mile West
N101	MD7000000384146	1/2 - 1 Mile West
O103	MD7000000301351	1/2 - 1 Mile SW
O104	MD7000000300613	1/2 - 1 Mile SW
O105	MD7000000178360	1/2 - 1 Mile SW
O106	MD7000000303796	1/2 - 1 Mile SW
O107	MD7000000302733	1/2 - 1 Mile SW
O108	MD7000000302658	1/2 - 1 Mile SW
Q113	MD7000000396450	1/2 - 1 Mile NW
Q114	MD7000000396439	1/2 - 1 Mile NW
Q115	MD7000000342119	1/2 - 1 Mile NW
Q116	MD7000000396938	1/2 - 1 Mile NW
Q117	MD7000000398637	1/2 - 1 Mile NW
Q118	MD7000000398635	1/2 - 1 Mile NW
Q119	MD7000000396940	1/2 - 1 Mile NW
R123	MD7000000382642	1/2 - 1 Mile WNW
R124	MD7000000382645	1/2 - 1 Mile WNW
R125	MD7000000384188	1/2 - 1 Mile WNW
128	MD7000000306245	1/2 - 1 Mile NE
129	MD7000000529072	1/2 - 1 Mile South

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
S131	MD7000000297420	1/2 - 1 Mile East
132	MD7000000305124	1/2 - 1 Mile NW
T134	MD7000000396440	1/2 - 1 Mile NW
T135	MD7000000396438	1/2 - 1 Mile NW
T136	MD7000000396900	1/2 - 1 Mile NW
T137	MD7000000396907	1/2 - 1 Mile NW
T138	MD7000000396905	1/2 - 1 Mile NW

PHYSICAL SETTING SOURCE MAP - 05079427.2r



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Oil, gas or related wells



SITE NAME: Brumbaugh-Kendle-Grove Farmstead
 ADDRESS: 14301 Pennsylvania Avenue
 Hagerstown MD 21742
 LAT/LONG: 39.706343 / 77.716865

CLIENT: Froehling & Robertson, Inc.
 CONTACT: Stephen Armstrong
 INQUIRY #: 05079427.2r
 DATE: October 17, 2017 2:58 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	10		
Pump hp:	.75		
Column len:	200		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000304024

A2
ENE
0 - 1/8 Mile
Higher

FED USGS USGS40000452654

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394224077425401		
Monloc name:	WA Ai 57		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7067615
Longitude:	-77.7147156	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	665.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Stonehenge Limestone		
Aquifer type:	Not Reported		
Construction date:	19741210	Welldepth:	280
Welldepth units:	ft	Wellholedepth:	280
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1974-12-10	20	

A3
ENE
1/8 - 1/4 Mile
Higher

FED USGS USGS40000452671

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394227077425201		
Monloc name:	WA Ai 64		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7075948
Longitude:	-77.71416	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	650.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Stonehenge Limestone		
Aquifer type:	Not Reported		
Construction date:	19730111	Welldepth:	120
Welldepth units:	ft	Wellholedepth:	120
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1973-01-11	25	

**B4
WNW
1/8 - 1/4 Mile
Higher**

MD WELLS MD7000000550880

Object id:	550880	County let:	Not Reported
Permit:	WA950910	Mgs id:	Not Reported
B1 seq:	5898	B1 recd:	2014 218
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 552		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	120		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	14235 OAK SPRINGS RD
Road side:	E	Road dista:	270 FT
Tax map:	0024	Block:	Not Reported
Parcel:	0948		
N grid83:	0		
E grid83:	0		
Lat dec de:	39.707043		
Lon dec de:	-77.720556		
Issue date:	2014 218	Special fl:	Not Reported
C1 seq:	25133	C1 recd:	2014 324
Completion:	2014 224		
Total dept:	77		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	28		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing typ:	ST		
Casing dia:	6		
Casing dep:	28		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	28		
Bottom scr:	77		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000550880

**B5
WNW
1/8 - 1/4 Mile
Higher**

MD WELLS MD7000000550879

Object id:	550879	County let:	Not Reported
Permit:	WA950909	Mgs id:	Not Reported
B1 seq:	5899	B1 recd:	2014 218
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 552		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	120		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	14235 OAK SPRINGS RD
Road side:	E	Road dista:	170 FT
Tax map:	0024	Block:	Not Reported
Parcel:	0689		
N grid83:	0		
E grid83:	0		
Lat dec de:	39.707643		
Lon dec de:	-77.720626		
Issue date:	2014 218	Special fl:	Not Reported
C1 seq:	25132	C1 recd:	2014 324
Completion:	2014 224		
Total dept:	83		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	18		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing typ:	ST		
Casing dia:	6		
Casing dep:	18		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	18		
Bottom scr:	83		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000550879

B6
West
1/8 - 1/4 Mile
Higher

MD WELLS MD7000000450304

Object id:	450304	County let:	WA
Permit:	WA942582	Mgs id:	Not Reported
B1 seq:	3563	B1 recd:	2002 111
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	CHARLIE BURCKER
Driller id:	MSD 133		
Est gpm pr:	5		
Use for wa:	F		
Approx dep:	200		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	2
Town direc:	N	Road name:	PA AVE
Road side:	E	Road dista:	1 MI
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	338152		
Lat dec de:	39.706568		
Lon dec de:	-77.721163		
Issue date:	2002 111	Special fl:	Not Reported
C1 seq:	7661	C1 recd:	2002 128
Completion:	2002 110		
Total dept:	185		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	63		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing typ:	ST		
Casing dia:	6		
Casing dep:	63		
Casing hei:	+1	Screen typ:	HO
Top screen:	63		
Bottom scr:	185		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	4		
Pumping ra:	50		
Level befo:	38		
Level duri:	38		
Test pump :	S	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000450304

**7
NW
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000396445

Object id:	396445	County let:	WA
Permit:	WA940456	Mgs id:	Not Reported
B1 seq:	2937	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	N	Road name:	CITICORP DR
Road side:	S	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226999		
E grid83:	338152		
Lat dec de:	39.709313		
Lon dec de:	-77.721191		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8434	C1 recd:	1996 8 26
Completion:	1996 6 4		
Total dept:	35		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	5		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing typ:	ST		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+2	Screen typ:	HO
Top screen:	5		
Bottom scr:	35		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	2		
Level befo:	6		
Level duri:	34		
Test pump :	S	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396445

8

**WNW
1/4 - 1/2 Mile
Higher**

MD WELLS

MD7000000550896

Object id:	550896	County let:	Not Reported
Permit:	WA950908	Mgs id:	Not Reported
B1 seq:	5900	B1 recd:	2014 218
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	KEVIN P WEIGLE
Driller id:	MWD 552		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	120		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	14235 OAK SPRINGS RD
Road side:	N	Road dista:	195 FT
Tax map:	0024	Block:	Not Reported
Parcel:	0689		
N grid83:	0		
E grid83:	0		
Lat dec de:	39.707773		
Lon dec de:	-77.722404		
Issue date:	2014 218	Special fl:	Not Reported
C1 seq:	25131	C1 recd:	2014 324
Completion:	2014 221		
Total dept:	352		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	1		
Grout bott:	18		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing typ:	ST		
Casing dia:	6		
Casing dep:	18		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	18		
Bottom scr:	352		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000550896

C9
East
1/4 - 1/2 Mile
Lower

FED USGS

USGS40000452638

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394222077424004		
Monloc name:	WA Ai 92		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7062059
Longitude:	-77.7108266	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	635.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Stonehenge Limestone		
Aquifer type:	Not Reported		
Construction date:	19810406	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	575
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

C10
East
1/4 - 1/2 Mile
Lower

FED USGS USGS40000452635

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394222077424001		
Monloc name:	WA Ai 58		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7062059
Longitude:	-77.7108266	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	635.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Stonehenge Limestone		
Aquifer type:	Not Reported		
Construction date:	19810826	Welldepth:	300
Welldepth units:	ft	Wellholedepth:	300
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

	Feet below	Feet to
Date	Surface	Sealevel

1981-08-26	50	

C11
East
1/4 - 1/2 Mile
Lower

FED USGS USGS40000452636

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394222077424002		
Monloc name:	WA Ai 79		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7062059
Longitude:	-77.7108266	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	635.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Stonehenge Limestone		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	225
Construction date:	19780201	Wellholeddepth:	225
Welldepth units:	ft		
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1978-02-01	45	

C12
East
1/4 - 1/2 Mile
Lower

FED USGS USGS40000452637

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394222077424003		
Monloc name:	WA Ai 80		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7062059
Longitude:	-77.7108266	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	635.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Stonehenge Limestone		
Aquifer type:	Not Reported		
Construction date:	19810406	Welldepth:	575
Welldepth units:	ft	Wellholeddepth:	575
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 0

13
ENE
1/4 - 1/2 Mile
Lower

MD WELLS MD7000000304796

Object id:	304796	County let:	WA
Permit:	WA810826	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1984 813
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	SHAFF, JOHN V JR.
Driller id:	MWD0188		
Est gpm pr:	15		
Use for wa:	F		
Approx dep:	300		
Drill meth:	AIR-PER	Replacemen:	S

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	STATE LINE	Town dista:	.7 MI
Town direc:	SE	Road name:	EDEN RD
Road side:	N	Road dista:	.25 MI
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226999		
E grid83:	339066		
Lat dec de:	39.709378		
Lon dec de:	-77.710529		
Issue date:	1984 816	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	198410 3
Completion:	1984 910		
Total dept:	425		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	425		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	10		
Level befo:	16		
Level duri:	208		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000304796

**D14
West
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000378144

Object id:	378144	County let:	WA
Permit:	WA920206	Mgs id:	Not Reported
B1 seq:	3904	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	2600FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337847		
Lat dec de:	39.706546		
Lon dec de:	-77.724717		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000378144

**D15
West
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000378145

Object id:	378145	County let:	WA
Permit:	WA920207	Mgs id:	Not Reported
B1 seq:	3903	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	2000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337847		
Lat dec de:	39.706546		
Lon dec de:	-77.724717		
Issue date:	1993 5 18	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000378145

**D16
West
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000396446

Object id:	396446	County let:	WA
Permit:	WA940457	Mgs id:	Not Reported
B1 seq:	2936	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	100		
Drill meth:	BORED	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	CITICORP DR
Road side:	S	Road dista:	25 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337847		
Lat dec de:	39.706546		
Lon dec de:	-77.724717		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8435	C1 recd:	1996 826
Completion:	1996 6 4		
Total dept:	66		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	51		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	51		
Casing hei:	+2	Screen typ:	HO
Top screen:	51		
Bottom scr:	66		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	1		
Level befo:	15		
Level duri:	56		
Test pump :	S	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396446

**E17
WSW
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000304791

Object id:	304791	County let:	WA
Permit:	WA810821	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1984 815
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	ADAMS, JAMES A.
Driller id:	MWD0369		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	24	Lot:	985
Nearest to:	HAGERSTOWN	Town dista:	4.3 MI
Town direc:	N	Road name:	SHOWALTER
Road side:	N	Road dista:	1000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337847		
Lat dec de:	39.703801		
Lon dec de:	-77.724689		
Issue date:	1984 814	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1984 914
Completion:	1984 821		
Total dept:	30		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	20		
Casing hei:	+02	Screen typ:	PL
Top screen:	20		
Bottom scr:	30		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	13		
Level duri:	13		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	A	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000304791

**E18
WSW
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000304790

Object id:	304790	County let:	WA
Permit:	WA810820	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1984 814
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	ADAMS, JAMES A.
Driller id:	MWD0369		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	24	Lot:	985
Nearest to:	HAGERSTOWN	Town dista:	4.3 MI
Town direc:	N	Road name:	SHOWALTER
Road side:	N	Road dista:	1000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337847		
Lat dec de:	39.703801		
Lon dec de:	-77.724689		
Issue date:	1984 814	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1984 914
Completion:	1984 821		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	10		
Casing hei:	+02	Screen typ:	PL
Top screen:	10		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	13		
Level duri:	13		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	A	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000304790

**E19
WSW
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000304789

Object id:	304789	County let:	WA
Permit:	WA810819	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1984 814
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	ADAMS, JAMES A.
Driller id:	MWD0369		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	24	Lot:	985
Nearest to:	HAGERSTOWN	Town dista:	4.3 MI
Town direc:	N	Road name:	SHOWALTER
Road side:	N	Road dista:	1000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337847		
Lat dec de:	39.703801		
Lon dec de:	-77.724689		
Issue date:	1984 814	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1984 914
Completion:	1984 828		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	10		
Casing hei:	+02	Screen typ:	PL
Top screen:	10		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	11		
Level duri:	11		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	A	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000304789

**E20
WSW
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000305264

Object id:	305264	County let:	WA
Permit:	WA811294	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1986 312
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	100		
Drill meth:	AIR-PER	Replacemen:	Y

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	GATEWAY IND. PARK
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	2.5 MI
Town direc:	N	Road name:	SHOWALTER
Road side:	N	Road dista:	650 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337847		
Lat dec de:	39.703801		
Lon dec de:	-77.724689		
Issue date:	1986 312	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1986 624
Completion:	1986 314		
Total dept:	125		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	40		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	40		
Casing hei:	+01	Screen typ:	HO
Top screen:	41		
Bottom scr:	50		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	15		
Level duri:	50		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	X	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000305264

**E21
WSW
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000304793

Object id:	304793	County let:	WA
Permit:	WA810823	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1984 815
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	ADAMS, JAMES A.
Driller id:	MWD0369		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	24	Lot:	985
Nearest to:	HAGERSTOWN	Town dista:	4.3 MI
Town direc:	N	Road name:	SHOWALTER
Road side:	N	Road dista:	1000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337847		
Lat dec de:	39.703801		
Lon dec de:	-77.724689		
Issue date:	1984 814	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1984 914
Completion:	1984 824		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	5		
Casing typ:	PL		
Casing dia:	2		
Casing dep:	10		
Casing hei:	+02	Screen typ:	PL
Top screen:	10		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	2		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	13		
Level duri:	13		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	A	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000304793

**E22
WSW
1/4 - 1/2 Mile
Higher**

MD WELLS MD7000000304792

Object id:	304792	County let:	WA
Permit:	WA810822	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1984 814
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	ADAMS, JAMES A.
Driller id:	MWD0369		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	24	Lot:	985
Nearest to:	HAGERSTOWN	Town dista:	4.3 MI
Town direc:	N	Road name:	SHOWALTER
Road side:	N	Road dista:	1000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337847		
Lat dec de:	39.703801		
Lon dec de:	-77.724689		
Issue date:	1984 814	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 327
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	+00	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000304792

**F23
SSW
1/4 - 1/2 Mile
Higher**

FED USGS USGS40000452447

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394202077431801		
Monloc name:	WA Ai 32		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7006505
Longitude:	-77.7213824	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	680.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	195602	Welldepth:	230
Welldepth units:	ft	Wellholedepth:	230
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1956-02	60	

F24
SSW
1/2 - 1 Mile
Higher

FED USGS USGS40000452420

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394200077431901		
Monloc name:	WA Ai 31		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7000949
Longitude:	-77.7216601	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	680.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	220
Welldepth units:	ft	Wellholedepth:	220
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1959-06-17	50	

G25
NE
1/2 - 1 Mile
Higher

MD WELLS MD7000000179090

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Object id:	179090	County let:	FR
Permit:	FR737174	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1979 827
City:	UPPER MARLBORO	State:	MD
Zip:	Not Reported	Driller na:	HARLEY, ROY
Driller id:	MWD0293		
Est gpm pr:	3		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	SUNDAY MANOR
Section:	3	Lot:	24
Nearest to:	FREDERICK	Town dista:	8 MI
Town direc:	N	Road name:	SUNDAYS LA
Road side:	N	Road dista:	100 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	1979 514	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1979 924
Completion:	1979 9 7		
Total dept:	165		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	21		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21	Screen typ:	HO
Casing hei:	+01		
Top screen:	21		
Bottom scr:	165		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	20		
Level befo:	20		
Level duri:	60		
Test pump :	R	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000179090

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

G26
NE
1/2 - 1 Mile
Higher

MD WELLS MD7000000300354

Object id:	300354	County let:	WA
Permit:	WA720188	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1972 2 1
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	F		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	S
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5 MI
Town direc:	N	Road name:	PARADISE CH RD
Road side:	Not Reported	Road dista:	300 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	1972 131	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1972 417
Completion:	1972 313		
Total dept:	75		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	24		
Casing hei:	+02	Screen typ:	HO
Top screen:	24		
Bottom scr:	75		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	10		
Level befo:	30		
Level duri:	50		
Test pump :	S	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000300354
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**G27
NE
1/2 - 1 Mile
Higher**

MD WELLS MD7000000172313

Object id:	172313	County let:	FR
Permit:	FR730398	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	197211 9
City:	FREDERICK	State:	MD
Zip:	Not Reported	Driller na:	HARRIS, JULIAN V
Driller id:	MWD0100		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	125		
Drill meth:	CABLE	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	CATOCTIN MANOR ESTS
Section:	Not Reported	Lot:	11
Nearest to:	FREDERICK	Town dista:	5 MI
Town direc:	N	Road name:	PEKKSILL DR
Road side:	S	Road dista:	30 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	1972 721	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1973 221
Completion:	19721124		
Total dept:	170		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	38		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	36		
Casing hei:	+02	Screen typ:	HO
Top screen:	36		
Bottom scr:	170		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	6		
Level befo:	40		
Level duri:	150		
Test pump :	O	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000172313
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**G28
NE
1/2 - 1 Mile
Higher**

MD WELLS MD7000000177496

Object id:	177496	County let:	FR
Permit:	FR735582	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19771219
City:	FREDERICK	State:	MD
Zip:	Not Reported	Driller na:	HARLEY, ROY F
Driller id:	MWD0293		
Est gpm pr:	3		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	TAURUS HILL
Section:	1	Lot:	1
Nearest to:	FREDERICK	Town dista:	8 MI
Town direc:	N	Road name:	SUNDAYS LANE
Road side:	W	Road dista:	450 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	19771121	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1978 2 8
Completion:	1978 129		
Total dept:	125		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	20		
Casing hei:	+01	Screen typ:	HO
Top screen:	20		
Bottom scr:	125		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	5		
Level befo:	30		
Level duri:	85		
Test pump :	R	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000177496
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

G29
NE
1/2 - 1 Mile
Higher

MD WELLS MD7000000301566

Object id:	301566	County let:	WA
Permit:	WA731095	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1975 6 4
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	6 MI
Town direc:	N	Road name:	REID
Road side:	S	Road dista:	75 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	1975 6 3	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1975 725
Completion:	1975 617		
Total dept:	75		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	23		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	23		
Casing hei:	+01	Screen typ:	HO
Top screen:	23		
Bottom scr:	75		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	40		
Level befo:	15		
Level duri:	25		
Test pump :	0	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000301566
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**G30
NE
1/2 - 1 Mile
Higher**

MD WELLS MD7000000302972

Object id:	302972	County let:	WA
Permit:	WA732501	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1978 828
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5 MI
Town direc:	N	Road name:	MARSH PIKE
Road side:	W	Road dista:	30 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	1978 825	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	197811 8
Completion:	1978 927		
Total dept:	125		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	62		
Bottom scr:	125		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	100		
Level befo:	25		
Level duri:	100		
Test pump :	A	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000302972

**G31
NE
1/2 - 1 Mile
Higher**

MD WELLS MD7000000303039

Object id:	303039	County let:	WA
Permit:	WA732569	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	197810 4
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	F		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4 MI
Town direc:	N	Road name:	PARADISE CHURCH RD
Road side:	E	Road dista:	250 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	1978 930	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19781220
Completion:	19781030		
Total dept:	175		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	175		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	20		
Level befo:	30		
Level duri:	175		
Test pump :	A	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000303039
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**G32
NE
1/2 - 1 Mile
Higher**

MD WELLS MD7000000302188

Object id:	302188	County let:	WA
Permit:	WA731716	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19761227
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	SHAFF, JOHN V JR
Driller id:	MWD0188		
Est gpm pr:	8		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	STATE LINE	Town dista:	3 MI
Town direc:	SE	Road name:	REID RD
Road side:	S	Road dista:	100 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	19761220	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1977 518
Completion:	1977 5 8		
Total dept:	50		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	50		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	22		
Level befo:	12		
Level duri:	28		
Test pump :	A	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000302188

**G33
NE
1/2 - 1 Mile
Higher**

MD WELLS MD7000000302706

Object id:	302706	County let:	WA
Permit:	WA732235	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1978 3 7
City:	SMITHSBURG	State:	MD
Zip:	Not Reported	Driller na:	ARDINGER, ROBT K 2
Driller id:	MWD0191		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	175		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	J D EARL MARTIN
Section:	Not Reported	Lot:	8
Nearest to:	HAGERSTOWN	Town dista:	4 MI
Town direc:	N	Road name:	E SIDE MARSH PIKE
Road side:	E	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	339066		
Lat dec de:	39.712123		
Lon dec de:	-77.710557		
Issue date:	1978 3 1	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1978 5 3
Completion:	1978 414		
Total dept:	240		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	21		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	240		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	6		
Level befo:	20		
Level duri:	240		
Test pump :	A	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000302706
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

34
NNE
1/2 - 1 Mile
Higher

MD WELLS MD7000000303984

Object id:	303984	County let:	WA
Permit:	WA810014	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1981 7 8
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	RUSSELL W PRIEST
Section:	Not Reported	Lot:	B
Nearest to:	HAGERSTOWN	Town dista:	5 MI
Town direc:	N	Road name:	REID
Road side:	S	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	338761		
Lat dec de:	39.714846		
Lon dec de:	-77.714139		
Issue date:	1981 7 6	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19811221
Completion:	1981 825		
Total dept:	300		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	20		
Casing hei:	+01	Screen typ:	HO
Top screen:	20		
Bottom scr:	300		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	1		
Level befo:	30		
Level duri:	300		
Test pump :	A	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000303984
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**H35
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396449

Object id:	396449	County let:	WA
Permit:	WA940455	Mgs id:	Not Reported
B1 seq:	2934	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	100		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8433	C1 recd:	1996 826
Completion:	1996 613		
Total dept:	56		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	41		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	41		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	41		
Bottom scr:	56		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	10		
Level befo:	15		
Level duri:	15		
Test pump :	S	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000396449
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**H36
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396451

Object id:	396451	County let:	WA
Permit:	WA940454	Mgs id:	Not Reported
B1 seq:	2935	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	25 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8442	C1 recd:	1996 826
Completion:	1996 620		
Total dept:	25		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	11		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	11		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	11		
Bottom scr:	25		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	S	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396451

**H37
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000379111

Object id:	379111	County let:	WA
Permit:	WA920197	Mgs id:	Not Reported
B1 seq:	3912	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	400		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	2350FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000379111

**H38
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384151

Object id:	384151	County let:	WA
Permit:	WA930047	Mgs id:	Not Reported
B1 seq:	4759	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	900 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384151

**H39
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000378143

Object id:	378143	County let:	WA
Permit:	WA920205	Mgs id:	Not Reported
B1 seq:	3905	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	2200FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000378143

**H40
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000076992

Object id:	76992	County let:	WA
Permit:	WA920199	Mgs id:	Not Reported
B1 seq:	3910	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	800 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000076992

**H41
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000378045

Object id:	378045	County let:	WA
Permit:	WA920198	Mgs id:	Not Reported
B1 seq:	3911	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	400		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	1400FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000378045

**H42
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396447

Object id:	396447	County let:	WA
Permit:	WA940458	Mgs id:	Not Reported
B1 seq:	2933	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	25 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8443	C1 recd:	1996 826
Completion:	1996 610		
Total dept:	55		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	10		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	10		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	10		
Bottom scr:	55		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	2		
Level befo:	17		
Level duri:	54		
Test pump :	S	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000396447
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**H43
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396448

Object id:	396448	County let:	WA
Permit:	WA940459	Mgs id:	Not Reported
B1 seq:	2932	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	100		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8436	C1 recd:	1996 826
Completion:	1996 6 2		
Total dept:	205		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	68		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	68		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	68		
Bottom scr:	205		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	4		
Pumping ra:	0		
Level befo:	17		
Level duri:	203		
Test pump :	S	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396448

**H44
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384154

Object id:	384154	County let:	WA
Permit:	WA930050	Mgs id:	Not Reported
B1 seq:	4754	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	830 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384154

**H45
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384152

Object id:	384152	County let:	WA
Permit:	WA930048	Mgs id:	Not Reported
B1 seq:	4758	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	845 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384152

**H46
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384153

Object id:	384153	County let:	WA
Permit:	WA930049	Mgs id:	Not Reported
B1 seq:	4755	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	840 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337542		
Lat dec de:	39.706525		
Lon dec de:	-77.728271		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384153

**I47
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374092

Object id:	374092	County let:	WA
Permit:	WA920386	Mgs id:	Not Reported
B1 seq:	8266	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	1500FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0992	C1 recd:	1994 921
Completion:	19931022		
Total dept:	36		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	9		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	9		
Casing hei:	+02	Screen typ:	HO
Top screen:	9		
Bottom scr:	36		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374092
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

I48
WSW
1/2 - 1 Mile
Higher

MD WELLS MD7000000374091

Object id:	374091	County let:	WA
Permit:	WA920387	Mgs id:	Not Reported
B1 seq:	8271	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0993	C1 recd:	1994 921
Completion:	19931021		
Total dept:	50		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	12		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	12		
Casing hei:	+02	Screen typ:	HO
Top screen:	12		
Bottom scr:	50		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374091
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I49
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000350712

Object id:	350712	County let:	WA
Permit:	WA920200	Mgs id:	Not Reported
B1 seq:	3909	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	400		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	Not Reported	Road dista:	800 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000350712

**150
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374093

Object id:	374093	County let:	WA
Permit:	WA920388	Mgs id:	Not Reported
B1 seq:	8272	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	300		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	800 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0994	C1 recd:	1994 919
Completion:	1994 818		
Total dept:	300		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	266		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	270		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	270		
Bottom scr:	300		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374093
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I51
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374096

Object id:	374096	County let:	WA
Permit:	WA920384	Mgs id:	Not Reported
B1 seq:	8264	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	300		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	100 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0990	C1 recd:	1994 919
Completion:	1994 818		
Total dept:	286		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	262		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	266		
Casing hei:	+02	Screen typ:	PL
Top screen:	266		
Bottom scr:	286		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374096
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I52
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374095

Object id:	374095	County let:	WA
Permit:	WA920390	Mgs id:	Not Reported
B1 seq:	8273	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	1500FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0996	C1 recd:	1994 921
Completion:	19931028		
Total dept:	65		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	8		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	8		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	8		
Bottom scr:	65		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	0	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374095
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I53
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374094

Object id:	374094	County let:	WA
Permit:	WA920389	Mgs id:	Not Reported
B1 seq:	8274	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	1400FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0995	C1 recd:	1994 921
Completion:	19931020		
Total dept:	50		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	11		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	11		
Casing hei:	+02	Screen typ:	HO
Top screen:	11		
Bottom scr:	50		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374094
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I54
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000344024

Object id:	344024	County let:	WA
Permit:	WA880311	Mgs id:	Not Reported
B1 seq:	3052	B1 recd:	198910 4
City:	HAGARSTOWN	State:	MD
Zip:	21740	Driller na:	MICHAEL W. HUBER
Driller id:	MWD0336		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	75		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	0
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	2000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	198910 5	Special fl:	N
C1 seq:	5150	C1 recd:	1990 424
Completion:	1987 812		
Total dept:	80		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	67		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	70		
Casing hei:	+2	Screen typ:	PL
Top screen:	70		
Bottom scr:	80		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000344024
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I55
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000344023

Object id:	344023	County let:	WA
Permit:	WA880310	Mgs id:	Not Reported
B1 seq:	2250	B1 recd:	198910 4
City:	HAGARSTOWN	State:	MD
Zip:	21740	Driller na:	MICHAEL W. HUBER
Driller id:	MWD0336		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	30		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	0
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	565 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	198910 5	Special fl:	N
C1 seq:	5149	C1 recd:	1990 424
Completion:	1987 810		
Total dept:	33		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	23		
Casing hei:	+2	Screen typ:	PL
Top screen:	23		
Bottom scr:	33		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	A	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000344023

**I56
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000344022

Object id:	344022	County let:	WA
Permit:	WA880309	Mgs id:	Not Reported
B1 seq:	3056	B1 recd:	198910 4
City:	HAGARSTOWN	State:	MD
Zip:	21740	Driller na:	MICHAEL W. HUBER
Driller id:	MWD0336		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	25		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	0
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	3 MI
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	198910 5	Special fl:	N
C1 seq:	5148	C1 recd:	1990 424
Completion:	1987 8 7		
Total dept:	25		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+2	Screen typ:	PL
Top screen:	5		
Bottom scr:	25		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000344022

**I57
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000344025

Object id:	344025	County let:	WA
Permit:	WA880312	Mgs id:	Not Reported
B1 seq:	3059	B1 recd:	198910 4
City:	HAGARSTOWN	State:	MD
Zip:	21740	Driller na:	MICHAEL W. HUBER
Driller id:	MWD0336		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	35		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	0
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	450 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	198910 5	Special fl:	N
C1 seq:	5151	C1 recd:	1990 424
Completion:	1987 813		
Total dept:	24		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	10		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	14		
Casing hei:	+2	Screen typ:	PL
Top screen:	14		
Bottom scr:	24		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000344025

**I58
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000344028

Object id:	344028	County let:	WA
Permit:	WA880315	Mgs id:	Not Reported
B1 seq:	3055	B1 recd:	198910 4
City:	HAGARSTOWN	State:	MD
Zip:	21740	Driller na:	MICHAEL W. HUBER
Driller id:	MWD0336		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	30		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	0
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	3000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	198910 5	Special fl:	N
C1 seq:	5154	C1 recd:	1990 426
Completion:	198711 9		
Total dept:	22		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	9		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	9		
Casing hei:	+2	Screen typ:	HO
Top screen:	9		
Bottom scr:	22		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000344028
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I59
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000344027

Object id:	344027	County let:	WA
Permit:	WA880314	Mgs id:	Not Reported
B1 seq:	3057	B1 recd:	198910 4
City:	HAGARSTOWN	State:	MD
Zip:	21740	Driller na:	MICHAEL W. HUBER
Driller id:	MWD0336		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	40		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	0
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	1000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	198910 5	Special fl:	N
C1 seq:	5153	C1 recd:	1990 426
Completion:	198711 6		
Total dept:	46		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	4		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	4		
Casing hei:	+2	Screen typ:	HO
Top screen:	4		
Bottom scr:	46		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000344027
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**160
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000344026

Object id:	344026	County let:	WA
Permit:	WA880313	Mgs id:	Not Reported
B1 seq:	3053	B1 recd:	198910 4
City:	HAGARSTOWN	State:	MD
Zip:	21740	Driller na:	MICHAEL W. HUBER
Driller id:	MWD0336		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	35		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	0
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	720 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	198910 5	Special fl:	N
C1 seq:	5152	C1 recd:	1996 424
Completion:	1987 811		
Total dept:	35		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	23		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	25		
Casing hei:	+2	Screen typ:	PL
Top screen:	25		
Bottom scr:	35		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000344026

**I61
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384155

Object id:	384155	County let:	WA
Permit:	WA930051	Mgs id:	Not Reported
B1 seq:	4756	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	815 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384155

**162
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000378046

Object id:	378046	County let:	WA
Permit:	WA920203	Mgs id:	Not Reported
B1 seq:	0882	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	1700FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000378046

**I63
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000378044

Object id:	378044	County let:	WA
Permit:	WA920202	Mgs id:	Not Reported
B1 seq:	3907	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	1900FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000378044

**I64
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384156

Object id:	384156	County let:	WA
Permit:	WA930052	Mgs id:	Not Reported
B1 seq:	4753	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	820 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384156

**I65
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384189

Object id:	384189	County let:	WA
Permit:	WA930053	Mgs id:	Not Reported
B1 seq:	4752	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	810 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384189

**I66
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384158

Object id:	384158	County let:	WA
Permit:	WA930055	Mgs id:	Not Reported
B1 seq:	4757	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER
Road side:	N	Road dista:	780 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384158

**I67
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384157

Object id:	384157	County let:	WA
Permit:	WA930054	Mgs id:	Not Reported
B1 seq:	4751	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	SHOWALTER RD
Road side:	N	Road dista:	800 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000384157
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**168
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374099

Object id:	374099	County let:	WA
Permit:	WA920382	Mgs id:	Not Reported
B1 seq:	8254	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MGD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	300		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	300 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0988	C1 recd:	1994 919
Completion:	1994 616		
Total dept:	400		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	366		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	370		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	370		
Bottom scr:	400		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374099
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**169
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374098

Object id:	374098	County let:	WA
Permit:	WA920381	Mgs id:	Not Reported
B1 seq:	8255	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MGD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	300		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	1300FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0987	C1 recd:	1994 919
Completion:	1994 422		
Total dept:	195		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	181		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	185		
Casing hei:	+02	Screen typ:	PL
Top screen:	185		
Bottom scr:	195		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000374098

**I70
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374097

Object id:	374097	County let:	WA
Permit:	WA920385	Mgs id:	Not Reported
B1 seq:	8265	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	900 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0991	C1 recd:	1994 921
Completion:	19931021		
Total dept:	35		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	15		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	15		
Casing hei:	+02	Screen typ:	HO
Top screen:	15		
Bottom scr:	35		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374097
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I71
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374100

Object id:	374100	County let:	WA
Permit:	WA920383	Mgs id:	Not Reported
B1 seq:	8263	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	100 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0989	C1 recd:	1994 921
Completion:	19931026		
Total dept:	50		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	9		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	9		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	9		
Bottom scr:	50		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	0	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374100
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I72
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000378043

Object id:	378043	County let:	WA
Permit:	WA920201	Mgs id:	Not Reported
B1 seq:	3908	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	0		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	1100FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000378043

**I73
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374103

Object id:	374103	County let:	WA
Permit:	WA920380	Mgs id:	Not Reported
B1 seq:	8253	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MGD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	800 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	4088	C1 recd:	1994 921
Completion:	19931023		
Total dept:	50		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	33		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	33		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	33		
Bottom scr:	50		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	O	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000374103
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**I74
WSW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000374101

Object id:	374101	County let:	WA
Permit:	WA920379	Mgs id:	Not Reported
B1 seq:	8250	B1 recd:	199310 8
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL W HUBER
Driller id:	MWD 046		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	300		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER RD
Road side:	N	Road dista:	1600FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	337542		
Lat dec de:	39.70378		
Lon dec de:	-77.728242		
Issue date:	199310 8	Special fl:	Not Reported
C1 seq:	0985	C1 recd:	1994 919
Completion:	1994 422		
Total dept:	268		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	254		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	258		
Casing hei:	+02	Screen typ:	PL
Top screen:	258		
Bottom scr:	268		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000374101

**J75
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384148

Object id:	384148	County let:	WA
Permit:	WA930043	Mgs id:	Not Reported
B1 seq:	4763	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	150		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4.5
Town direc:	N	Road name:	HENSEN BLVD
Road side:	N	Road dista:	300 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226999		
E grid83:	337542		
Lat dec de:	39.70927		
Lon dec de:	-77.728299		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384148

**J76
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384147

Object id:	384147	County let:	WA
Permit:	WA930042	Mgs id:	Not Reported
B1 seq:	4765	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4.5
Town direc:	N	Road name:	HENSEN BLVD
Road side:	N	Road dista:	250 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226999		
E grid83:	337542		
Lat dec de:	39.70927		
Lon dec de:	-77.728299		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384147

**J77
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384150

Object id:	384150	County let:	WA
Permit:	WA930045	Mgs id:	Not Reported
B1 seq:	4766	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4.5
Town direc:	N	Road name:	HENSEN BLVD
Road side:	N	Road dista:	450 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226999		
E grid83:	337542		
Lat dec de:	39.70927		
Lon dec de:	-77.728299		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384150

**J78
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384149

Object id:	384149	County let:	WA
Permit:	WA930044	Mgs id:	Not Reported
B1 seq:	4762	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4.5
Town direc:	N	Road name:	HENSEN BLVD
Road side:	N	Road dista:	300 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226999		
E grid83:	337542		
Lat dec de:	39.70927		
Lon dec de:	-77.728299		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000384149
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

79
SW
1/2 - 1 Mile
Higher

FED USGS USGS40000452407

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394159077433301		
Monloc name:	WA Ai 13		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.6998171
Longitude:	-77.7255491	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	685.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	19420000	Welldepth:	38.4
Welldepth units:	ft	Wellholedepth:	38.4
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-10-10	23.80	

80
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40000452501

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394207077422301		
Monloc name:	WA Ai 43		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7020394
Longitude:	-77.7061043	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	605.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Conococheague Limestone		
Aquifer type:	Not Reported		
Construction date:	19691210	Welldepth:	60
Welldepth units:	ft	Wellholedepth:	60
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1969-12-10	25	

81
SSE
1/2 - 1 Mile
Lower

MD WELLS MD7000000299710

Object id:	299710	County let:	WA
Permit:	WA700184	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	196912 1
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	TOMS, RAY R JR
Driller id:	MWD0999		
Est gpm pr:	10		
Use for wa:	F		
Approx dep:	100		
Drill meth:	ROTARY	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	PARAMOUNT	Town dista:	1 MI
Town direc:	NW	Road name:	PARADISE CHURCH RD
Road side:	W	Road dista:	1 MI
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225780		
E grid83:	339066		
Lat dec de:	39.698398		
Lon dec de:	-77.710419		
Issue date:	19691126	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1970 114
Completion:	19691210		
Total dept:	60		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	20		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing typ:	ST		
Casing dia:	5		
Casing dep:	20		
Casing hei:	+01	Screen typ:	HO
Top screen:	20		
Bottom scr:	60		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	50		
Level befo:	25		
Level duri:	0		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000299710

**K82
North
1/2 - 1 Mile
Higher**

FED USGS USGS40000452961

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394258077430201		
Monloc name:	WA Ai 1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7162057
Longitude:	-77.7169379	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	705.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	19460814	Welldepth:	35
Welldepth units:	ft	Wellholedepth:	35
Wellholedepth units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1951-03-07	20.00	

K83
North
1/2 - 1 Mile
Higher

FED USGS USGS40000452958

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394258077430101		
Monloc name:	WA Ai 2		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7162057
Longitude:	-77.7166601	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	700.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	1946	Welldepth:	185
Welldepth units:	ft	Wellholedepth:	185
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

K84
North
1/2 - 1 Mile
Higher

FED USGS USGS40000452959

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394258077430102		
Monloc name:	WA Ai 3		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7162057
Longitude:	-77.7166601	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	700.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	349
Construction date:	1933	Wellholeddepth:	349
Welldepth units:	ft		
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 0

K85
North
1/2 - 1 Mile
Higher

FED USGS USGS40000452960

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394258077430103		
Monloc name:	WA Ai 51		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7162057
Longitude:	-77.7166601	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	700.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	185
Welldepth units:	ft	Wellholeddepth:	185
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1968-02-06	16.80	

L86
WNW
1/2 - 1 Mile
Higher

MD WELLS MD7000000302190

Object id:	302190	County let:	WA
Permit:	WA731718	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19761227
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	6 MI
Town direc:	N	Road name:	OAKS
Road side:	W	Road dista:	150 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	19761220	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1977 3 4
Completion:	1977 210		
Total dept:	305		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	25		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	25		
Casing hei:	+01	Screen typ:	HO
Top screen:	25		
Bottom scr:	305		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	3		
Level befo:	25		
Level duri:	300		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000302190

**L87
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000303101

Object id:	303101	County let:	WA
Permit:	WA732631	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19781127
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	I		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	WA1978G031	Subdivisio:	RISSER
Section:	Not Reported	Lot:	5
Nearest to:	HAGERSTOWN	Town dista:	9 MI
Town direc:	N	Road name:	MASON DIXON LA
Road side:	S	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	19781013	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19781220
Completion:	197812 8		
Total dept:	200		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	21		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	200		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	4		
Level befo:	20		
Level duri:	200		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000303101

**L88
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000300791

Object id:	300791	County let:	WA
Permit:	WA730319	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1973 531
City:	CLEAR SPRING	State:	MD
Zip:	Not Reported	Driller na:	LAMBERSON WELL CO
Driller id:	MWD0103		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	250		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	CLEAR SPRING	Town dista:	5 MI
Town direc:	N	Road name:	MERCERSBURG RD
Road side:	E	Road dista:	100 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	1973 530	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1973 9 4
Completion:	1973 720		
Total dept:	105		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	90		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	90		
Casing hei:	+01	Screen typ:	HO
Top screen:	90		
Bottom scr:	105		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	10		
Level befo:	50		
Level duri:	100		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000300791

**L89
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000301862

Object id:	301862	County let:	WA
Permit:	WA731391	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1976 324
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5 MI
Town direc:	N	Road name:	REID RD
Road side:	W	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	1976 323	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1976 427
Completion:	1976 4 9		
Total dept:	100		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	100		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	25		
Level befo:	40		
Level duri:	50		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000301862

**L90
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000397572

Object id:	397572	County let:	WA
Permit:	WA941547	Mgs id:	Not Reported
B1 seq:	9914	B1 recd:	1999 419
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	CHARLES EICHELBERGER
Driller id:	MWD 332		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	100		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	WASHINGTON CO REGION
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	1
Town direc:	N	Road name:	AIRPORT ACCESS RD
Road side:	W	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	1999 419	Special fl:	Not Reported
C1 seq:	3024	C1 recd:	199910 4
Completion:	1999 423		
Total dept:	201		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	6		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	6		
Casing hei:	+2	Screen typ:	HO
Top screen:	6		
Bottom scr:	201		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000397572

**L91
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000397576

Object id:	397576	County let:	WA
Permit:	WA941544	Mgs id:	Not Reported
B1 seq:	9911	B1 recd:	1999 419
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	CHARLES EICHELBERGER
Driller id:	MWD 332		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	WASHINGTON CO REGION
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	1
Town direc:	N	Road name:	AIRPORT ACCESS RD
Road side:	W	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	1999 419	Special fl:	Not Reported
C1 seq:	3021	C1 recd:	199910 4
Completion:	1999 422		
Total dept:	98		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	10		
Casing typ:	ST		
Casing dia:	8		
Casing dep:	10		
Casing hei:	+2	Screen typ:	HO
Top screen:	10		
Bottom scr:	98		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000397576

**L92
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000397579

Object id:	397579	County let:	WA
Permit:	WA941543	Mgs id:	Not Reported
B1 seq:	9910	B1 recd:	1999 419
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	CHARLES EICHELBERG
Driller id:	MWD 332		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	WASHINGTON CO REGION
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	1
Town direc:	N	Road name:	AIRPORT ACCESS RD
Road side:	W	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	1999 419	Special fl:	Not Reported
C1 seq:	3020	C1 recd:	199910 4
Completion:	1999 520		
Total dept:	100		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	12		
Casing typ:	ST		
Casing dia:	12		
Casing dep:	12		
Casing hei:	+2	Screen typ:	HO
Top screen:	12		
Bottom scr:	100		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000397579

**L93
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000397574

Object id:	397574	County let:	WA
Permit:	WA941545	Mgs id:	Not Reported
B1 seq:	9912	B1 recd:	1999 419
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	CHARLES EICHELBERGER
Driller id:	MWD 332		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	WASHINGTON CO REGION
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	1
Town direc:	N	Road name:	AIRPORT ACCESS RD
Road side:	W	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	1999 419	Special fl:	Not Reported
C1 seq:	3022	C1 recd:	199910 4
Completion:	1999 425		
Total dept:	20		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	5		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+2	Screen typ:	HO
Top screen:	5		
Bottom scr:	20		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000397574

**L94
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000397575

Object id:	397575	County let:	WA
Permit:	WA941546	Mgs id:	Not Reported
B1 seq:	9913	B1 recd:	1999 419
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	CHARLES EICHELBERGER
Driller id:	MWD 332		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	WASHINGTON CO REGION
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	1
Town direc:	N	Road name:	AIRPORT ACCESS RD
Road side:	W	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337542		
Lat dec de:	39.712014		
Lon dec de:	-77.728328		
Issue date:	1999 419	Special fl:	Not Reported
C1 seq:	3023	C1 recd:	199910 4
Completion:	1999 5 7		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	6		
Casing typ:	ST		
Casing dia:	8		
Casing dep:	6		
Casing hei:	+2	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000397575

**M95
ESE
1/2 - 1 Mile
Lower**

MD WELLS MD7000000304879

Object id:	304879	County let:	WA
Permit:	WA810909	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	19841116
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	2.4 MI
Town direc:	NE	Road name:	EDEN RD
Road side:	N	Road dista:	35 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	339676		
Lat dec de:	39.70393		
Lon dec de:	-77.703367		
Issue date:	19841116	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1985 129
Completion:	198412 4		
Total dept:	450		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	30		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	30		
Casing hei:	+01	Screen typ:	HO
Top screen:	30		
Bottom scr:	450		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	4		
Pumping ra:	3		
Level befo:	45		
Level duri:	450		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000304879

**M96
ESE
1/2 - 1 Mile
Lower**

MD WELLS MD7000000306046

Object id:	306046	County let:	WA
Permit:	WA812107	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	198712 1
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	300		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	3 MI
Town direc:	N	Road name:	PARADISE CH RD
Road side:	E	Road dista:	60 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	339676		
Lat dec de:	39.70393		
Lon dec de:	-77.703367		
Issue date:	198712 1	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1988 210
Completion:	1988 124		
Total dept:	100		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	21		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	100		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	40		
Level befo:	45		
Level duri:	100		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000306046

**M97
ESE
1/2 - 1 Mile
Lower**

MD WELLS MD7000000338485

Object id:	338485	County let:	WA
Permit:	WA881175	Mgs id:	Not Reported
B1 seq:	1246	B1 recd:	1991 919
City:	MAUGANSVILLE	State:	MD
Zip:	Not Reported	Driller na:	NEIL NEGLEY
Driller id:	MWD0387		
Est gpm pr:	6		
Use for wa:	DW		
Approx dep:	250		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	IVAN MARTIN
Section:	Not Reported	Lot:	1
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	PARADISE CHURCH ROAD
Road side:	W	Road dista:	27 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226390		
E grid83:	339676		
Lat dec de:	39.70393		
Lon dec de:	-77.703367		
Issue date:	1991 920	Special fl:	N
C1 seq:	5260	C1 recd:	19911029
Completion:	199110 4		
Total dept:	148		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+1	Screen typ:	HO
Top screen:	20		
Bottom scr:	148		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	70		
Level befo:	30		
Level duri:	120		
Test pump :	A	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000338485

98
South
1/2 - 1 Mile
Higher

MD WELLS MD7000000185597

Object id:	185597	County let:	FR
Permit:	FR814667	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1987 6 4
City:	FREDERICK	State:	MD
Zip:	21701	Driller na:	TEACH, KENNETH LEROY
Driller id:	MWD0224		
Est gpm pr:	3		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	AIR-ROT	Replacemen:	Y

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	MEADOWBROOKE
Section:	Not Reported	Lot:	16
Nearest to:	FREDERICK	Town dista:	3 MI
Town direc:	N	Road name:	OPUSSUMTOWN PIKE
Road side:	W	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225475		
E grid83:	338456		
Lat dec de:	39.69561		
Lon dec de:	-77.717497		
Issue date:	1987 6 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	+00	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000185597

**N99
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000378147

Object id:	378147	County let:	WA
Permit:	WA920204	Mgs id:	Not Reported
B1 seq:	3906	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	400		
Drill meth:	BORED	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	2000FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337237		
Lat dec de:	39.706503		
Lon dec de:	-77.731825		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000378147

**N100
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000379110

Object id:	379110	County let:	WA
Permit:	WA920196	Mgs id:	Not Reported
B1 seq:	3913	B1 recd:	1993 518
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	MICHAEL P WILLEY
Driller id:	MWD 455		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	400		
Drill meth:	BORED	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	MAUGANSVILLE	Town dista:	Not Reported
Town direc:	T	Road name:	SHOWALTER ROAD
Road side:	N	Road dista:	1600FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337237		
Lat dec de:	39.706503		
Lon dec de:	-77.731825		
Issue date:	1993 518	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000379110

**N101
West
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384146

Object id:	384146	County let:	WA
Permit:	WA930041	Mgs id:	Not Reported
B1 seq:	4764	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4.5
Town direc:	N	Road name:	HENSEN BLVD
Road side:	N	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226695		
E grid83:	337237		
Lat dec de:	39.706503		
Lon dec de:	-77.731825		
Issue date:	199311 4	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384146

**102
NW
1/2 - 1 Mile
Higher**

FED USGS USGS40000452920

Org. Identifier:	USGS-MD	Drainagearea value:	Not Reported
Formal name:	USGS Maryland Water Science Center	Contrib drainagearea:	Not Reported
Monloc Identifier:	USGS-394254077433701	Latitude:	39.7150946
Monloc name:	WA Ai 54	Sourcemap scale:	24000
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004		
Drainagearea Units:	Not Reported		
Contrib drainagearea units:	Not Reported		
Longitude:	-77.7266603		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	705.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	19850907	Welldepth:	70
Welldepth units:	ft	Wellholedepth:	70
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

O103
SW
1/2 - 1 Mile
Higher

MD WELLS MD7000000301351

Object id:	301351	County let:	WA
Permit:	WA730880	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	197410 3
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4 MI
Town direc:	N	Road name:	EDEN
Road side:	S	Road dista:	400 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225780		
E grid83:	337542		
Lat dec de:	39.69829		
Lon dec de:	-77.728186		
Issue date:	197410 2	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1975 116
Completion:	19741210		
Total dept:	280		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	22		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	22		
Casing hei:	+01	Screen typ:	HO
Top screen:	22		
Bottom scr:	280		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	3		
Level befo:	20		
Level duri:	200		
Test pump :	A	Pump insta:	Not Reported
Install pu:	S		
Capacity:	5		
Pump hp:	1		
Column len:	260		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000301351

**O104
SW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000300613

Object id:	300613	County let:	WA
Permit:	WA730141	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	197211 3
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	LAMBERSON WELL CO
Driller id:	MWD0103		
Est gpm pr:	10		
Use for wa:	DW		
Approx dep:	150		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4 MI
Town direc:	N	Road name:	EDEN RD
Road side:	N	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225780		
E grid83:	337542		
Lat dec de:	39.69829		
Lon dec de:	-77.728186		
Issue date:	197211 1	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1973 322
Completion:	1973 111		
Total dept:	120		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	26		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	26		
Casing hei:	+01	Screen typ:	HO
Top screen:	26		
Bottom scr:	120		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	25		
Level befo:	25		
Level duri:	110		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000300613

**O105
SW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000178360

Object id:	178360	County let:	FR
Permit:	FR736446	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	197810 5
City:	FREDERICK	State:	MD
Zip:	Not Reported	Driller na:	HARLEY, ROY F
Driller id:	MWD0293		
Est gpm pr:	20		
Use for wa:	T		
Approx dep:	200		
Drill meth:	AIR-PER	Replacemen:	S
Wapid:	FR1977G022	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	FREDERICK	Town dista:	4 MI
Town direc:	N	Road name:	US 15
Road side:	W	Road dista:	1 MI
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225780		
E grid83:	337542		
Lat dec de:	39.69829		
Lon dec de:	-77.728186		
Issue date:	1978 822	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19781128
Completion:	19781017		
Total dept:	250		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	25		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	25		
Casing hei:	+01	Screen typ:	HO
Top screen:	25		
Bottom scr:	250		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	5		
Pumping ra:	8		
Level befo:	38		
Level duri:	178		
Test pump :	R	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000178360

O106
SW
1/2 - 1 Mile
Higher

MD WELLS MD7000000303796

Object id:	303796	County let:	WA
Permit:	WA733325	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1981 4 7
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5 MI
Town direc:	N	Road name:	EDEN
Road side:	S	Road dista:	30 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225780		
E grid83:	337542		
Lat dec de:	39.69829		
Lon dec de:	-77.728186		
Issue date:	19801031	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1981 616
Completion:	1981 4 6		
Total dept:	575		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	22		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	22		
Casing hei:	+01	Screen typ:	HO
Top screen:	22		
Bottom scr:	575		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	1		
Level befo:	200		
Level duri:	575		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000303796

**O107
SW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000302733

Object id:	302733	County let:	WA
Permit:	WA732262	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1978 327
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	F		
Approx dep:	200		
Drill meth:	AIR-PER	Replacemen:	S
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	STATE LINE	Town dista:	2 MI
Town direc:	S	Road name:	EDEN RD
Road side:	N	Road dista:	1800FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225780		
E grid83:	337542		
Lat dec de:	39.69829		
Lon dec de:	-77.728186		
Issue date:	1978 323	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1978 525
Completion:	1978 323		
Total dept:	345		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	21		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	345		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	1		
Level befo:	40		
Level duri:	300		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	D	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000302733

**O108
SW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000302658

Object id:	302658	County let:	WA
Permit:	WA732187	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1978 1 6
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	WOODWARD, DENIS H
Driller id:	MWD0258		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	200		
Drill meth:	AIR-PER	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	STATE LINE	Town dista:	2 MI
Town direc:	SE	Road name:	EDEN
Road side:	S	Road dista:	40 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225780		
E grid83:	337542		
Lat dec de:	39.69829		
Lon dec de:	-77.728186		
Issue date:	1977 1 3	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1978 518
Completion:	1978 2 1		
Total dept:	225		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	21		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+01	Screen typ:	HO
Top screen:	21		
Bottom scr:	225		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	20		
Level befo:	45		
Level duri:	85		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000302658

109
WSW
1/2 - 1 Mile
Higher

FED USGS USGS40000452421

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394200077434901		
Monloc name:	WA Ai 14		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7000949
Longitude:	-77.7299936	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	680.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	19200000	Welldepth:	82
Welldepth units:	ft	Wellholedepth:	82
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1958-10-10	33.50	

P110
NNE
1/2 - 1 Mile
Higher

FED USGS USGS40000453002

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394301077423601		
Monloc name:	WA Ai 56		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.717039
Longitude:	-77.7097156	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	680.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Stonehenge Limestone		
Aquifer type:	Not Reported		
Construction date:	19770508	Welldepth:	50
Welldepth units:	ft	Wellholedepth:	50
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1977-05-08	12	

P111
NNE
1/2 - 1 Mile
Higher

FED USGS USGS40000453003

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394301077423602		
Monloc name:	WA Ai 77		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.717039
Longitude:	-77.7097156	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	680.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Stonehenge Limestone		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	Not Reported
Construction date:	19770508	Wellholeddepth:	550
Welldepth units:	Not Reported		
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1977-05-08

Note: The site was dry (no water level recorded).

112
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40000452559

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394212077420701		
Monloc name:	WA Ai 59		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7034282
Longitude:	-77.7016598	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	625.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Conococheague Limestone		
Aquifer type:	Not Reported		
Construction date:	19841204	Welldepth:	450
Welldepth units:	ft	Wellholeddepth:	450
Wellholeddepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1984-12-04 45

Q113
NW
1/2 - 1 Mile
Higher

MD WELLS MD7000000396450

Object id:	396450	County let:	WA
Permit:	WA940453	Mgs id:	Not Reported
B1 seq:	2938	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	150		
Drill meth:	BORED	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	CITICORP DR
Road side:	S	Road dista:	50 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337542		
Lat dec de:	39.714759		
Lon dec de:	-77.728356		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8441	C1 recd:	1996 826
Completion:	1996 618		
Total dept:	135		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	4		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	120		
Casing hei:	Not Reported	Screen typ:	HO
Top screen:	120		
Bottom scr:	135		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	10		
Level befo:	13		
Level duri:	20		
Test pump :	S	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396450

**Q114
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396439

Object id:	396439	County let:	WA
Permit:	WA940460	Mgs id:	Not Reported
B1 seq:	2939	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	100		
Drill meth:	BORED	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	WASHINGTON
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	CITICORP DR
Road side:	W	Road dista:	300 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337542		
Lat dec de:	39.714759		
Lon dec de:	-77.728356		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8437	C1 recd:	1996 826
Completion:	1996 616		
Total dept:	140		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	80		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	80		
Casing hei:	+2	Screen typ:	HO
Top screen:	80		
Bottom scr:	140		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	10		
Level befo:	13		
Level duri:	16		
Test pump :	S	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396439

**Q115
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000342119

Object id:	342119	County let:	WA
Permit:	WA941103	Mgs id:	Not Reported
B1 seq:	2426	B1 recd:	1998 126
City:	ALEXANDRIA	State:	VA
Zip:	22312	Driller na:	GEORGE F EASTERDAY
Driller id:	MWD 40		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	CITICORP
Section:	Not Reported	Lot:	BA-01
Nearest to:	MAUGANSVILLE	Town dista:	2
Town direc:	NE	Road name:	CITICORP DRIVE
Road side:	E	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337542		
Lat dec de:	39.714759		
Lon dec de:	-77.728356		
Issue date:	1998 128	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000342119

**Q116
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396938

Object id:	396938	County let:	WA
Permit:	WA941102	Mgs id:	Not Reported
B1 seq:	2427	B1 recd:	1998 126
City:	ALEXANDRIA	State:	VA
Zip:	22312	Driller na:	GEORGE F EASTERDAY
Driller id:	MWD 40		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	80		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	CITICORP
Section:	Not Reported	Lot:	CCW7
Nearest to:	MAUGANSVILLE	Town dista:	2
Town direc:	NE	Road name:	CITICORP DRIVE
Road side:	E	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337542		
Lat dec de:	39.714759		
Lon dec de:	-77.728356		
Issue date:	1998 128	Special fl:	Not Reported
C1 seq:	3640	C1 recd:	1998 312
Completion:	1998 2 3		
Total dept:	120		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	18		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	20		
Casing hei:	+2	Screen typ:	HO
Top screen:	18		
Bottom scr:	120		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396938

**Q117
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000398637

Object id:	398637	County let:	WA
Permit:	WA941104	Mgs id:	Not Reported
B1 seq:	2424	B1 recd:	1998 126
City:	ALEXANDRIA	State:	VA
Zip:	22312	Driller na:	GEORGE F EASTERDAY
Driller id:	MWD 40		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	CITICORP
Section:	Not Reported	Lot:	BA-03
Nearest to:	MAUGANSVILLE	Town dista:	2
Town direc:	NE	Road name:	CITICORP DRIVE
Road side:	E	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337542		
Lat dec de:	39.714759		
Lon dec de:	-77.728356		
Issue date:	1998 128	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000398637

**Q118
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000398635

Object id:	398635	County let:	WA
Permit:	WA941105	Mgs id:	Not Reported
B1 seq:	2425	B1 recd:	1998 126
City:	ALEXANDRIA	State:	VA
Zip:	22312	Driller na:	GEORGE F EASTERDAY
Driller id:	MWD 40		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	20		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	CITICORP
Section:	Not Reported	Lot:	BA-02
Nearest to:	MAUGANSVILLE	Town dista:	2
Town direc:	NE	Road name:	CITICORP DRIVE
Road side:	E	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337542		
Lat dec de:	39.714759		
Lon dec de:	-77.728356		
Issue date:	1998 128	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	C	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000398635

**Q119
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396940

Object id:	396940	County let:	WA
Permit:	WA941101	Mgs id:	Not Reported
B1 seq:	2423	B1 recd:	1998 126
City:	ALEXANDRIA	State:	VA
Zip:	22312	Driller na:	GEORGE F EASTERDAY
Driller id:	MWD 40		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	80		
Drill meth:	AIR-ROT	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	CITICORP
Section:	Not Reported	Lot:	CCW6
Nearest to:	MAUGANSVILLE	Town dista:	2
Town direc:	NE	Road name:	CITICORP DRIVE
Road side:	E	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337542		
Lat dec de:	39.714759		
Lon dec de:	-77.728356		
Issue date:	1998 128	Special fl:	Not Reported
C1 seq:	3639	C1 recd:	1998 312
Completion:	1998 2 3		
Total dept:	81		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	18		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	20		
Casing hei:	+2	Screen typ:	HO
Top screen:	18		
Bottom scr:	81		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	6		
Level befo:	11		
Level duri:	80		
Test pump :	A	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396940

**120
North
1/2 - 1 Mile
Higher**

FED USGS

USGS40000453076

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394307077425801		
Monloc name:	WA Ai 39		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7187056
Longitude:	-77.7158268	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	710.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	19690625	Welldepth:	85
Welldepth units:	ft	Wellholedepth:	85
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1969-06-25	20	

**121
NW
1/2 - 1 Mile
Higher**

FED USGS USGS40000452865

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394248077435001		
Monloc name:	WA Ai 9		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.713428
Longitude:	-77.7302715	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	705.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	19560700	Welldepth:	400
Welldepth units:	ft	Wellholedepth:	400
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1959-03-17	22.70	

**122
WSW
1/2 - 1 Mile
Higher**

FED USGS USGS40000452566

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394213077440001		
Monloc name:	WA Ai 8		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7037059
Longitude:	-77.7330492	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	690.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	19571029	Welldepth:	491
Welldepth units:	ft	Wellholedepth:	491
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1959-04-07	28.40	

**R123
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000382642

Object id:	382642	County let:	WA
Permit:	WA930089	Mgs id:	Not Reported
B1 seq:	2117	B1 recd:	19931214
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	WALTER T CONNELLY
Driller id:	MGD 035		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	40		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	AIRPORT ACCESS ROAD
Road side:	S	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337237		
Lat dec de:	39.711993		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon dec de:	-77.731882	Special fl:	Not Reported
Issue date:	19931214	C1 recd:	1994 124
C1 seq:	7544		
Completion:	1994 1 6		
Total dept:	28		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	3		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	8		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	8		
Bottom scr:	18		
Screen t 1:	PL		
Top scre 1:	18		
Bottom s 1:	28		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000382642

**R124
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000382645

Object id:	382645	County let:	WA
Permit:	WA930090	Mgs id:	Not Reported
B1 seq:	2116	B1 recd:	19931214
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	WALTER T CONNELLY
Driller id:	MGD 035		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	40		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	AIRPORT ACCESS RD
Road side:	S	Road dista:	500 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337237		
Lat dec de:	39.711993		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon dec de:	-77.731882	Special fl:	Not Reported
Issue date:	19931214	C1 recd:	1994 124
C1 seq:	4245		
Completion:	1994 1 7		
Total dept:	30		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	8		
Casing typ:	PL		
Casing dia:	4		
Casing dep:	10		
Casing hei:	Not Reported	Screen typ:	PL
Top screen:	10		
Bottom scr:	20		
Screen t 1:	PL		
Top scre 1:	20		
Bottom s 1:	30		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	Not Reported	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000382645

**R125
WNW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000384188

Object id:	384188	County let:	WA
Permit:	WA930046	Mgs id:	Not Reported
B1 seq:	4767	B1 recd:	199311 4
City:	CHANTILLY	State:	VA
Zip:	22021	Driller na:	DAVID T LYNN
Driller id:	MWD 053		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	Not Reported	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	4.5
Town direc:	N	Road name:	HENSEN BLVD
Road side:	N	Road dista:	650 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227304		
E grid83:	337237		
Lat dec de:	39.711993		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Lon dec de:	-77.731882	Special fl:	Not Reported
Issue date:	199311 4	C1 recd:	0
C1 seq:	Not Reported		
Completion:	0		
Total dept:	0		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		
Casing typ:	Not Reported		
Casing dia:	0		
Casing dep:	0		
Casing hei:	Not Reported	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000384188

126
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40000452514

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394208077420401		
Monloc name:	WA Ai 4		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7023171
Longitude:	-77.7008264	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	625.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Conococheague Limestone		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer type:	Not Reported	Welldepth:	79
Construction date:	19541206	Wellholedepth:	79
Welldepth units:	ft		
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1954-12-06	49	

S127
ESE
1/2 - 1 Mile
Lower

FED USGS USGS40000452558

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394212077420201		
Monloc name:	WA Ai 5		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7034282
Longitude:	-77.7002709	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	630.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Conococheague Limestone		
Aquifer type:	Not Reported		
Construction date:	19571229	Welldepth:	80
Welldepth units:	ft	Wellholedepth:	80
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1957-12-29	30	

128
NE
1/2 - 1 Mile
Higher

MD WELLS MD7000000306245

Object id:	306245	County let:	WA
Permit:	WA812314	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1988 620
City:	HAGERSTOWN	State:	MD
Zip:	21740	Driller na:	WOODWARD, DEAN J
Driller id:	MWD0406		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	250		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	6 MI
Town direc:	NE	Road name:	REID RD
Road side:	N	Road dista:	65 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227914		
E grid83:	339371		
Lat dec de:	39.717634		
Lon dec de:	-77.707058		
Issue date:	1988 621	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	1988 7 8
Completion:	1988 621		
Total dept:	350		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	42		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	42		
Casing hei:	+01	Screen typ:	HO
Top screen:	42		
Bottom scr:	350		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	10		
Level befo:	45		
Level duri:	350		
Test pump :	A	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000306245

129
South
1/2 - 1 Mile
Lower

MD WELLS MD7000000529072

Object id:	529072	County let:	Not Reported
Permit:	WA950202	Mgs id:	Not Reported
B1 seq:	5441	B1 recd:	2008 8 7
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	GARY SHAFF
Driller id:	MSD 170		
Est gpm pr:	5		
Use for wa:	DW		
Approx dep:	300		
Drill meth:	AIR-PER	Replacemen:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	1
Town direc:	N	Road name:	ISLAND RD
Road side:	W	Road dista:	150 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	225171		
E grid83:	338761		
Lat dec de:	39.692886		
Lon dec de:	-77.713916		
Issue date:	2008 8 8	Special fl:	Y
C1 seq:	5114	C1 recd:	200810 9
Completion:	2008 811		
Total dept:	150		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	20		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	21		
Casing hei:	+1	Screen typ:	HO
Top screen:	20		
Bottom scr:	150		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	2		
Pumping ra:	35		
Level befo:	33		
Level duri:	150		
Test pump :	A	Pump insta:	N
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000529072

S130
East
1/2 - 1 Mile
Lower

FED USGS USGS40000452574

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394214077415801		
Monloc name:	WA Ai 24		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.7039838
Longitude:	-77.6991598	Sourcemap scale:	24000

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	620.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Conococheague Limestone		
Aquifer type:	Not Reported		
Construction date:	195904	Welldepth:	146
Welldepth units:	ft	Wellholedepth:	146
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel

1959-04-10	30.50	

S131
East
1/2 - 1 Mile
Lower

MD WELLS MD7000000297420

Object id:	297420	County let:	WA
Permit:	WA034127	Mgs id:	WAAi024
B1 seq:	Not Reported	B1 recd:	0
City:	HAGERSTOWN	State:	MD
Zip:	Not Reported	Driller na:	JOS HOFFMAN CO INC
Driller id:	MWD0000		
Est gpm pr:	0		
Use for wa:	I		
Approx dep:	0		
Drill meth:	OTHER	Replacemen:	Not Reported
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	PARAMOUNT	Town dista:	Not Reported
Town direc:	Not Reported	Road name:	Not Reported
Road side:	Not Reported	Road dista:	Not Reported
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	226389		
E grid83:	340043		
Lat dec de:	39.703949		
Lon dec de:	-77.699082		
Issue date:	0	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	0
Completion:	1959 410		
Total dept:	146		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Not Reported
Grout type:	Not Reported		
Grout top:	0		
Grout bott:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing typ:	Not Reported		
Casing dia:	6		
Casing dep:	11		
Casing hei:	2	Screen typ:	Not Reported
Top screen:	0		
Bottom scr:	0		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	15		
Level befo:	30		
Level duri:	130		
Test pump :	Not Reported	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000297420

**132
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000305124

Object id:	305124	County let:	WA
Permit:	WA811155	Mgs id:	Not Reported
B1 seq:	Not Reported	B1 recd:	1985 9 5
City:	GAITHERSBURG	State:	MD
Zip:	20878	Driller na:	EASTERDAY, LOUIS D.
Driller id:	MWD0041		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	50		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	CCW	Lot:	1
Nearest to:	HAGERSTOWN	Town dista:	5.4 MI
Town direc:	S	Road name:	STATE LINE
Road side:	S	Road dista:	600 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227914		
E grid83:	337542		
Lat dec de:	39.717504		
Lon dec de:	-77.728384		
Issue date:	1985 9 5	Special fl:	Not Reported
C1 seq:	Not Reported	C1 recd:	19851120
Completion:	1985 9 8		
Total dept:	83		
Num unsucc:	0		
Hydrofract:	Not Reported	Grouted:	Y
Grout type:	BC		
Grout top:	13		
Grout bott:	15		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing typ:	ST		
Casing dia:	6		
Casing dep:	17		
Casing hei:	+02	Screen typ:	HO
Top screen:	15		
Bottom scr:	83		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	1		
Level befo:	1		
Level duri:	1		
Test pump :	O	Pump insta:	Not Reported
Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000305124

**133
North
1/2 - 1 Mile
Higher**

FED USGS USGS40000453138

Org. Identifier:	USGS-MD		
Formal name:	USGS Maryland Water Science Center		
Monloc Identifier:	USGS-394314077425801		
Monloc name:	WA Ai 55		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	02070004	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	39.72065
Longitude:	-77.7158268	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	720.
Vert measure units:	feet	Vertacc measure val:	10
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Valley and Ridge aquifers		
Formation type:	Rockdale Run Formation		
Aquifer type:	Not Reported		
Construction date:	19770210	Welldepth:	305
Welldepth units:	ft	Wellholedepth:	305
Wellholedepth units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground-water levels, Number of Measurements: 1

Date	Feet below Surface	Feet to Sealevel
1977-02-10	25	

**T134
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396440

Object id:	396440	County let:	WA
Permit:	WA940461	Mgs id:	Not Reported
B1 seq:	2940	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	CITICORP DR
Road side:	W	Road dista:	300 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337237		
Lat dec de:	39.714738		
Lon dec de:	-77.73191		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8439	C1 recd:	1996 826
Completion:	1996 619		
Total dept:	65		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	5		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	5		
Casing hei:	+2	Screen typ:	HO
Top screen:	5		
Bottom scr:	65		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	2		
Level befo:	25		
Level duri:	59		
Test pump :	S	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000396440
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**T135
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396438

Object id:	396438	County let:	WA
Permit:	WA940463	Mgs id:	Not Reported
B1 seq:	2942	B1 recd:	1996 5 6
City:	TRENTON	State:	NJ
Zip:	08610	Driller na:	RICHARD D SIES SR
Driller id:	MGD 28		
Est gpm pr:	0		
Use for wa:	T		
Approx dep:	50		
Drill meth:	BORED	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	Not Reported
Nearest to:	HAGERSTOWN	Town dista:	5
Town direc:	N	Road name:	HENSON BLVD
Road side:	N	Road dista:	950 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337237		
Lat dec de:	39.714738		
Lon dec de:	-77.73191		
Issue date:	1996 5 7	Special fl:	Not Reported
C1 seq:	8440	C1 recd:	1996 826
Completion:	1996 618		
Total dept:	43		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	10		
Casing typ:	ST		
Casing dia:	4		
Casing dep:	10		
Casing hei:	+2	Screen typ:	HO
Top screen:	10		
Bottom scr:	43		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	3		
Pumping ra:	5		
Level befo:	10		
Level duri:	25		
Test pump :	S	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000396438
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**T136
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396900

Object id:	396900	County let:	WA
Permit:	WA941143	Mgs id:	Not Reported
B1 seq:	8088	B1 recd:	1998 310
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	NEIL C NEGLEY
Driller id:	MWD 387		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW3
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	18112 AIRPARK ROAD
Road side:	S	Road dista:	1100FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337237		
Lat dec de:	39.714738		
Lon dec de:	-77.73191		
Issue date:	1998 311	Special fl:	Not Reported
C1 seq:	3680	C1 recd:	1998 428
Completion:	1998 4 3		
Total dept:	30		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	CM		
Grout top:	0		
Grout bott:	8		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	10		
Casing hei:	+2	Screen typ:	HO
Top screen:	8		
Bottom scr:	30		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000396900
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

**T137
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396907

Object id:	396907	County let:	WA
Permit:	WA941142	Mgs id:	Not Reported
B1 seq:	8087	B1 recd:	1998 310
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	NEIL C NEGLEY
Driller id:	MWD 387		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW2
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	18112 AIR PARK ROAD
Road side:	S	Road dista:	600 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337237		
Lat dec de:	39.714738		
Lon dec de:	-77.73191		
Issue date:	1998 311	Special fl:	Not Reported
C1 seq:	3681	C1 recd:	1998 511
Completion:	1998 4 3		
Total dept:	50		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	36		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	38		
Casing hei:	+2	Screen typ:	HO
Top screen:	36		
Bottom scr:	50		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	0		
Flowing we:	Not Reported	Telescopin:	Not Reported
Log type:	Not Reported		
Hrs pumped:	0		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	Not Reported	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported		
Capacity:	0		
Pump hp:	0		
Column len:	0		
Closed:	Not Reported	Abandoned:	Not Reported
Abandon da:	0	Site id:	MD7000000396907

**T138
NW
1/2 - 1 Mile
Higher**

MD WELLS MD7000000396905

Object id:	396905	County let:	WA
Permit:	WA941141	Mgs id:	Not Reported
B1 seq:	8086	B1 recd:	1998 310
City:	HAGERSTOWN	State:	MD
Zip:	21742	Driller na:	NEIL C NEGLEY
Driller id:	MWD 387		
Est gpm pr:	1		
Use for wa:	T		
Approx dep:	25		
Drill meth:	AIR-ROT	Replacemen:	N
Wapid:	Not Reported	Subdivisio:	Not Reported
Section:	Not Reported	Lot:	MW1
Nearest to:	HAGERSTOWN	Town dista:	4
Town direc:	N	Road name:	18112 AIR PARK ROAD
Road side:	S	Road dista:	200 FT
Tax map:	Not Reported	Block:	Not Reported
Parcel:	Not Reported		
N grid83:	227609		
E grid83:	337237		
Lat dec de:	39.714738		
Lon dec de:	-77.73191		
Issue date:	1998 311	Special fl:	Not Reported
C1 seq:	3679	C1 recd:	1998 428
Completion:	1998 416		
Total dept:	25		
Num unsucc:	0		
Hydrofract:	N	Grouted:	Y
Grout type:	BC		
Grout top:	0		
Grout bott:	8		
Casing typ:	ST		
Casing dia:	6		
Casing dep:	10		
Casing hei:	+2	Screen typ:	PL
Top screen:	5		
Bottom scr:	25		
Screen t 1:	Not Reported		
Top scre 1:	0		
Bottom s 1:	0		
Screen t 2:	Not Reported		
Top scre 2:	0		
Bottom s 2:	0		
Screen dia:	4		
Flowing we:	Not Reported	Telescopin:	T
Log type:	Not Reported		
Hrs pumped:	1		
Pumping ra:	0		
Level befo:	0		
Level duri:	0		
Test pump :	A	Pump insta:	N

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Install pu:	Not Reported	Abandoned:	Not Reported
Capacity:	0	Site id:	MD7000000396905
Pump hp:	0		
Column len:	0		
Closed:	Not Reported		
Abandon da:	0		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

EPA Region 3 Statistical Summary Readings for Zip Code: 21742

Number of sites tested: 83.

Maximum Radon Level: 106.1 pCi/L.

Minimum Radon Level: 0.6 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
30 (36.14%)	21 (25.30%)	21 (25.30%)	10 (12.05%)	0 (0.00%)	1 (1.20%)

Federal EPA Radon Zone for WASHINGTON County: 1

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Maryland Public Supply Wells Database

Source: Department of the Environment

Telephone: 410-537-3702

Water use types included are farm (livestock watering and agricultural irrigation), geo-thermal, industrial-commercial-state and federal government, municipal, test-observation-monitoring.

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Location Information

Source: Department of the Environment.

Telephone: 410-537-3557

RADON

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

EPA Region 3 Statistical Summary Readings

Source: Region 3 EPA

Telephone: 215-814-2082

Radon readings for Delaware, D.C., Maryland, Pennsylvania, Virginia and West Virginia.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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Appendix F: Supporting Documents



Environmental Planner

sarmstrong@fandr.com



Stephen Armstrong specializes in providing NEPA related environmental services. His broad range of field experience includes conducting cultural, historical, and natural resources investigations. In addition to these, Mr. Armstrong has experience facilitating regulatory Agency coordination and public outreach events as related to environmental considerations. He is proficient with the ESRI ArcGIS software suite and the utilization of Trimble GPS units. Mr. Armstrong's broad knowledge base and technical expertise has proven to be quite the valuable asset to the F&R team.

Relevant Experience

Aslin Beer Company Phase I

Herndon, Virginia

Mr. Armstrong reviewed investigative data for the Horn Motors property in the Town of Herndon in Northern Virginia for a Phase I Environmental Site Assessment and helped to develop recommendations regarding how to address known contamination at the project site from multiple sources of contamination in the area. This project is near a large development area that aims to develop downtown Herndon into a mixed-used commercial and residential area.

Charles R Jonas Federal Courthouse

Charlotte, North Carolina

Mr. Armstrong helped to develop the appropriate level of environmental analysis under the National Environmental Policy Act (NEPA) for the major renovation and expansion of the Charles R. Jonas Federal Courthouse in downtown Charlotte, North Carolina. The project includes a complete interior and exterior renovation of the 134,428 square foot facility and construction of an adjacent 198,000 square foot annex. The goal of the project is to improve security, allow for future growth, create discrete circulation in the courthouse and positively impact downtown Charlotte.

Parham Administration Building Phase II Environmental Site Assessment and Soil/Groundwater Management Plan

Annapolis, Maryland

Mr. Armstrong helped to develop a Phase II Environmental Site Assessment for the site of a telecommunications tower that is immediately adjacent to a Maryland Voluntary Remediation Program (VRP) site. The VRP site, which is known to have high levels of arsenic in the soil, requires the management of soil and groundwater on the property. Mr. Armstrong also helped to develop a soil and groundwater management plan for management of contaminated soils related to the excavation for the telecommunications tower.

Invertebrate Sampling

Statewide - Virginia, Maryland, Alabama

Mr. Armstrong was the lead sampler for sampling for ticks, beetles and mosquitoes at three sites in Virginia, Maryland and Alabama. Mr. Armstrong was responsible for picking appropriate locations for samples, while also training staff in the appropriate sampling techniques and procedures. Ticks were sampled via a dragging method, beetles were sampled via pitfall traps and mosquitoes were sampled via suspended carbon dioxide traps.

Education

B.S., Environmental Science,
Lynchburg College, 2011

Certifications

40-hour HAZWOPER

EPA AHERA Asbestos
Inspector

Years of Experience

1 Year with F&R
6 Years Total



Education

B.S., Environmental
Science and Geology, Mary
Washington College, 2002

Registrations

Virginia Accredited/Licensed
E&S Control Inspector

Virginia Accredited/Licensed
Lead Inspector Technician

Virginia Accredited/Licensed
Asbestos Inspector

OSHA Health and Safety
Training-29 CFR 1910.120

Years of Experience

13 Years with F&R
15 Years Total

Zach Parker coordinates and manages F&R's due diligence program for our commercial banking clients. Duties include consultation with clients on potential regulatory and technical issues in support of their risk management process. Mr. Parker's duties also include preparation of proposals, review of technical reports, and quality control of due diligence reporting in order to conform with client-specific scopes of work, risk management policies, and the ASTM standard. Mr. Parker also serves as the relationship manager for F&R's due diligence program for our commercial banking clients.

Relevant Experience

Various Commercial Banking Companies

Nationwide

Mr. Parker has performed and managed over 1,000 Phase I and Phase II Environmental Site Assessments (ESAs), Property Condition Assessments, and Hazardous Materials Surveys on a variety of residential, commercial, and industrial properties. These services included reconnaissance of the site and adjoining properties, interviews, and review of historical records and regulatory databases and files in an effort to identify evidence of recognized environmental conditions in connection with the site. The majority of these assessments also addressed business environmental risk concerns such as asbestos, lead-based paint, mold, erosion and sediment control issues, wetlands, and floodplains.

U.S. Department of Defense Classified Facilities

Statewide Virginia

Mr. Parker prepared Environmental Assessments for facility upgrades and construction projects at several DOD facilities in Virginia. These projects were performed in conformance with the National Environmental Policy Act (NEPA) and included analysis of the potential impact of the proposed action on factors including biological resources, water resources, transportation infrastructure, visual resources, air quality, socioeconomic conditions, threatened/endangered species, wetland areas, and land use. In each project several alternatives were analyzed to determine the course of action with the least impact.

Virginia Community College System

Statewide Virginia

Mr. Parker has performed several EIRs prior to the construction of new facilities at VCCS campuses. VCCS facilities where work was performed include Tidewater Community College and Piedmont Community College.

Longwood University;

Property Condition Assessments; Phase I ESAs; Hazardous Materials Surveys

Farmville, Virginia

Mr. Parker performed and managed numerous assessments for university-owned housing and housing the university was in the process of acquiring. Mr. Parker also provides technical guidance and support in the University's and Real Estate Foundations acquisition and redevelopment plans.



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

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**Hazardous Materials Survey
Brumbaugh-Kendle-Grove Farmstead
Grant Numbers 18-013, 18-014, 18-015, and 18-016
14301 Pennsylvania Avenue
Hagerstown, Maryland 21742**

Prepared For:

Keith Fritz, PE
Airport Design Consultants, Inc.
6031 University Blvd #330
Ellicott City, Maryland 21043

Prepared By:

Froehling & Robertson, Inc.
22923 Quicksilver Drive, Suite 111
Dulles, Virginia 20166

F&R Project Number 72V-0140

November 14, 2017

Prepared by:

Stephanie Santiago
Industrial Hygienist
Environmental Services, Dulles

Reviewed by:

John B. Love, CHMM, OHST
Environmental Department Manager
National Capital Area



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Appendices:

- Appendix A – Asbestos Sample Location Maps
Appendix B – Asbestos Documentation Field Notes
Appendix C – Asbestos Laboratory Results and Chain of Custody
Appendix D – Asbestos Photo Log
Appendix E – Lead Based Paint Sample Location Maps
Appendix F – Lead Based Paint Documentation Field Notes
Appendix G – Lead Based Paint Chip Laboratory Results and Chain of Custody
Appendix H – Lead Based Paint Photo Log
Appendix I – Mold Photo Log



1.0 Introduction:

As authorized by Airport Design Consultants, Inc., Froehling & Robertson, Inc. (F&R) personnel provided hazardous material consulting services at the Brumbaugh – Kendle – Grove Farmstead (Farmstead) located at 14301 Pennsylvania Ave, Hagerstown, Maryland. The services were conducted to support the demolition of the Farmstead; site work was performed on October 23, 2017.

The proposed scope of work for this project was to evaluate the Farmstead Property that consisted of a Farmhouse, Washhouse, Smokehouse, Chicken House, and Barn for the presence of hazardous materials via sampling and analysis for asbestos containing materials (ACM), testing various surfaces for lead-based paint (LBP), and visually surveying the area for the presence of mold that may be impacted during the planned demolition.

The ACM via bulk sampling and Lead Based Paint sampling were performed by Ms. Stephanie Santiago, Industrial Hygienist with F&R. Maryland Asbestos Inspector License Number is 17017941 and EPA Accredited Lead Inspector Certification Number is 61676.

The survey included the following services:

- Identification and sampling, as necessary, suspect asbestos-containing materials (ACM) within the areas anticipated to be impacted by the demolition.
- Determining the presence, location, NESHAP category, estimated quantity and condition of identified ACMs.
- Testing of surface coatings for the presence of LBP within the areas anticipated to be impacted by the demolition.
- A visual inspection for obvious indications of building materials with moisture intrusion/water damage and/or mold growth.

2.0 Asbestos-Containing Material:

2.1 Methodology:

For this project, a visual survey and sampling for suspect ACM was conducted in the entire building (interior/exterior), including materials higher than eight (8) feet. All samples were collected in accordance with National Emission Standards for Hazardous Air Pollutants (NESHAP-40 CFR Subpart M), Asbestos Hazard Emergency Response Act (AHERA-40 CFR Part 763) and submitted to SanAir Technologies Laboratory (SanAir) in Powhatan, Virginia. SanAir is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and the Commonwealth of Virginia to analyze suspect ACM. A total of thirty one (31) samples were submitted for analysis using Polarized Light Microscopy (PLM) following EPA Method 600/R-93/116. Refer to Appendix A for a sampling diagram, Appendix B for field notes, Appendix C for Chain of Custody Documentation and Laboratory Reports, and Appendix D for photographs.



2.2 Findings:

Thirty one (31) samples of suspect asbestos containing materials were taken as part of this survey. Of the thirty one (31) samples, two (2) of the materials tested positive (>1%) for asbestos. Table 1 lists the suspect ACM materials tested and the results of the laboratory analysis for the samples collected.

Table 1: Asbestos Testing and Analysis Results

Sample #	Sample Location	Material	Friable (Yes/No)	% Asbestos PLM	Approx. Quantity
1A	Farmhouse Roof	Black Asphalt Shingle Roofing	-	NAD	-
1B	Farmhouse Roof	Black Asphalt Shingle Roofing	-	NAD	-
2A	Basement	White Insulation on Wooden Beam	Yes	70% Chrysotile	15 LF
2B	Basement	White Insulation on Wooden Beam	Yes	70% Chrysotile	15 LF
2C	Basement	White Insulation on Wooden Beam	Yes	70% Chrysotile	15 LF
3A	Basement – Stairway	Blue/Beige Plaster Wall	-	NAD	-
3B	Basement – Stairway	Blue/Beige Plaster Wall	-	NAD	-
3C	Basement – Stairway	Blue/Beige Plaster Wall	-	NAD	-
4A	Front Entrance – Farmhouse	White/Beige Plaster Ceiling	-	NAD	-
4B	Front Entrance – Farmhouse	White/Beige Plaster Ceiling	-	NAD	-
4C	Front Entrance – Farmhouse	White/Beige Plaster Ceiling	-	NAD	-
5A	Living Room – Farmhouse	White/Beige Plaster Ceiling	-	NAD	-
5B	Living Room – Farmhouse	White/Beige Plaster Ceiling	-	NAD	-
6A	Dining Room – Farmhouse	White/Beige Plaster Wall	-	NAD	-
6B	Dining Room – Farmhouse	White/Beige Plaster Wall	-	NAD	-
7A	Dining Room – Farmhouse	Blue/Beige Plaster Wall	-	NAD	-
7B	Dining Room – Farmhouse	Blue/Beige Plaster Wall	-	NAD	-
8A	Kitchen – Farmhouse	Brown Vinyl Floor Tile	No	15% Chrysotile	160 SF
8B	Kitchen – Farmhouse	Brown Vinyl Floor Tile	No	15% Chrysotile	160 SF
9A	Dining Room – Farmhouse	Orange Carpet w/ Flooring	-	NAD	-
9B	Dining Room – Farmhouse	Orange Carpet w/ Flooring	-	NAD	-
10A	Kitchen – Farmhouse	White/Grey Drywall Ceiling	-	NAD	-
10B	Kitchen – Farmhouse	White/Grey Drywall Ceiling	-	NAD	-
11A	Laundry Room – Farmhouse	Tan Vinyl Floor Tile	-	NAD	-



Sample #	Sample Location	Material	Friable (Yes/No)	% Asbestos PLM	Approx. Quantity
11B	Laundry Room – Farmhouse	Tan Vinyl Floor Tile	-	NAD	-
12A	Sitting Room – Farmhouse	Blue/Beige Plaster Ceiling	-	NAD	-
12B	Sitting Room – Farmhouse	Blue/Beige Plaster Ceiling	-	NAD	-
13A	Washhouse	Blue/Tan Plaster Wall	-	NAD	-
13B	Washhouse	Blue/Tan Plaster Wall	-	NAD	-
14A	Washhouse	White/Tan Plaster Wall	-	NAD	-
14B	Washhouse	White/Tan Plaster Wall	-	NAD	-

***NAD- No Asbestos Detected

2.3 Conclusions:

F&R conducted a survey of the reasonably and safely accessible portions of the Farmstead which were included in the anticipated demolition.

2.3.1 Friable Asbestos-Containing Materials:

The white insulation observed on the wood beam that was located in the basement portion of the Farmhouse was found to contain 70% chrysotile asbestos. There is approximately 15 linear feet of the insulation in the basement. It is tattered and destroyed while some pieces may be present on the ground.

2.3.2 Non-Friable Asbestos-Containing Materials:

The brown 1x1 vinyl floor tile in the Kitchen of the Farmhouse was found to contain 15% chrysotile asbestos. There is approximately 160 square feet of vinyl floor tile in the Kitchen.

2.3.3 Presumed Asbestos-Containing Materials:

No building materials were classified as Presumed Asbestos-Containing Materials.

During the conduct of this survey, observations were limited to those materials which were within the areas designated by the client and were safely accessible and visible. If during demolition, work is performed that will impact any suspect materials, including those located behind/within solid walls and/or above solid ceilings that have not been surveyed, it is recommended that these materials be identified and sampled by a Licensed Asbestos Inspector to determine its asbestos content, if any, prior to disturbance.



2.4 Applicable Regulations:

2.4.1 EPA/NESHAP Regulations for Asbestos Containing Materials:

The U.S. Environmental Protection Agency promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR Part 61), which addresses the application, removal, and disposal of ACM. Under NESHAP the following categories are defined for asbestos-containing materials:

Friable - When dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

Non-friable - When dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Category I Non-friable ACM - Packings, gaskets, resilient floor coverings, and asphalt roofing products containing more than 1% asbestos.

Category II Non-friable ACM – Any material, excluding Category I Non-friable ACM, which contains more than 1% asbestos.

Regulated Asbestos Containing Material (RACM) – One of the following:

1. Friable ACM
2. Category I Non-friable ACM that has become friable.
3. Category I Non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading.
4. Category II Non-friable ACM that has a high probability of becoming, or has become, friable by the forces expected to act on the material in the course of demolition operations.

Under NESHAP, the following actions are required:

1. Prior to the commencement of demolition activities, the building owner must inspect the affected facility or part of the facility where the demolition activities will occur for the presence of asbestos.
2. Remove all RACM from the facility before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access for subsequent removal.
3. RACM need not be removed if:
 - a) It is Category I non-friable ACM that is not in poor condition.
 - b) It is on a facility component that is encased in concrete or other similar material and is adequately wet whenever exposed.
 - c) It was not accessible for testing and was therefore not discovered until after demolition began and because of the demolition the material cannot be safely removed.



- d) It is Category II non-friable ACM and the probability is low that the material will become crumbled, pulverized, or reduced to powder during demolition.

2.4.2 OSHA:

The Occupational Safety and Health Administration (OSHA) regulates employee exposure to asbestos under 29 CFR 1926.1101 and 29 CFR 1926.1001. Work associated with known or suspect ACMs must be conducted according to these regulations in addition to the noted EPA regulations.

3.0 Lead-Based Paint:

For the project, a visual survey and paint chip sampling for Lead-Based Paint (LBP) was conducted within the anticipated demolition area, as described by the client. Based on the nature of this survey, when one component tests positive for the presence of lead paint, all similar painted components must be assumed to be positive unless additional testing is performed.

3.1 Methodology for Lead Paint Chip Sampling:

F&R performed a visual survey and paint chip sampling and analysis for suspect lead based paint components' surfaces on the Farmstead Property (interior/exterior) that consisted of the Farmhouse, Washhouse, Smokehouse, Chicken House, and Barn, including materials higher or deeper than eight (8) feet that are anticipated to be impacted during the proposed demolition. The survey was generally conducted following EPA's work practice standards for conducting LBP activities (40 CFR 745.227), and the U.S. Housing and Urban Development (HUD) *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* (Second Edition, July 2012). The paint chip samples were analyzed for lead content by SanAir Technologies Laboratory, an American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) accredited laboratory via EPA Method SW846/M3050B/7000B. Painted surfaces are classified as "positive" or "negative" for lead content based on the US EPA, Maryland, and HUD action level (0.5% by weight). The laboratory results are attached in Appendix G. Results of the Paint Chip Samples are presented below in Table 2. See Appendix E for the lead based paint chip sampling location map, Appendix F for lead-related field notes, Appendix G for laboratory results/chain of custody, and Appendix H for a photo log of the sample locations.

3.2 Findings:

Thirty (30) paint chip samples were taken as part of this survey. Of the thirty (30) paint chip samples, twenty (20) of the components tested positive for lead-based paint when compared to the EPA / Maryland Action Level of 0.5% by weight. Table 2 lists the suspect LBP building components tested and the results of the laboratory analysis for the samples collected.

Table 2: Lead Based Paint- Paint Chip Testing and Analysis

Sample #	Location	Substrate	Component	Color	% Pb
PC #1	Smokehouse	Wood	Door	White	13.4813%



Sample #	Location	Substrate	Component	Color	% Pb
PC #2	Smokehouse	Wood	Door Casing	White	15.4025%
PC #3	Smokehouse	Wood	Roof Overhang	White	9.718%
PC #4	Smokehouse	Concrete	Wall	White	<0.0097%
PC #5	Smokehouse	Steel	Meat Pole	White	1.8274%
PC #6	Chicken House	Wood	Exterior	White	21.8935%
PC #7	Chicken House	Wood	Door Casing	White	26.8534%
PC #8	Porch – Farmhouse	Wood	Porch Columns	White	7.6478%
PC #9	Porch – Farmhouse	Wood	Door Casing	White	1.9136%
PC #10	Porch – Farmhouse	Wood	Window Frame	White	0.5497%
PC #11	Porch – Farmhouse	Wood	Ceiling	Teal	19.5447%
PC #12	Porch – Farmhouse	Concrete	Porch Floor	Light Blue	0.1549%
PC #13	Porch – Farmhouse	Concrete	Stairs	Baby Blue	0.0526%
PC #14	Porch – Farmhouse	Wood	Step	Light Blue	18.7266%
PC #15	Farmhouse – Exterior	Wood	Window Sill	White	16.6157%
PC #16	Farmhouse – Exterior	Steel	Rain Gutter	White	0.9562%
PC #17	Basement – Farmhouse	Steel	Boiler	Green	1.444%
PC #18	Living Room - Farmhouse	Plaster	Wall	Light Blue	0.0203%
PC #19	Living Room – Farmhouse	Wood	Chair Rail - Wall	Peach	3.734%
PC #20	Dining Room – Farmhouse	Plaster	Wall	White	1.825%
PC #21	Kitchen – Farmhouse	Wood	Door	Peach	0.0164%
PC #22	Kitchen – Farmhouse	Wood	Door	White	17.2333%
PC #23	Siting Room – Farmhouse	Plaster	Ceiling	Blue	0.0098%
PC #24	Siting Room – Farmhouse	Plaster	Wall	Pink	0.0643%
PC #25	Siting Room – Farmhouse	Wood	Wall Baseboard	White	0.0448%
PC #26	Living Room – Farmhouse	Wood	Door	Light Blue	0.0128%
PC #27	Washhouse	Plaster	Wall	Blue	6.3991%
PC #28	Washhouse	Plaster	Wall	White	4.8686
PC #29	Washhouse	Wood	Window Shutter	Green	4.2882%
PC #30	Barn	Steel	Barn Gate	Grey	<0.0091%

¹ BOLD indicates positive Lead Based Paint chip building components greater than the HUD Action Level for Maryland of 0.5% by weight.



3.3 Conclusions:

Lead based paint building components were detected on either the interior, exterior, or both for the following structures located on the Farmstead; Smokehouse, Chicken House, Farmhouse, and Washhouse. The Smokehouse contained lead based paint detected on the painted door components, roofing components, and meat hanging poles. The Chicken House contained lead based paint detected on the painted door components and exterior of the Chicken House. The Farmhouse contained lead based paint detected on the painted door component, front porch components, window components, rain gutter, various walls, and boiler. The Washhouse contained lead based paint detected on the painted walls, and window components. A summary of the lead based paint components is shown in Table 3.

Table 3: Positive Lead Based Paint Components

Structure	Location	Components
Smokehouse	Exterior	White painted door and roofing components
Smokehouse	Interior	White painted door components and meat hanging poles
Chicken House	Exterior	White painted exterior and door components
Farmhouse	Front Porch	White painted porch, door, and window components. Teal porch ceiling and light blue front entrance step.
Farmhouse	Exterior	White painted rain gutter, window components, and door components
Farmhouse	Basement	Green painted boiler
Farmhouse	First Floor	White painted walls and door components, and peach painted chair rail.
Washhouse	Interior	Blue and white painted walls, and green painted window components.

Further, the following materials, if present should be presumed to contain lead based paint since F&R personnel was unable to take paint chip samples from the second floor of the Farmhouse, Barn exterior and interior, and silo due to unsafe conditions.

- White plaster walls
- White wood door components
- White wood window components
- White wood, concrete, or steel building components
- Blue plaster walls
- Green wood/concrete building components
- Teal wood building components



Any other materials that may be suspected of containing a lead based paint concentration that have not been tested should be assumed to contain lead based paint.

4.0 Mold Visual Survey:

F&R performed a visual survey of the Farmstead Property that contains five (5) building structures; Farmhouse, Smokehouse, Chicken House, Washhouse, and Barn to investigate the conditions within these building structures. Refer to Appendix I for a photo log of mold growth throughout the various structures on the Farmstead.

F&R provides the following findings based on the inspection:

- Visual evidence of mold growth was noted at the time of the inspection.
- Evidence of water damage on the ceilings throughout the entire Farmhouse.
- Concerns of air quality due to mold growth inside the Farmhouse.
- Concerns of unstable structure conditions due to mold growth and rotted flooring.

5.0 Recommendations:

The following provides general recommendations for addressing hazardous materials in the planned demolition of the facilities at this site.

5.1 Asbestos containing materials:

The brown vinyl floor tile located in the Kitchen and the pipe insulation located on a wooden beam in the Basement of the Farmhouse contain asbestos containing material. These materials should be removed and disposed of by licensed Asbestos Abatement Contractor appropriately containerized, and disposed of at a landfill authorized to receive ACM contaminated waste material prior to demolition.

5.2 Lead Based Paint containing materials:

5.2.1 Recommendation and OSHA Regulations for Lead-Based Paint:

F&R recommends informing the demolition contractor of the presence of LBP in and on the structures to be demolished. It is further recommended that environmental and personal air monitoring be conducted by the demolition contractor during any removal process to determine actual personal exposure during demolition activity in order to determine the levels of personal protection and environmental controls required.

The demolition contractor is required to comply with the requirements of the OSHA Lead in Construction Standard (29 CFR 1926.62). In addition, all the waste material from the demolition work shall be tested for lead by the Toxicity Characteristic Leaching Procedure (TCLP). If the results show more than 5 milligrams per liter (mg/L) of lead, all the waste must be handled as hazardous waste. The waste must not be disposed of until the test results are obtained.



It is recommended that the lead based paint containing building components be further sampled to determine appropriate disposal during demolition. It is also recommended that the soils immediately surrounding the structures be tested to determine the lead content and appropriate removal and disposal during demolition

5.2.2 EPA Regulations for Lead-Based Paint:

For disposal of construction/demolition debris that has LBP, the EPA requires that testing of lead content be performed to determine proper disposal. EPA regulations require that a generator of waste determine if that waste is hazardous by performing testing in accordance with the requirements of 40 CFR 261.11 or for wastes that may be Resource Conservation and Recovery Act hazardous (such as items with high lead content), the generator may assume that the waste is hazardous and comply with the hazardous waste regulation.

5.3 Mold Containing Materials:

Based on our visual inspection, mold conditions were observed throughout the structures on the Property. Based on the fact that buildings will be demolished, it is recommended that a qualified mold remediation contractor be retained to remove and dispose of mold affected building components as part of the demolition work.

6.0 Limitations:

This report has been prepared for the exclusive use of Airport Design Consultants, Inc. This service was performed in accordance with generally accepted environmental practices. No other warranty, expressed or implied, is made. Our conclusions and recommendations are based, in part, upon information provided to us by others and our site observations. We have not verified the completeness or accuracy of the information provided by others, unless otherwise noted. Our observations and recommendations are based upon conditions readily visible at the site at the time of our site visit, and upon current industry standards. During F&R's inspection, accessible areas were visually surveyed for the presences of suspected ACM, LBP, and Mold. Inaccessible areas, such as behind ceilings or walls may not have been surveyed and therefore suspected ACM, LBP, and Mold may not have been identified. Areas inspected for suspect ACM, LBP, and Mold were limited to those designated by the scope of services.

During this study, suspect asbestos samples were submitted for analysis at an NVLAP-accredited laboratory via polarized light microscopy; suspect LBP was analyzed using industry standard methods and practices. As with any similar survey of this nature, actual conditions exist only at the precise locations from which suspect samples were collected. Certain inferences are based on the results of this sampling and related testing to form a professional opinion of conditions in areas beyond those from which the samples were collected. No other warranty, expressed or implied, is made.

Under this scope of services, F&R assumes no responsibility regarding response actions (e.g. O&M Plans, Encapsulation, Abatement, Removal, Notifications, etc.) initiated as a result of these findings. F&R assumes no liability for the duties and responsibilities of the Client with respect to compliance with these regulations. Compliance with regulations and response actions are the sole responsibility of the Client and

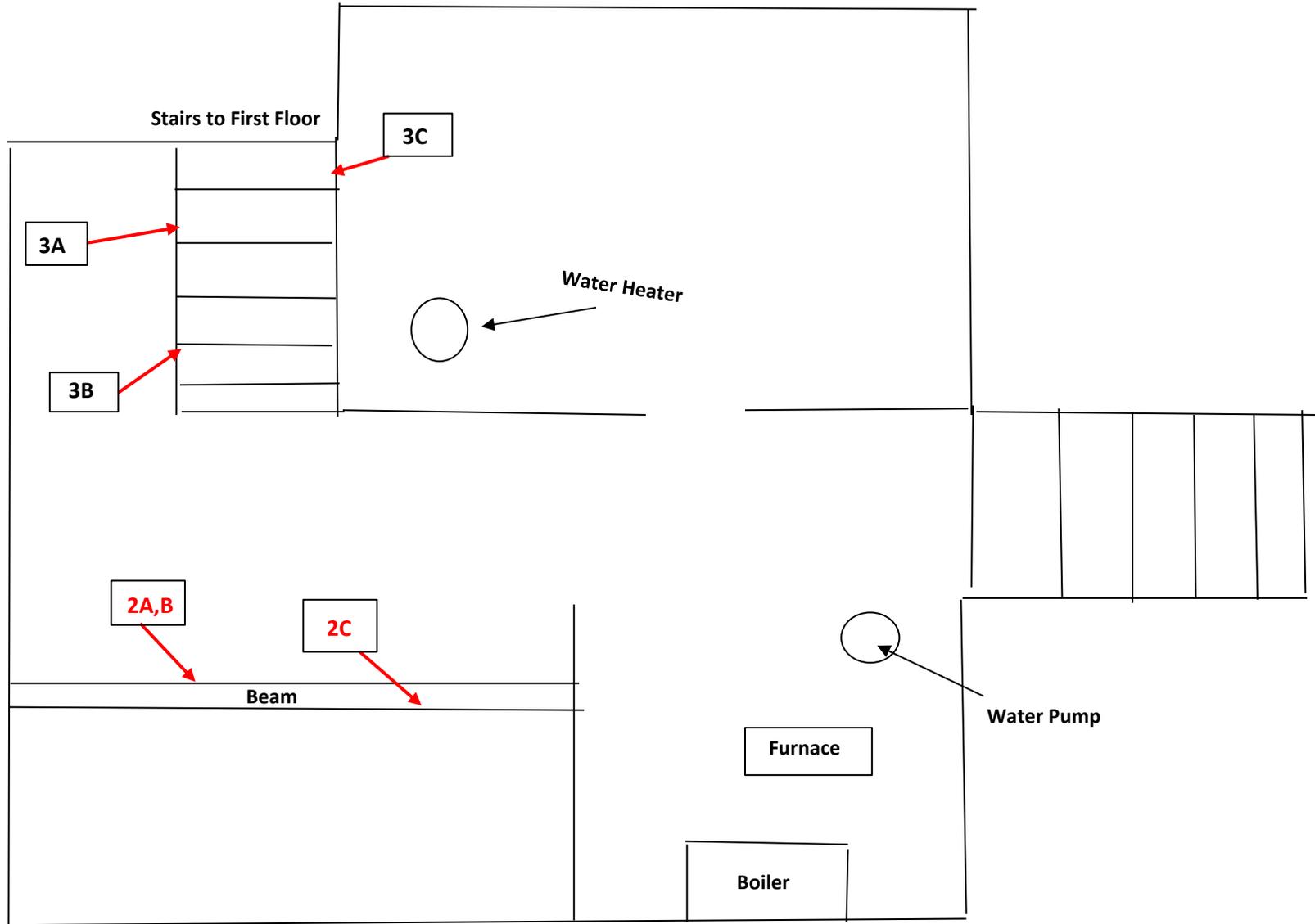


should be conducted in accordance with local, state, and/or federal requirements and should be performed by appropriately qualified and licensed-personnel, as warranted.

Froehling & Robertson, Inc. by virtue of providing the services described in this report, does not assume the responsibility of the person(s) in charge of the site, or otherwise undertake responsibility for reporting to any local, state, or federal public agencies any conditions at the site that may present a potential danger to public health, safety, or the environment. The Client agrees to notify the appropriate local, state, or federal public agencies as required by law, or otherwise to disclose, in a timely manner, any information that may be necessary to prevent any danger to public health, safety, or the environment. The contents of the report should not be construed in any way as a recommendation to purchase, sell, or develop the project site.



Appendix A – ASBESTOS SAMPLE LOCATION MAPS



****Red indicates ACM**



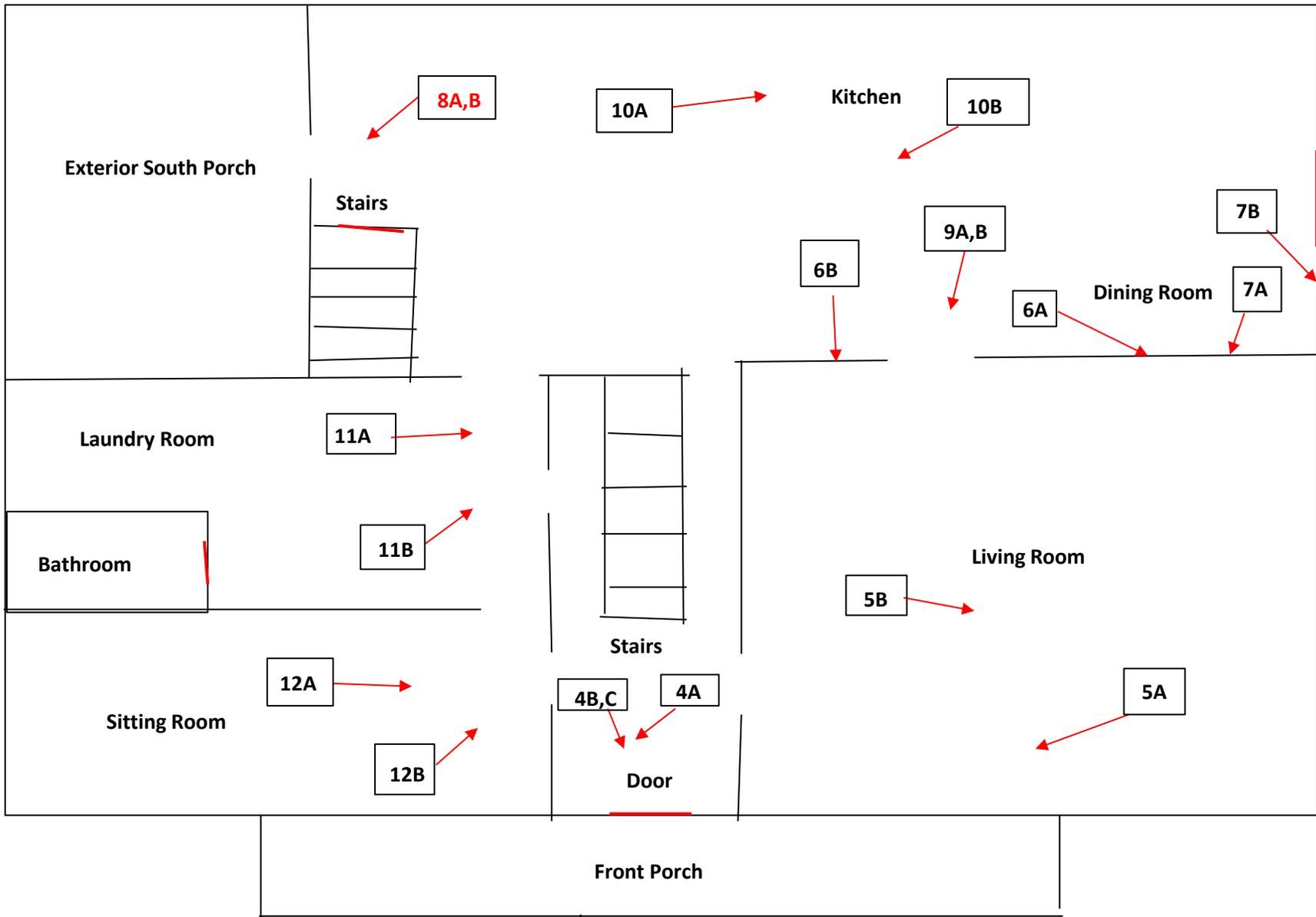
SINCE 1881

FROEHLING & ROBERTSON, INC.

Engineering • Environmental • Geotechnical
 22923 Quicksilver Drive , Suite 111 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

**ASBESTOS SAMPLING DIAGRAM
 Farmhouse - Basement
 Hagerstown, Maryland**

Project No.:	72V-0140	Scale:	NTS
Date:	7-Nov-17	Drawn:	SS
Figure No.:	1	Checked:	SS



1A & 1B - Asphalt Shingle Roof

Step

****Red indicates ACM**



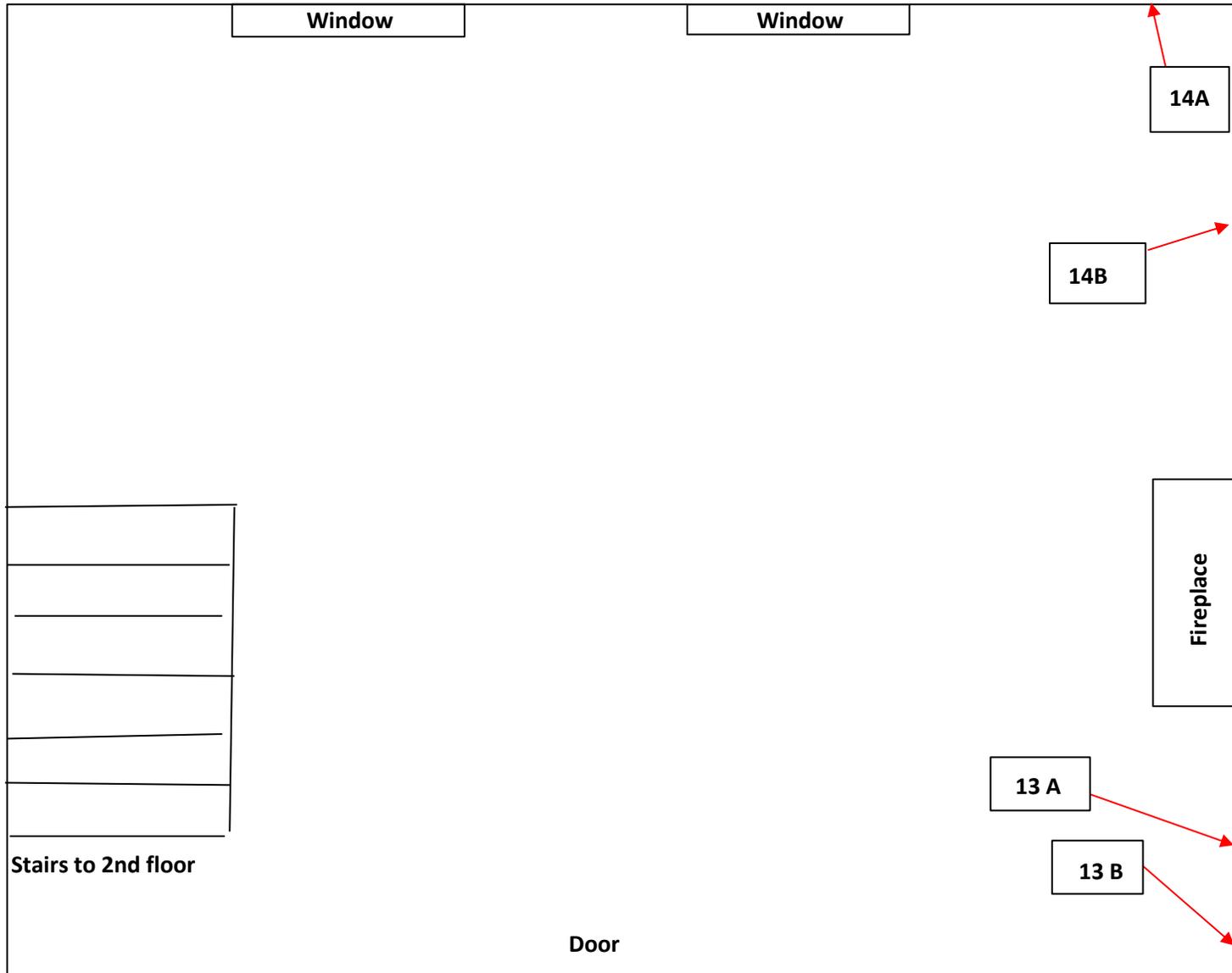
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**ASBESTOS SAMPLING DIAGRAM
 First Floor of Farmhouse
 Hagerstown, Maryland**

Project No.:	72V-0140	Scale:	NTS
Date:	7-Nov-17	Drawn:	SS
Figure No.:	2	Checked:	SS



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ASBESTOS SAMPLING DIAGRAM
Washhouse
Hagerstown, Maryland

Project No.:	72V-0140	Scale:	NTS
Date:	7-Nov-17	Drawn:	SS
Figure No.:	3	Checked:	SS



APPENDIX B – ASBESTOS DOCUMENTATION FIELD NOTES



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

22923 Quicksilver Drive, Suite 111
 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

Ceiling/Wall
 materials
 on this
 house
 plaster

mainly wood, plaster
 10/23 9:30-3:00

Date:

Project # 72V-0140

Field Personnel: Stephanie

ADC I - Grove Farmstead

Asbestos Samples					
Sample I.D.	Location	Material/Description	Friable (Yes/No)	Size	Quantity
1A	Farmhouse roof	asphalt & fiberglass roof	yes		
1B	Farmhouse roof	asphalt shingle roof	yes		
2A	Farm basement pipe / wood floor	TSI white ZNSW	yes	15	LF
2B	Farm basement pipe / wood floor	TSI white ZNSW	yes	15	LF
2C	Farm basement	TSI white insulation	yes	15	LE
3A	Farm basement shower	blue/white plaster wall	yes		40 SF
3B	" "	blue/white plaster wall	yes		40 SF
3C	" "	blue/white plaster wall	yes		40 SF
4A	Farmhouse entrance	white plaster ceiling	yes		
4B	Farmhouse entrance	white plaster ceiling	yes		
4C	" "	" " ceiling	yes		
5A	Farmhouse living room	white plaster ceiling	yes		

5B
 5C
 " " living room



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

22923 Quicksilver Drive, Suite 111

Dulles, Virginia 20166 | USA

T 703.996.0123 | F 703.996.0124

6A	Farmhouse dining room	White wall plaster	YES	NO	
6B	" dining room	White wall plaster	YES	NO	
7A	Farmhouse dining room	Blue wall panel plaster	YES		
7B	" "	blue wall plaster	YES		
8A	Kitchen	Vinyl floor tile brown	NO	15x11	
8B	Kitchen	Vinyl floor tile brown	NO	15x11	
9A	Parlor	4 layer orange carpet	NO		
9B	dining room	4 layer orange	NO		
10A	Kitchen	White plaster ceiling	YES		
10B	Kitchen	" "	YES		
11A	laundry room	Vinyl floor tile tan	NO		
11B	laundry room	Vinyl floor tile tan	NO		
12A	Sitting room	blue plaster ceiling	YES		

12B sitting room blue plaster ceiling YES



FROEHLING & ROBERTSON, INC.
Engineering • Environmental • Geotechnical

SHEET NO. _____ OF _____

JOB _____

DATE _____

COMPUTATIONS FOR _____

BY _____ CHKD _____

- 1A/B - single roof - ~~100~~ 200 280 SF
- MARBLE -
- 4 - entrance ceiling = 40 SF
- 5 - living room ceiling = 300 SF
- 6 - dining room wall plaster = ~~125~~ ~~100~~ 350 SF
- 7 - dining room blue plaster wall = ⁷⁵ 80 SF
- 8 - brown vinyl floor tile kitchen - 100 SF
- 9 - orange carpet and marble in dining room - 140 SF
- 10 - white ceiling in dining room/kitchen - 400 SF
- 11 - tan vinyl floor tile in laundry room - 100 SF



1551 Oakbridge Dr. STE B
 Powhatan, VA 23139
 804.897.1177 / 888.895.1177
 Fax 804.897.0070
 sanair.com

Asbestos
Chain of Custody
 Form 140, Rev 1, 1/20/2017

SanAir ID Number

Company: <u>Frohling & Hubertson, Inc.</u>	Project #: <u>92V-0140</u>	Collect by: <u>J. Santiago</u>
Address: <u>22423 Quicksilver Dr, Swell</u>	Project Name: <u>Grove Farmstead</u>	Phone #: <u>703-796-0912</u>
City, St., Zip: <u>Dallas, VA</u>	Date Collected: <u>10/23/2017</u>	Fax #:
State of Collection: <u>MD</u> Account#: <u>2526</u>	P.O. Number:	Email: <u>Santiago@FandR.com</u>

Bulk		Air		Soil	
ABB	PLM EPA 600/R-93/116 <input checked="" type="checkbox"/>	ABA	PCM NIOSH 7400 <input type="checkbox"/>	ABSE	PLM EPA 600/R-93/116 (Qual.) <input type="checkbox"/>
	Positive Stop <input type="checkbox"/>	ABA-2	OSHA w TWA* <input type="checkbox"/>	Vermiculite & Soil	
ABEPA	PLM EPA 400 Point Count <input type="checkbox"/>	ABTEM	TEM AHERA <input type="checkbox"/>	ABSP	PLM CARB 435 (LOD <1%) <input type="checkbox"/>
ABB1K	PLM EPA 1000 Point Count <input type="checkbox"/>	ABATN	TEM NIOSH 7402 <input type="checkbox"/>	ABSP1	PLM CARB 435 (LOD 0.25%) <input type="checkbox"/>
ABBEN	PLM EPA NOB** <input type="checkbox"/>	ABT2	TEM Level II <input type="checkbox"/>	ABSP2	PLM CARB 435 (LOD 0.1%) <input type="checkbox"/>
ABBCH	TEM Chatfield** <input type="checkbox"/>	Other:	<input type="checkbox"/>	Dust	
ABBTM	TEM EPA NOB** <input type="checkbox"/>	New York ELAP		ABWA	TEM Wipe ASTM D-6480 <input type="checkbox"/>
ABQ	PLM Qualitative <input type="checkbox"/>	PLM NY	PLM EPA 600/M4-82-020 <input type="checkbox"/>	ABDMV	TEM Microvac ASTM D-5755 <input type="checkbox"/>
		ABEPA2	NY ELAP 198.1 <input type="checkbox"/>	Matrix Other	
		ABENY	NY ELAP 198.6 PLM NOB <input type="checkbox"/>		
		ABBNY	NY ELAP 198.4 TEM NOB <input type="checkbox"/>		

** Available on 24-hr. to 5-day TAT

Turn Around Times	3 HR (4 HR TEM) <input type="checkbox"/>	6 HR (8HR TEM) <input type="checkbox"/>	12 HR <input type="checkbox"/>	24 HR <input type="checkbox"/>
	<input type="checkbox"/> 2 Days	<input type="checkbox"/> 3 Days	<input type="checkbox"/> 4 Days	<input type="checkbox"/> 5 Days

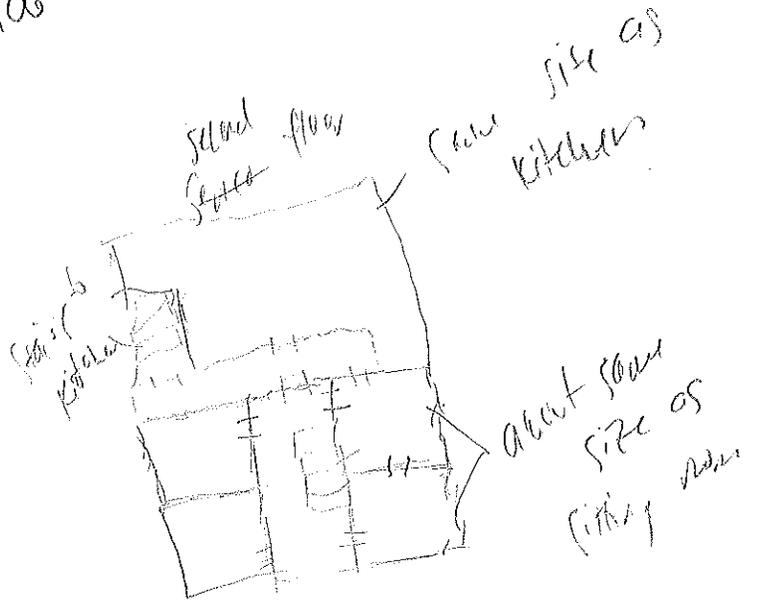
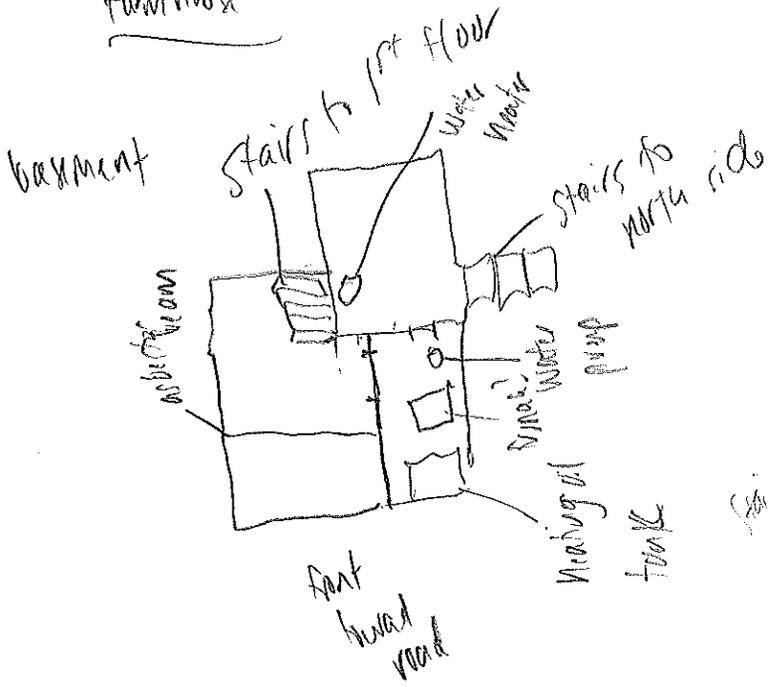
Special Instructions

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start - Stop Time*
1A	Asphalt Shingle Roof - Black / Farmhouse				
1B	Asphalt Shingle Roof - Black / Farmhouse				
2A	White - T&E piping insulation - Farm Basement				
2B	White - piping insulation - farmhouse basement				
2C	White - piping insulation - farmhouse basement				
3A	Blue - Plaster wall FH Basement Stairway				
3B	Blue - Plaster wall FH Basement Stairway				
3C	Blue - Plaster wall FH Basement Stairway				
4A	White - plaster ceiling FH main entrance				
4B	White - plaster ceiling FH main entrance				
4C	White - plaster ceiling FH main entrance				
5A	White - plaster ceiling living room				

Relinquished by	Date	Time	Received by	Date	Time
	10/24				

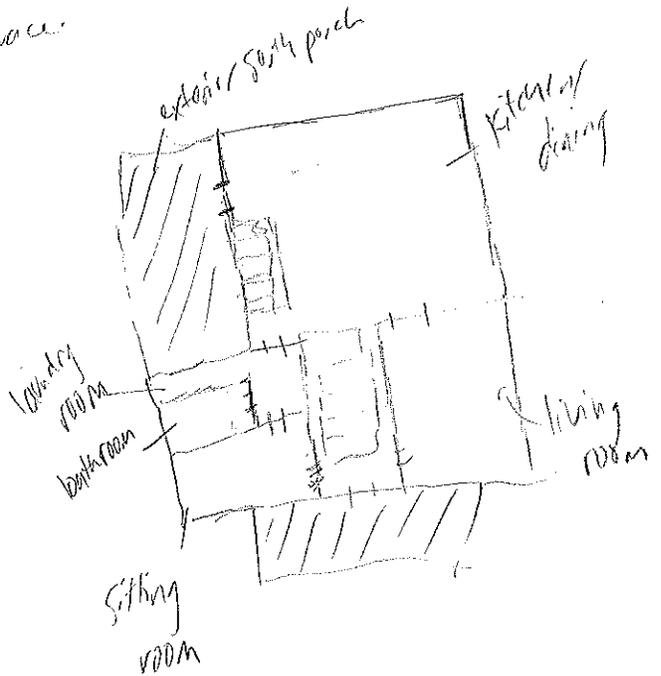
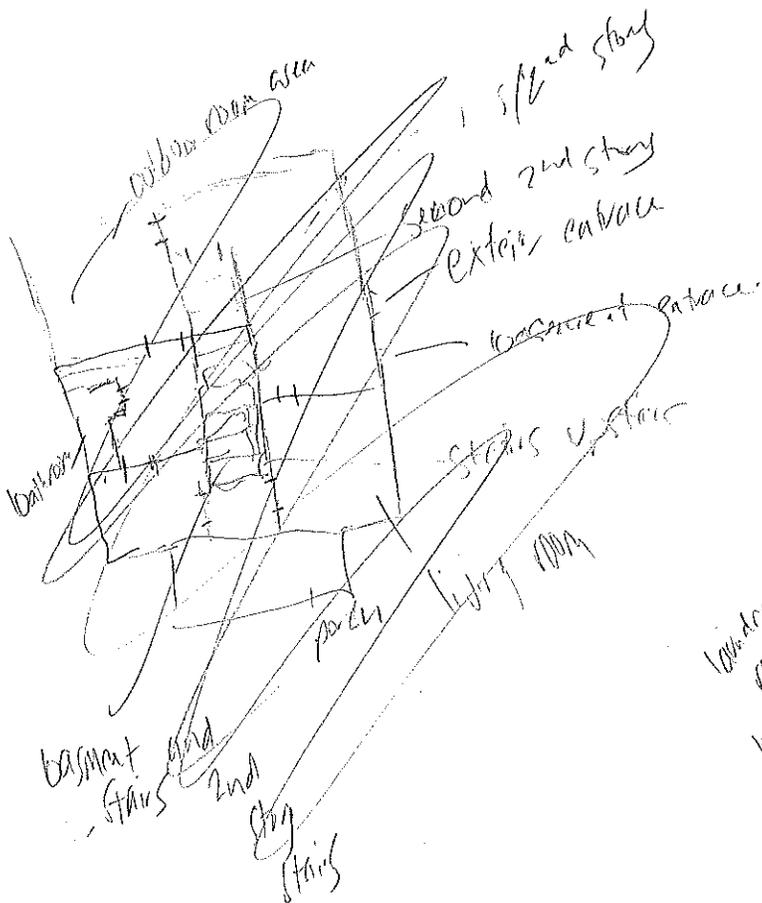
If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or holiday work must be scheduled ahead of time and is charged for rush turnaround time. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.

Attic/loft



first floor

Apple was open
with exposed wood





APPENDIX C – ASBESTOS LABORATORY RESULTS & CHAIN OF CUSTODY

SanAir Technologies Laboratory

Analysis Report

prepared for

Froehling & Robertson Inc

Report Date: 10/30/2017
Project Name: Grove Farmstead
Project #: 72V-0140
SanAir ID#: 17043152



NVLAP LAB CODE 200870-0



Certification # 652931



License # LAB0166



804.897.1177

www.sanair.com



SanAir Technologies Laboratory, Inc.

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139
804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: <http://www.sanair.com> E-mail: iaq@sanair.com

Froehling & Robertson Inc
3015 Dumbarton Road
Richmond, VA 23228

October 30, 2017

SanAir ID # 17043152
Project Name: Grove Farmstead
Project Number: 72V-0140

Dear S. Santiago,

We at SanAir would like to thank you for the work you recently submitted. The 31 sample(s) were received on Wednesday, October 25, 2017 via FedEx. The final report(s) is enclosed for the following sample(s): 1A, 1B, 2A, 2B, 2C, 3A, 3B, 3C, 4A, 4B, 4C, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B, 13A, 13B, 14A, 14B.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino
Asbestos & Materials Laboratory Manager
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

sample conditions:

4 sample(s) in Discrepancy w/ COC condition 27 sample(s) in Good condition



SanAir Technologies Laboratory, Inc.

1551 Oakbridge Drive, Suite B, Powhatan, VA 23139
804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: <http://www.sanair.com> E-mail: iaq@sanair.com

SanAir ID Number

17043152

FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
Richmond, VA 23228

Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 1:29:16 PM
Analyst: Childress, Susan

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
1A / 17043152-001 Asphalt Shingle Roof/ Farmhouse	Black Non-Fibrous Heterogeneous	20% Cellulose	80% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
1B / 17043152-002 Asphalt Shingle Roof/ Farmhouse	Black Non-Fibrous Heterogeneous	20% Cellulose	80% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
2A / 17043152-003 TSI Piping Insulation - Farm Basement	White Fibrous Homogeneous	15% Cellulose	15% Other	70% Chrysotile

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
2B / 17043152-004 Piping Insulation - Farmhouse Basement	White Fibrous Homogeneous	15% Cellulose	15% Other	70% Chrysotile

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
2C / 17043152-005 Piping Insulation - Farmhouse Basement	White Fibrous Homogeneous	15% Cellulose	15% Other	70% Chrysotile

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
3A / 17043152-006 Plaster Wall FH Basement Stairway, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected
3A / 17043152-006 Plaster Wall FH Basement Stairway, Skim Coat	Blue Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Analyst: *Susan Childress*
Analysis Date: 10/30/2017

Approved Signatory: *[Signature]*
Date: 10/30/2017



SanAir Technologies Laboratory, Inc.

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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: <http://www.sanair.com> E-mail: iaq@sanair.com

SanAir ID Number

17043152

FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
Richmond, VA 23228

Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 1:29:16 PM
Analyst: Childress, Susan

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
3B / 17043152-007 Plaster Wall FH Basement Stairway, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected

3B / 17043152-007 Plaster Wall FH Basement Stairway, Skim Coat	Blue Non-Fibrous Homogeneous		100% Other	None Detected
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SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
3C / 17043152-008 Plaster Wall FH Basement Stairway, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected

3C / 17043152-008 Plaster Wall FH Basement Stairway, Skim Coat	Blue Non-Fibrous Homogeneous		100% Other	None Detected
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SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
4A / 17043152-009 Plaster Ceiling FH Maintenance, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected

4A / 17043152-009 Plaster Ceiling FH Maintenance, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
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SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
4B / 17043152-010 Plaster Ceiling FH Maintenance, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected

4B / 17043152-010 Plaster Ceiling FH Maintenance, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
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SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
4C / 17043152-011 Plaster Ceiling FH Maintenance, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected

4C / 17043152-011 Plaster Ceiling FH Maintenance, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
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Certification

Analyst: *Susan Childress*

Approved Signatory: *[Signature]*

Analysis Date: 10/30/2017

Date: 10/30/2017

Page 4 of 11



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Analyst: Childress, Susan

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
5A / 17043152-012 Plaster Ceiling Living Room, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected
5A / 17043152-012 Plaster Ceiling Living Room, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
5A / 17043152-012 Plaster Ceiling Living Room, Texture	White Non-Fibrous Homogeneous	6% Cellulose	94% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
5B / 17043152-013 Plaster Ceiling/ Living Room, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected
5B / 17043152-013 Plaster Ceiling/ Living Room, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
5B / 17043152-013 Plaster Ceiling/ Living Room, Texture	White Non-Fibrous Homogeneous	6% Cellulose	94% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
6A / 17043152-014 Wall Plaster/ Dining Room, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected
6A / 17043152-014 Wall Plaster/ Dining Room, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
6A / 17043152-014 Wall Plaster/ Dining Room, Texture	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
6B / 17043152-015 Wall Plaster/ Dining Room, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected
6B / 17043152-015 Wall Plaster/ Dining Room, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
6B / 17043152-015 Wall Plaster/ Dining Room, Texture	White Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Analyst: *Susan P. Childress*

Approved Signatory: *[Signature]*

Analysis Date: 10/30/2017

Date: 10/30/2017



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Analyst: Childress, Susan

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
7A / 17043152-016 Wall Plaster/ Dining Room, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair < 1% Cellulose	100% Other	None Detected
7A / 17043152-016 Wall Plaster/ Dining Room, Skim Coat	Blue Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
7B / 17043152-017 Wall Plaster/ Dining Room, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair < 1% Cellulose	100% Other	None Detected
7B / 17043152-017 Wall Plaster/ Dining Room, Skim Coat	Blue Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
8A / 17043152-018 Vinyl Floor Tile/ Kitchen	Brown Non-Fibrous Homogeneous	10% Cellulose	75% Other	15% Chrysotile

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
8B / 17043152-019 Vinyl Floor Tile/ Kitchen	Brown Non-Fibrous Homogeneous	10% Cellulose	75% Other	15% Chrysotile

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
9A / 17043152-020 Carpet W/ Mastic/ Dining Room, Flooring	Grey Non-Fibrous Heterogeneous	30% Cellulose	70% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
9B / 17043152-021 Carpet W/ Mastic/ Dining Room, Flooring	Grey Non-Fibrous Heterogeneous	30% Cellulose	70% Other	None Detected

Certification

Analyst: *Susan Childress*

Analysis Date: 10/30/2017

Approved Signatory:

Date: 10/30/2017



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SanAir ID Number

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Address: 3015 Dumbarton Road
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Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

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Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 1:29:16 PM
Analyst: Childress, Susan

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
10A / 17043152-022 Plaster Ceiling/ Kitchen, Drywall	Grey Non-Fibrous Homogeneous	3% Cellulose	97% Other	None Detected
10A / 17043152-022 Plaster Ceiling/ Kitchen, Texture	White Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
10B / 17043152-023 Plaster Ceiling/ Kitchen, Drywall	Grey Non-Fibrous Homogeneous	3% Cellulose	97% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
11A / 17043152-024 Vinyl Floor Tile/ Laundry Room	Tan Non-Fibrous Homogeneous	5% Glass	95% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
11B / 17043152-025 Vinyl Floor Tile/ Laundry Room	Tan Non-Fibrous Homogeneous	5% Glass	95% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
12A / 17043152-026 Plaster Ceiling/ Sitting Room, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected
12A / 17043152-026 Plaster Ceiling/ Sitting Room, Skim Coat	Blue Non-Fibrous Homogeneous		100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
12B / 17043152-027 Plaster Ceiling/ Sitting Room, Plaster	Beige Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected
12B / 17043152-027 Plaster Ceiling/ Sitting Room, Skim Coat	Blue Non-Fibrous Homogeneous		100% Other	None Detected

Certification

Analyst: *Susan P. Childress*
Analysis Date: 10/30/2017

Approved Signatory: *[Signature]*
Date: 10/30/2017



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Project Number: 72V-0140
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Project Name: Grove Farmstead

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Report Date: 10/30/2017 1:29:16 PM
Analyst: Childress, Susan

Asbestos Bulk PLM EPA 600/R-93/116

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
13A / 17043152-028 Plaster Wall/ Washhouse, Plaster	Tan Non-Fibrous Homogeneous	< 1% Hair < 1% Cellulose	100% Other	None Detected

13A / 17043152-028 Plaster Wall/ Washhouse, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
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SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
13B / 17043152-029 Plaster Wall/ Washhouse, Plaster	Tan Non-Fibrous Homogeneous	< 1% Hair < 1% Cellulose	100% Other	None Detected

13B / 17043152-029 Plaster Wall/ Washhouse, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
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SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
14A / 17043152-030 Plaster Wall/ Washhouse	Tan Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected

SanAir ID / Description	Stereoscopic Appearance	Components		Asbestos Fibers
		% Fibrous	% Non-Fibrous	
14B / 17043152-031 Plaster Wall/ Washhouse, Plaster	Tan Non-Fibrous Homogeneous	< 1% Hair	100% Other	None Detected

14B / 17043152-031 Plaster Wall/ Washhouse, Skim Coat	White Non-Fibrous Homogeneous		100% Other	None Detected
--	-------------------------------------	--	------------	---------------

Certification

Analyst: *Susan Childress*
Analysis Date: 10/30/2017

Approved Signatory: *[Signature]*
Date: 10/30/2017

Disclaimer

The final report cannot be reproduced, except in full, without written authorization from SanAir. Fibers smaller than 5 microns cannot be seen with this method due to scope limitations. The accuracy of the results is dependent upon the client's sampling procedure and information provided to the laboratory by the client. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the sample and information provided by the client. This report may not be used by the client to claim product endorsement by NVLAP or any other agency of the U.S. government.

For NY state samples, method EPA 600/M4-82-020 is performed.

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

NY ELAP lab ID 11983



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 Fax 804.897.0070
 sanair.com

Asbestos Chain of Custody
 Form 140, Rev 1, 1/20/2017

SanAir ID Number
 17043152

Company: <u>Friedrich & Hubertson, Inc.</u>	Project #: <u>92V-0140</u>	Collect by: <u>J. Santiago</u>
Address: <u>22423 Quicksilver Dr, Suitell</u>	Project Name: <u>Grove Farmstead</u>	Phone #: <u>703-796-0912</u>
City, St., Zip: <u>Dulles, VA</u>	Date Collected: <u>10/23/2017</u>	Fax #:
State of Collection: <u>MD</u>	Account#: <u>2526</u>	P.O. Number:
		Email: <u>jsantiago@FandR.com</u>

Bulk			Air			Soil		
ABB	PLM EPA 600/R-93/116	<input checked="" type="checkbox"/>	ABA	PCM NIOSH 7400	<input type="checkbox"/>	ABSE	PLM EPA 600/R-93/116 (Qual.)	<input type="checkbox"/>
	Positive Stop	<input type="checkbox"/>	ABA-2	OSHA w/ TWA*	<input type="checkbox"/>	Vermiculite & Soil		
ABEPA	PLM EPA 400 Point Count	<input type="checkbox"/>	ABTEM	TEM AHERA	<input type="checkbox"/>	ABSP	PLM CARB 435 (LOD <1%)	<input type="checkbox"/>
ABB1K	PLM EPA 1000 Point Count	<input type="checkbox"/>	ABATN	TEM NIOSH 7402	<input type="checkbox"/>	ABSP1	PLM CARB 435 (LOD 0.25%)	<input type="checkbox"/>
ABBEN	PLM EPA NOB**	<input type="checkbox"/>	ABT2	TEM Level II	<input type="checkbox"/>	ABSP2	PLM CARB 435 (LOD 0.1%)	<input type="checkbox"/>
ABBCH	TEM Chatfield**	<input type="checkbox"/>	Other:		<input type="checkbox"/>	Dust		
ABBTM	TEM EPA NOB**	<input type="checkbox"/>	New York ELAP			ABWA	TEM Wipe ASTM D-6480	<input type="checkbox"/>
ABQ	PLM Qualitative	<input type="checkbox"/>	PLM NY	PLM EPA 600/M4-82-020	<input type="checkbox"/>	ABDMV	TEM Microvac ASTM D-5755	<input type="checkbox"/>
			ABEPA2	NY ELAP 198.1	<input type="checkbox"/>	Matrix Other		
			ABENY	NY ELAP 198.6 PLM NOB	<input type="checkbox"/>			<input type="checkbox"/>
			ABBNY	NY ELAP 198.4 TEM NOB	<input type="checkbox"/>			<input type="checkbox"/>
Water								
ABHE	EPA 100.2	<input type="checkbox"/>						

** Available on 24-hr. to 5-day TAT

Turn Around Times	3 HR (4 HR TEM) <input type="checkbox"/>	6 HR (8HR TEM) <input type="checkbox"/>	12 HR <input type="checkbox"/>	24 HR <input type="checkbox"/>
	<input type="checkbox"/> 2 Days	<input checked="" type="checkbox"/> 3 Days	<input type="checkbox"/> 4 Days	<input type="checkbox"/> 5 Days

Special Instructions

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start - Stop Time*
1A	Asphalt Shingle Roof - Black / Farmhouse				
1B	Asphalt Shingle Roof - Black / Farmhouse				
2A	White - T&E piping insulation - Farm basement				
2B	White - Piping insulation - Farmhouse Basement				
2C	White - Piping insulation - Farmhouse Basement				
3A	Blue - Plaster Wall FH Basement Stairway				
3B	Blue - Plaster Wall FH Basement Stairway				
3C	Blue - Plaster Wall FH Basement Stairway				
4A	White - Plaster Ceiling FH main entrance				
4B	White - Plaster Ceiling FH main entrance				
4C	White - Plaster Ceiling FH main entrance				
5A	White - Plaster ceiling living room				

Relinquished by	Date	Time	Received by	Date	Time
<u>[Signature]</u>	<u>10/24</u>	<u>4:00pm</u>	<u>[Signature]</u>	<u>OCT 25 2017</u>	<u>10:10am</u>

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or holiday work must be scheduled ahead of time and is charged for rush turnaround time. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.

17043152

Sample #	Sample Identification/Location	Volume or Area	Sample Date	Flow Rate*	Start - Stop Time*
5B	White - plaster ceiling / living room				
6A	White - wall plaster / dining room				
6B	White - wall plaster / dining room				
7A	Blue - wall plaster / dining room				
7B	Blue - wall plaster / dining room				
8A	Brown - Vinyl floor tile / Kitchen				
8B	Brown - Vinyl floor tile / Kitchen				
9A	Orange Carpet w/ black mastic / dining room				
9B	Orange Carpet w/ black mastic / dining room				
10A	White plaster ceiling / Kitchen				
10B	White plaster ceiling / Kitchen				
11A	Tan vinyl floor tile / laundry room				
11B	Tan vinyl floor tile / laundry room				
12A	Blue plaster ceiling / sitting room				
12B	Blue plaster ceiling / sitting room				
13A	Blue plaster wall / wash house				
13B	Blue plaster wall / wash house				
14A	White plaster wall / wash house				
14B	White plaster wall / wash house				

Special Instructions

Relinquished by	Date	Time	Received by	Date	Time
<i>[Signature]</i>	10/24	4:00 pm	<i>[Signature]</i>	OCT 25 2017	10:10 AM

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or holiday work must be scheduled ahead of time and is charged for rush turnaround time. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.



APPENDIX D – ASBESTOS PHOTO LOG



Photo #1: Sample 1A-1B – Black Asphalt Shingle collected from the roof of the Farmhouse.



Photo #2: Samples 2A-2C – White insulation collected from a wooden beam located in the basement of the Farmhouse.

SITE PHOTOGRAPHS

FROEHLING & ROBERTSON, INC.
 ENGINEERING • ENVIRONMENTAL • GEOTECHNICAL
 22923 Quicksilver Drive #111
 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI- Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #3: Samples 3A-3C – Blue/Beige Plaster Wall collected from the stairway corridor leading to the first floor of the Farmhouse.



Photo #4: Samples 4A-4C – White Plaster Ceiling collected from the front entrance of the Farmhouse.

SITE PHOTOGRAPHS

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 22923 Quicksilver Drive #111
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Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #5: Samples 5A-5B – White Plaster Ceiling collected from the Living Room of the Farmhouse.



Photo #6: Samples 6A-6B – White Plaster Wall collected from the Dining Room of the Farmhouse.

SITE PHOTOGRAPHS

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Project:	ADCI- Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #7: Samples 7A-7B – Blue Plaster Chair Rail collected from the Dining Room of the Farmhouse.



Photo #8: Samples 8A-8B – 1x1 Brown Vinyl Floor Tile collected from the Kitchen of the Farmhouse.

SITE PHOTOGRAPHS

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Project:	ADCI – Grove Farmstead Hazmat
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #9: Samples 9A-9B – Orange Carpet with flooring collected from the Dining Room of the Farmhouse.



Photo #10: Samples 10A-10B – White Drywall/Texture Ceiling collected from the Kitchen of the Farmhouse.

SITE PHOTOGRAPHS

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 Dulles, Virginia 20166 | USA
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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #11: Samples 11A-11B – Tan Vinyl Flooring collected from the Laundry Room of the Farmhouse.



Photo #12: Samples 12A-12B – Blue Plaster Ceiling collected from the Sitting Room of the Farmhouse.

SITE PHOTOGRAPHS

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F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #13: Samples 13A-13B – Blue Plaster Wall collected from the Washhouse.



Photo #14: Samples 14A-14B – White Plaster Wall collected from the Washhouse.

SITE PHOTOGRAPHS

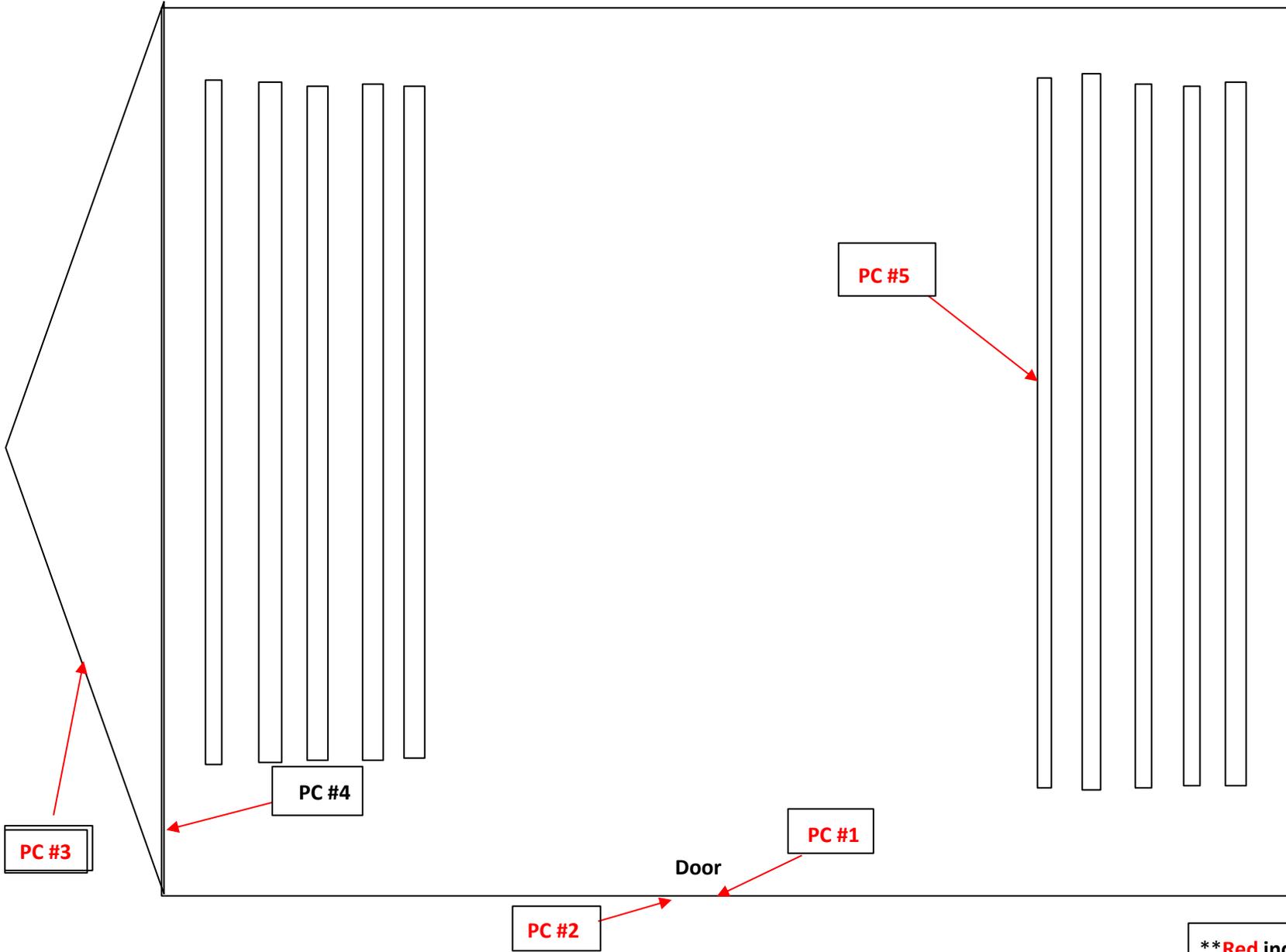


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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017



APPENDIX E – LEAD BASED PAINT SAMPLE LOCATION MAP



SINCE 1881

FROEHLING & ROBERTSON, INC.

Engineering • Environmental • Geotechnical
 22923 Quicksilver Drive , Suite 111 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

**Lead Based Paint Sampling Diagram
 Smoke House
 Hagerstown, Maryland**

Project No.:	72V-0140	Scale:	NTS
Date:	7-Nov-17	Drawn:	SS
Figure No.:	4	Checked:	SS



****Red indicates positive LBP**



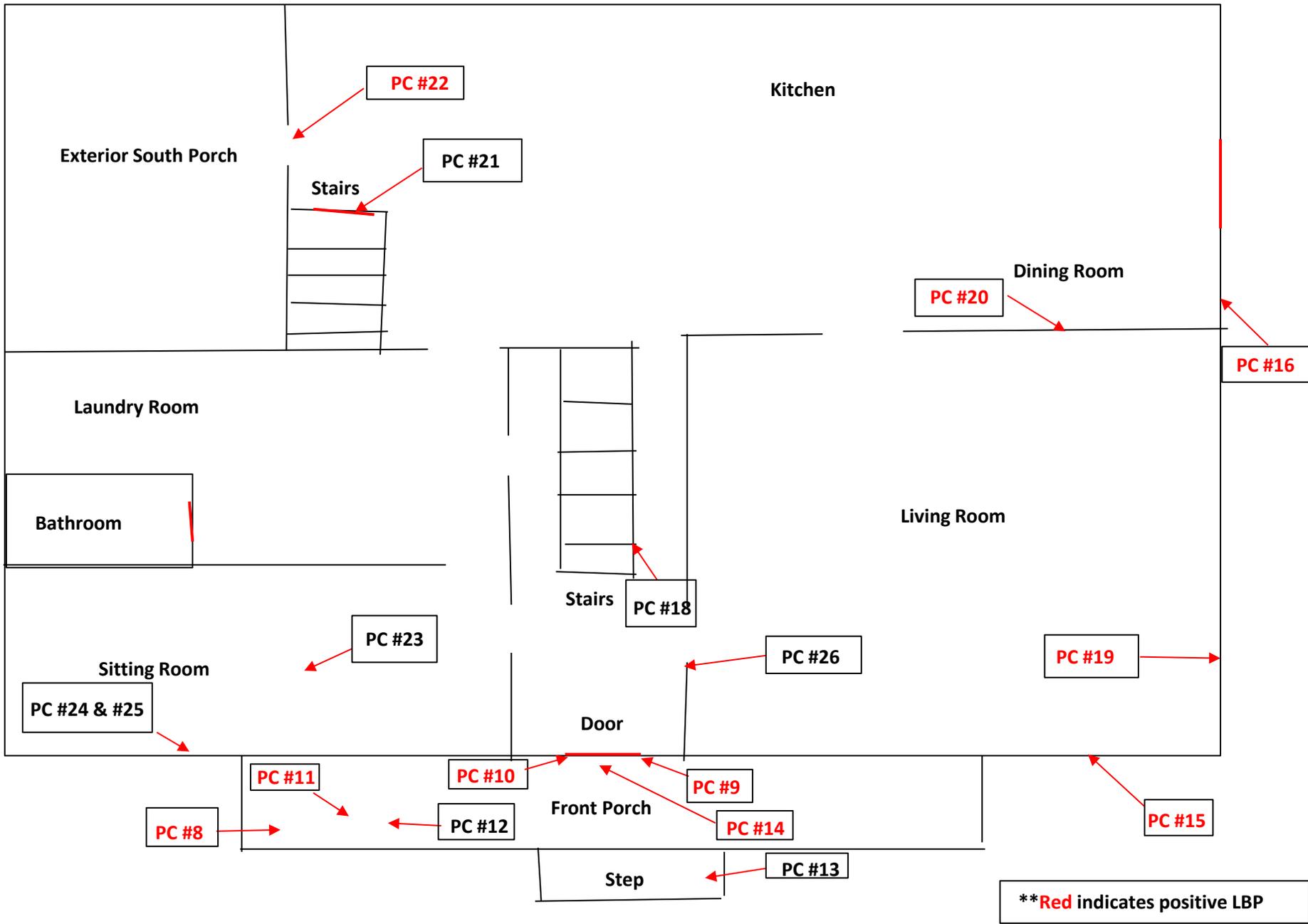
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FROEHLING & ROBERTSON, INC.

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 22923 Quicksilver Drive , Suite 111 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

**Lead Based Paint Sampling Diagram
 Chicken House
 Hagerstown, Maryland**

Project No.:	72V-0140	Scale:	NTS
Date:	7-Nov-17	Drawn:	SS
Figure No.:	5	Checked:	SS



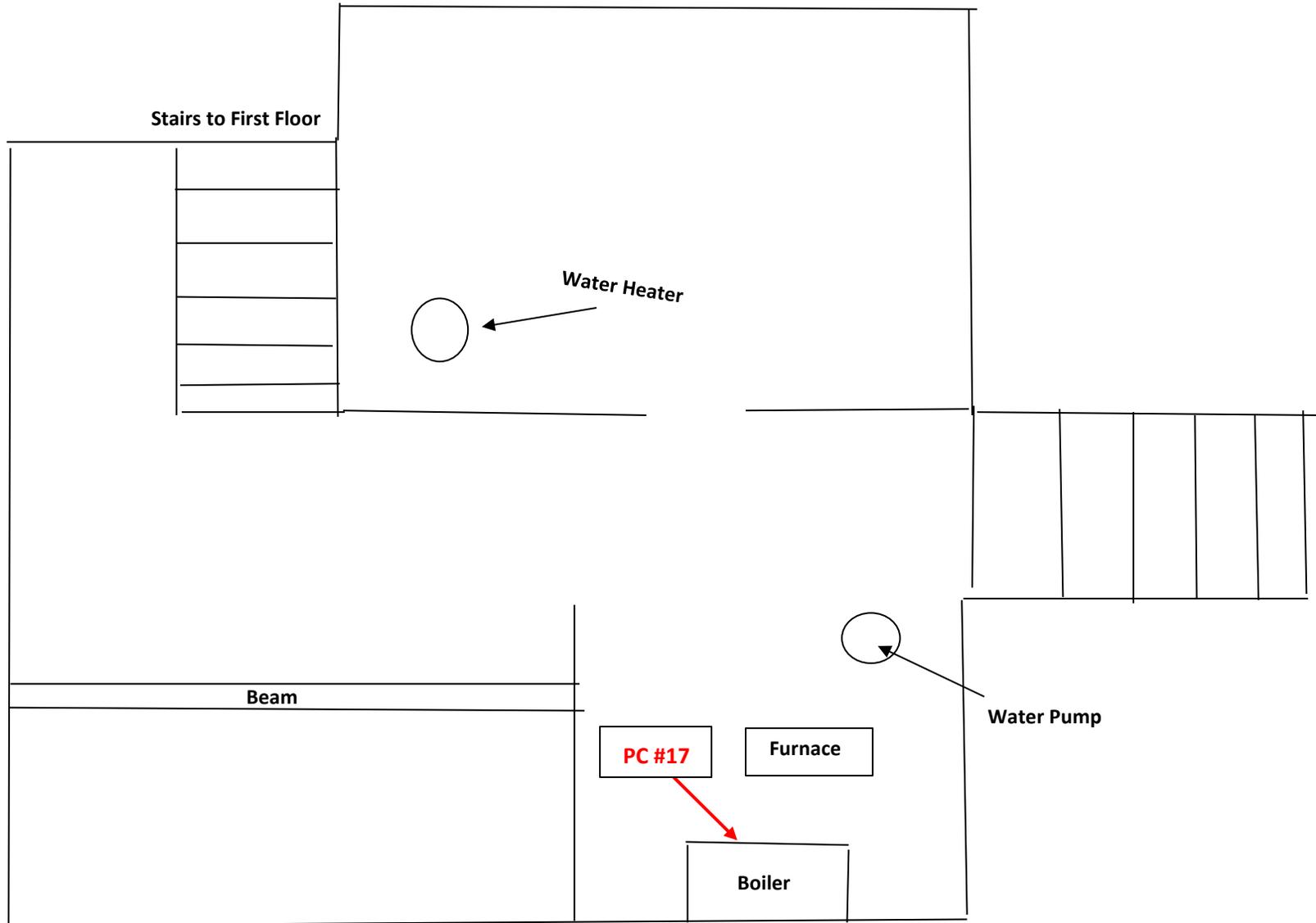
SINCE 1881

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 T 703.996.0123 | F 703.996.0124

**Lead Based Paint Chip Sampling Diagram
 Farmhouse- First Floor
 Hagerstown, Maryland**

Project No.:	72V-0140	Scale:	NTS
Date:	7-Nov-17	Drawn:	SS
Figure No.:	6	Checked:	SS



****Red indicates positive LBP**



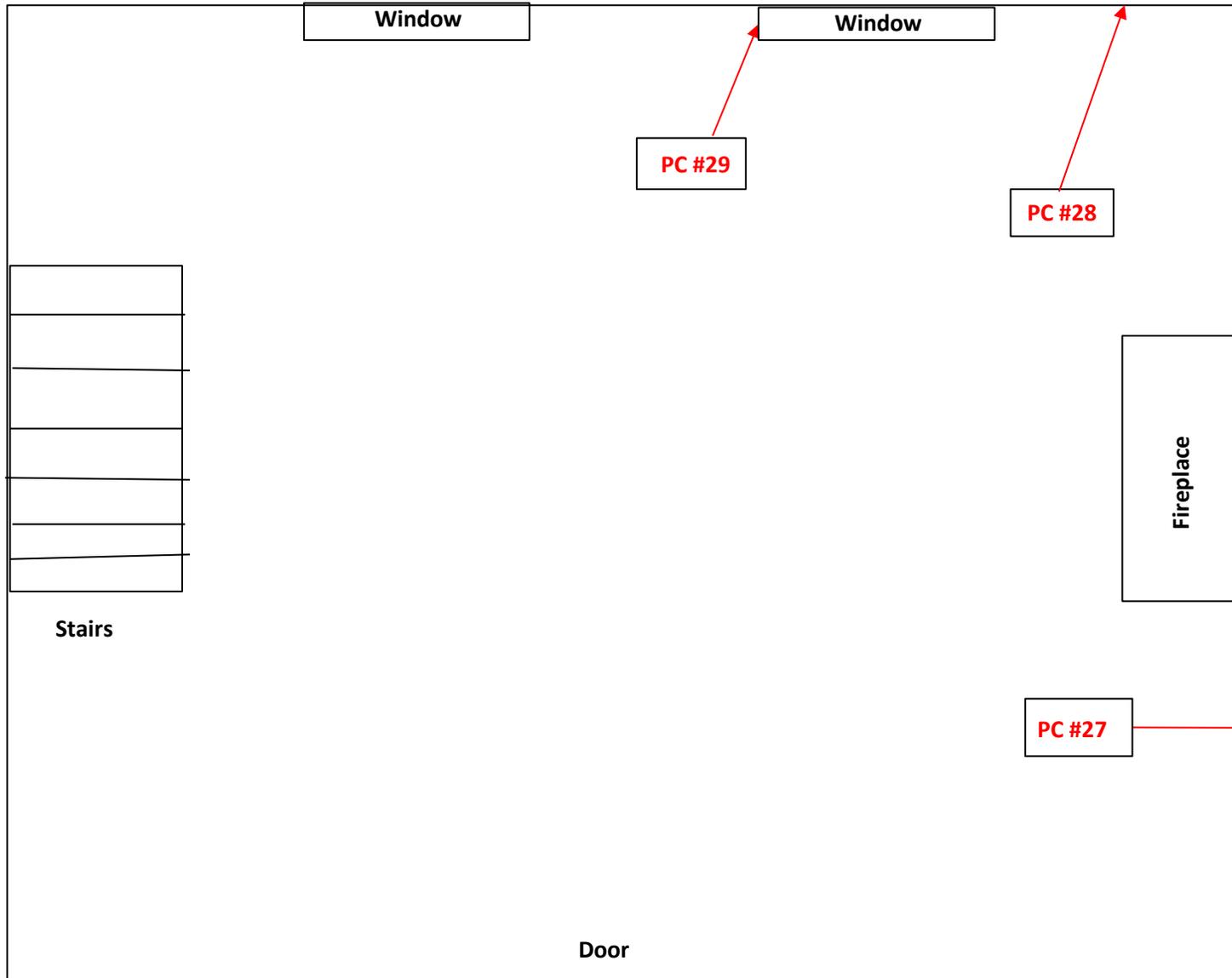
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LEAD BASED PAINT CHIP SAMPLING DIAGRAM
Farmhouse - Basement
Hagerstown, Maryland

Project No.:	72V-0140	Scale:	NTS
Date:	7-Nov-17	Drawn:	SS
Figure No.:	7	Checked:	SS



****Red indicates positive LBP**



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**Lead Based Paint Sampling Diagram
 Washhouse
 Hagerstown, Maryland**

Project No.:	72V-0140	Scale:	NTS
Date:	7-Nov-17	Drawn:	SS
Figure No.:	8	Checked:	SS



APPENDIX F – LEAD BASED PAINT DOCUMENTATION FIELD NOTES



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

22923 Quicksilver Drive, Suite 111
 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

Date: 10/23/2017 9:30 - 9:30
 Field Personnel: Stephanie

Project # 72V-0140

ADC I - Grove Farmstead

Lead Based Paint -- Paint Chip Samples					
Sample I.D.	Location	Substrate	Component	Color	Quantity
PC#1	Smoke house exterior door	wood	door	White	
PC#2	Smoke house exterior door	wood	door casing	White	
PC#3	Smoke house exterior roof	wood	roof casing eave	White	
PC#4	Smoke house interior	stone	wall B	White	
PC#5	Smoke house interior	Steel	pole	White	
PC#6	Chicken house	wood	door exterior wall	White	
PC#7	Chicken house exterior	wood	door casing	White	
PC#8	Farmhouse front exterior	wood	wood pillar door casing	White	
PC#9	Farmhouse front exterior	wood	door casing	White	
PC#10	Farmhouse front exterior	wood	window frame	White	
PC#11	Farmhouse front exterior	wood	ceiling roof	tan	
PC#12	Farmhouse front exterior	concrete	rafters	light blue	
PC#13	Farmhouse	concrete	stairs	orange	

← door is same material



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Dulles, Virginia 20166 | USA

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Sample I.D.	Location	Substrate	Component	Color	Quantity
PCT#14	Farmhouse front	wood	door step	light blue	
PCT#15	Farmhouse front	wood	Window sill	White	
PCT#16	Farmhouse side	Metal	rash gutter	white	
PCT#17	Pavement	Steel	Roiler	Green	
PCT#18	Farmhouse interior	wood	Wall	light blue	
PCT#19	Farmhouse room to right	wood	Wallpaper	peach	
PCT#20	Farmhouse dining room	plaster	Wall	White	
PCT#21	Farmhouse kitchen	wood	door	peach	
PCT#22	Wrecker	wood	door	White	
PCT#23	Sitting room	plaster	ceiling	blue	
PCT#24	Sitting room	paper	Wall	pink	
PCT#25	Sitting room	wood	Wall baseboard	White	
PCT#26	Dining room	Wood	door	Blue	

(light)



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

22923 Quicksilver Drive, Suite 111
 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

Date:

Project # 72V-0140

Field Personnel: Stephanie

Lead Based Paint – Paint Chip Samples					
Sample I.D.	Location	Substrate	Component	Color	Quantity
PC# 27	warehouse	metal	plg wall	blue	
PC# 28	warehouse	plaster	wall	white	
PC# 29	warehouse	wood	window	green	
PC# 31	farm	steel	hanging	grey	
assume	Silo contains LBP -> white paint				
	feeder/machinery at feed house				
	Barn painted white as well like other structures on				
	part 4				

assume green wood walls are LBP



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Metals & Lead
Chain of Custody
 Form 70, Revision 9, 01/19/2017

SanAir ID Number

Company: Froehling & Robertson Inc.	Project #: 72V-0140	Phone #: 703.996.0123
Address: 22923 Quicksilver Drive, Suite 111	Project Name: Grove Farmstead	Phone #:
City, St., Zip: Dulles, VA 20166	Date Collected: 10/23	Fax #:
Samples Collected By: S. Santiago	P.O. Number:	Email: SSantiago@FandR.com
Account #: 2526	U.S. State Collected in: VA	Email:

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air (ug/m ³)	Total Concentration of Lead <input checked="" type="checkbox"/>	<input type="checkbox"/> ICP-total concentration of metals (please list metals):
<input type="checkbox"/> Wipe (ug/ft ²)	Total Concentration of RCRA 8 Metals <input type="checkbox"/>	
<input checked="" type="checkbox"/> Paint <input type="checkbox"/> Soil <input type="checkbox"/> Bulk (ug/g or ppm)	TCLP for Lead <input type="checkbox"/>	
<input type="checkbox"/> Other:	TCLP for RCRA 8 Metals <input type="checkbox"/>	

Turn Around Time	Same Day <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input type="checkbox"/>
	<input checked="" type="checkbox"/> Standard (5 day)	<input type="checkbox"/> Full TCLP (10d)		

Sample #	Collection Date & Time	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) Area (Sq ft)
PC#1	10/23/17 9:30	White - exterior door / Smokehouse				
PC#2	10/23/17 9:35	White - exterior door casing / Smokehouse				
PC#3	10/23/17 9:38	White - exterior roof overhang / Smokehouse				
PC#4	10/23/17 9:41	White - interior walls / Smokehouse				
PC#5	10/23/17 9:43	White - interior steel mantel / Smokehouse				
PC#6	10/23/17 9:45	White - exterior / Chicken house				
PC#7	10/23/17 9:50	White - exterior downspout / Chicken house				
PC#8	10/23/17 9:53	White - porch columns / Farmhouse				
PC#9	10/23/17 10:00	White - porch downspout / Farmhouse				
PC#10	10/23/17 10:05	White - porch window frame / Farmhouse				
PC#11	10/23/17 10:15	Teal - porch ceiling / Farmhouse				
PC#12	10/23/17 10:20	Light blue - patio concrete / Farmhouse				
PC#13	10/23/17 10:23	Light blue - patio stairway / Farmhouse				
PC#14	10/23/17 10:28	Light blue - step patio / Farmhouse				

Special Instructions	
----------------------	--

Relinquished by	Date	Time	Received by	Date	Time

If no technician is provided, then the primary contact of your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm will begin at 8 am the next business morning. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the Rush TAT rate. There is a minimum charge of \$100 for weekend work. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.



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**Metals & Lead
 Chain of Custody**
 Form 70, Revision 9, 01/19/2017

SanAir ID Number

Company: Froehling & Robertson Inc.	Project #: 92V-0140	Phone #: 703.996.0123
Address: 22923 Quicksilver Drive, Suite 111	Project Name: Grove Farmstead	Phone #:
City, St., Zip: Dulles, VA 20166	Date Collected: 10/23	Fax #:
Samples Collected By: S. Santiago	P.O. Number:	Email: SSantiago@FandR.com
Account #: 2526	U.S. State Collected in: VA	Email:

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air (ug/m ³)	Total Concentration of Lead <input checked="" type="checkbox"/>	<input type="checkbox"/> ICP-total concentration of metals (please list metals):
<input type="checkbox"/> Wipe (ug/ft ²)	Total Concentration of RCRA 8 Metals <input type="checkbox"/>	
<input checked="" type="checkbox"/> Paint <input type="checkbox"/> Soil <input type="checkbox"/> Bulk (ug/g or ppm)	TCLP for Lead <input type="checkbox"/>	
<input type="checkbox"/> Other:	TCLP for RCRA 8 Metals <input type="checkbox"/>	

Turn Around Time	Same Day <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input type="checkbox"/>
	<input checked="" type="checkbox"/> Standard (5 day)	<input type="checkbox"/> Full TCLP (10d)		

Sample #	Collection Date & Time	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) Area (Sq ft)
PC#15	10/23 10:35	White - window sill / farmhouse				
PC#16	10/23 10:40	White - window sill / farmhouse				
PC#17	10/23 10:45	Green - Bulb / Basement				
PC#18	10/23 11:15	Light Blue - wall / living room				
PC#19	10/23 11:20	Reddish - wall base / living room				
PC#20	10/23 11:29	White - wall / dining room				
PC#21	10/23 11:35	Reddish - Door / kitchen				
PC#22	10/23 11:40	White - door / kitchen				
PC#23	10/23 11:50	Blue - ceiling / sitting room				
PC#24	10/23 11:55	Pink - wall / sitting room				
PC#25	10/23 12:15	White - wall baseboard / sitting room				
PC#26	10/23 12:30	Light Blue - Door / living room				
PC#27	10/23 12:45	Blue - wall / wall base				
PC#28	10/23 12:55	White - wall / wall base				

Special Instructions	
----------------------	--

Relinquished by	Date	Time	Received by	Date	Time

If no technician is provided, then the primary contact of your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm will begin at 8 am the next business morning. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the Rush TAT rate. There is a minimum charge of \$100 for weekend work. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.



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**Metals & Lead
 Chain of Custody**
 Form 70, Revision 9, 01/19/2017

SanAir ID Number

Company: Froehling & Robertson Inc.	Project #: 92V-0140	Phone #: 703.996.0123
Address: 22923 Quicksilver Drive, Suite 111	Project Name: Grove Farmstead	Phone #:
City, St., Zip: Dulles, VA 20166	Date Collected: 10/23	Fax #:
Samples Collected By: S. Santiago	P.O. Number:	Email: SSantiago@FandR.com
Account #: 2526	U.S. State Collected in: VA	Email:

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air (ug/m ³)	Total Concentration of Lead <input checked="" type="checkbox"/>	<input type="checkbox"/> ICP-total concentration of metals (please list metals):		
<input type="checkbox"/> Wipe (ug/ft ²)	Total Concentration of RCRA 8 Metals <input type="checkbox"/>			
<input checked="" type="checkbox"/> Paint <input type="checkbox"/> Soil <input type="checkbox"/> Bulk (ug/g or ppm)	TCLP for Lead <input type="checkbox"/>			
<input type="checkbox"/> Other:	TCLP for RCRA 8 Metals <input type="checkbox"/>			
Turn Around Time	Same Day <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input type="checkbox"/>
	<input checked="" type="checkbox"/> Standard (5 day)	<input type="checkbox"/> Full TCLP (10d)		

Sample #	Collection Date & Time	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) Area (Sq ft)
PC# 29	10/23 1:30	Porosigreen window shutter/barnhouse				
PC# 30	10/23 1:50	Grey Barnyard, Barnhouse				

Special Instructions	
----------------------	--

Relinquished by	Date	Time	Received by	Date	Time

If no technician is provided, then the primary contact of your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm will begin at 8 am the next business morning. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the Rush TAT rate. There is a minimum charge of \$100 for weekend work. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.



APPENDIX G – LEAD BASED PAINT LABORATORY RESULTS & CHAIN OF CUSTODY

SanAir Technologies Laboratory

Analysis Report

prepared for

Froehling & Robertson Inc

Report Date: 10/30/2017
Project Name: Grove Farmstead
Project #: 72V-0140
SanAir ID#: 17043149



NVLAP LAB CODE 200870-0



Certification # 652931



License # LAB0166



804.897.1177

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SanAir Technologies Laboratory, Inc.

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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: <http://www.sanair.com> E-mail: iaq@sanair.com

Froehling & Robertson Inc
3015 Dumbarton Road
Richmond, VA 23228

October 30, 2017

SanAir ID # 17043149
Project Name: Grove Farmstead
Project Number: 72V-0140

Dear S. Santiago,

We at SanAir would like to thank you for the work you recently submitted. The 30 sample(s) were received on Wednesday, October 25, 2017 via FedEx. The final report(s) is enclosed for the following sample(s): PC# 1, PC# 2, PC# 3, PC# 4, PC# 5, PC# 6, PC# 7, PC# 8, PC# 9, PC# 10, PC# 11, PC# 12, PC# 13, PC# 14, PC# 15, PC# 16, PC# 17, PC# 18, PC# 19, PC# 20, PC# 21, PC# 22, PC# 23, PC# 24, PC# 25, PC# 26, PC# 27, PC# 28, PC# 29, PC# 30.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Abisola Kasali
Metals Laboratory Director
SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter
- Analysis Pages
- Disclaimers and Additional Information

sample conditions:

30 sample(s) in Good condition



SanAir Technologies Laboratory, Inc.

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804.897.1177 Toll Free: 888.895.1177 Fax: 804.897.0070
Web: <http://www.sanair.com> E-mail: iaq@sanair.com

SanAir ID Number

17043149

FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
Richmond, VA 23228

Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 10:36:38 AM
Analyst: Kasali, Abisola O.

Lead Paint Analysis

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-001	PC# 1 / White - Exterior Door / Smokehouse	17661	0.131	76.3	134813.1 $\mu\text{g/g}$ (ppm)	13.4813 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-002	PC# 2 / White - Exterior Door Casing / Smokehouse	20362	0.1322	75.6	154025.1 $\mu\text{g/g}$ (ppm)	15.4025 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-003	PC# 3 / White - Exterior Roof Aerhang / Smokehouse	12041	0.1239	80.7	97179.9 $\mu\text{g/g}$ (ppm)	9.718 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-004	PC# 4 / White - Interior Wall B / Smokehouse	< 10	0.1035	96.6	<96.6 $\mu\text{g/g}$ (ppm)	<0.0097 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-005	PC# 5 / White - Interior Steel Meutpole / Smokehouse	2142	0.1172	85.3	18273.7 $\mu\text{g/g}$ (ppm)	1.8274 % By Weight

Certification

SanAir Technologies Laboratory, Inc. participates in the certification for environmental lead analysis programs as administered by AIHA-ELLAP (Lab ID 162952) and the State of New York-ELAP (Lab Id 11983), and has met the EPA's NLLAP program standards.

Signature:

Date: 10/27/2017

Reviewed:

Date: 10/30/2017



SanAir Technologies Laboratory, Inc.

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Web: <http://www.sanair.com> E-mail: iaq@sanair.com

SanAir ID Number

17043149

FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
Richmond, VA 23228

Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 10:36:38 AM
Analyst: Kasali, Abisola O.

Lead Paint Analysis

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-006	PC# 6 / White - Exterior Chicken House	34570	0.1579	63.3	218934.6 $\mu\text{g/g}$ (ppm)	21.8935 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-007	PC# 7 / White - Exterior Door Casing / Chicken House	28733	0.107	93.5	268534.1 $\mu\text{g/g}$ (ppm)	26.8534 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-008	PC# 8 / White - Porch Columns / Farmhouse	7793	0.1019	98.1	76478.3 $\mu\text{g/g}$ (ppm)	7.6478 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-009	PC# 9 / White - Porch Door Casing / Farmhouse	2095	0.1095	91.3	19136.5 $\mu\text{g/g}$ (ppm)	1.9136 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-010	PC# 10 / White - Porch Window Frame / Framhouse	782	0.1423	70.3	5496.9 $\mu\text{g/g}$ (ppm)	0.5497 % By Weight

Certification

SanAir Technologies Laboratory, Inc. participates in the certification for environmental lead analysis programs as administered by AIHA-ELLAP (Lab ID 162952) and the State of New York-ELAP (Lab Id 11983), and has met the EPA's NLLAP program standards.

Signature: 

Date: 10/27/2017

Reviewed: 

Date: 10/30/2017



SanAir Technologies Laboratory, Inc.

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SanAir ID Number

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FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
Richmond, VA 23228

Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 10:36:38 AM
Analyst: Kasali, Abisola O.

Lead Paint Analysis

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-011	PC# 11 / Teal - Porch Ceiling / Farmhouse	20463	0.1047	95.5	195446.5 $\mu\text{g/g}$ (ppm)	19.5447 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-012	PC# 12 / Light Blue - Patio Concrete / Farmhouse	189	0.1222	81.8	1549.3 $\mu\text{g/g}$ (ppm)	0.1549 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-013	PC# 13 / Baby Blue - Patio Stairway / Farmhouse	59	0.1129	88.6	526.5 $\mu\text{g/g}$ (ppm)	0.0526 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-014	PC# 14 / Light Blue - Step Patio / Farmhouse	21648	0.1156	86.5	187265.7 $\mu\text{g/g}$ (ppm)	18.7266 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-015	PC# 15 / White - Window Sill / Farmhouse	19640	0.1182	84.6	166157.1 $\mu\text{g/g}$ (ppm)	16.6157 % By Weight

Certification

SanAir Technologies Laboratory, Inc. participates in the certification for environmental lead analysis programs as administered by AIHA-ELLAP (Lab ID 162952) and the State of New York-ELAP (Lab Id 11983), and has met the EPA's NLLAP program standards.

Signature: 

Date: 10/27/2017

Reviewed: 

Date: 10/30/2017



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FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
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Project Number: 72V-0140
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Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 10:36:38 AM
Analyst: Kasali, Abisola O.

Lead Paint Analysis

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-016	PC# 16 / White - Raingutter / Farmhouse	980	0.1025	97.6	9562.2 $\mu\text{g/g}$ (ppm)	0.9562 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-017	PC# 17 / Green - Boiler / Basement	1580	0.1094	91.4	14439.5 $\mu\text{g/g}$ (ppm)	1.444 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-018	PC# 18 / Light BLue - Wall / Living Room	21	0.1029	97.2	202.8 $\mu\text{g/g}$ (ppm)	0.0203 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-019	PC# 19 / Peach - Wall Base / Livingroom	5265	0.141	70.9	37339.7 $\mu\text{g/g}$ (ppm)	3.734 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-020	PC# 20 / White - Wall / Dining Room	1971	0.108	92.6	18249.6 $\mu\text{g/g}$ (ppm)	1.825 % By Weight

Certification

SanAir Technologies Laboratory, Inc. participates in the certification for environmental lead analysis programs as administered by AIHA-ELLAP (Lab ID 162952) and the State of New York-ELAP (Lab Id 11983), and has met the EPA's NLLAP program standards.

Signature:

Date: 10/27/2017

Reviewed:

Date: 10/30/2017



SanAir Technologies Laboratory, Inc.

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Web: <http://www.sanair.com> E-mail: iaq@sanair.com

SanAir ID Number

17043149

FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
Richmond, VA 23228

Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 10:36:38 AM
Analyst: Kasali, Abisola O.

Lead Paint Analysis

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-021	PC# 21 / Peach - Door / Kitchen	22	0.1316	76	164 $\mu\text{g/g}$ (ppm)	0.0164 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-022	PC# 22 / White - Door / Kitchen	22059	0.128	78.1	172332.7 $\mu\text{g/g}$ (ppm)	17.2333 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-023	PC# 23 / Blue - Ceiling / Siting Room	12	0.1246	80.3	97.9 $\mu\text{g/g}$ (ppm)	0.0098 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-024	PC# 24 / Pink - Wall / Siting Room	73	0.1142	87.6	643.2 $\mu\text{g/g}$ (ppm)	0.0643 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-025	PC# 25 / White - Wall Baseboard / Siting Room	47	0.1052	95.1	448.3 $\mu\text{g/g}$ (ppm)	0.0448 % By Weight

Certification

SanAir Technologies Laboratory, Inc. participates in the certification for environmental lead analysis programs as administered by AIHA-ELLAP (Lab ID 162952) and the State of New York-ELAP (Lab Id 11983), and has met the EPA's NLLAP program standards.

Signature:

Date: 10/27/2017

Reviewed:

Date: 10/30/2017



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SanAir ID Number

17043149

FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
Richmond, VA 23228

Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 10:36:38 AM
Analyst: Kasali, Abisola O.

Lead Paint Analysis

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-026	PC# 26 / Light Blue - Door / Living Room	13	0.1007	99.3	128.3 $\mu\text{g/g}$ (ppm)	0.0128 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-027	PC# 27 / Blue - Wall / Washhouse	6745	0.1054	94.9	63991 $\mu\text{g/g}$ (ppm)	6.3991 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-028	PC# 28 / White - Wall / Washhouse	6889	0.1415	70.7	48686.4 $\mu\text{g/g}$ (ppm)	4.8686 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-029	PC# 29 / Forest Green / Window Shutter / Barnhouse	4413	0.1029	97.2	42881.6 $\mu\text{g/g}$ (ppm)	4.2882 % By Weight

Test Method: SW846/M3050B/7000B

NOTE: $\mu\text{g/g}=\text{ppm}$

Sample	Description	$\mu\text{g Pb}$ in Sample	Sample Size (grams)	Calculated RL	Sample Result	Sample Result
17043149-030	PC# 30 / Grey Barn Gate, Barnhouse	< 10	0.1103	90.7	<90.7 $\mu\text{g/g}$ (ppm)	<0.0091 % By Weight

Certification

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Signature:

Date: 10/27/2017

Reviewed:

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FINAL REPORT

Name: Froehling & Robertson Inc
Address: 3015 Dumbarton Road
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Project Number: 72V-0140
P.O. Number:
Project Name: Grove Farmstead

Collected Date: 10/23/2017
Received Date: 10/25/2017 10:10:00 AM
Report Date: 10/30/2017 10:36:38 AM
McGee, Jennifer

ORGANISM DESCRIPTIONS

The descriptions of the organisms presented are derived from various reference materials. The laboratory report is based on the data derived from the samples submitted and no interpretation of the data, as to potential, or actual, health effects resulting from exposure to the numbers of organisms found, can be made by laboratory personnel. Any interpretation of the potential health effects of the presence of this organism must be made by qualified professional personnel with first hand knowledge of the sample site, and the problems associated with that site.

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Lead Exposure Limits

Air

- 1.5 µg/m³ EPA National Ambient Air Quality Standard (Quality Time – Weight Average)
- 30 µg/m³ OSHA Action Level (8-hour time weighted average)
- 50 µg/m³ OSHA Permissible Exposure Limit (General Industry)
- 50 µg/m³ OSHA Permissible Exposure Limit (Construction)

Dust

Non-Grant Funded Projects (Standard Clearance Applies):

- 40ug/ft² HUD Clearance Level for Floors
- 250ug/ft² HUD Clearance Level for Window Sills
- 400ug/ft² HUD Clearance Level for Window Troughs

Grant Funded Clearance (OLHCHH; LBPHC; LHRD Grantees):

- 10ug/ft² HUD Clearance Level for Floors
- 100ug/ft² HUD Clearance Level for Window Sills and Window Troughs
- 40ug/ft² HUD Clearance Level for Porch Floors

Water

- 15 ppb (µg/liter) EPA Maximum Containment Level

Paint

- 0.5% by weigh HUD definition of lead based paint
- 1.0 mg/cm²
- 5000 ppm

Soil

- 400 ppm HUD-Play areas and high-contact areas for children

TCLP EPA Limits

5.0 mg/L Silver (Ag)	100 mg/L Barium (Ba)	5.0 mg/L Chromium (Cr)	5.0 mg/L Lead (Pb)
5.0 mg/L Arsenic (As)	1.0 mg/L Cadmium (Cd)	0.2 mg/L Mercury (Hg)	1.0 mg/L Selenium (Se)



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Metals & Lead
Chain of Custody
 Form 70, Revision 9, 01/19/2017

SanAir ID Number
 17043149

Company: Froehling & Robertson Inc.	Project #: 72V-0140	Phone #: 703.996.0123
Address: 22923 Quicksilver Drive, Suite 111	Project Name: Grove Farmstead	Phone #:
City, St., Zip: Dulles, VA 20166	Date Collected: 10/23	Fax #:
Samples Collected By: S. Santiago	P.O. Number:	Email: SSantiago@FandR.com
Account #: 2526	U.S. State Collected in: VA	Email:

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air (ug/m ³)	Total Concentration of Lead <input checked="" type="checkbox"/>	<input type="checkbox"/> ICP-total concentration of metals (please list metals):		
<input type="checkbox"/> Wipe (ug/ft ²)	Total Concentration of RCRA 8 Metals <input type="checkbox"/>			
<input checked="" type="checkbox"/> Paint <input type="checkbox"/> Soil <input type="checkbox"/> Bulk (ug/g or ppm)	TCLP for Lead <input type="checkbox"/>			
<input type="checkbox"/> Other:	TCLP for RCRA 8 Metals <input type="checkbox"/>			
Turn Around Time	Same Day <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input checked="" type="checkbox"/>
	Standard (5 day)	<input type="checkbox"/> Full TCLP (10d)		

Sample #	Collection Date & Time	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) Area (Sq ft)
PC#1	10/23/17 9:30	White - exterior door / Smokehouse				
PC#2	10/23/17 9:35	White - exterior door casing / Smokehouse				
PC#3	10/23/17 9:38	White - exterior roof overhang / Smokehouse				
PC#4	10/23/17 9:41	White - interior wall B / Smokehouse				
PC#5	10/23/17 9:43	White - interior steel meat pole / Smokehouse				
PC#6	10/23/17 9:45	White - exterior / Chicken house				
PC#7	10/23/17 9:50	White - exterior door casing / Chicken house				
PC#8	10/23/17 9:53	White - porch columns / Farmhouse				
PC#9	10/23/17 10:00	White - porch door casing / Farmhouse				
PC#10	10/23/17 10:05	White - porch window frame / Farmhouse				
PC#11	10/23/17 10:15	Teal - porch ceiling / Farmhouse				
PC#12	10/23/17 10:20	Light Blue - patio concrete / Farmhouse				
PC#13	10/23/17 10:23	Baby Blue - patio stairway / Farmhouse				
PC#14	10/23/17 10:28	Light Blue - step patio / Farmhouse				

Special Instructions

Relinquished by	Date	Time	Received by	Date	Time
<i>[Signature]</i>	10/24	4:00 PM	SG	10/25/17	10:10

If no technician is provided, then the primary contact of your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm will begin at 8 am the next business morning. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the Rush TAT rate. There is a minimum charge of \$100 for weekend work. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.



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Metals & Lead
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 Form 70, Revision 9, 01/19/2017

SanAir ID Number 17043149

Company: Froehling & Robertson Inc.	Project #: 92V-0140	Phone #: 703.996.0123
Address: 22923 Quicksilver Drive, Suite 111	Project Name: Grove Farmstead	Phone #:
City, St., Zip: Dulles, VA 20166	Date Collected: 10/23	Fax #:
Samples Collected By: S. Santiago	P.O. Number:	Email: SSantiago@FandR.com
Account #: 2526	U.S. State Collected in: VA	Email:

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air (ug/m ³)	Total Concentration of Lead <input checked="" type="checkbox"/>	<input type="checkbox"/> ICP-total concentration of metals (please list metals):		
<input type="checkbox"/> Wipe (ug/ft ²)	Total Concentration of RCRA 8 Metals <input type="checkbox"/>			
<input checked="" type="checkbox"/> Paint <input type="checkbox"/> Soil <input type="checkbox"/> Bulk (ug/g or ppm)	TCLP for Lead <input type="checkbox"/>			
<input type="checkbox"/> Other:	TCLP for RCRA 8 Metals <input type="checkbox"/>			
Turn Around Time	Same Day <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input checked="" type="checkbox"/>
	Standard (5 day)	<input type="checkbox"/> Full TCLP (10d)		

Sample #	Collection Date & Time	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L)	Area (Sq ft)
PC#15	10/23 10:33	White - window sill / farmhouse					
PC#16	10/23 10:40	White - rain gutter / farmhouse					
PC#17	10/23 10:45	Green - Bulb / Basement					
PC#18	10/23 11:15	Light Blue - wall / living room					
PC#19	10/23 11:20	Peach - wall base / living room					
PC#20	10/23 11:29	White - wall / dining room					
PC#21	10/23 11:35	Peach - Door / kitchen					
PC#22	10/23 11:40	White - door / kitchen					
PC#23	10/23 11:50	Blue - ceiling / dining room					
PC#24	10/23 11:55	Pink - wall / dining room					
PC#25	10/23 12:15	White - wall baseboard / dining room					
PC#26	10/23 12:30	Light Blue - Door / living room					
PC#27	10/23 12:45	Blue - wall / wall base					
PC#28	10/23 12:55	White - wall / wall base					

Special Instructions

Relinquished by	Date	Time	Received by	Date	Time
[Signature]	10/24	4:00 pm	[Signature]	10/25/17	10:10

If no technician is provided, then the primary contact of your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm will begin at 8 am the next business morning. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the Rush TAT rate. There is a minimum charge of \$100 for weekend work. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.



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**Metals & Lead
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 Form 70, Revision 9, 01/19/2017

SanAir ID Number
 17043149

Company: Froehling & Robertson Inc.	Project #: 92V-0140	Phone #: 703.996.0123
Address: 22923 Quicksilver Drive, Suite 111	Project Name: Grove Farm Stead	Phone #:
City, St., Zip: Dulles, VA 20166	Date Collected: 10/23	Fax #:
Samples Collected By: S. Santiago	P.O. Number:	Email: SSantiago@FandR.com
Account #: 2526	U.S. State Collected in: VA	Email:

Matrix Types

Metals Analysis Types

<input type="checkbox"/> Air (ug/m ³)	Total Concentration of Lead <input checked="" type="checkbox"/>	<input type="checkbox"/> ICP-total concentration of metals (please list metals):		
<input type="checkbox"/> Wipe (ug/ft ²)	Total Concentration of RCRA 8 Metals <input type="checkbox"/>			
<input checked="" type="checkbox"/> Paint <input type="checkbox"/> Soil <input type="checkbox"/> Bulk (ug/g or ppm)	TCLP for Lead <input type="checkbox"/>			
<input type="checkbox"/> Other:	TCLP for RCRA 8 Metals <input type="checkbox"/>			
Turn Around Time	Same Day <input type="checkbox"/>	1 Day <input type="checkbox"/>	2 days <input type="checkbox"/>	3 Days <input checked="" type="checkbox"/>
	Standard (5 day)	<input type="checkbox"/> Full TCLP (10d)		

Sample #	Collection Date & Time	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) Area (Sq ft)
PC# 29	10/23 1:30	Forestgreen / window shutter, Barnhouse				
PC# 30	10/23 1:50	Grey Barnhouse, Barnhouse				

Special Instructions

Relinquished by	Date	Time	Received by	Date	Time
[Signature]	10/24	4:17pm	[Signature]	10/25/17	10:10

If no technician is provided, then the primary contact of your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm will begin at 8 am the next business morning. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the Rush TAT rate. There is a minimum charge of \$100 for weekend work. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.



APPENDIX H – LEAD BASED PAINT PHOTO LOG



Photo #1: Sample PC #1 – White Wood Door sample collected from the Smokehouse exterior.



Photo #2: Sample PC #2 – White Wood Door Casing sample collected from the Smokehouse exterior .

SITE PHOTOGRAPHS

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Client:	Keith Fritz- Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #3: Sample PC #3 –White Wood Roof Overhang sample collected from the Smokehouse exterior.



Photo #4: Sample PC #4–White Concrete Wall sample collected from the Interior of the Smokehouse.

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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #5: Sample PC #5 – White Steel Pole Meat Hanger Pole sample collected from the interior of the Smokehouse.



Photo #6: Sample PC #6 – White Wood Exterior sample collected from the Chicken house.

SITE PHOTOGRAPHS

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Client:	Keth Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #7: Sample PC #7– White Wood Door Casing sample collected from the exterior of the Chicken House.



Photo #8: Sample PC #8 – White Wood Pillar sample collected from the Front Porch of the Farmhouse.

SITE PHOTOGRAPHS

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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #9: Sample PC #9– White Wood Door Casing sample collected from the exterior of the Farmhouse’s Front Porch.



Photo #10: Sample PC #10 – White Wood Window Frame sample collected from the exterior of the Farmhouse’s Front Porch above the door.

SITE PHOTOGRAPHS

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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #11: Sample PC #11– Teal Wood Ceiling Porch Roof sample collected from the Farmhouse’s Porch.



Photo #12: Sample PC #12 – Blue Concrete Porch sample collected from the Farmhouse’s Front Porch.

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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #13: Sample PC #13 – Baby Blue Concrete Stairs sample collected from the Farmhouse’s Front Porch.



Photo #14: Sample PC #14 – Blue Concrete Front Step sample collected from the Farmhouse’s Front Porch.

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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit – 23 October 2017





Photo #15: Sample PC #15– White Wood Window Sill sample collected from the Farmhouse’s Front Porch.



Photo #16: Sample PC #16 – White Steel Rain Gutter sample collected from the exterior of the Farmhouse.

SITE PHOTOGRAPHS



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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017



Photo #17: Sample PC #17– Green Steel sample collected from the Boiler located in the Basement.



Photo #18: Sample PC #18 – Blue Plaster Wall sample collected from the Front Entrance Wall located in the Farmhouse.

SITE PHOTOGRAPHS

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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #19: Sample PC #19– Pink Wood Chair Rail sample collected from the Living Room of the Farmhouse.



Photo #20: Sample PC #20 – White Plaster Wall sample collected from the Dining Room of the Farmhouse.

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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #21: Sample PC #21– Pink Wood Door sample collected from the Kitchen of the Farmhouse.



Photo #22: Sample PC #22 – White Wood Door sample collected from the Kitchen of the Farmhouse.

SITE PHOTOGRAPHS

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Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #23: Sample PC #23– Blue Plaster Ceiling sample collected from the Sitting Room of the Farmhouse.



Photo #24: Sample PC #24 – Pink Plaster Wall sample collected from the Sitting Room of the Farmhouse.

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Client:	Keith Fritz – Airport Design Consultants, Inc.
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Source:	F&R Site Visit - 23 October 2017





Photo #25: Sample PC #25– White Wood Baseboard sample collected from the Sitting Room of the Farmhouse.



Photo #26: Sample PC #26 – Blue Wood Door sample collected from the Living Room of the Farmhouse.

SITE PHOTOGRAPHS

FROEHLING & ROBERTSON, INC.
 ENGINEERING • ENVIRONMENTAL • GEOTECHNICAL
 22923 Quicksilver Drive #111
 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #27: Sample PC #27– Blue Plaster Wall sample collected from the Washhouse.



Photo #28: Sample PC #28 – White Plaster Wall sample collected from the Washhouse.

SITE PHOTOGRAPHS

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F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #29: Sample PC #29—Green Wood Window Shutter sample collected from the Washhouse.



Photo #30: Sample PC #30 – Grey Steel Barn Gate sample collected from the Barn Area.

SITE PHOTOGRAPHS

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Client:	Keith Fritz – Airport Design Consultants, Inc.
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Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





APPENDIX I – MOLD PHOTO LOG



Photo #1: View of the front entrance to the Farmhouse.



Photo #2: View of the water damage on the ceiling in the Living Room of the Farmhouse.

SITE PHOTOGRAPHS

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Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #3: View of the water damage and mold observed in the Sitting Room of the Farmhouse.



Photo #4: View of mold observed through out the Sitting Room on walls and ceiling in the Farmhouse.

SITE PHOTOGRAPHS

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Project:	Grove Farmstead – Hazmat Survey
Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #5:View of water damage observed through out the Kitchen of the Farmhouse.



Photo #6: View of mold and water damage observed on the under carriage of the 2nd floor stairs.

SITE PHOTOGRAPHS

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 22923 Quicksilver Drive #111
 Dulles, Virginia 20166 | USA
 T 703.996.0123 | F 703.996.0124

Client:	Keith Fritz – Airport Design Consultants, Inc.
Project:	ADCI – Grove Farmstead Hazmat Survey
Location:	Hagerstown, Virginia
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #7: View of mold observed on the 2nd floor hallway ceiling of the Farmhouse.



Photo #8: View of mold and water damaged observed in a room located on the 2nd floor of the Farmhouse.

SITE PHOTOGRAPHS

FROEHLING & ROBERTSON, INC.
 ENGINEERING • ENVIRONMENTAL • GEOTECHNICAL
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Client:	Keith Fritz – Airport Design Consultants, Inc.
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Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #9: View of mold observed in one of the rooms located on the 2nd floor of the Farmhouse.



Photo #10: View of water damaged observed in a room located on the 2nd floor of the Farmhouse.

SITE PHOTOGRAPHS

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Source:	F&R Site Visit - 23 October 2017





Photo #11: View of mold observed in one of the rooms located on the 2nd floor of the Farmhouse.



Photo #12: View of mold observed in one of the rooms located on the 2nd floor of the Farmhouse.

SITE PHOTOGRAPHS

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Source:	F&R Site Visit - 23 October 2017





Photo #13: View of mold observed on the 2nd floor.



Photo #14: View of rotting wood observed in the basement of the Farmhouse.

SITE PHOTOGRAPHS

FROEHLING & ROBERTSON, INC.
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Client:	Keith Fritz – Airport Design Consultants, Inc.
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Location:	Hagerstown, Maryland
F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017





Photo #15: View of mold observed on the wall in the Basement of the Farmhouse.



Photo #16: View of rotting wood observed on the exterior of the Farmhouse.

SITE PHOTOGRAPHS

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Source:	F&R Site Visit - 23 October 2017





Photo #17: View of rotting wood observed in the Chicken House.

SITE PHOTOGRAPHS

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F&R Project No:	72V-0140
Source:	F&R Site Visit - 23 October 2017



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SECTION XVIII

**APPENDIX C – WASHINGTON COUNTY HEALTH
DEPARTMENT - TEMPORARY SEWAGE PERMIT**

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Application for permit for a temporary: sewerage water Receipt No. 25949 No. 96094

Name of Applicant (Please Print) LUTHER GROVE Address 13226 NORTHCREST RD 739-4220 Phone Hagertown MD 21740 Grid Coordinates N E

Property location, subdivision, block, lot 14301 PENN-AV Date Received: 3-28-96 By: P.W.

No. Bedrooms 4 Lot size Garbage Grinder Yes No Auto Washer Yes No Water Supply (type) Well

Commercial Use Domestic Use New Home Existing Home Repair PERMIT GOOD FOR ONE YEAR

System(s) will be installed in compliance with Maryland and State Regulations 26.04.02 Owner's Signature Luther Grove Permit date: 3/28/96

TO BE COMPLETED BY THE HEALTH DEPARTMENT

Commercial: Complete plans submitted for approval Yes No Test Results: Repair Area No. 1 min. Repair Area No. 2 min. Issued Denied JEE

Soil type When to test Flood Plain Yes No Hydro-Geological Excav. Bedrock ft. Water table ft. SITE SUITABLE: Yes No

Minimum septic tank size Existing Distribution box Yes No Minimum distance from water supply: 100 ft. or ft. FINAL INSPECTION

Test results Primary Area Tile field system: Min. Seepage Pit system: Min. Water Supply Approved Disapproved

Total length of tile lines 340 ft. Number of pits: Date: Driller:

Distance between lines 9 ft. Total depth: ft. Liquid depth: ft.

Number of lines 4 Length lines 8.5 ft. each Size excavation ft. X ft. Side wall area sq. ft. FINAL INSPECTION

Width of trench 3 ft. wide Maximum depth 2 1/2 ft. @ 18" cover Type of tank: Existing Sewage Systems Approved Disapproved

Proposed System Final Drawing as Installed Date: 4/8/96

Installer: T. Hoffmann License No.:

Grout: Date:

No. Bags: Casing: ft. Sanitarian:

Water Sample Results:

Permanent Disinfection Well Tag No.

Approved by:

Title:

Reviewed by: Chase

Date mailed: 4-10-96

Mailed to: L. Grove

Special Instructions or Corrections 1) check baffle and replace with PVC TEE if necessary, 2) system is to be 100' from the well.

Permit Conditions: No part of system(s) to be covered until inspected and approved by the Health Department.

Any changes from the proposed drawing must be first approved by the Health Department.

Change in final grade without prior approval voids permit.

To comply with Title 26.04.02.03 (A), (2) this system(s) must be abandoned and connection made to community water and sewage facilities within one year or less after the system becomes available.

Address: Rt. 11 Penn Ave



Maryland Department of the
Environment

FACTS ABOUT: FORMER FAIRCHILD REPUBLIC SITE (MD-56)

SITE LOCATION AND DESCRIPTION

The former Fairchild Republic Site (i.e., the "Site") is located at 18434 Showalter Road in Hagerstown, Washington County, Maryland 21742. The Site is currently occupied by the Hagerstown Regional Airport and various commercial and light industrial tenants. Buildings at the Site flank the north-south and east-west runways, which occupy the majority of the Site. The three major areas of environmental concern at the Site are the former Main Plant complex on the southeastern portion of the Site, the former Plant 12 area on the southwestern portion of the Site, and the former Plant 11 and Hot Fire Pit area on the northwestern portion of the Site.

SITE HISTORY

The Site had been used as an airplane manufacturing facility and associated airfield beginning in 1928 by the Kreider-Reisner Aircraft Company, Inc., which became a subsidiary of the Fairchild Aircraft Corporation in 1929. The airfield and airport itself was sold to the City of Hagerstown in 1933, while Fairchild maintained ownership of the hangar buildings and manufacturing facilities flanking the runway. The plant structures at the Site were used for various stages of airplane and airplane component manufacturing, while the Hot Fire area was used as an emergency fire response testing and training area, with an approximately 4-acre associated land-filling area. The Site was permitted by the State of Maryland as a designated hazardous waste facility from 1980 to 1983. Fairchild continued airplane manufacturing activities at the Site until 1983, when then current economic conditions forced Fairchild out of the aviation business. The Main Plant complex was donated to the State of Maryland in 1983, who then sold the property to Top-Flight Limited Partnership in 1987. The composite bonding plant, Plant 12, continued to be operated by Fairchild to fill preexisting contracts to Boeing, Lockheed, and Saab. Plant 12 was sold to Rohr Industries in 1987, who continued the manufacturing of aircraft parts before closing the plant in 1993. The Plant 11 and Hot Fire Pit area were sold by Fairchild to Washington County, Maryland in 1979, with an adjoining area used by Fairchild for drying of chrome sludge being purchased by the County and added to the property in 1988. The ownership of portions of the property that had been donated to the State was transferred to either the City of Hagerstown or Washington County by 1990.

ENVIRONMENTAL INVESTIGATIONS AND ACTIONS

Chlorinated solvent and chromium contamination has been identified in all three of the major areas of concern at the Fairchild Republic property. Investigations of groundwater at the Site by



Maryland Department of the Environment
1800 Washington Boulevard | Baltimore, MD 21230-1718 | www.mde.state.md.us
410-537-3000 | 800-633-6101 | TTY Users: 800-735-2258
Martin O'Malley, Governor | Anthony G. Brown, Lt. Governor | Robert M. Summers, Ph.D., Secretary

Knauff / LRP / July 2012

the State of Maryland were performed at the Site as early as the 1950s; however, the first significant and sustained State actions began in the late 1970s, when groundwater investigations performed by the State and private contractors hired by the Site ownership identified elevated concentrations of chromium and volatile organic compounds (VOCs), including chlorinated solvents, in groundwater at the Site and on down-gradient adjoining properties. Additionally, beginning in the 1980s, numerous hazardous waste violations were cited by the State under Fairchild and Rohr's hazardous waste permits. Various environmental investigations and actions have occurred at the Site since this time. The most significant are as follows.

Between 1979 and 1984, excavation and removal of chromium-contaminated materials was performed from the chromium sludge drying basins located in the Hot Fire Pit area of the Site. Soil in this area was excavated to the bedrock. Throughout the 1980s, approximately 5,000 cubic yards of chromium-contaminated soil and waste was removed from this area and a clay cap was installed.

In 1985, approximately 1,000 cubic yards of chromium and chlorinated solvent-contaminated soil were removed from the vicinity of a drainage outfall and ditch, identified as Outfall 5, located just south of the Plant 12 structure.

In 1986, three chromic acid plating pits located in the Main Plant Complex were decommissioned. Three concrete tanks and underlying chromium-contaminated soil were removed from the Site.

From the early 1980s to the early 1990s, low levels of chlorinated solvent contamination were identified in various off-Site potable wells in the vicinity of the Site. Many of these properties and the Site itself were subsequently hooked into the local municipal water supply. From early 1990s to the early 2000s, the concentrations of chlorinated solvents in the off-Site wells were shown to be decreasing over time. On-Site contaminant concentrations, while more pronounced, were also trending significantly downward, except for at the Plant 11 and Hot Fire Pit area, where the underlying karst geology complicated investigation and remediation efforts.

To address the difficulties posed by the karst geology underlying the Site, an ozone sparging unit was installed at the Site in 1999. While the elevated concentrations of chlorinated solvents persisted at the Hot Fire Pit area of the Site, a noted decrease in their concentration was noted during the ozone sparging treatment. Additionally, the overall chlorinated solvent plume was greatly reduced and contained by the ozone sparging treatment. However, it should be noted that the air sparging unit had little effect on chromium contamination in groundwater under the Hot Fire Pit area, which wildly fluctuated from as high as 21 parts per million to non-detect, sometimes at the same sample location. The ozone sparging unit began experiencing technical problems and malfunction in late 2004 and early 2005. As a result, in early 2006, the State approved a two-year shutdown of the unit, in order to allow Fairchild's technicians the



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410-537-3000 | 800-633-6101 | TTY Users: 800-735-2258
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Knauff / LRP / July 2012

opportunity to repair the unit and return it to good working order. Monitoring was to continue during this time. Prior to the recommissioning of the air sparging system, Fairchild declared Chapter 11 Bankruptcy in March 2009 and, as of October 2010, associated legal proceedings continued.

CURRENT SITE STATUS

Following the start of the bankruptcy proceedings, Site investigation was placed on a temporary hiatus. The Controlled Hazardous Substance (i.e., CHS) Enforcement Division of the Maryland Department of the Environment (i.e., MDE) is currently in the process of reevaluating the project and re-securing Site access. Site investigations had been performed by private consultants hired by Fairchild; however, future investigation will have direct oversight by the MDE and will be aimed at determining the current status of the on-Site wells and the ozone sparging system, the current state of groundwater below the Site, and the effect of the system shut-off on the chemical and hydrologic dynamic of the contaminant plume since sampling was last performed in August 2006. A letter to inquire about reestablishing Site access has been drafted and shall be sent to representatives of the Hagerstown Regional Airport in July 2012.



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SECTION XIX
APPENDIX D – MDE - WELL ABANDONMENT-
SEALING REPORT FORM

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MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
 1800 Washington Blvd., Baltimore, Maryland 21230 (410) 537-3784

 WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- * COUNTY ENVIRONMENTAL AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

DATE WELL ABANDONED: _____ (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

* PERMIT NUMBER OF REPLACEMENT WELL: _____

* PERSON ABANDONING WELL: _____ WELL DRILLER'S LICENSE NUMBER: _____

CIRCLE: MWD / MSD / MGD

* OWNER'S NAME: _____

* WELL LOCATION:

SITE LOCATION MAP

COUNTY: _____
 NEAREST TOWN: _____
 TAX MAP _____ BLOCK _____ PARCEL _____
 SUBDIVISION: _____
 SECTION: _____ LOT: _____
 STREET ADDRESS: _____

LATITUDE 3 _ . _ _ _ _ _

LONGITUDE 7 _ . _ _ _ _ _

* TYPE OF WELL BEING ABANDONED:

____ DRILLED ____ JETTED
 ____ BORED ____ HAND DUG
 ____ OTHER (specify) _____

LOG OF SEALING MATERIAL

* USE CODE:

____ DOMESTIC ____ MUNICIPAL/PUBLIC
 ____ IRRIGATION ____ INDUSTRIAL
 ____ TEST/OBSERVATION ____ GEOTHERMAL

MATERIAL	FEET	
	FROM	TO
VOLUME OF MATERIAL USED		

* TYPE OF CASING:

____ STEEL ____ PLASTIC
 ____ CONCRETE ____ OTHER (specify) _____

SIZE OF CASING: _____ INCHES IN DIAMETER

DEPTH OF WELL: _____ FEET DEEP

WAS ANY CASING REMOVED? ____ YES ____ NO

If yes, length removed, in feet: _____

WAS CASING RIPPED OR PERFORATED? ____ YES ____ NO

 SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN LICENSE# MWD / MSD / MGS DATE

CIRCLE ONE



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SECTION XX
PROJECT DRAWINGS

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Washington County, MD

HAGERSTOWN REGIONAL AIRPORT

BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION

A.I.P. No. 3-24-0019-058

BID No. PUR-1377

BID DOCUMENTS

DECEMBER 2017

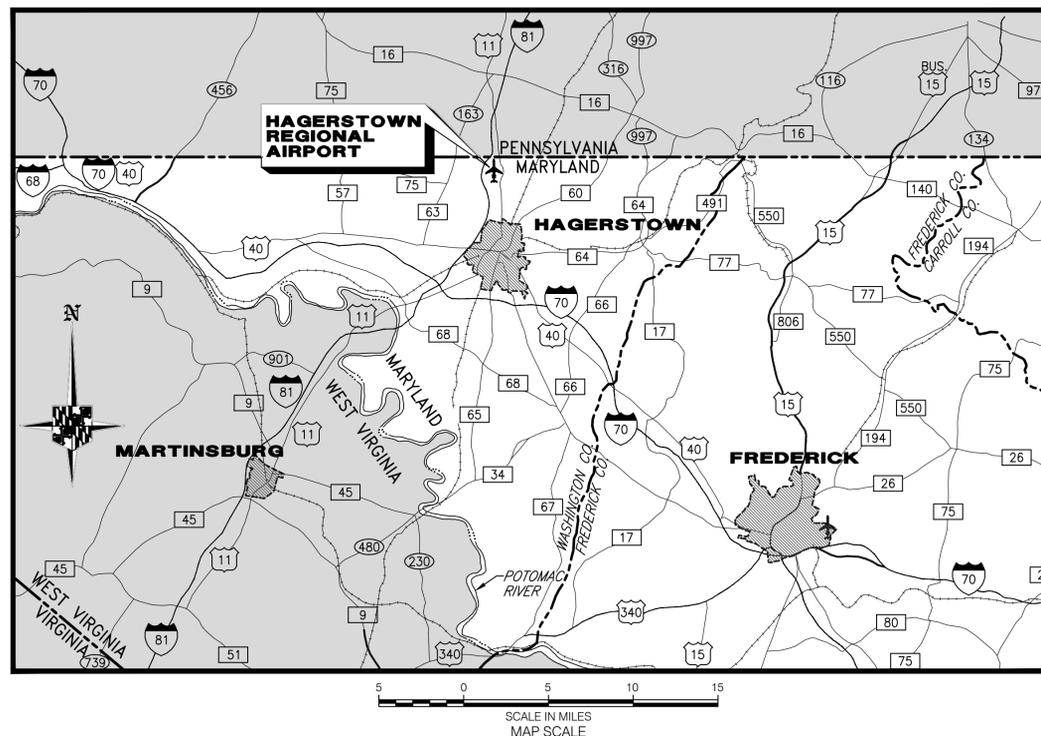
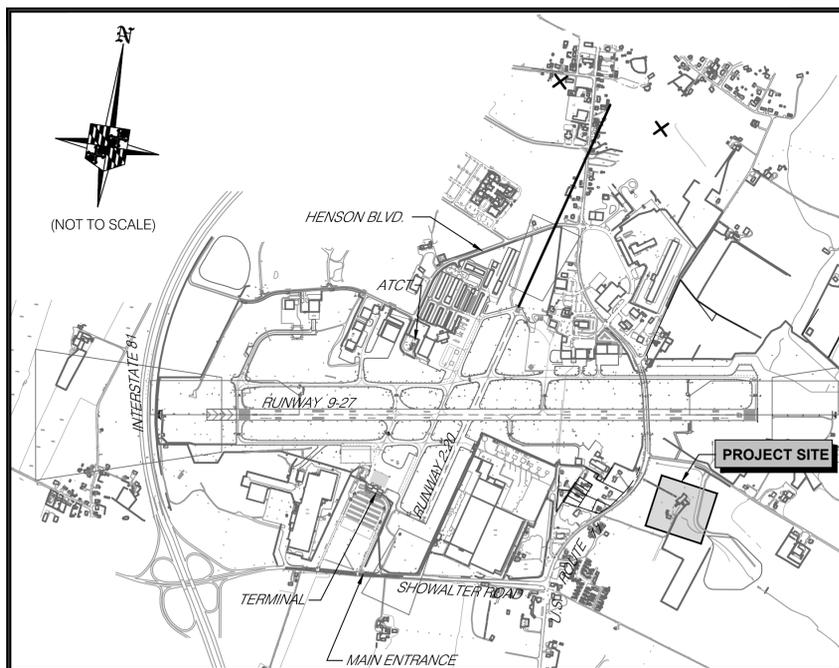
MAA GRANT No. : MAA-GR-18-016

GRADING PERMIT No. : GP-17-034

VICINITY MAP

LOCATION MAP

INDEX OF DRAWINGS



SHEET No.:

- G.100
- G.101
- C.100
- C.101
- C.200

SHEET TITLE:

- COVER SHEET
- GENERAL CONSTRUCTION AND SAFETY NOTES
- EXISTING CONDITIONS PLAN
- SITE PLAN
- EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

**WASHINGTON COUNTY SOIL CONSERVATION DISTRICT
SOIL EROSION AND SEDIMENT CONTROL PLAN APPROVAL**

BY: _____

DATE: _____
(PLAN IS VALID FOR TWO YEARS FROM DATE OF APPROVAL)

DISTURBED AREA QUANTITIES

THE TOTAL AREA TO BE DISTURBED SHOWN ON THESE PLANS HAS BEEN DETERMINED TO BE APPROXIMATELY 58 ACRES AND THE TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO BE APPROXIMATELY 0 C.Y. OF EXCAVATION AND 175 C.Y. OF FILL.

* THESE QUANTITIES ARE APPROXIMATE AND SHALL NOT BE USED BY THE CONTRACTOR FOR BIDDING PURPOSES.

OWNER/DEVELOPER CERTIFICATION - SCD

I/WE CERTIFY ALL/ANY PARTIES RESPONSIBLE FOR CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL: BE DONE PURSUANT TO THIS PLAN AND RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SOIL EROSION AND SEDIMENT.

12-19-17 Phillip Rubenow
DATE PRINTED NAME SIGNATURE

APPROVED:
WASHINGTON COUNTY DIVISION OF PLAN REVIEW & PERMITTING

SIGNATURE _____ DATE: _____

UTILITY NOTIFICATION

THE SOIL CONSERVATION DISTRICT MAKES NO REPRESENTATION AS TO THE EXISTENCE OR NON-EXISTENCE OF ANY UTILITIES AT THE CONSTRUCTION SITE. SHOWN ON THESE CONSTRUCTION DRAWINGS ARE THOSE UTILITIES WHICH HAVE BEEN IDENTIFIED. IT IS THE RESPONSIBILITY OF THE LANDOWNERS OR OPERATORS AND CONTRACTORS TO ASSURE THEMSELVES THAT NO HAZARD EXISTS OR DAMAGE WILL OCCUR TO UTILITIES. CONTRACTOR TO CONTACT MISS UTILITY AT: PHONE No. 1-800-257-7777.

S.W.M. NARRATIVE

THIS PROJECT AREA CURRENTLY IS TREATED BY AN EXISTING BMP (REGIONAL SWM POND B3 ADJACENT TO THE PROPERTY). THE PROJECT WILL DEMOLISH EXISTING BUILDINGS/FOUNDATIONS AND SIDEWALK ON THE BRUMBAUGH-KENDLE-GROVE FARMSTEAD INCLUDING A FARMHOUSE, BARN, SMOKEHOUSE AND SILO AND GRADE THE DEMOLITION AREAS TO MATCH THE SURROUNDING GRADE. THIS WILL RESULT IN A NET IMPERVIOUS AREA REDUCTION CONTRIBUTING TO THE BMP OF APPROXIMATELY 15,500 SQ.FT.

SUMMARY: THE NET IMPERVIOUS AREA RESULTING FROM THE PROJECT IS A DECREASE OF 15,500 SQ.FT. IMPERVIOUS SURFACE AND IS TREATED BY AN EXISTING BMP. THEREFORE A VARIANCE IS REQUESTED IN ACCORDANCE WITH 2015 MARYLAND STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL GUIDELINES FOR STATE AND FEDERAL PROJECTS SECTION 3.4 VARIANCES.

ENGINEER/ARCHITECT DESIGN CERTIFICATION

I HEREBY CERTIFY THIS PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAS BEEN DESIGNED IN ACCORDANCE WITH LOCAL ORDINANCES, COMAR 26.17.01.07, MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

12/19/17 _____ 33119
DATE REG. NO. SIGNATURE
MICHAEL P. PIZZA



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 33119
Expiration Date: JAN 28, 2019.



HAGERSTOWN REGIONAL AIRPORT

APPROVED [Signature] 12-19-17
DATE

FILE NAME: O:\HGR\Projects\2017-1303\CAD\SHEETS\001_G_100_COVER_SHEET.dwg PLOTTED: Wednesday, January 17, 2018 - 11:25am USER: schiorn

GENERAL CONSTRUCTION NOTES:

- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT PLANS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF WASHINGTON COUNTY (THE AIRPORT SPONSOR), THEIR AUTHORIZED REPRESENTATIVES, THE FEDERAL AVIATION ADMINISTRATION (FAA), THE MD STATE HISTORIC PRESERVATION OFFICER (MDSHPO) AND OTHER GOVERNING AGENCIES.
- THE PROJECT IS TO BE COMPLETED IN CLOSE CONFORMANCE WITH THE CONSTRUCTION PLANS AND CONTRACT SPECIFICATIONS AND SHALL BE CONSTRUCTED IN A TIMELY MANNER IN ACCORDANCE WITH THE CONTRACTOR'S APPROVED PROJECT SCHEDULE.
- THE CONTRACTOR IS EXPECTED TO COMPLETE THE ENTIRE PROJECT ON TIME. THE IMPORTANCE OF THIS IS STRESSED BY THE INCLUSION OF LIQUIDATED DAMAGES IN THE SPECIFICATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE HIGHWAYS, COUNTY ROADS, OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE PAVEMENTS USED AS HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR BEFORE CONSTRUCTION CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER.
- CONTRACTOR'S STAGING AREAS - AREAS ARE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE. THE CONTRACTOR'S STAGING AREAS SHALL BE GRADED, TOPSOILED, SEEDED, AND MULCHED UPON COMPLETION OF USE.
- DISPOSAL AREA - A DISPOSAL AREA FOR NON-SALVAGEABLE MATERIAL WILL NOT BE AVAILABLE ON AIRPORT PROPERTY. THE CONTRACTOR'S WASTE MATERIALS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY. WASTE MATERIALS INCLUDE THOSE ITEMS WHICH ARE A DIRECT RESULT OF CONSTRUCTION, TRASH, (I.E. CUPS, CANS, ETC.) SHALL BE DISPOSED OF THROUGH PROPER SANITARY METHODS.
- SAFETY - THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN A SAFE MANNER AS SPECIFIED IN THE SECTION TITLED, "CONTRACTORS SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.
- CONSTRUCTION LIMITS - ALL CONTRACTOR VEHICLES AND TRAFFIC (UNLESS OTHERWISE AUTHORIZED) SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS OR HAUL ROUTES. CONSTRUCTION, STORAGE AND STOCKPILING LIMITS ARE FURTHER DEFINED IN THE SECTION TITLED, "CONTRACTORS SAFETY REQUIREMENTS DURING CONSTRUCTION" ON THIS SHEET.
- THE CONTRACTOR SHALL OBTAIN ALL THE PERMITS AND LICENSES REQUIRED FOR THE PROJECT WORK AT HIS OWN EXPENSE.
- BASE MAPPING FOR THIS PROJECT IS BASED ON HISTORICAL MAPPING PROVIDED BY THE AIRPORT.
- EXISTING AND PROPOSED GRADES - EXISTING GRADES SHOWN ON THE DRAWINGS ARE BELIEVED TO BE ACCURATE, BUT THE SPONSOR, OR ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THESE GRADES. IF THE CONTRACTOR DOES NOT CONCUR WITH THE ELEVATIONS GIVEN ON THE DRAWINGS, HE SHALL NOTIFY THE ENGINEER IN WRITING PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITIES. START OF WORK BY THE CONTRACTOR WITHOUT SUCH NOTIFICATION WILL BE INTERPRETED AS AN AGREEMENT BY THE CONTRACTOR WITH THE ACCURACY OF THE GRADES SHOWN ON THE PLANS. EXISTING GRADES ARE BASED ON AERIAL PHOTOGRAPHY AND ARCHAEOLOGICAL WORK IS CONTINUING ON SITE. THEREFORE GRADES NEED TO BE CONFIRMED IN FIELD AND CONTRACTOR SHOULD VISIT SITE TO SEE CONDITION OF GROUND.
- PERMITS - THE CONTRACTOR MUST OBTAIN APPROPRIATE PERMITS FROM THE PROPER GOVERNMENT AGENCIES FOR ACCESS TO, AND TO USE THEIR ROADS FOR DELIVERY OF MATERIALS AND EQUIPMENT TO THE SITE. ANY DAMAGE TO OFF-SITE OR ON-SITE ROADS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. IF BLASTING IS REQUIRED TO FACILITATE EXCAVATION PROPER PERMITS MUST BE OBTAINED.
- PRIOR TO DEMOLITION ACTIVITIES STARTING, 501(C)(3) SALVAGE ORGANIZATIONS WILL BE AFFORDED THE OPPORTUNITY TO RECOVER BUILDING COMPONENTS. ANY 501(C)(3) ORGANIZATION APPROVED BY THE COUNTY WILL BE PROVIDED ACCESS TO THE SITE BUILDING COMPONENTS FOR RECOVERY. THE PERIOD FOR REMOVING BUILDING COMPONENTS SHALL BE THIRTY (30) DAYS.
- SHOULD THE CONTRACTOR FIND ANY HISTORIC PROPERTIES OR ITEMS DURING THE CONSTRUCTION OF THIS PROJECT, HE/SHE SHOULD IMMEDIATELY NOTIFY THE ENGINEER.
- DEMOLITION WILL REQUIRE MITIGATION AND ABATEMENT OF LEAD BASED PAINT (LBP) AND ASBESTOS CONTAINING MATERIAL (ACM). THE CONTRACTOR WILL BE REQUIRED TO TEST AND ANALYZE THE STRUCTURE FOR THE PRESENCE OF LBP AND ACM. AN ACM SURVEY WAS COMPLETED BY FROEHLING & ROBERTSON, INC AND IS INCLUDED WITHIN APPENDIX B. THE SURVEY IS PROVIDED FOR THE CONTRACTOR TO REFERENCE AND DOES NOT PRECLUDE THE NEED FOR THE CONTRACTOR TO PERFORM THEIR OWN TESTING AND IDENTIFICATION.

CONTRACTORS SAFETY REQUIREMENTS DURING CONSTRUCTION:

A. GENERAL SAFETY REQUIREMENTS

- THE CONTRACTOR SHALL ACQUAINT HIS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITY AND OPERATIONS THAT ARE INHERENT TO HAGERSTOWN REGIONAL AIRPORT AND SHALL CONDUCT HIS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES FOR SAFETY SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL SAFETY DEVICES AS REQUIRED FOR THE PROTECTION OF HIS PERSONNEL.
- PROTECTION OF ALL PERSONS SHALL BE PROVIDED THROUGHOUT THE PROGRESS OF THE WORK. THE WORK SHALL PROCEED IN SUCH A MANNER AS TO PROVIDE SAFE CONDITIONS FOR ALL WORKERS AND GOVERNMENT PERSONNEL. THE SEQUENCE OF OPERATION SHALL BE SUCH THAT MAXIMUM PROTECTION IS AFFORDED TO INSURE THAT PERSONNEL AND WORKERS IN THE WORK AREA ARE NOT SUBJECT TO ANY DANGEROUS CONDITIONS. THE CONTRACTOR MUST PROVIDE SAFETY MEASURES TO GUARD AGAINST INJURY.

B. CONSTRUCTION AND FACILITIES MAINTENANCE

- THE CONTRACTOR SHALL BE AWARE OF THE FOLLOWING TYPES OF SAFETY PROBLEMS AND/OR HAZARDS AND TAKE PRECAUTIONS TO PREVENT THEM FROM OCCURRING:
 - (A) OBJECTS, WHETHER OR NOT MARKED OR FLAGGED, OR ACTIVITIES ANYWHERE ON OR IN THE VICINITY OF AIRPORT WHICH COULD BE DISTRACTING, CONFUSING, OR ALARMING TO PILOTS DURING AIRCRAFT OPERATIONS.
 - (B) UNFLAGGED/UNLIGHTED LOW VISIBILITY ITEMS SUCH AS TALL CRANES, DRILLS, AND THE LIKE ANYWHERE IN THE VICINITY OF ACTIVE RUNWAYS, OR IN ANY APPROACH OR DEPARTURE AREAS.
 - (C) TRASH OR OTHER MATERIALS WITH FOREIGN OBJECT DAMAGE (FOD) POTENTIAL.
 - (D) FAILURE TO CONTROL UNAUTHORIZED VEHICLE AND HUMAN ACCESS FROM ACTIVE AIRCRAFT OPERATING AREAS.
 - (E) BIRD ATTRACTANTS ON AIRPORT SUCH AS: EDIBLES (FOOD SCRAPS, ETC.), MISCELLANEOUS TRASH, OR PONDED WATER.
- THE CONTRACTOR SHALL CONDUCT ACTIVITIES SO AS NOT TO VIOLATE ANY SAFETY STANDARDS CONTAINED HEREIN. THE CONTRACTOR SHALL INSPECT ALL CONSTRUCTION AND STORAGE AREAS AS OFTEN AS NECESSARY AND PROMPTLY TAKE ALL STEPS NECESSARY TO PREVENT/REMEDY ANY UNSAFE OR POTENTIALLY UNSAFE CONDITIONS OR ACTIVITIES DISCOVERED.
- BEFORE ACTUAL COMMENCEMENT OF CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL NOTIFY, IN WRITING, AT LEAST 48 HOURS IN ADVANCE, THE AIRPORT DIRECTOR OF HIS INTENTIONS OF CONSTRUCTION, STATING THE PROPOSED TIME, DATE, AND AREA OF WHICH COMMENCEMENT IS TO OCCUR.

UPON COMPLETION OF WORK AND RETURN OF ALL RELATED AREAS TO STANDARD CONDITIONS, THE CONTRACTOR SHALL AGAIN NOTIFY THE AIRPORT DIRECTOR, IN WRITING, AND DESCRIBE THE AREA THAT IS COMPLETE AND AVAILABLE FOR NORMAL AIRPORT OPERATIONS.

THE AIRPORT DIRECTOR WILL BE RESPONSIBLE FOR ISSUING APPROPRIATE NOTICE TO AIRMEN (NOTAM) CONCERNING CONSTRUCTION ACTIVITY.

C. FLAGMEN

THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, FURNISH FLAGMEN AS NECESSARY TO CONTROL HIS TRAFFIC TO AND FROM ROUTE 11 (UNLESS OTHERWISE DIRECTED BY THE ENGINEER).

D. MISCELLANEOUS

- OPEN FLAME, WELDING OR TORCH CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE PREVIOUSLY APPROVED BY THE ENGINEER.
- EXCEPT FOR EMERGENCIES, ALL CONTACT WITH AIRPORT PERSONNEL SHALL BE MADE THROUGH THE ENGINEER. FOR EMERGENCIES INVOLVING SAFETY (INJURIES, FIRES, SECURITY BREACHES, ETC.) THE CONTRACTOR SHALL MAKE DIRECT CONTACT WITH AIRPORT DIRECTOR FOLLOWED BY NOTIFICATION TO THE ENGINEER AS SOON AS POSSIBLE.
- THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY.
- IN ACCORDANCE WITH THE SPECIFICATIONS, FEDERAL WAGE RATES SHALL BE POSTED OUTSIDE THE SITE FIELD OFFICE(S) IN A WEATHERPROOF ENCLOSURE.

E. UTILITIES

- UNDERGROUND UTILITIES: THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE CONSIDERED TO BE ONLY ESTIMATED LOCATIONS. ALL UTILITY LOCATIONS SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION. IN THE EVENT ANY UTILITY IS DAMAGED THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING FOR INCURRED COSTS OF REPAIRS.
- THE CONTRACTOR SHALL ALSO NOTIFY "MISS UTILITY" AT 1-800-257-7777. THE COST ASSOCIATED WITH CONTACTING MISS UTILITY SHALL BE BORNE BY THE CONTRACTOR. ANY COSTS ASSOCIATED WITH DAMAGE TO UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
- UTILITIES NOTIFICATION: AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND AND OVERHEAD UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, AND THE OWNER OF EACH UTILITY FACILITY AFFECTED.

F. SAFETY/SECURITY

- THE PROJECT SUPERVISORS SHALL HAVE WITH THEM AT ALL TIMES THE TELEPHONE NUMBERS FOR THE FOLLOWING PERSONS. IN THE EVENT OF AN EMERGENCY THESE PERSONNEL SHOULD BE CONTACTED IN DESCENDING ORDER:

MR. PHIL RIDENOUR, AIRPORT DIRECTOR
 MR. TERRY STOUFFER, AIRPORT MAINTENANCE SUPERVISOR
 MR. GENE BOLANOWSKI, OPERATIONS MANAGER
 MR. BOB HOOPENGARDNER, AIRPORT FIRE CHIEF

TELEPHONE NUMBERS WILL BE PROVIDED TO THE CONTRACTOR AT THE PRE-CONSTRUCTION MEETING. ADDITIONAL CONTACTS MAY BE PROVIDED TO THE CONTRACTOR AT THAT TIME.

FILE NAME: O:\HGR\Projects\2017-1\303\CAD\Sheets\002_G_101_GENERAL_CONSTRUCTION_AND_SAFETY_NOTES.dwg PLOTTED: Wednesday, January 10, 2018 - 2:45pm USER: schiam



6031 UNIVERSITY BLVD.
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 PHONE: 410-465-9600
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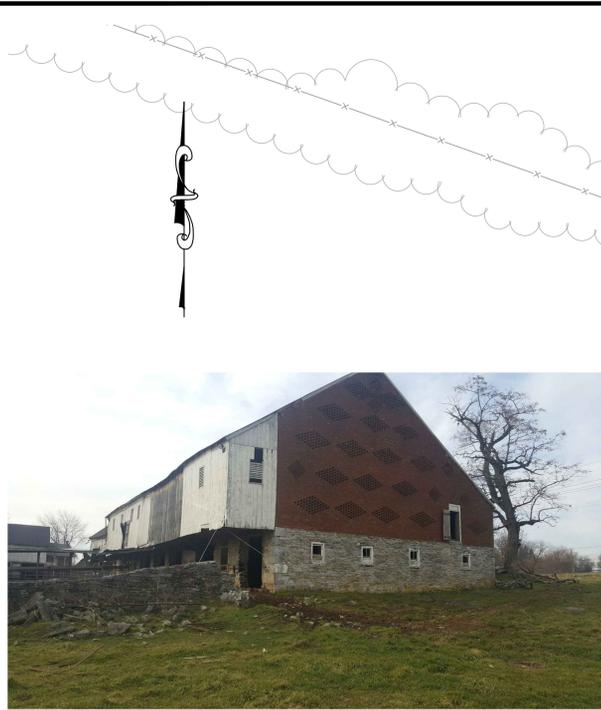


Professional Certification:
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 33119
 Expiration Date: 01/28/2019

DESIGNED:	S.A.C.	No.	DATE	DESCRIPTION
DRAWN:	R.E.Z.			
CHECKED:	K.M.F.			
APPROVED:	M.S.K.			



PROJECT TITLE: BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION		FAA AIP No.: 3-24-0019-058
SHEET TITLE: GENERAL CONSTRUCTION AND SAFETY NOTES		Bid No.: PUR-1377
SCALE: AS SHOWN		MAA Grant No.: MAA-GR-18-016
DATE: DECEMBER 2017		SHEET No.: G.101



1
C1.00 PHOTO 1
BARN-LOWER LEVEL



2
C1.00 PHOTO 2
SILO



3
C1.00 PHOTO 3
STONE SMOKEHOUSE



4
C1.00 PHOTO 4
SUMMER KITCHEN



5
C1.00 PHOTO 5
FARM HOUSE

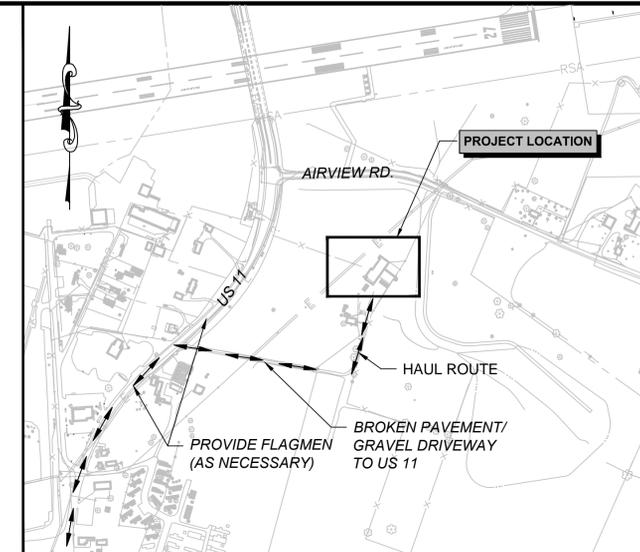
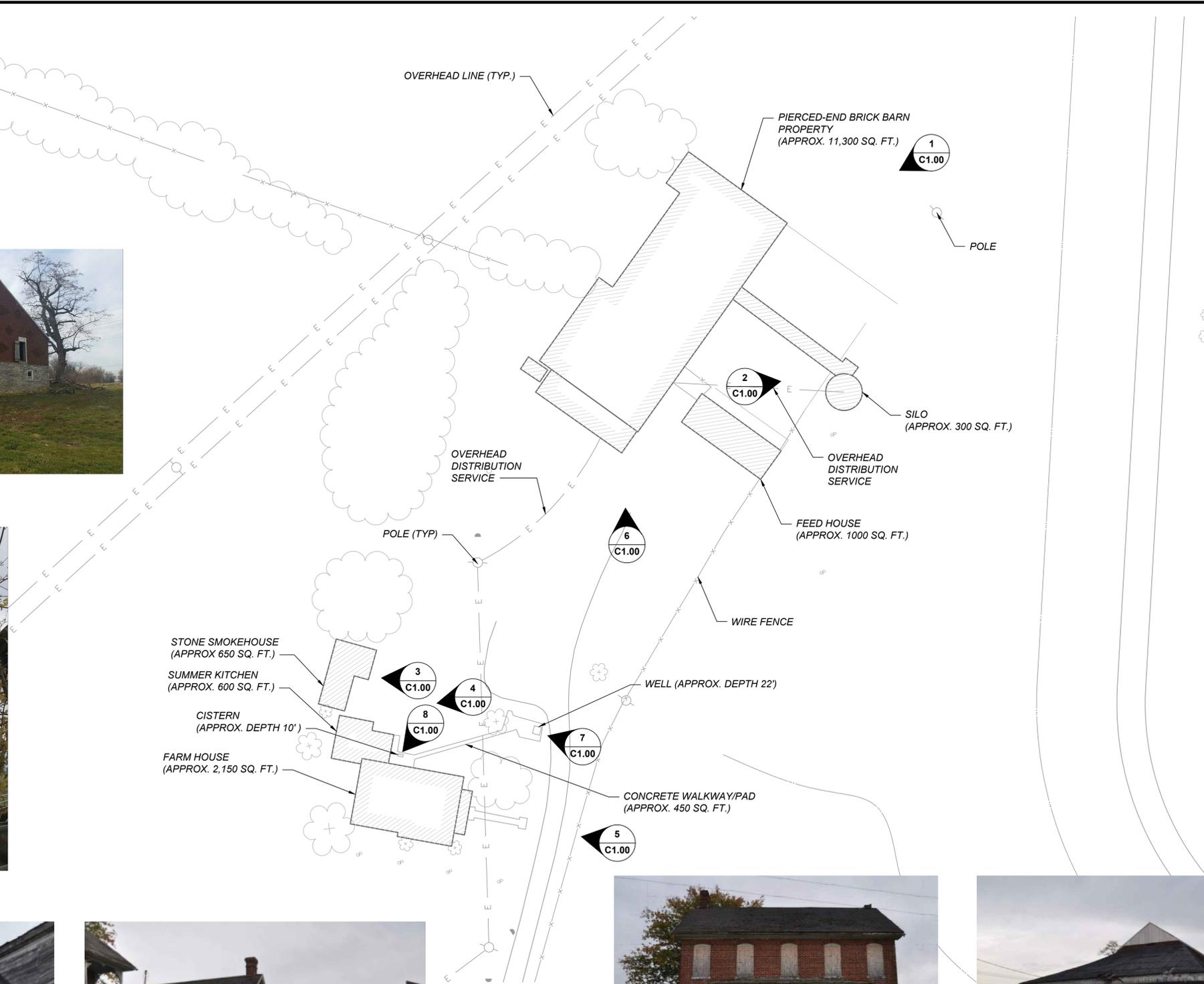


6
C1.00 PHOTO 6
PIERCED-END BRICK BARN PROPERTY



8
C1.00 PHOTO 8
CISTERN

7
C1.00 PHOTO 7
WELL



KEY PLAN
NOT TO SCALE



SCALE IN FEET

FILE NAME: O:\HGR\Projects\2017-1303\CAD\SHEETS\0003_C.100_EXISTING CONDITIONS PLAN.dwg PLOTTED: Thursday, January 11, 2018 - 8:55am USER: hspouras

ADCI
AIRPORT DESIGN CONSULTANTS INC.

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Expiration Date: 01/28/2019

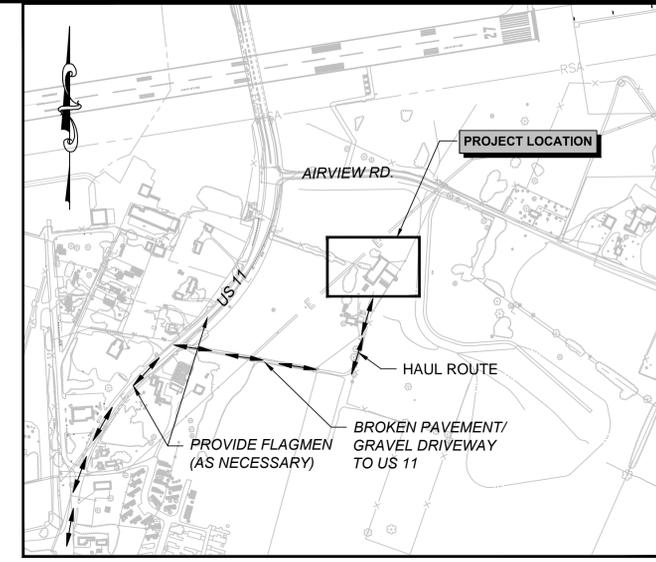
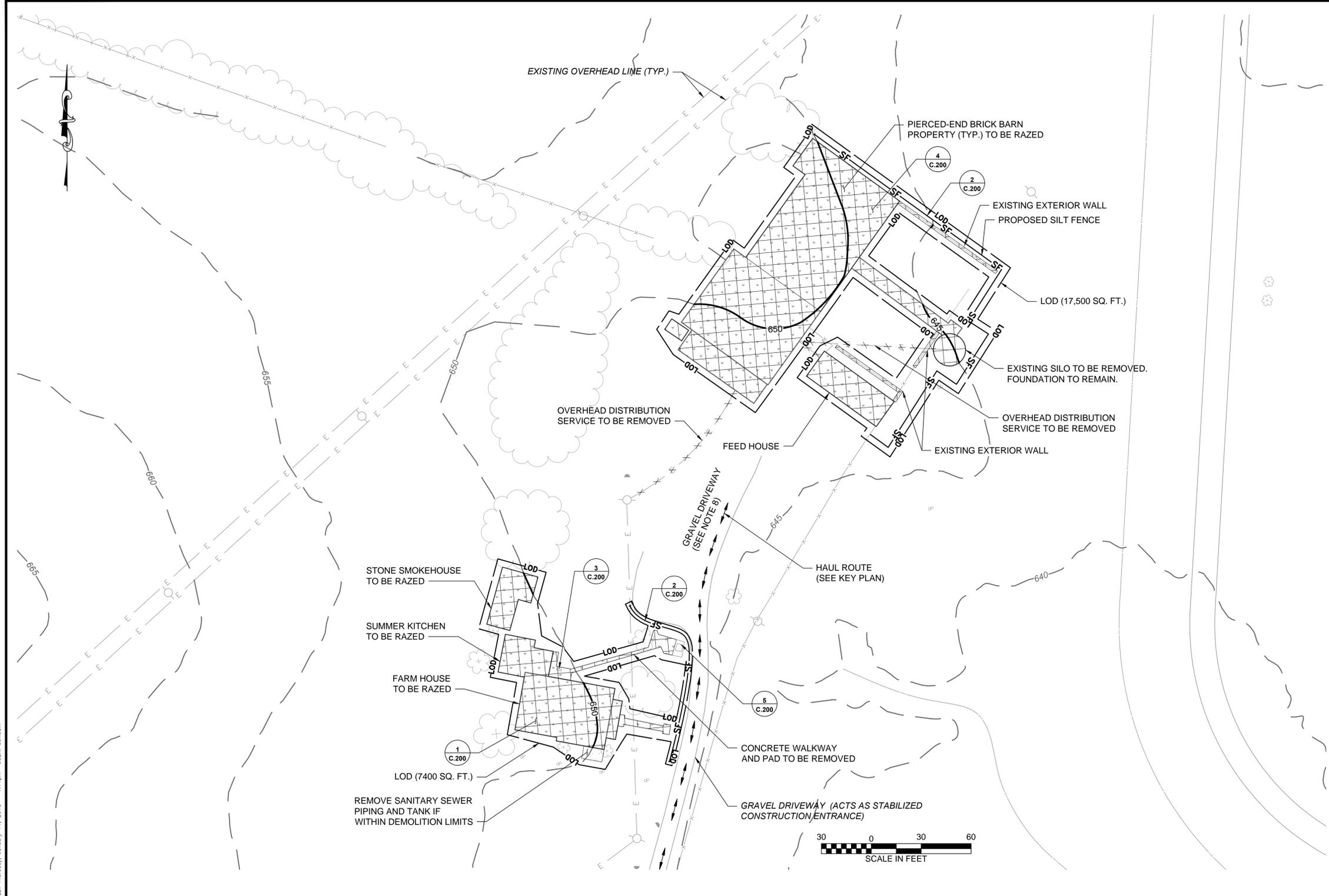
DESIGNED:	No.	DATE	DESCRIPTION
S.A.C.			
DRAWN:			
R.E.Z.			
CHECKED:			
K.M.F.			
APPROVED:			
M.S.K.			

Washington County, MD
HAGERSTOWN REGIONAL AIRPORT

PROJECT TITLE:	BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION
SHEET TITLE:	EXISTING CONDITIONS PLAN
SCALE:	AS SHOWN
DATE:	DECEMBER 2017

FAA AIP No.: 3-24-0019-058 Bid No.: PUR-1377 MAA Grant No.: MAA-GR-18-016
SHEET No.: C.100

FILE NAME: C:\HGR\Projects\2017-2019\2017-2019\004-C.101-SITE PLAN.dwg PLOTTED: Thursday, January 11, 2018 - 1:11pm USER: schloam



- LEGEND**
- 630 — EXISTING CONTOURS
 - 650 — PROPOSED CONTOURS
 - x — FENCE LINE
 - SF — SILT FENCE
 - ▨ DEMOLITION, TOPSOIL, SEED AND MULCH
 - LOD — LIMITS OF DISTURBANCE (LOD) (SEE NOTE 7)

- SITE NOTES**
1. CONTRACTOR SHALL GRADE DEMOLITION AREAS TO PROMOTE POSITIVE DRAINAGE.
 2. CONTRACTOR SHALL COORDINATE OUTAGE AND WORK WITH POTOMAC EDISON TO REMOVE OVERHEAD DISTRIBUTION SERVICE PRIOR TO DEMOLITION OF BRICK BARN.
 3. CONTRACTOR SHALL CONFIRM LOCATION OF SANITARY SYSTEM. LOCATION OUTLINED IN DRAWINGS IS APPROXIMATE. MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) HEALTH FORM IS PROVIDED WITHIN SPECIFICATION APPENDIX.
 4. TRACES OF CHLORINATED SOLVENT AND HEXAVALENT CHROMIUM HAS BEEN DOCUMENTED IN THE GROUNDWATER AT THE WELL. MDE HAS RETAINED THESE RESULTS AND SHOULD BE CONTACTED FOR ADDITIONAL INFORMATION.
 5. SALVAGE: UPON AWARD, CONTRACTOR SHALL PROVIDE 30 CALENDAR DAYS FOR A SELECTED 501(C)(3) ORGANIZATION TO ACCESS THE SITE AND EXTRACT MATERIALS FROM EACH OF THE STRUCTURES TO BE RAZED. BID PRICE SHOULD ALSO INCLUDE ANY REMOVAL WORK IN WHICH THE 501(3)(C) ORGANIZATIONS CANNOT PERFORM WHERE ASSISTANCE FROM THE CONTRACTOR IS NEEDED.
 6. CONTRACT DURATION IS NOT TO EXCEED 45 CONSECUTIVE CALENDAR DAYS. THIS DURATION IS INCLUSIVE OF THE 30 DAY PERIOD FOR THE 501(C)(3) ORGANIZATION'S WORK. DURING THIS 30 DAY PERIOD, THE CONTRACTOR MAY WORK CONCURRENTLY WITH THE 501(3)(C) ORGANIZATIONS ON TASKS WHICH DO NOT IMPACT THE SALVAGE MATERIAL REMOVAL BUT FACILITATES MEETING THE PROJECT DURATION.
 7. CONTRACTOR SHALL OVERSEED WITHIN ALL LIMITS OF DISTURBANCE AREAS.
 8. GRAVEL DRIVEWAY MAY BE USED AS STAGING AND STOCKPILE AREA BUT SHALL NOT BE IN UNPAVED AREAS.

DESCRIPTION OF WORK		
<ul style="list-style-type: none"> • DEMOLISH/DISPOSAL OF PIERCED END BRICK BARN (APPROX. 11,300 SQ. FT.). • DEMOLISH/DISPOSAL OF STONE SMOKEHOUSE (APPROX. 650 SQ. FT. TOTAL) • DEMOLISH/DISPOSAL OF SUMMER KITCHEN (APPROX. 600 SQ. FT.) • DEMOLISH/DISPOSAL OF FARM HOUSE (APPROX. 2,150 SQ. FT.) 	<ul style="list-style-type: none"> • DEMOLISH/DISPOSAL OF EXISTING SILO (APPROX. 300 SQ. FT.) • REMOVAL/DISPOSAL OF EXISTING CONCRETE WALKWAY/PAD (APPROX. 450 SQ. FT. TOTAL) • REMOVAL/DISPOSAL OF EXISTING FEED HOUSE (APPROX. 1000 SQ. FT.) • REMOVAL/DISPOSAL OF EXISTING EXTERIOR WALLS (APPROX. 160 LF) 	<ul style="list-style-type: none"> • GRADE DEMOLITION AREA TO MATCH SURROUNDING GRADES. • BARN LOWER LEVEL WALLS TO BE DEMOLISHED IN PLACE. • ALL BACKFILL SHALL BE GRADED TO MATCH EXISTING GRADE AND BE GRADED TO DRAIN. APPROXIMATE BACKFILL QUANTITY - 775 CY • CONTRACTOR SHALL BACKFILL IN ACCORDANCE WITH SHA SPECIFICATION MD-203.

MDE No. 17-SF-xxxx
NOTE TO CONTRACTOR: SEDIMENT CONTROL WILL BE STRICTLY ENFORCED

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R.E.Z.			
CHECKED:			
K.M.F.			
APPROVED:			
M.S.K.			

Washington County, MD
HAGERSTOWN REGIONAL AIRPORT

PROJECT TITLE:	BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION
SHEET TITLE:	SITE PLAN
SCALE:	AS SHOWN
DATE:	DECEMBER 2017

FAA AIP No.: 3-24-0019-058 Bid No.: PUR-1377 MAA Grant No.: MAA-GR-18-016
SHEET No.: C.101

EROSION AND SEDIMENT CONTROL NOTES:

- ALL EROSION/SEDIMENT CONTROL MEASURES SHALL COMPLY WITH THE "2011 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."
- ALL DISTURBED AREAS TO BE SEEDDED WITHIN 7 DAYS OF INITIAL GRADING. FOR TEMPORARY SEEDING SPECIFICATIONS, SEE SECTION G-20, "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AT THE INITIATION OF GRADING.
- ALL CONSTRUCTED CHANNELS AND SWALES SHALL HAVE SOIL STABILIZATION MATTING INSTALLED UP TO THE DESIGN FLOW DEPTH.
- DURING CONSTRUCTION, ALL SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED AFTER EACH RAINFALL AND REPAIRED IF NECESSARY. SEDIMENT TO BE REMOVED TO A SUITABLE DISPOSAL AREA AND STABILIZED WITH PERMANENT VEGETATIVE COVER.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SEDIMENT AND EROSION CONTROL MEASURES UNTIL DISTURBED AREAS ARE STABILIZED.
- AFTER FINE GRADING, ALL DISTURBED AREAS ARE TO BE PERMANENTLY SEEDDED AND MULCHED.
- NO SLOPE SHALL BE GREATER THAN 2:1.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 3 CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THIS DOES NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE CURRENTLY BEING USED FOR MATERIAL STORAGE OR FOR THOSE AREAS ON WHICH ACTUAL CONSTRUCTION ACTIVITIES ARE CURRENTLY BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO INSURE THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."

TEMPORARY SEEDING NOTES:

- GENERAL:**
- SCOPE: PLANTING SHORT-TERM VEGETATION TO STABILIZED, CLEARED OR GRADED AREAS SUBJECT TO EROSION FOR A PERIOD OF 14 DAYS TO 6 MONTHS.
 - STANDARDS: TEMPORARY SEEDING SHALL CONFORM TO ALL REQUIREMENTS OF THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," SECTION B-4-4, PUBLISHED JOINTLY BY MARYLAND DEPARTMENT OF THE ENVIRONMENT, NATURAL RESOURCES CONSERVATION SERVICE AND MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS.
 - SEDIMENT AND EROSION CONTROL: ALL PERIMETER CONTROLS MUST BE STABILIZED IN 7 DAYS. ALL INTERIOR CONTROLS MUST BE STABILIZED IN 14 DAYS.

SPECIFICATIONS:

- SITE PREPARATION:**
 - PRIOR TO SEEDING INSTALL ALL REQUIRED SEDIMENT AND EROSION CONTROL MEASURES.
 - FINAL GRADING NOT REQUIRED FOR TEMPORARY SEEDING.
- SOIL AMENDMENTS:**
 - FERTILIZER SHALL BE APPLIED AT THE RATE OF 436 LBS./AC. (10 LBS./1000 SQ. FT.) USING 10-20-20- OR EQUIVALENT.
 - LIME SHALL BE APPLIED AT A RATE OF 2 TONS/AC. (90 LBS./1000 SQ. FT.).
- SEEDBED PREPARATION:**
 - SOIL SHALL BE LOOSENED TO A DEPTH OF 3-5 INCHES BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS PRIOR TO SEEDING.
- SEEDING:**
 - USE THE MIXTURE SPECIFIED ON THE TEMPORARY SEEDING SUMMARY.
 - APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER DRILL, CULTIPACKER, OR HYDROSEEDER.
- MULCHING:**
 - MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. MULCH MATERIALS AND APPLICATIONS SHALL CONFORM TO THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," SECTION B-4-3, PUBLISHED JOINTLY BY MARYLAND DEPARTMENT OF THE ENVIRONMENT, NATURAL RESOURCES CONSERVATION SERVICE AND MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS.

PERMANENT STABILIZATION WITH SOD/TURFGRASS

- ALL SPECIFICATIONS, SITE PREPARATION, INSTALLATION AND MAINTENANCE OF SOD/TURFGRASS FOR PERMANENT, LONG-LIVED VEGETATIVE COVER SHALL CONFORM TO SECTION B-4-5 OF THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," PUBLISHED JOINTLY MARYLAND DEPARTMENT OF THE ENVIRONMENT, NATURAL RESOURCES CONSERVATION SERVICE AND MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS.

PERMANENT SEEDING & SOD NOTES:

GENERAL:

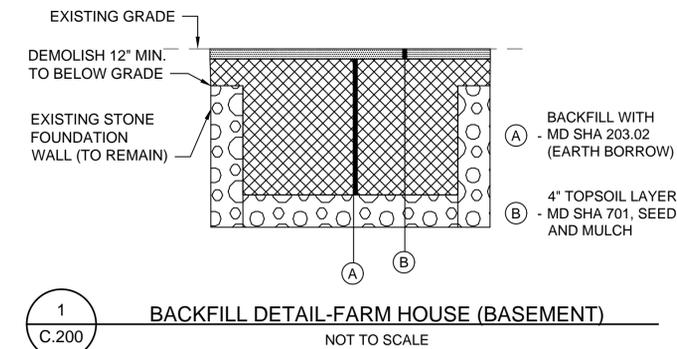
- SCOPE: PLANTING PERMANENT, LONG-LIVED VEGETATIVE COVER ON GRADED OR CLEARED AREAS.
- STANDARDS: PERMANENT SEEDING SHALL CONFORM TO ALL REQUIREMENTS OF THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," SECTION B-4-5, PUBLISHED JOINTLY BY MARYLAND DEPARTMENT OF THE ENVIRONMENT, NATURAL RESOURCES CONSERVATION SERVICE AND MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS.

SPECIFICATIONS:

- SOIL AMENDMENTS:**
 - FOR SITES OF 5 ACRES OR UNDER, APPLY 45 LBS./AC. (1.0 LBS. ACTUAL NITROGEN/1000 SQ. FT.) AND 90 LBS./AC. (2 LBS. ACTUAL P205 AND K20/1000 SQ. FT.). A SLOW RELEASE UREAFORM FERTILIZER (46-0-0) MAY BE APPLIED TO AREAS RECEIVING LOW MAINTENANCE TO PROVIDE NITROGEN OVER A LONGER PERIOD OF TIME. FOR THIS TREATMENT, APPLY 150 LBS./AC. (3.5 LBS./1000 SQ. FT.) OF A UREAFORM FERTILIZER IN ADDITION TO THE ABOVE FERTILIZER APPLICATION AT TIME OF SEEDING.
 - LIME SHALL BE APPLIED AT A RATE OF 2 TONS/AC. (90 LBS./1000 SQ. FT.).
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3-5 INCHES OF SOIL.
 - SITES HAVING A DISTURBED AREA OVER 5 ACRES SHALL HAVE SOIL TESTS PERFORMED TO DETERMINE RATE.
- SEEDBED PREPARATION:**
 - SOIL SHALL BE LOOSENED TO A DEPTH OF 3-5 INCHES BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS PRIOR TO SEEDING.
- SEEDING:**
 - USE THE MIXTURE SPECIFIED ON THE PERMANENT SEEDING SUMMARY.
 - APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER, OR HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER ON A FIRM, MOIST SEEDBED). MAXIMUM SEEDING DEPTH SHOULD BE 1/4" ON CLAYEY SOILS AND 1/2" ON SANDY SOILS, WHEN USING OTHER THAN HYDROSEEDER METHOD OF APPLICATION. NOTE: IF HYDROSEEDING IS USED AND THE SEED AND FERTILIZER IS MIXED, THEY WILL BE MIXED ON SITE AND THE SEEDING SHALL BE IMMEDIATE WITHOUT INTERRUPTION.
- MULCHING:**
 - MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. MULCH MATERIALS AND APPLICATIONS SHALL CONFORM TO THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," SECTION 20.0, PUBLISHED JOINTLY BY MARYLAND DEPARTMENT OF THE ENVIRONMENT, NATURAL RESOURCES CONSERVATION SERVICE AND MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS.

EROSION AND SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION:

- CONTACT THE WASHINGTON COUNTY ENGINEERING DEPARTMENT (240.313.2400) AND WSCSD (301.797.6821) AT LEAST FIVE DAYS BEFORE COMMENCING CONSTRUCTION TO SET UP PRE-CON MEETING AND OBTAIN PERMISSION TO PROCEED.
- INSTALL THE FOLLOWING CONTROLS PRIOR TO BEGINNING DEMOLITION.
 - SILT FENCE AS SHOWN.
- REMOVE PAVEMENTS/STRUCTURES AS SHOWN.
- BACKFILL PAVEMENT/FOUNDATION LIMITS.
- COMPLETE FINE GRADING.
- STABILIZE (TOPSOIL, SEED & MULCH)
- PERMANENT SEEDING SHALL BE COMPLETED IN SPRING 2018. RE-SEED AS REQUIRED IN FALL 2018.
- ALL SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL REMAIN IN PLACE UNTIL ALL UPLAND AREAS ARE STABILIZED AND APPROVAL RECEIVED FROM WSCSD. CONTACT WSCSD UPON FINAL STABILIZATION TO SCHEDULE A CLOSEOUT REVIEW MEETING. CONTROLS MAY ONLY BE REMOVED UPON RELEASE OF WSCSD AFTER THE CLOSEOUT REVIEW MEETING.



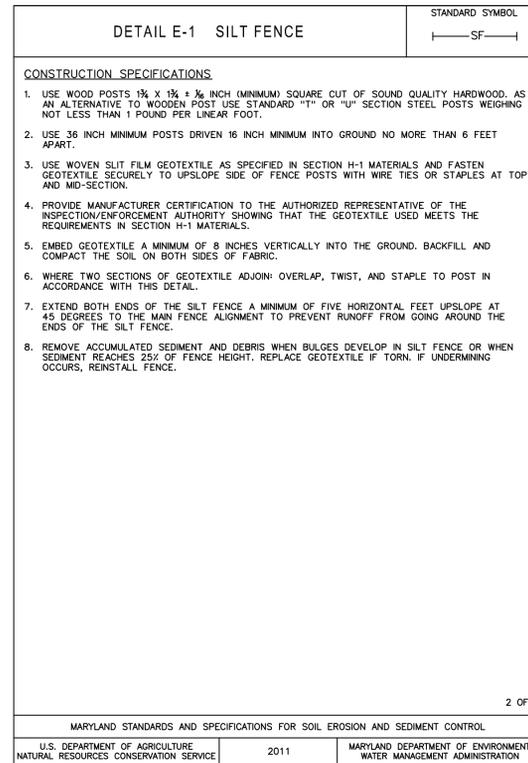
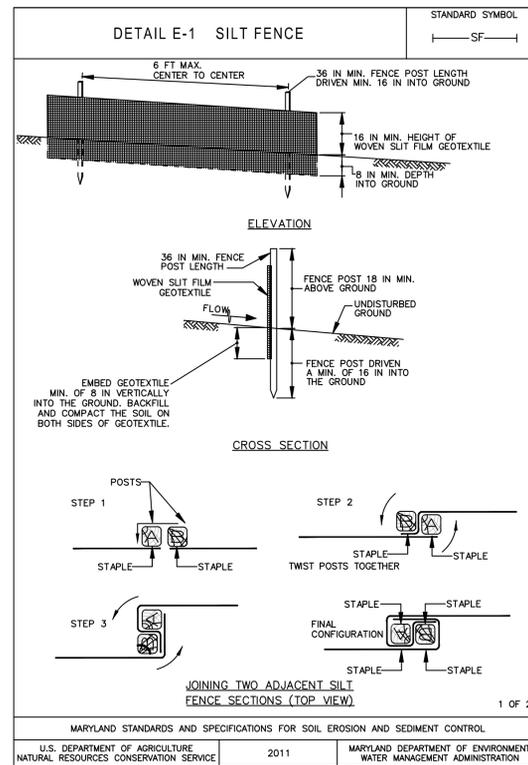
1
C.200
BACKFILL DETAIL-FARM HOUSE (BASEMENT)
NOT TO SCALE

PERMANENT SEEDING SUMMARY

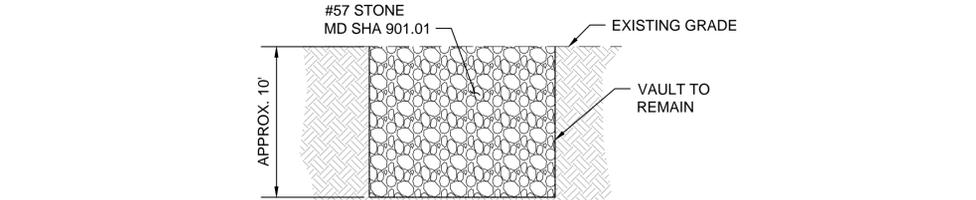
SEED MIXTURE (HARDINESS ZONE 6b) FROM					FERTILIZER RATE (10-22-22)			LIME RATE
MIX No.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS	N	P205	K20	
9	TALL FESCUE PERENNIAL RYEGRASS KENTUCKY BLUEGRASS	80 LBS. 20 LBS. 40 LBS.	3/1 - 5/15 8/15 - 10/15	1-2 INCH	45 LB./AC. (1.0 LB./1000 S.F.)	90 LB./AC. (2.016 LB./1000 S.F.)	90 LB./AC. (216 LB./1000 S.F.)	2 TONS/AC. 90 LBS./1000 S.F.

TEMPORARY SEEDING SUMMARY

SEED MIXTURE (HARDINESS ZONE 6b) FROM					FERTILIZER RATE (10-20-20)	LIME RATE
MIX No.	SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS		
1	BARLEY	96 LBS.	3/15-5/31 8/1-9/30	1 INCH	436 LBS./AC.	2 TONS/AC. (90 LB./1000 S.F.)

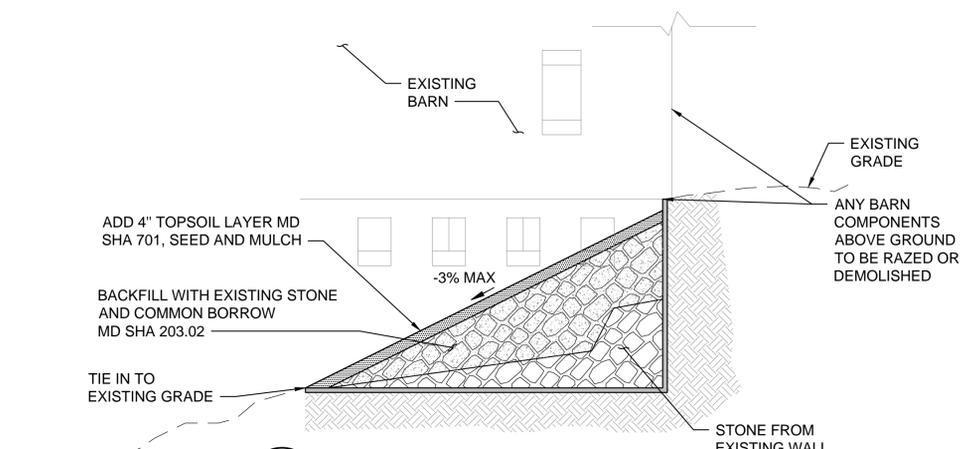


2
C.200
SILT FENCE
NOT TO SCALE



3
C.200
CISTERN SEALING DETAIL
NOT TO SCALE

- NOTES**
- FILL WITH #57 STONE MD SHA 901.01.
 - DEPTH OF THE CISTERN IS APPROXIMATELY 10'.



4
C.200
BACKFILL DETAIL-BARN (LOWER LEVEL)
NOT TO SCALE

- NOTES**
- REMOVE ANY EXCESS DEBRIS PRIOR TO BACKFILLING.

- NOTES**
- CONTRACTOR SHALL HIRE A WELL DRILLER LICENSED BY THE MARYLAND STATE BOARD OF WELL DRILLERS TO COMPLETE THIS WORK.
 - CONTRACTOR SHALL INVESTIGATE CONDITION OF WELL, DETAILS OF CONSTRUCTION AND WHENEVER ANY OBSTRUCTIONS EXIST THAT MAY INTERFERE WITH THE FILLING AND SEALING OF THE WELL. IF THERE ARE OBSTRUCTIONS, REMOVE THEM BY CLEANING THE HOLE OR RE-DRILLING.
 - WELL SEALING SHALL COMPLY WITH COMAR 26.04.04.34-36.
 - UPON COMPLETION, THE LICENSED WELL DRILLER SHALL COMPLETE AND SUBMIT AN MDE WATER WELL ABANDONMENT SEALING REPORT. THIS REPORT SHALL BE SUBMITTED NO LATER THAN 45 DAYS AFTER ABANDONMENT AND SEALING OF THE WELL.
 - IF REQUIRED BY WASHINGTON COUNTY, THE LICENSED DRILLER SHALL PROVIDE SEALING PLANS/SPECIFICATIONS FOR APPROVAL AND 24 HOUR NOTIFICATION PRIOR TO THE COMMENCEMENT OF WORK.
 - DEPTH OF THE WELL IS APPROXIMATELY 22'.

5
C.200
WELL-SEALING DETAIL
NOT TO SCALE

NOTE TO CONTRACTOR: SEDIMENT CONTROL WILL BE STRICTLY ENFORCED

Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 33119, Expiration Date: JAN. 28, 2019.

ADCI
AIRPORT DESIGN CONSULTANTS INC.
6031 UNIVERSITY BLVD.
SUITE 330
ELLCOTT CITY, MD 211043
PHONE: 410-465-9600
FAX: 410-465-9602



DESIGNED: S.A.C.	No.	DATE	DESCRIPTION
DRAWN: R.E.Z.			
CHECKED: K.M.F.			
APPROVED: M.S.K.			

Washington County, MD
HAGERSTOWN REGIONAL AIRPORT
HGR

PROJECT TITLE: BRUMBAUGH-KENDLE-GROVE FARMSTEAD DEMOLITION	FAA AIP No.: 3-24-0019-058 Bid No.: PUR-1377 MAA Grant No.: MAA-GR-18-016
SHEET TITLE: EROSION AND SEDIMENT CONTROL DETAILS	SHEET No.:
SCALE: AS SHOWN	DATE: DECEMBER 2017

C.200

FILE NAME: O:\HGR\Projects\2017-1303\CAD\Sheets\005_C.200_EROSION AND SEDIMENT CONTROL.dwg PLOTTED: Wednesday, January 10, 2018 - 3:02pm USER: schiam