

ERM NC, Inc.
15720 Brixham Hill Avenue
Suite 120
Charlotte, NC 28277
(704) 541-8345
(704) 541-8416 (fax)

June 29, 2015

Matthew Aufman
NCDENR - Division of Waste Management
217 West Jones Street
Raleigh, North Carolina 27603

Subject: Remedial Investigation Work Plan Addendum
Engineered Controls International, LLC (ECI)
1239 Rock Creek Dairy Road
Whitsett, Guilford County, North Carolina
Docket No. 14-SF-383
NONCD0002903



Dear Mr. Aufman:

On behalf of ECI, ERM NC, Inc. (ERM) is transmitting this Remedial Investigation Workplan Addendum for the referenced ECI facility located in Whitsett, North Carolina ([Figure 1](#)). The addendum describes the planned additional groundwater assessment activities at the site.

Background and Rationale for Work

Upon being retained by ECI as the Registered Environmental Consultant (REC) for the Whitsett project, ERM developed a *Remedial Investigation Workplan* (ERM, May 12, 2014) and *Remedial Investigation Workplan Addendum* (ERM, September 23, 2014) to assess potential residual soil and groundwater impact in three areas of concern (AOCs) at the site and groundwater downgradient of the AOCs. From May 2014 through May 2015, ERM implemented the workplans and conducted a Phase I RI and a Phase II RI Addendum at the referenced site.

Results of the RI activities confirmed that a residual volatile organic compound (VOC) source mass is present in shallow soils in the vicinity of the former Vapor Degreaser Area (AOC 1). The extent of the VOC-affected soils has been delineated to the unrestricted/residential Preliminary Soil Remediation Goal (PSRG) of 880 micrograms per kilogram (ug/kg) for trichloroethene (TCE), the main constituent-of-concern for the site. No soil samples from AOC 1 contain VOC concentrations above the industrial PSRGs.

The extent of VOC-affected groundwater from the former source areas has been laterally delineated except in the downgradient direction to the northwest. Off-site

access has been granted from off-site property owner Rock Creek Investments, LLC that will allow installation of two monitor wells (nested pair) on their property to complete lateral groundwater impact delineation to the northwest. A copy of the access agreement between ECI and Rock Creek Investments is attached. As required, both the NCDENR application to install two off-site monitor wells (Form GW22-MR) and the Guilford County Application for Installation of a Groundwater Monitoring Well are also attached. The Guilford County application has also been submitted to the county health department.

Additional delineation of the potential soil and groundwater treatment zone is also necessary prior to completion of a proposed remedial action plan. As such, the source area treatment zone at the Whitsett facility will be defined in greater detail by collecting and analyzing discrete soil and groundwater samples from three (3) proposed nested monitor wells located within and immediately downgradient of the source area inside the facility building. The results of the assessment activities will provide additional soil and groundwater data to refine the current understanding of the residual VOC source mass and the area and volume that will be targeted for remediation. Well installation activities are planned to be conducted concurrently, and details of the planned additional RI activities are provided below. Prior to mobilizing for drilling activities, ERM will conduct public and private subsurface utility clearance in the area of the proposed well locations.

Planned Off-Site Well Installation Activities

The off-site lateral extent wells (PMW-14 and PMW-14D) are planned for installation approximately 500 feet northwest of existing monitor well set (MW-1/DW-1/DW-1D) to the target depths of approximately 75 feet below land surface (ft bls) and 135 ft bls, respectively. The proposed well pair location is shown on [Figure 2](#). The proposed well pair location was determined based on the apparent groundwater flow pattern as well as siting constraints posed by steep topography and subsurface utilities. The proposed target depths were selected to provide monitoring of equivalent elevation zones as monitored by existing intermediate bedrock well DW-1 and deep bedrock well DW-1D which contain the most elevated VOC concentrations in the on-site mid-plume area.

Due to the presence of shallow bedrock at the site, the off-site monitor wells will be installed as Type III, double cased wells. To install each well, ERM will contract with a licensed North Carolina driller to mobilize to the Whitsett site. Monitor well installations will be accomplished by first using hollow-stem auger (HSA) drilling methods in saprolite and partially weathered rock aquifer zones until auger refusal is encountered. Once bedrock or auger refusal is encountered, air rotary or rotary core drilling methods will then be used to advance each borehole through bedrock to the

target completion depths. If necessary based on field conditions encountered during drilling, a 4-inch diameter schedule 40 polyvinyl chloride (PVC) surface casing will be installed and grouted with cement at each well location to isolate the saprolite aquifer zone from the intermediate and/or deep bedrock aquifer zones. The grout will then be allowed to cure for approximately 24 hours before the boring is completed to depth to allow installation of the Type III wells in accordance the North Carolina well installation rules. Each new monitor well will be constructed of 10 feet of 0.010-inch slotted 2" PVC well screen and the appropriate amount of 2-inch PVC riser to bring the well to land surface. The monitor wells will be completed at land surface with a locking, flush-grade manhole within a 2-foot square concrete pad.

Planned Treatment Zone Delineation Well Installation Activities

Following utility clearance, the treatment zone delineation will be performed by advancing three borings in the vicinity and downgradient of the former degreaser area inside the Whitsett facility building. Proposed well locations are shown on [Figure 2](#). Each boring will be advanced to a depth of approximately 100 ft bls. Drilling activities will be completed using rotary coring methods that will allow continuous soil and rock core samples to be collected for lithologic logging. Up to three soil samples will be collected during drilling and analyzed for VOCs via EPA method 8260B and the Synthetic Precipitation Leaching Procedure (SPLP) analyses to provide data for additional evaluation of site-specific soil remedial goals to support the remedial design.

Once the borings are completed, shallow and intermediate bedrock groundwater monitor wells will be installed in each boring as a nested well pair. The wells will ultimately be utilized for performance monitoring of the remedial action at the source area. Each nested well pair will consist of one Type II monitor well installed to a depth of approximately 100 feet with up to 10 feet of screen, and one Type II monitor well installed to a depth of approximately 65 feet with up to 10 feet of screen. Once installed, the nested wells will be surveyed, developed, purged and sampled.

Additional Activities

Upon completion, the monitor wells will be developed by bailing or pumping until turbidity is significantly reduced. Once developed, the newly installed wells will be sampled using low-flow methods and the samples will be analyzed for VOCs via EPA method 8260B. Additional groundwater samples will be collected from the two existing nested air sparge / soil vapor extraction pilot test observation wells (OB-1 and OB-2) and monitor well MW-11.

The new wells will be surveyed and their locations and well construction information will be updated in the existing site figures and tables. Upon receipt of analytical results, ERM will review the data and incorporate the results into the RI report.

It is anticipated that well installation activities will begin on July 6, 2015. If you have any questions or comments regarding this workplan addendum, please contact ERM at 704-541-8345.

Sincerely,



Edward Hollifield, P.G.
Project Manager



Thomas Wilson, P.G., RSM
Principal

cc: Jimmy McCandies - ECI

Attachments:

- REC Certification Pages
- Figure 1 - Site Location Map
- Figure 2 - Proposed Monitor Well Location Map
- Access Agreement Between ECI and Rock Creek Investments
- NCDENR Form GW22-MR
- Guilford County Application for Installation of Monitoring Well

REC Certification Pages

IHSB SITE NAME Engineered Controls International - Whitsett

DATE & NAME OF DOCUMENT 2014 06 - Remedial Investigation Work Plan Addendum

TYPE OF SUBMITTAL (circle all that apply): Report, Work plan, Work Phase Comp. Statement, Schedule Change

REMEDIATING PARTY DOCUMENT CERTIFICATION STATEMENT (.0306(B)(2))

"I certify under penalty of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this certification, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

Jimmy McCandies

Name of Remediating Party

Jimmy McCandies
Signature of Remediating Party

06/29/15
Date

NOTARIZATION

North Carolina (Enter State)

Alamance COUNTY

I, Patricia J. Hill, a Notary Public of said County and State, do hereby certify that Jimmy McCandies did personally appear and sign before me this day, produced proper identification in the form of personally known was duly sworn or affirmed, and declared that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certification is true and accurate, and he or she then signed this Certification in my presence.

WITNESS my hand and official seal this 29th day of June, 2017

Patricia J. Hill
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: 2-7-17



IHSB SITE NAME Engineered Controls International - Whitsett

DATE & NAME OF DOCUMENT 2015 06 - Remedial Investigation Work Plan Addendum

TYPE OF SUBMITTAL (circle all that apply): Report, Work plan, Work Phase Comp. Statement, Schedule Change

REGISTERED SITE MANAGER CERTIFICATION OF SIGNATURES

As the Registered Environmental Consultant for the Site for which this filing is made, I certify that the signatures included herewith are genuine and authentic original handwritten signatures and/or true, accurate, and complete copies of the genuine and authentic original handwritten signatures of the persons who purport to sign for this filing. I further certify that I have collected through reliable means the originals and/or copies of said signatures from the persons authorized to sign for this filing who, in fact, signed the originals thereof. Those persons and I understand and agree that any copies of signatures have the same legally binding effect as original handwritten signatures, and I certify that any person for whom I am submitting a copy of their signature has provided me with their express consent to submit said copy. Additionally, I certify that I am authorized to attest to the genuineness and authenticity of the signatures, both originals and any copies, being submitted herewith and that by signing below, I do in fact attest to the genuineness and authenticity of all the signatures, both originals and copies, being submitted for this filing.

Tom Wilson

Name of Registered Site Manager

Thomas M Wilson
Signature of Registered Site Manager

6-29-2015
Date

REGISTERED SITE MANAGER DOCUMENT CERTIFICATION STATEMENT (.0306(b)(1))

"I certify under penalty of law that I am personally familiar with the information contained in this submittal, including any and all supporting documents accompanying this certification, and that the material and information contained herein is, to the best of my knowledge and belief, true, accurate and complete and complies with the Inactive Hazardous Sites Response Act N.C.G.S. 130A-310, et seq, and the remedial action program Rules 15A NCAC 13C .0300. I am aware that there are significant penalties for willfully submitting false, inaccurate or incomplete information."

Tom Wilson

Name of Registered Site Manager

Thomas M Wilson
Signature of Registered Site Manager

6-29-2015
Date

NOTARIZATION

North Carolina (Enter State)

Union COUNTY

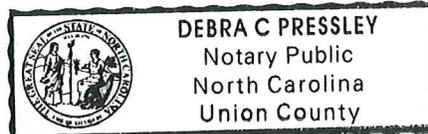
I, Debra Pressley, a Notary Public of said County and State, do hereby certify that Thomas M Wilson did personally appear and sign before me this day, produced proper identification in the form of NCDL, was duly sworn or affirmed, and declared that, he or she is the duly authorized environmental consultant of the remediating party of the property referenced above and that, to the best of his or her knowledge and belief, after thorough investigation, the information contained in the above certifications is true and accurate, and he or she then signed these Certifications in my presence.

WITNESS my hand and official seal this 29 day of June, 2015

Debra Pressley
Notary Public (signature)

(OFFICIAL SEAL)

My commission expires: 10/27/2017



Figures

Explanation

Site



0 500 1,000 Feet

Basemap Copyright © 2013 National Geographic Society, i-cubed.

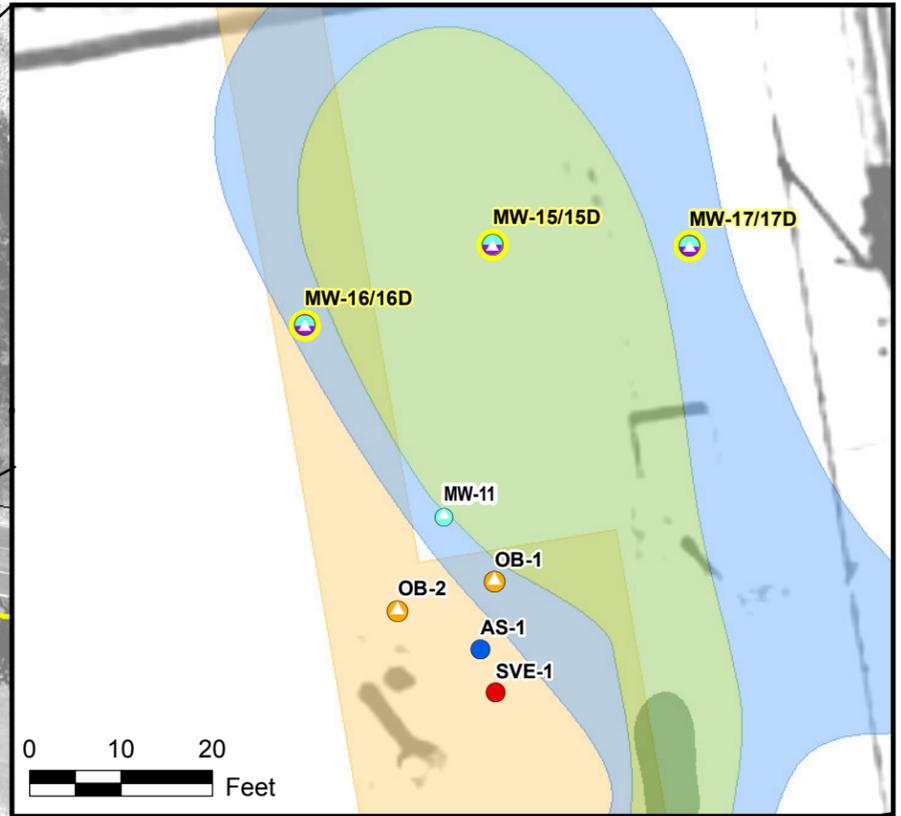
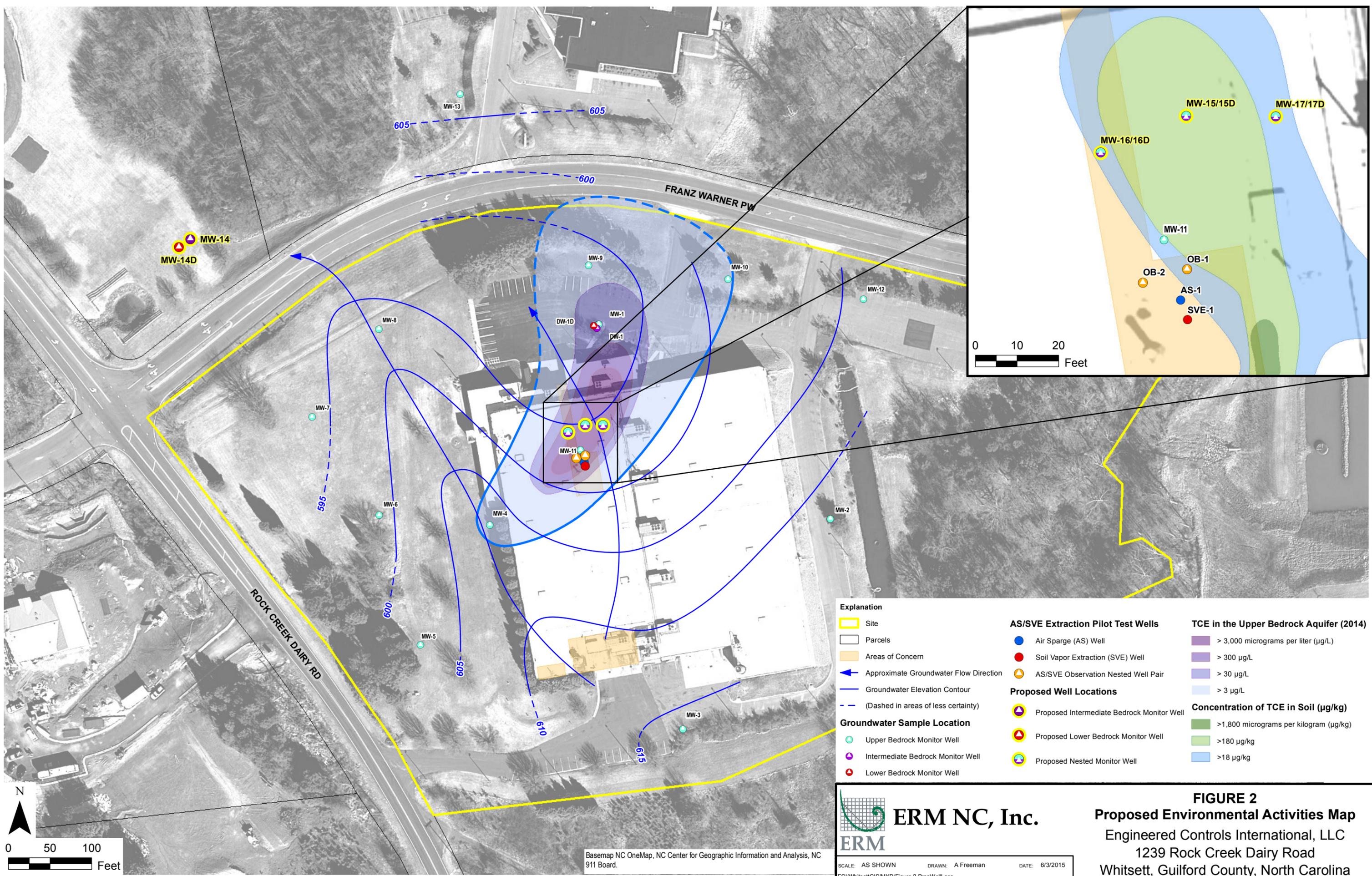


ERM NC, Inc.

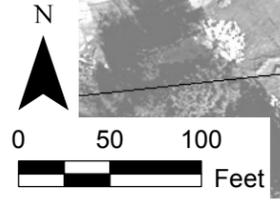
FIGURE 1 Site Location Map

Engineered Controls International, LLC
1239 Rock Creek Dairy Road
Whitsett, Guilford County, North Carolina

DATE: 6/2/2015 SCALE: AS SHOWN DRAWN: A Freeman
FILE: ECI/WhitsettGIS/MXD/Figure 1 SLM



Explanation		AS/SVE Extraction Pilot Test Wells	TCE in the Upper Bedrock Aquifer (2014)
Site		Air Sparge (AS) Well	> 3,000 micrograms per liter (µg/L)
Parcels		Soil Vapor Extraction (SVE) Well	> 300 µg/L
Areas of Concern		AS/SVE Observation Nested Well Pair	> 30 µg/L
Approximate Groundwater Flow Direction		Proposed Well Locations	> 3 µg/L
Groundwater Elevation Contour		Proposed Intermediate Bedrock Monitor Well	Concentration of TCE in Soil (µg/kg)
(Dashed in areas of less certainty)		Proposed Lower Bedrock Monitor Well	>1,800 micrograms per kilogram (µg/kg)
Groundwater Sample Location		Proposed Nested Monitor Well	>180 µg/kg
Upper Bedrock Monitor Well			>18 µg/kg
Intermediate Bedrock Monitor Well			
Lower Bedrock Monitor Well			



Basemap NC OneMap, NC Center for Geographic Information and Analysis, NC 911 Board.

ERM NC, Inc.
 SCALE: AS SHOWN DRAWN: A Freeman DATE: 6/3/2015
 ECI\Whitsett\GIS\MXD\Figure 2 PropWellLocs

FIGURE 2
Proposed Environmental Activities Map
 Engineered Controls International, LLC
 1239 Rock Creek Dairy Road
 Whitsett, Guilford County, North Carolina

Access Agreement

ACCESS AGREEMENT AND INDEMNITY

This Access Agreement (this "Agreement") dated as of June 9, 2015 (the "Effective Date"), by and between Rock Creek Investments, LLC a North Carolina limited liability company ("Owner") and Engineered Controls International, LLC, a Delaware corporation ("ECI"), grants to ECI the right to enter the real property owned by Owner and located 1235 Near Rock Creek Dairy Road, Whitsett, North Carolina, tax parcel number 0108789 (as described more fully on Exhibit A hereto, the "Property") to perform the activities described herein on the terms and conditions contained herein:

RECITALS:

A. The Property is owned by Owner. Owner and ECI collectively shall be referred herein to as the "Parties."

B. ECI and its agents, employees, officers, consultants partners, advisors, and contractors, including ERM NC, Inc. (collectively, "Representatives"), seek to gain access to the Property for the purpose of installing two adjacent flush-mounted groundwater monitoring wells (the "Wells") on the Property and doing periodic groundwater sampling from the Wells during the duration of this Agreement (the "Work").

AGREEMENT:

Subject to the limitations and conditions set forth below and in consideration of the agreement hereinafter set forth and the premises contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Parties, Owner grants to ECI and its Representatives the right to enter onto the Property for the limited purposes set forth below:

1. This Agreement authorizes ECI and its Representatives to perform the Work at ECI's sole expense, on the Property, subject to the terms and conditions set forth herein. ECI will notify Owner in writing no fewer than five (5) business days in advance of when ECI intends to perform Work on the Property, and with such notice will provide Owner with a detailed scope of work, including, but not limited to, a description of the parameters, test methods and subsequent data analysis to be performed, for Owner's approval, which approval shall not unreasonably be withheld or delayed.

Notification shall be sent to the following:

Rock Creek Investments, LLC
c/o Schulman & Beard
125 S. Elm Street, Suite 403
Greensboro, NC 27401
Attention: Richard beard
Phone: 336-282-3773
Email: richard@SSBRE.com

Owner may at any time, and from time-to-time, notify ECI in writing of changes to the notice persons and addresses listed above.

2. The commencement date of this Agreement shall be the Effective Date.

3. Prior to commencement of the Work, ECI shall obtain from any local, state or federal authority having jurisdiction over any aspect of the Work, all required permits, authorizations, and approvals. All Work performed by ECI and its Representatives pursuant to this Agreement shall be performed and completed in compliance in all material respects with all applicable codes, ordinances, laws, regulations and orders, and in a workmanlike and professional manner, so as to minimize disturbance to the occupants of the Property. ECI will, and shall cause its Representatives to, minimize to the greatest practicable extent the creation of noise, dust, and/or disturbance at the Property, and any interference with Owner's, its tenants', or any visitors' use and enjoyment thereof. Owner may require that any such Work be performed during "off" hours, nights/evenings or on weekends if reasonably necessary to avoid such disturbances.

4. Removal and disposal of extracted soil and groundwater, and any other materials or wastes from the Property generated by ECI or its Representatives in performance of the Work shall be the responsibility of ECI, at ECI's sole cost and expense, and shall be removed and disposed of in accordance with all applicable codes, ordinances, laws and regulations. If access to Owner's facilities, including parking, may be obstructed during or after performance of Work, ECI shall obtain prior written approval from Owner, which approval shall not unreasonably be withheld or delayed.

5. All Work performed by ECI and its Representatives under this Agreement shall be performed at ECI's sole cost and expense.

6. ECI shall promptly provide Owner, at no cost to Owner, with complete copies of all testing or monitoring results, or laboratory analyses, relating to the Work or the existence or suspected existence or any threatened adverse health, safety or environmental conditions or problems or contamination at the Property, and all plans, reports, maps, drawings, or other such documents, materials, and information which constitute or pertain to the Work, including but not limited to any environmental reports and data or the like, and documents submitted to the North Carolina Department of Environment and Natural Resources, relating to the Work. ECI agrees that Owner may rely upon the information ECI and its Representatives developed through the Work. Documents required to be provided by ECI pursuant to this Section 6 shall be sent to the individual listed in Section 1 herein.

7. ECI shall be responsible for repairing any damage caused to the Property by ECI as a result of the Work. All repairs shall be made promptly upon completion of the Work. Neither ECI nor its Representatives shall allow any release of soil cuttings, wastewaters or other wastes or contamination from the Work at the Property. In addition, any and all such "investigative-derived waste" from the Work shall be manifested by ECI as the "generator" and disposed of off-site and handled in accordance with applicable law. Upon completion of the Work, and at ECI's sole cost and expense, ECI or its Representatives shall do the following: remove any and all construction, measuring, monitoring, and other equipment or devices used by ECI or its Representatives from the Property; remove any and all dirt, debris and waste of any nature generated during the Work; repair

any damage to the Property caused by the Work (including any holes, borings, wells, or similar excavations); properly abandon the Wells in accordance with applicable laws; and promptly restore the Property, to Owner's reasonable satisfaction, to the condition it was in prior to Owner permitting ECI and its Representatives to conduct the Work.

8. The authorization granted herein to ECI and its Representatives to enter onto the Property shall terminate on the earlier of July 1, 2017 (the "Expiration Date") or on written notice by Owner to ECI. Upon the expiration or termination of this Agreement, ECI and its Representatives shall no longer be permitted access to the Property except to remove all their investigative, assessment, monitoring, and/or measuring equipment or devices and any related wastes or other materials within thirty (30) days of the termination of the Agreement or the Expiration Date. Within thirty (30) days prior to the Expiration Date, ECI may provide written notice to Owner of its desire to extend the duration of this Agreement in one year increments such that ECI may continue to perform the Work. Owner will consider such request and, in its sole discretion, if it approves the extension, the Parties will execute an amendment to this Agreement signed by both Parties hereto extending the term of this Agreement for one (1) year. Subsequent extension requests will be addressed in any such amendment to the Agreement.

9. ECI covenants and agrees to defend, indemnify, and hold harmless Owner and its affiliates, employees, officers, directors, agents, successors and assigns from and against any and all claims, suits, demands, actions, causes of action, harm, damages, injury, losses, judgments, fines, penalties or liabilities whatsoever (including without limitation the reasonable fees of attorneys, experts and consultants, and environmental investigative/remediation expenses) (collectively, "Losses") which may be asserted by any person or entity whatsoever, arising out of or relating to, directly or indirectly, any and all personal injury or death, property damage, business disruption (including indirect, special or consequential damages related thereto) or environmental harm or contamination caused by ECI or its Representatives at the Property during the performance of or otherwise relating to the Work

10. ECI further agrees to defend, indemnify, and hold harmless Owner and its affiliates, successors, and assigns from and against any and all Losses which may be asserted by any person or entity whatsoever, arising out of or relating, directly or indirectly, to any environmental condition related to a release of a contaminant, pollutant, hazardous substance, hazardous material or waste, including but not limited to any volatile organic compound (VOC) or any petroleum or any petroleum byproduct, that emanated or migrated from or is connected in any way to ECI's real property or activities or operations conducted by ECI or its Representatives at ECI's real property or elsewhere and identified, discovered, or confirmed at the Property during the Work.

11. ECI shall maintain the following insurance coverage while performing the Work and shall provide evidence of coverage reasonably satisfactory to Owner before beginning the Work: (i) statutory workers compensation and employer's liability coverage; (ii) commercial general liability coverage of at least \$2,000,000 per claim and \$3,000,000 in the aggregate; and (iii) contractor's pollution liability coverage of at least \$2,000,000 per claim and \$3,000,000 in the aggregate, all (except for workers compensation coverage) naming Owner as an additional insured and providing occurrence basis liability insurance coverage. All such policies shall (a) be primary and non-contributory to any other insurance available, and (b) be obtained from an insurance company licensed to do business in the United States with an A.M. Best ratings of A- and "XII" or better. Prior

to entering the Property, ECI shall provide to Owner certificates of insurance evidencing such coverage.

12. Except for such disclosures as are required by law, no information obtained from the performance of the Work shall be disclosed by ECI or its Representatives to any other person without the express written consent of Owner, and no such information shall be used by ECI or its Representatives for any purpose other for the groundwater testing as described herein. ECI agrees that it will be responsible for any breach of this Agreement by its Representatives of this Agreement. The parties acknowledge and agree that applicable law will require that ECI report results of groundwater analysis conducted during the Work to the North Carolina Department of Environment and Natural Resources, and that such reporting will not constitute a breach of this Agreement.

13. The failure or delay of Owner to enforce any provision of this Agreement will not be deemed to be a waiver of Owner's right to enforce that or any other provision of this Agreement at a later time. Non-pursuit by Owner of any remedy provided herein shall not prevent the later exercise by Owner of any other remedies available to it at law and/or in equity. Furthermore, this Agreement shall not be deemed to be a waiver of any rights or remedies available to the Owner at law and/or in equity with respect to any personal injury, property damage, environmental harm, and/or any other liability for any actions conducted on the Property by ECI or its Representatives.

14. The Parties acknowledge and agree that in the event of a breach of this Agreement, no adequate remedy at law is available to Owner, and Owner shall have the right to seek specific performance of any and all obligations by ECI and its Representatives under this Agreement. Such right to specific performance shall be in addition to, and shall not limit, any other remedy available at law or equity for any such breach. Moreover, the rights of Owner to indemnification pursuant to this Agreement will be in addition to any other rights Owner may have hereunder or under law or regulation.

15. This Agreement shall be governed by and construed in accordance with the laws of the State of North Carolina without regard to any provisions of its conflicts of laws principles.

16. Paragraphs 7, 8, 9, 10, 12, 13, 14, 15 and 16 of this Agreement shall survive the termination or expiration of this Agreement.

17. This Agreement represents the complete agreement between the Parties relating to the subject matter hereof, and supersedes any and all previous negotiations, representations, commitments, and agreements, whether written, oral, or implied, relating to the subject matter hereof. No change, amendment, or modification of this Agreement shall be effective unless made in writing and signed by all Parties hereto.

18. This Agreement may be executed in counterparts, each of which shall constitute an original and all of which shall together constitute a single instrument.

[The remainder of this page is intentionally left blank.]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement effective as of the Effective Date.

Rock Creek Investments, LLC

By: 

Name: T. Richard Beard, Jr

Its: Manager / member

Engineered Controls International, LLC

By: 

Name: MARIO IANNANTUONO

Its: CHIEF OPERATING OFFICER

**Monitor Well Permit Applications
NCDENR and
Guilford County**

ERM NC, Inc.

15720 Brixham Hill Ave
Suite 120
Charlotte, NC 28277
(704) 541-8345

June 29, 2015

Reference: Monitor Well Permit Modification
Engineered Controls International Facility
1239 Rock Creek Dairy Road
Whitsett, Guilford County, NC
Permit #: 012-12-MW18-RW0
Incident No. NONCD0002904



Sandi Priddy
Guilford County Public Health Dept.
400 W. Market Street
Greensboro, NC 27401
(336-641-6798)

Via Email

Ms. Priddy:

On behalf of Engineered Controls International, LLC, ERM is submitting the attached monitor well permit amendment application with a well construction diagrams and site figures for up to six additional planned monitor wells at the referenced site. A check for \$360.00 to cover the fee for the additional wells is attached. Two of the planned wells will be installed on the adjacent downgradient property. A copy of the signed access agreement is also enclosed.

Please contact Amanda Freeman or myself with any questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ed Hollifield', written in a cursive style.

Ed Hollifield, P.G.
Project Manager

enclosures: Well construction details
Access agreement
Site Figures

GUILFORD COUNTY DEPARTMENT OF PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
APPLICATION FOR INSTALLATION OF GROUNDWATER MONITORING WELL,
AIR INJECTION WELL, AIR SPARGING WELL, OR RECOVERY WELL

Date: 06/24/2015

New:

Amendment: Existing Permit Number: 012-12-MW14-RW0

In accordance with the provision of the Guilford County Well Rules, application is hereby made for a well installation permit.

1. Site Name: Engineered Controls International, LLC Incident #: NONCD0002904

2. Address of Well(s): 1239 Rock Creek Dairy Road, Whitsett, North Carolina 27377

3. Type and Number of wells to be constructed: Monitoring 6 Air Injection 0 Air Sparging 0 Recovery

4. Name of Well Owner: Engineered Controls International

5. Name of Contact Person: Jimmy McCandies Telephone: 336-380-5645

6. Mailing Address of Well Owner: P.O. Box 247

City: Elon State: NC Zip: 27244

7. Property Owner (if different from well owner): Same as above

8. Property Owner's Mailing Address: Same as above

9. Reason for Well Installation: environmental assessment
(e.g. non-discharge permit, suspected contamination, environmental assessment, etc.)

10. Type of Facility for which the well is needed: Specialty Valve Manufacturing Facility
(e.g. non-discharge facility, waste disposal site, landfill, underground storage tank, etc.)

11. Contaminant Type (if known): chlorinated volatile organic compounds
(e.g. nutrient, organics, petroleum, heavy metals, etc.)

12. Are there any existing recovery wells? No
If yes, how many? Permit Number:

13. Distance to a known waste or pollution source: 10 feet

14. Are there any wells located less than 500 feet from the proposed well? No
If yes, give the distance: feet

15. Well Driller: SAEDACCO

16. Registration Number: To be determined based on schedule (see list) Fee: \$ 360

17. Well Driller Address: 9088 Northfield Dr Date:

Fort Mill, SC 29707 Receipt #:

Telephone: (803) 548-2180 Received by:

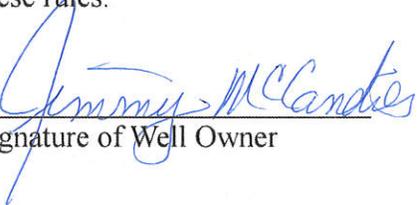
Additional Information

1. Attach a map showing the location of the following:

- (a) Proposed well(s)
- (b) All existing wells and test boring within the property boundary
- (c) All water supply wells (if any) within 500 feet of the well
- (d) At least two reference points (e.g. numbered roads, intersections, streams, etc.)

2. Provide a well construction information and diagram for each well (separate pages).

The Well Owner hereby agrees that the proposed well(s) will be constructed in accordance with specifications and conditions set forth in Guilford County Well Rules and accepts full responsibility for compliance with these rules.


Signature of Well Owner

Environmental/Safety Coordinator
Title

Address: P.O. Box 247 Elon, NC 27244

Telephone: 336-380-5645

If the property is owned by someone other than the well owner, the property owner hereby consents to allow the well owner to construct wells as outlined in this application and that it shall be the responsibility of the well owner to ensure that these wells conform to the Guilford County Well Rules.

See Attached Access Agreement
Signature of Property Owner (if different the well owner)

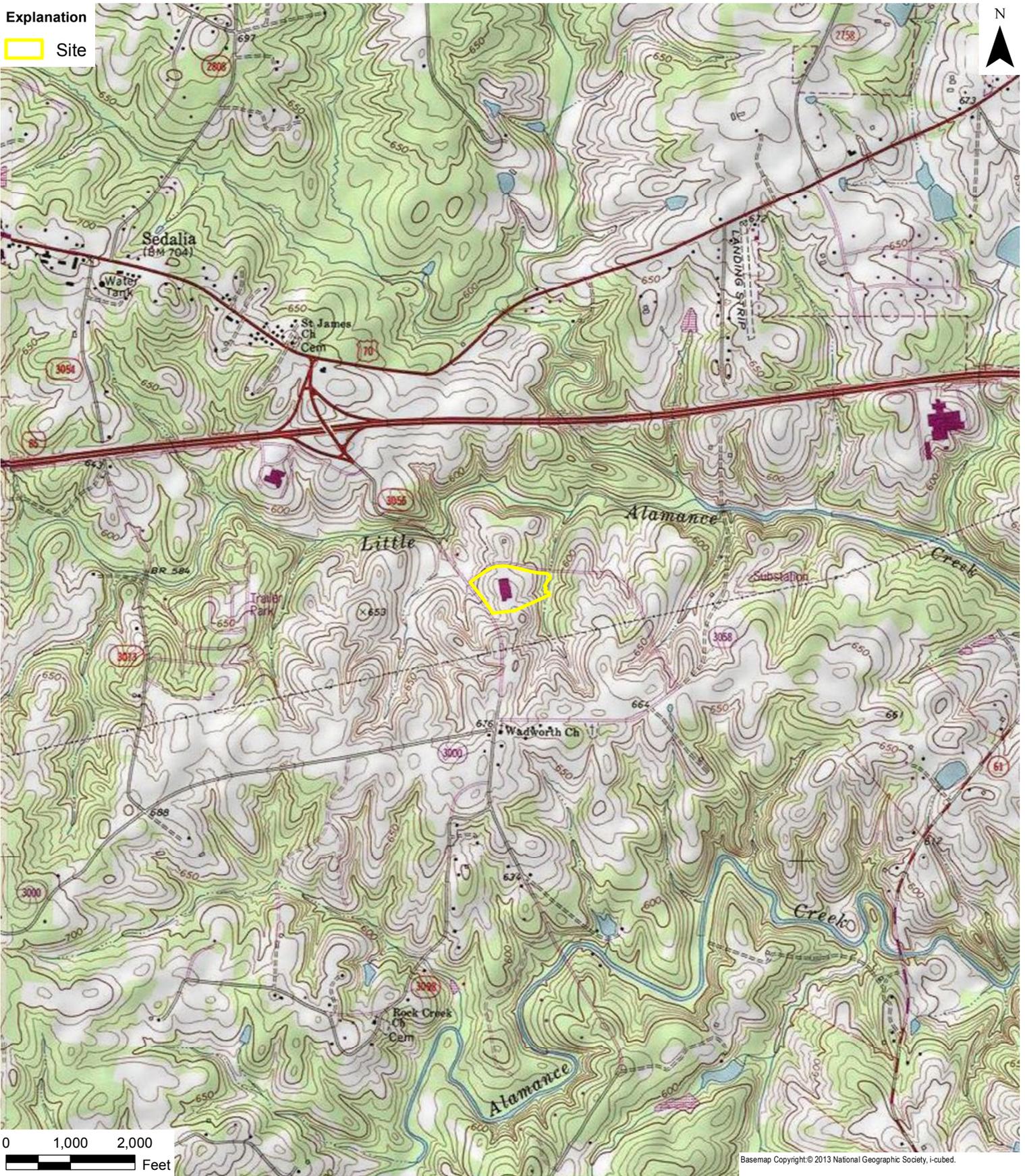
(Attach agreements)

SAEDACCO Well Drillers

First Name	Last Name	Middle Name	Certification #	Level
Robert	Miller	Lee	2675	A
Christopher	Dennison	M.	4273	B
Brian	Ewing	Edward	4240	B
Randy	Hoffman	D	3476	A
William	Keyes	Taylor	4220	A
Richy	Lemire	Lee	2593	A
Stefan	Smith	J	3576	A
Steve	Poloniewicz	Vincent	2284	A
Timothy	Thomas	Lee	2012	A
Micheal	Wilson		3351	A

Explanation

Site



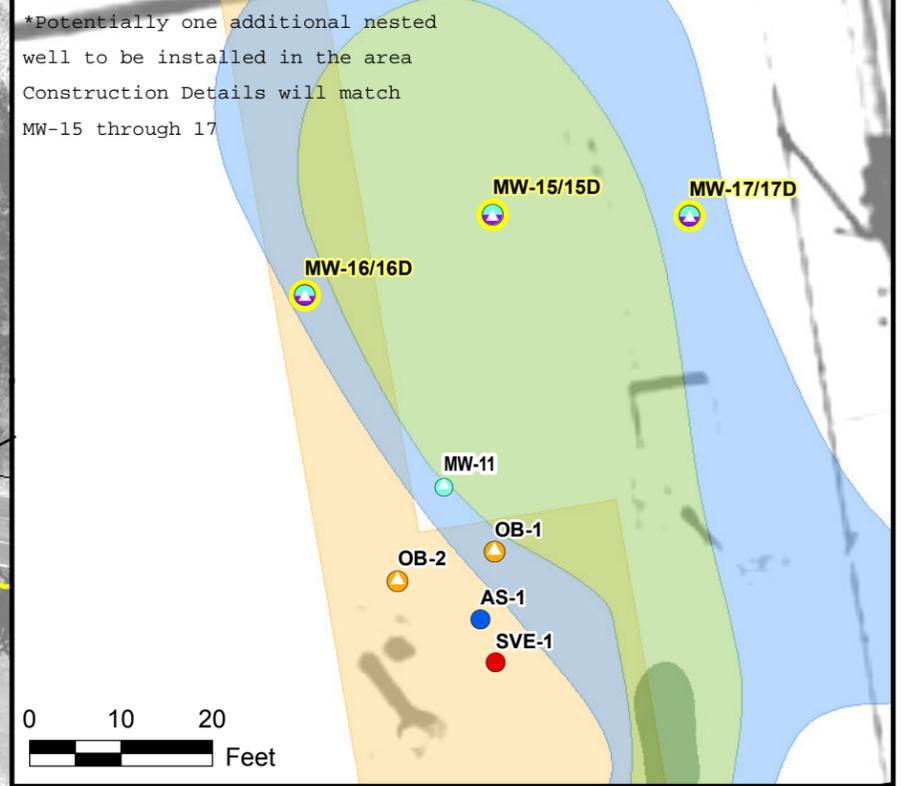
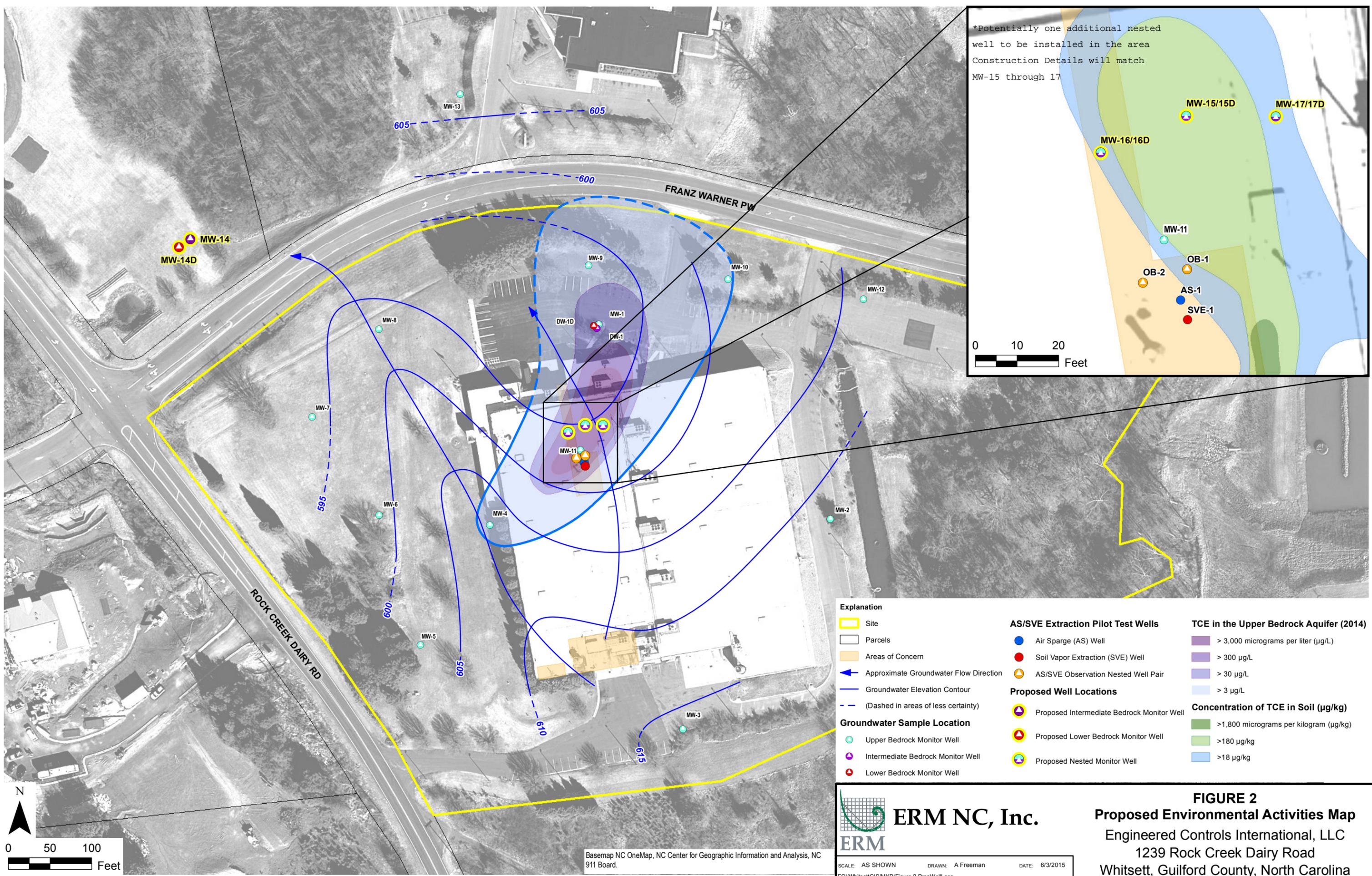
Basemap Copyright © 2013 National Geographic Society, i-cubed.



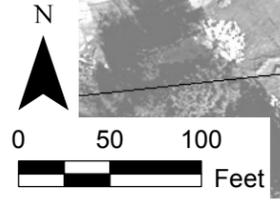
ERM NC, Inc.

FIGURE 1 Site Location Map

Engineered Controls International, LLC
1239 Rock Creek Dairy Road
Whitsett, Guilford County, North Carolina



Explanation		AS/SVE Extraction Pilot Test Wells	TCE in the Upper Bedrock Aquifer (2014)
Site		Air Sparge (AS) Well	> 3,000 micrograms per liter (µg/L)
Parcels		Soil Vapor Extraction (SVE) Well	> 300 µg/L
Areas of Concern		AS/SVE Observation Nested Well Pair	> 30 µg/L
Approximate Groundwater Flow Direction		Proposed Well Locations	> 3 µg/L
Groundwater Elevation Contour		Proposed Intermediate Bedrock Monitor Well	Concentration of TCE in Soil (µg/kg)
(Dashed in areas of less certainty)		Proposed Lower Bedrock Monitor Well	>1,800 micrograms per kilogram (µg/kg)
Groundwater Sample Location		Proposed Nested Monitor Well	>180 µg/kg
Upper Bedrock Monitor Well			>18 µg/kg
Intermediate Bedrock Monitor Well			
Lower Bedrock Monitor Well			



Basemap NC OneMap, NC Center for Geographic Information and Analysis, NC 911 Board.

ERM NC, Inc.
SCALE: AS SHOWN DRAWN: A Freeman DATE: 6/3/2015
ECI\Whitsett\GIS\MXD\Figure 2 PropWellLocs

FIGURE 2
Proposed Environmental Activities Map
Engineered Controls International, LLC
1239 Rock Creek Dairy Road
Whitsett, Guilford County, North Carolina

FIGURE 2a. MONITORING WELL CONSTRUCTION LOG

Project Name Engineered Controls International, LLC
Location Whitsett, NC
Installed By TBD
Inspected By TBD
Method of Installation Hollow Stem Auger/Air Rotary
Remarks _____

Piez./Well No. MW-14
Project No. _____
Date TBD **Time** TBD

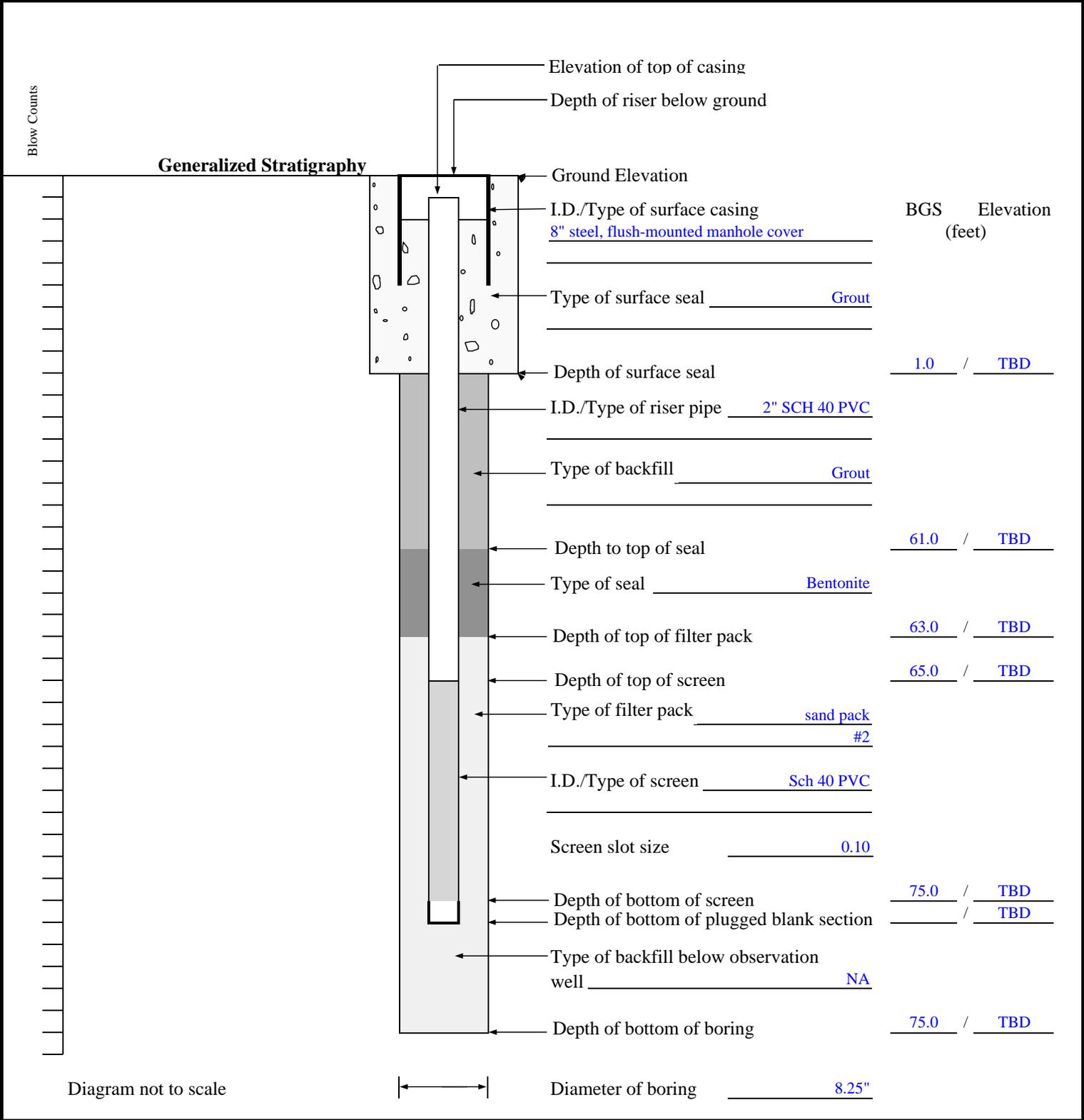
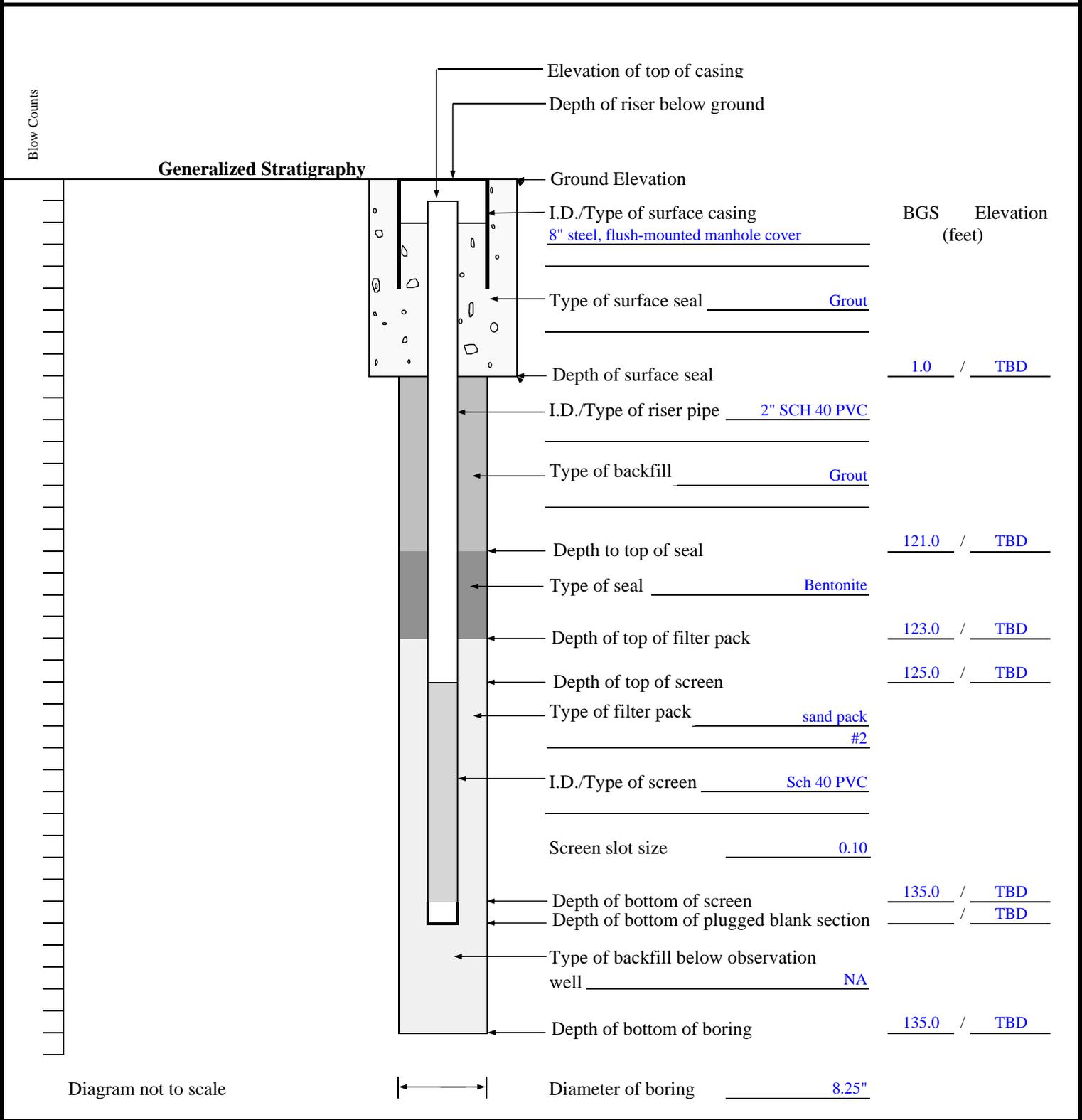


FIGURE 2b. MONITORING WELL CONSTRUCTION LOG

Project Name Engineered Controls International, LLC
Location Whitsett, NC
Installed By TBD
Inspected By TBD
Method of Installation Hollow Stem Auger/Air Rotary
Remarks _____

Piez./Well No. MW-14D
Project No. _____
Date TBD **Time** TBD



TYPE II MONITORING WELL CONSTRUCTION LOG

Project Name ECI
 Location 1239 Rock Creek Dairy Road, Whitsett, NC
 Installed By _____
 Inspected By _____
 Method of Installation Rotary Coring
 Remarks _____

Piez./Well No. MW-15, MW-16, MW-17
 Project No. 0294369.01
 Date TBD Time TBD

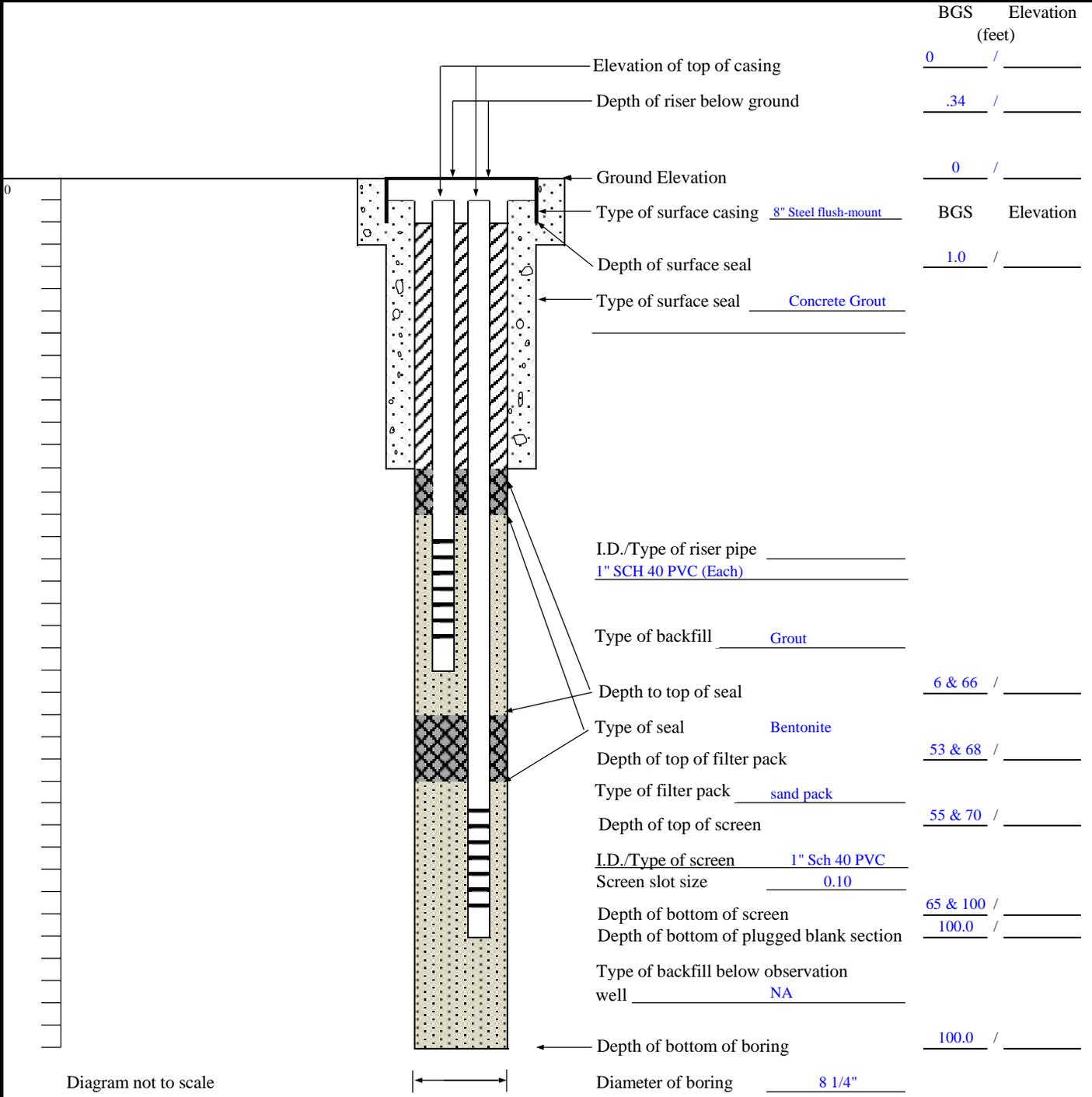


Diagram not to scale

**NORTH CAROLINA DEPARTMENT OF ENVIRONMENT & NATURAL RESOURCES
DIVISION OF WATER RESOURCES – AQUIFER PROTECTION SECTION
APPLICATION FOR PERMIT TO CONSTRUCT A MONITORING OR RECOVERY WELL SYSTEM**

PLEASE TYPE OR PRINT CLEARLY

In accordance with the provisions of Article 7, Chapter 87, General Statutes of North Carolina and regulations pursuant thereto, application is hereby made for a permit to construct monitoring or recovery wells.

- | | |
|-------------------------|------------------------------------|
| | FOR OFFICE USE ONLY |
| 1. Date: <u>6/24/15</u> | PERMIT NO. _____ ISSUED DATE _____ |
2. County: Guilford
3. What type of well are you applying for? (monitoring or recovery): Monitoring
4. Applicant: Engineered Controls International, Inc. Telephone: 336-380-5645
Applicant's Mailing Address: 1239 Rock Creek Dairy Road, Whitsett, NC 27377
Applicant's Email Address (if available): jmccandi@regoproducts.com
5. Contact Person (if different than Applicant): Ed Hollifield Telephone: 704-541-8345
Contact Person's Mailing Address: 15720 Brixham Hill Ave, Suite 120, Charlotte, NC 28277
Contact Person's Email Address (if available): ed.hollifield@erm.com
6. Property Owner (if different than Applicant): Rock Creek Investments LLC Telephone: xxx-xxx-xxxx
Property Owner's Mailing Address: 125 S Elm Street, Suite 103, Greensboro, NC 27401
Property Owner's Email Address (if available): _____
7. Property Physical Address (including zip code) and PIN Number 1235 Near Rock Creek Rd, Whitsett, NC 27377
(PIN: 0108789)
8. Reason for Well(s): Groundwater quality assessment
(ex: non-discharge permit requirements, suspected contamination, assessment, groundwater contamination, remediation, etc.)
9. Type of facility or site for which the well(s) is(are) needed: Specialty Valve Manufacturing Facility
(ex: non-discharge facility, waste disposal site, landfill, UST, etc.)
10. Are there any current water quality permits or incidents associated with this facility or site? If so, list permit and/or incident no(s).
NONCD0002904
11. Type of contaminants being monitored or recovered: Chlorinated volatile organic compounds
(ex: organics, nutrients, heavy metals, etc.)
12. Are there any existing wells associated with the proposed well(s)? If yes, how many? No
Existing Monitoring or Recovery Well Construction Permit No(s): N/A (Guilford County Well Permit: 012-12-MW13-RW0)
13. Distance from proposed well(s) to nearest known waste or pollution source (in feet): 500 feet
14. Are there any water supply wells located less than 500 feet from the proposed well(s)? No
If yes, give distance(s): _____
15. Well Contractor: SAEDACCO Certification No.: 2284-A
Well Contractor Address: 9088 Northfield Drive, Fort Mill, SC 29707

PROPOSED WELL CONSTRUCTION INFORMATION

1. As required by 15A NCAC 02C .0105(f)(7), attach a well construction diagram of each well showing the following:
- | | |
|-------------------------------|------------------------------------------|
| a. Borehole and well diameter | e. Type of casing material and thickness |
| b. Estimated well depth | f. Grout horizons |
| c. Screen intervals | g. Well head completion details |
| d. Sand/gravel pack intervals | |

Continued on Reverse

PROPOSED WELL CONSTRUCTION INFORMATION (Continued)

- | | |
|-------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 2. Number of wells to be constructed in unconsolidated material: <u>0</u> | 5. How will the well(s) be secured? <u>flush mounted bolttable steel manhole covers with pad locked J plugs</u> |
| 3. Number of wells to be constructed in bedrock: <u>2</u> | 6. Estimated beginning construction date: <u>June 2015</u> |
| 4. Total Number of wells to be constructed: <u>2</u>
<i>(add answers from 2 and 3)</i> | 7. Estimated construction completion date: <u>June 2015</u> |

ADDITIONAL INFORMATION

1. As required by 15A NCAC 02C .0105(f)(5), attach a scaled map of the site showing the locations of the following:
- All property boundaries, at least one of which is referenced to a minimum of two landmarks such as identified roads, intersections, streams, or lakes within 500 feet of the proposed well or well system.
 - All existing wells, identified by type of use, within 500 feet of the proposed well or well system.
 - The proposed well or well system.
 - Any test borings within 500 feet of proposed well or well system.
 - All sources of known or potential groundwater contamination (such as septic tank systems, pesticide, chemical or fuel storage areas, animal feedlots as defined in G.S. 143-215.10B(5), landfills, or other waste disposal areas) within 500 feet of the proposed well or well system.

SIGNATURES

The Applicant hereby agrees that the proposed well(s) will be constructed in accordance with approved specifications and conditions of this Well Construction Permit as regulated under the Well Construction Standards (Title 15A of the North Carolina Administrative Code, Subchapter 2C) and accepts full responsibility for compliance with these rules

Jimmy McCandies
 Signature of Applicant or *Agent
Jimmy McCandies
 Printed name of Applicant or *Agent

Environmental/Safety Coordinator
 Title of Applicant or *Agent
** If signing as Agent, attach authorization agreement stating that you have the authority to act as the Agent.*

If the property is owned by someone other than the applicant, the property owner hereby consents to allow the applicant to construct wells as outlined in this Well Construction Permit application and that it shall be the responsibility of the applicant to ensure that the well(s) conform to the Well Construction Standards (Title 15A of the North Carolina Administrative Code, Subchapter 2C).

see attached access agreement
 Signature of Property Owner (if different than Applicant)

Printed name of Property Owner (if different than Applicant)

DIRECTIONS

Please send the completed application to the appropriate Division of Water Resources's Aquifer Protection Section Regional Office:

Asheville Regional Office
 2090 U.S. Highway 70
 Swannanoa, NC 28778
 Phone: (828) 296-4500
 Fax: (828) 299-7043

Raleigh Regional Office
 3800 Barrett Drive
 Raleigh, NC 27609
 Phone: (919) 791-4200
 Fax: (919) 571-4718

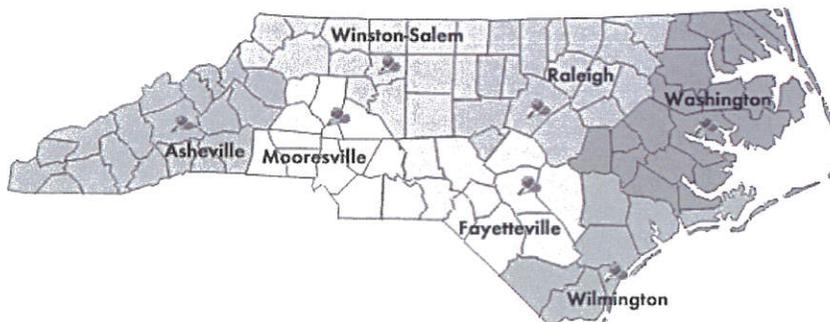
Wilmington Regional Office
 127 Cardinal Drive Extension
 Wilmington, NC 28405
 Phone: (910) 796-7215
 Fax: (910) 350-2004

Fayetteville Regional Office
 225 Green Street, Suite 714
 Fayetteville, NC 28301-5094
 Phone: (910) 433-3300
 Fax: (910) 486-0707

Washington Regional Office
 943 Washington Square Mall
 Washington, NC 27889
 Phone: (252) 946-6481
 Fax: (252) 975-3716

Winston-Salem Regional Office
 585 Waughtown Street
 Winston-Salem, NC 27107
 Phone: (336) 771-5000
 Fax: (336) 771-4630

Mooreville Regional Office
 610 East Center Avenue
 Mooreville, NC 28115
 Phone: (704) 663-1699
 Fax: (704) 663-6040



ACCESS AGREEMENT AND INDEMNITY

This Access Agreement (this "Agreement") dated as of June 9, 2015 (the "Effective Date"), by and between Rock Creek Investments, LLC a North Carolina limited liability company ("Owner") and Engineered Controls International, LLC, a Delaware corporation ("ECI"), grants to ECI the right to enter the real property owned by Owner and located 1235 Near Rock Creek Dairy Road, Whitsett, North Carolina, tax parcel number 0108789 (as described more fully on Exhibit A hereto, the "Property") to perform the activities described herein on the terms and conditions contained herein:

RECITALS:

A. The Property is owned by Owner. Owner and ECI collectively shall be referred herein to as the "Parties."

B. ECI and its agents, employees, officers, consultants partners, advisors, and contractors, including ERM NC, Inc. (collectively, "Representatives"), seek to gain access to the Property for the purpose of installing two adjacent flush-mounted groundwater monitoring wells (the "Wells") on the Property and doing periodic groundwater sampling from the Wells during the duration of this Agreement (the "Work").

AGREEMENT:

Subject to the limitations and conditions set forth below and in consideration of the agreement hereinafter set forth and the premises contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Parties, Owner grants to ECI and its Representatives the right to enter onto the Property for the limited purposes set forth below:

1. This Agreement authorizes ECI and its Representatives to perform the Work at ECI's sole expense, on the Property, subject to the terms and conditions set forth herein. ECI will notify Owner in writing no fewer than five (5) business days in advance of when ECI intends to perform Work on the Property, and with such notice will provide Owner with a detailed scope of work, including, but not limited to, a description of the parameters, test methods and subsequent data analysis to be performed, for Owner's approval, which approval shall not unreasonably be withheld or delayed.

Notification shall be sent to the following:

Rock Creek Investments, LLC
c/o Schulman & Beard
125 S. Elm Street, Suite 403
Greensboro, NC 27401
Attention: Richard beard
Phone: 336-282-3773
Email: richard@SSBRE.com

Owner may at any time, and from time-to-time, notify ECI in writing of changes to the notice persons and addresses listed above.

2. The commencement date of this Agreement shall be the Effective Date.

3. Prior to commencement of the Work, ECI shall obtain from any local, state or federal authority having jurisdiction over any aspect of the Work, all required permits, authorizations, and approvals. All Work performed by ECI and its Representatives pursuant to this Agreement shall be performed and completed in compliance in all material respects with all applicable codes, ordinances, laws, regulations and orders, and in a workmanlike and professional manner, so as to minimize disturbance to the occupants of the Property. ECI will, and shall cause its Representatives to, minimize to the greatest practicable extent the creation of noise, dust, and/or disturbance at the Property, and any interference with Owner's, its tenants', or any visitors' use and enjoyment thereof. Owner may require that any such Work be performed during "off" hours, nights/evenings or on weekends if reasonably necessary to avoid such disturbances.

4. Removal and disposal of extracted soil and groundwater, and any other materials or wastes from the Property generated by ECI or its Representatives in performance of the Work shall be the responsibility of ECI, at ECI's sole cost and expense, and shall be removed and disposed of in accordance with all applicable codes, ordinances, laws and regulations. If access to Owner's facilities, including parking, may be obstructed during or after performance of Work, ECI shall obtain prior written approval from Owner, which approval shall not unreasonably be withheld or delayed.

5. All Work performed by ECI and its Representatives under this Agreement shall be performed at ECI's sole cost and expense.

6. ECI shall promptly provide Owner, at no cost to Owner, with complete copies of all testing or monitoring results, or laboratory analyses, relating to the Work or the existence or suspected existence or any threatened adverse health, safety or environmental conditions or problems or contamination at the Property, and all plans, reports, maps, drawings, or other such documents, materials, and information which constitute or pertain to the Work, including but not limited to any environmental reports and data or the like, and documents submitted to the North Carolina Department of Environment and Natural Resources, relating to the Work. ECI agrees that Owner may rely upon the information ECI and its Representatives developed through the Work. Documents required to be provided by ECI pursuant to this Section 6 shall be sent to the individual listed in Section 1 herein.

7. ECI shall be responsible for repairing any damage caused to the Property by ECI as a result of the Work. All repairs shall be made promptly upon completion of the Work. Neither ECI nor its Representatives shall allow any release of soil cuttings, wastewaters or other wastes or contamination from the Work at the Property. In addition, any and all such "investigative-derived waste" from the Work shall be manifested by ECI as the "generator" and disposed of off-site and handled in accordance with applicable law. Upon completion of the Work, and at ECI's sole cost and expense, ECI or its Representatives shall do the following: remove any and all construction, measuring, monitoring, and other equipment or devices used by ECI or its Representatives from the Property; remove any and all dirt, debris and waste of any nature generated during the Work; repair

any damage to the Property caused by the Work (including any holes, borings, wells, or similar excavations); properly abandon the Wells in accordance with applicable laws; and promptly restore the Property, to Owner's reasonable satisfaction, to the condition it was in prior to Owner permitting ECI and its Representatives to conduct the Work.

8. The authorization granted herein to ECI and its Representatives to enter onto the Property shall terminate on the earlier of July 1, 2017 (the "Expiration Date") or on written notice by Owner to ECI. Upon the expiration or termination of this Agreement, ECI and its Representatives shall no longer be permitted access to the Property except to remove all their investigative, assessment, monitoring, and/or measuring equipment or devices and any related wastes or other materials within thirty (30) days of the termination of the Agreement or the Expiration Date. Within thirty (30) days prior to the Expiration Date, ECI may provide written notice to Owner of its desire to extend the duration of this Agreement in one year increments such that ECI may continue to perform the Work. Owner will consider such request and, in its sole discretion, if it approves the extension, the Parties will execute an amendment to this Agreement signed by both Parties hereto extending the term of this Agreement for one (1) year. Subsequent extension requests will be addressed in any such amendment to the Agreement.

9. ECI covenants and agrees to defend, indemnify, and hold harmless Owner and its affiliates, employees, officers, directors, agents, successors and assigns from and against any and all claims, suits, demands, actions, causes of action, harm, damages, injury, losses, judgments, fines, penalties or liabilities whatsoever (including without limitation the reasonable fees of attorneys, experts and consultants, and environmental investigative/remediation expenses) (collectively, "Losses") which may be asserted by any person or entity whatsoever, arising out of or relating to, directly or indirectly, any and all personal injury or death, property damage, business disruption (including indirect, special or consequential damages related thereto) or environmental harm or contamination caused by ECI or its Representatives at the Property during the performance of or otherwise relating to the Work

10. ECI further agrees to defend, indemnify, and hold harmless Owner and its affiliates, successors, and assigns from and against any and all Losses which may be asserted by any person or entity whatsoever, arising out of or relating, directly or indirectly, to any environmental condition related to a release of a contaminant, pollutant, hazardous substance, hazardous material or waste, including but not limited to any volatile organic compound (VOC) or any petroleum or any petroleum byproduct, that emanated or migrated from or is connected in any way to ECI's real property or activities or operations conducted by ECI or its Representatives at ECI's real property or elsewhere and identified, discovered, or confirmed at the Property during the Work.

11. ECI shall maintain the following insurance coverage while performing the Work and shall provide evidence of coverage reasonably satisfactory to Owner before beginning the Work: (i) statutory workers compensation and employer's liability coverage; (ii) commercial general liability coverage of at least \$2,000,000 per claim and \$3,000,000 in the aggregate; and (iii) contractor's pollution liability coverage of at least \$2,000,000 per claim and \$3,000,000 in the aggregate, all (except for workers compensation coverage) naming Owner as an additional insured and providing occurrence basis liability insurance coverage. All such policies shall (a) be primary and non-contributory to any other insurance available, and (b) be obtained from an insurance company licensed to do business in the United States with an A.M. Best ratings of A- and "XII" or better. Prior

to entering the Property, ECI shall provide to Owner certificates of insurance evidencing such coverage.

12. Except for such disclosures as are required by law, no information obtained from the performance of the Work shall be disclosed by ECI or its Representatives to any other person without the express written consent of Owner, and no such information shall be used by ECI or its Representatives for any purpose other for the groundwater testing as described herein. ECI agrees that it will be responsible for any breach of this Agreement by its Representatives of this Agreement. The parties acknowledge and agree that applicable law will require that ECI report results of groundwater analysis conducted during the Work to the North Carolina Department of Environment and Natural Resources, and that such reporting will not constitute a breach of this Agreement.

13. The failure or delay of Owner to enforce any provision of this Agreement will not be deemed to be a waiver of Owner's right to enforce that or any other provision of this Agreement at a later time. Non-pursuit by Owner of any remedy provided herein shall not prevent the later exercise by Owner of any other remedies available to it at law and/or in equity. Furthermore, this Agreement shall not be deemed to be a waiver of any rights or remedies available to the Owner at law and/or in equity with respect to any personal injury, property damage, environmental harm, and/or any other liability for any actions conducted on the Property by ECI or its Representatives.

14. The Parties acknowledge and agree that in the event of a breach of this Agreement, no adequate remedy at law is available to Owner, and Owner shall have the right to seek specific performance of any and all obligations by ECI and its Representatives under this Agreement. Such right to specific performance shall be in addition to, and shall not limit, any other remedy available at law or equity for any such breach. Moreover, the rights of Owner to indemnification pursuant to this Agreement will be in addition to any other rights Owner may have hereunder or under law or regulation.

15. This Agreement shall be governed by and construed in accordance with the laws of the State of North Carolina without regard to any provisions of its conflicts of laws principles.

16. Paragraphs 7, 8, 9, 10, 12, 13, 14, 15 and 16 of this Agreement shall survive the termination or expiration of this Agreement.

17. This Agreement represents the complete agreement between the Parties relating to the subject matter hereof, and supersedes any and all previous negotiations, representations, commitments, and agreements, whether written, oral, or implied, relating to the subject matter hereof. No change, amendment, or modification of this Agreement shall be effective unless made in writing and signed by all Parties hereto.

18. This Agreement may be executed in counterparts, each of which shall constitute an original and all of which shall together constitute a single instrument.

[The remainder of this page is intentionally left blank.]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement effective as of the Effective Date.

Rock Creek Investments, LLC

By: 

Name: T. Richard Beard, Jr

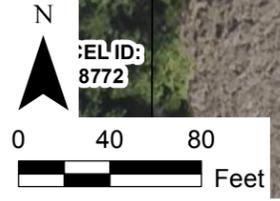
Its: Manager / member

Engineered Controls International, LLC

By: 

Name: MARIO IANNANTUONO

Its: CHIEF OPERATING OFFICER



Explanation	
	Site
	Parcels
Proposed Well Locations	
	Proposed Intermediate Bedrock Monitor Well
	Proposed Lower Bedrock Monitor Well

 **ERM NC, Inc.**

SCALE: AS SHOWN DRAWN: A Freeman DATE: 4/9/2015
 ECI/WhitsettGIS/MXD/Figure 1 RCL_AA

FIGURE 1
Proposed Environmental Activities Map
 Engineered Controls International, LLC
 1239 Rock Creek Dairy Road
 Whitsett, Guilford County, North Carolina

Basemap NC OneMap, NC Center for Geographic Information and Analysis, NC 911 Board.

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