


3616 MARSHALL AVE

11517205

10/5/09

thomatc

Groundwater and Wastewater Services File Imaging Project
May 2007
*Barcode Font = IDAutomationHC39M*

SC Thin DH

8056 Commercial

WSW-4

4/25

**MECKLENBURG COUNTY**
**GROUNDWATER & WASTEWATER SERVICES**

**APPLICATION FOR A ~~RESIDENTIAL SITE~~ IMPROVEMENT PERMIT/ CONSTRUCTION AUTHORIZATION FOR AN ON-SITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL**

**1. SEPTIC / TYPE APPLICATION:** ☒ N/A ☐ NEW SYSTEM ☐ ALTERATION ☐ REPAIR ☐ MODIFIED PLOT PLAN

**2. WELL / TYPE APPLICATION:** ☐ N/A ☐ NEW WELL ☐ MAJOR REPAIR ☒ ABANDONMENT

**3. JOB LOCATION INFORMATION:**

**TAX PARCEL NUMBER:** 11517205

**STREET ADDRESS:** 3616 Marshall Avenue (garage)

**CITY:** Charlotte

**STATE:** NC **ZIP:** 28208

**SUBDIVISION NAME:** N/A

**LOT #:** N/A **LOT SIZE (acres):** Unknown

**TOWNSHIP:** 6 + 7 PB +10 DH

House, 336

Weeks, 964

☐ 0-MECKLENBURG ☐ 3-CORNELIUS ☐ 6-HUNTERSVILLE
☒ 1-CHARLOTTE ☐ 4-PINEVILLE ☐ 7-MINT HILL
☐ 2-DAVIDSON ☐ 5-MATTHEWS

**4. BUILDING INFORMATION:**

**BUILDING TYPE:**

☐ SINGLE MOBILE HOME ☐ MODULAR HOME
☐ DOUBLE WIDE ☐ MULTIPLE FAMILY
☐ HOUSE ☒ OTHER Garage

**HEATED SQUARE FOOTAGE:** 2890

**NUMBER OF BEDROOMS:** None (Warehouse/Garage)

**NUMBER OF OCCUPANTS:** Day Workers (# unknown)

**FOUNDATION TYPE:**

☒ CONCRETE SLAB ☐ BASEMENT WITH PLUMBING
☐ CRAWL SPACE ☐ BASMENT WITH NO PLUMBING

**5. IF PLANNING TO EXPAND OR ALTER THE EXISTING SEPTIC SYSTEM PLEASE COMPLETE THE FOLLOWING SECTION:** ☒ N/A

NUMBER OF BEDROOMS TO BE ADDED: _____ NUMBER OF ADDITIONAL OCCUPANTS IN THE RESIDENCE: _____

**6. WATER SUPPLY:** ☒ MUNICIPAL ☐ PRIVATE WELL ☐ PUBLIC WELL ☐ SHARED WELL ☐ OTHER _____

**7. PROPOSED USE OF WELL:** ☒ N/A ☐ IRRIGATION ☐ POTABLE (DRINKING WATER) ☐ OTHER _____

**8. PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE** *(1-MOST DESIRED 5-LEAST DESIRED):*

☒ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER _____

**8A. RANK:** ____ ____ ____ ____ ____

**9. DO ANY OF THE FOLLOWING APPLY TO THE PROPERTY IN QUESTION? IF "YES" PLEASE ATTACH SUPPORTING DOCUMENTATION.**

| | | | | | |
|---|---|---|---|---|---|
| BURIED CABLES, LANDFILLS, STUMPHOLES | ☐ YES | ☒ NO | GRADING/SOIL REMOVAL PERFORMED | ☐ YES | ☒ NO |
| EXISTING WASTEWATER (SEPTIC) SYSTEMS | ☒ YES | ☐ NO | JURISDICTIONAL WETLANDS | ☐ YES | ☒ NO |
| WELLS, SPRINGS, OR WATER LINES | ☒ YES | ☐ NO | APPROVAL REQUIRED BY ANY OTHER PUBLIC AGENCY | ☐ YES | ☒ NO |
| EASEMENTS OR RIGHT-OF-WAYS | ☐ YES | ☒ NO | WASTEWATER OTHER THAN DOMESTIC SEWAGE | ☐ YES | ☒ NO |
| CHEMICAL/PETROLEUM STORAGE TANKS | ☒ YES | ☐ NO | KNOWN UNDERGROUND CONTAMINATION | ☒ YES | ☐ NO |
| WASTE STORAGE | ☒ YES | ☐ NO | GROUNDWATER USE RESTRICTIONS/VARIANCES | ☒ YES | ☐ NO |

**10. WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED?** 4/6/92 ☐ UNKNOWN

**11. WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY?** _____ ☒ N/A

**12. PROPERTY OWNER:**

NAME: Richard J and Linda H Behr
ADDRESS: P.O. Box 668272
CITY: Charlotte
STATE: NC ZIP: 28266
HOME PHONE:
WORK PHONE:
MOBILE PHONE: (704) 737-3357
FAX:

**13. OWNER'S LEGAL REPRESENTATIVE, IF APPLICABLE:**

NAME: See Property Owner Information
ADDRESS: AL Quarles
CITY: Some
STATE: ZIP:
HOME PHONE:
WORK PHONE: 523-4726
MOBILE PHONE:
FAX: 565-4929



MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6894

Revised on: 7/1/08

WSW-4
11517205

**14. SEPTIC SYSTEM PERMIT APPLICATION:**

If the information in this application is falsified, changed, or the site is altered, then the Improvement Permit and Authorization to Construct shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for either sixty (60) months or is non-expiring depending upon the documentation submitted: complete site plan = 60 months, complete plat = non-expiring.

_____ (Initial here for septic system applications)

**15. WELL PERMIT APPLICATION:**

If the information in this application is falsified, changed, or the site is altered, then the Well Permit shall become invalid. I have read this application and certify that the information provided herein is true, complete and correct. Authorized county and state officials are granted right of entry to conduct necessary inspections to determine compliance with applicable laws and rules. I understand that I am solely responsible for the proper identification and labeling of all property lines and corners and making the site accessible so that a complete site evaluation can be performed. The permit is valid for a period of twelve (12) months from the date of issuance.

WAQ (Initial here for well applications)

**16. APPLICATION SIGNATURE SECTION:**

ONLY COMPLETE APPLICATIONS WILL BE PROCESSED. A proper signature is required in order to process your application. Please review the application carefully and sign in the space provided below.

A Quarles — 3-26-09

Property Owner's or Owner's Legal Representative Signature — Date

S+ME, Inc. 704-523-4726 (aquarles@smeinc.com

*OFFICE USE ONLY*

☐ SURVEY PLAT TO SCALE SUBMITTED ☐ SCALED SITE PLAN SUBMITTED ☐ UN-SCALED SITE PLAN SUBMITTED

SEPTIC APPLICATION FEES RECEIVED: $ _____ DATE FEE RECEIVED: _____

WELL APPLICATION FEES RECEIVED: $ UNK DATE FEE RECEIVED: _____

APPLICATION PROCESSED BY: JC

GWS FILE NUMBER ASSIGNED: 8056

APPLICATION ID NUMBER ASSIGNED: 4125

COMMENTS:



MECKLENBURG COUNTY – GROUNDWATER & WASTEWATER SERVICES
700 N. TRYON ST. SUITE 211 CHARLOTTE, NC 28202, OFFICE: 704-336-5103, FAX: 704-336-6894

Revised on: 7/1/08

Mecklenburg County
Groundwater & Wastewater Services
700 N. Tryon St. Suite 211
Charlotte, NC 28202
Phone: (704) 336-5103
Fax: (704) 336-6894

# PERMIT TO CONDUCT MAJOR REPAIR AND/OR ABANDON A WATER SUPPLY WELL

**Permit#:** 10004125 **File #:** 8056 **Tax Parcel #:** 115-172-05
**Property Owner:** Richard J & Linda H Behr
**Job Location Address:** 3616 MARSHALL AVE
**City/ETJ:** CHARLOTTE **State:** NC **Zip Code:** 28208
**Permit Issuance Date:** 4/8/2009
**Use of Well:** N/A
**Type of Facility Served by Well:**
**Project Type:** Abandonment

**Area of Regulated Groundwater Usage Restrictions Apply:** YES

If Yes, see requirements in Specific Conditions of This Permit.

**General Conditions of This Permit:**

- The Water Supply Well repair or abandonment must meet all requirements set forth in the *Mecklenburg County Groundwater Well Regulations* and any other applicable rules and laws.
- A North Carolina Certified Well Contractor must perform the well construction activities.
- Repair of any Water Supply Well with the well head terminating below ground surface (buried seal) shall include extending the well casing at least twelve inches above the surface.
- This Permit shall be VALID for a period not to exceed 12 months from the date of issuance.

**Specific Conditions of This Permit (Check all that apply):**

☐ Grout must be placed the full extent of the casing.

☐ Initial water sample to taken and analyzed for (check all that apply):

☐ Volatile Organic Compounds (VOC's) ☐ Semi-volatile Compounds ☐ Metals (Specify in Other Conditions)
☐ Pesticides ☐ Herbicides ☐ Other (See Below)

**Other Conditions of This Permit:**

Because sampling records indicate this well is contaminated, it is required to be abandoned according to procedures for abandonment of contaminated water supply wells from Chapter II, Section VIII, Paragraph 7.

Debra Howell R.S.
Authorized Agent: Print Name

Debra Howell R.S.
Signature:

Al Quarles S&ME, Inc
Owner/Legal Agent: Print Name

Al Quarles
Signature:

Mecklenburg County
Groundwater & Wastewater Services
700 N. Tryon St. Suite 211
Charlotte, NC 28202
Phone: (704) 336-5103
Fax: (704) 336-6894

## PERMIT TO CONDUCT MAJOR REPAIR AND/OR ABANDON A WATER SUPPLY WELL

**Permit#:** 10004125 **File #:** 8056 **Tax Parcel #:** 115-172-05
**Property Owner:** Richard J & Linda H Behr
**Job Location Address:**3616 MARSHALL AVE
**City/ETJ:**CHARLOTTE **State:** NC **Zip Code:** 28208
**Permit Issuance Date:** 4/6/2009
**Use of Well:** N/A
**Type of Facility Served by Well:**
**Project Type:** Abandonment

**Area of Regulated Groundwater Usage Restrictions Apply:** YES

If Yes, see requirements in Specific Conditions of This Permit.

**General Conditions of This Permit:**

- The Water Supply Well repair or abandonment must meet all requirements set forth in the *Mecklenburg County Groundwater Well Regulations* and any other applicable rules and laws.
- A North Carolina Certified Well Contractor must perform the well construction activities.
- Repair of any Water Supply Well with the well head terminating below ground surface (buried seal) shall include extending the well casing at least twelve inches above the surface.
- This Permit shall be VALID for a period not to exceed 12 months from the date of issuance.

**Specific Conditions of This Permit (Check all that apply):**

☐ Grout must be placed the full extent of the casing.
☐ Initial water sample to taken and analyzed for (check all that apply):
☐ Volatile Organic Compounds (VOC's) ☐ Semi-volatile Compounds ☐ Metals (Specify in Other Conditions)
☐ Pesticides ☐ Herbicides ☐ Other (See Below)

**Other Conditions of This Permit:**

Because sampling records indicate this well is contaminated, it is required to be abandoned according to procedures for abandonment of contaminated water supply wells from Chapter II, Section VIII, Paragraph 7.

Debra Howell R.S.
Authorized Agent: Print Name

Debra Howell R.S.
Signature:

Owner/Legal Agent: Print Name

Signature:

**Groundwater & Wastewater Services**
700 N. Tryon St., Suite 211
Charlotte, NC 28202
704-336-5103 Phone 704-336-6894 Fax

# WORK ORDER

## Work Order Information

Work Order Number: **78842**
Work Order Type: **ARGU Well Review**
Submitted To: STUTTS, JACK
Date Initiated: 4/3/09 9:59:42 AM
Date Completed: 4/3/09 10:04:00 AM
Date Closed:
Unattached WO: N
Associated SR Number:

Priority: **3**
Status: IP

Initiated By: CALDWELL, SHAWNA
Completed By: CALDWELL, SHAWNA
Closed By:

## Location

Address: **3616 MARSHALL AVENUE**
Location: Located with PID#

## Instructions

1. Create one work order for each ARGU review performed.
2. Geocode the location using the location address from WASPS.
3. Attach the appropriate GIS well feature(s) from the ARGU_Wells_WASPS data layer under the ENTITIES tab.
4. Select the appropriate TOWN under the DETAILS tab.
5. All documentation associated w/ the review should be included as attachments.
6. Enter time for labor required to complete all work associated w/ review.
7. Use the COMMENTS field to document work activities.

ARGU Well features are automatically created in gis when the well permit application is entered into WASPS.

## Comments

Create one work order per ARGU Review
By CALDWELL, SHAWNA: 4/3/09 10:06:56 AM
Based on this ARGU review, the permit for a well abandonment at PID# 115-172-05, 3616 Marshall Ave., Charlotte is therefore approved requiring abandonment under the Mecklenburg Co. Groundwater Regulations dated Oct. 5, 2004. Because well sampling records indicate contamination in the well to be abandoned, the well requires abandonment under the Mecklenburg Co. Groundwater Regulations dated Oct. 5, 2004, Chapter II Construction, Repair and Abandonment for Private Water Supply Wells to include procedures for permanent abandonment of contaminated water supply wells from Chapter II, Section VIII, Paragraph 7 as follows:

7. Procedures for permanent abandonment of contaminated water supply wells.

a. All casing and screen materials may be removed prior to initiation of abandonment procedures if such removal will not cause or contribute to contamination of the groundwater. Any casing not grouted in accordance with 15A NCAC 2C .0107(e) shall be removed or properly grouted.

b. The entire depth of the water supply well shall be sounded before it is sealed to ensure freedom from obstructions that may interfere with sealing

operations.

c. In the case of gravel-packed water supply wells in which the casing and screens have not been removed, neat-cement, or bentonite grout shall be injected into the water supply well completely filling it from the bottom of the casing to the top.

d. Water supply wells constructed in unconsolidated formations shall be completely filled with cement grout, or bentonite grout by introducing it through a pipe extending to the bottom of the water supply well which can be raised as the well is filled.

e. Water supply wells constructed in consolidated rock formations or that penetrate zones of consolidated rock shall be filled with cement grout or bentonite grout by introducing it through a pipe extending to the bottom of the well which can be raised as the well is filled. The top of the cement grout or bentonite grout shall extend up to land surface.

## Hydrogeologist Permit Application Review

Application #: 4125
Permit File #: 8056

Permit Type: Abandonment (Commercial)

ARGU Review Completed: (•) Yes ( ) No

Permit Denial?: ( ) Yes (•) No

Additional Conditions:

☐ Full Grouting ☐ Casing to Bedrock ☐ Sampling Re-sampling Frequency: NONE

☐ Volatile Organic Compounds (VOC's) ☐ Semi-volatile Compounds ☐ Metals (Specify in Other Conditions)

☐ Pesticides ☐ Herbicides ☐ Other

Comments/Other Sample Types:

Because sampling records indicate this well is contaminated, it is required to be abandoned according to procedures for abandonment of contaminated water supply wells from Chapter II, Section VIII, Paragraph 7.

EHS Review | Update | Time Spent (hours): ☐ Change: 1.00

The application has been forwarded to Debra Howell for review.

**App. #:** 4125

Septic Fee: [ ]

Date: [ ]

CRT[ ]

**PERMIT APPLICATION FOR A COMMERCIAL / INDUSTRIAL SITE IMPROVEMENT PERMIT FOR ONSITE WASTEWATER SYSTEM, NEW WELL INSTALLATION, OR REPAIR OF EXISTING WELL**

**MECKLENBURG COUNTY GROUNDWATER & WASTEWATER SERVICES**

**FILE #** 8056

Well Fee: 0.00

Date: 3/26/2009

CRT[ ]

SEPTIC / TYPE APPLICATION: ◉ N/A ○ NEW SYSTEM ○ ALTERATION ○ REPAIR ○ MODIFIED PLOT PLAN

WELL / TYPE APPLICATION: ◉ N/A ○ NEW WELL ○ MAJOR REPAIR ○ ABANDONMENT

**JOB LOCATION INFORMATION:**

TAX / PARCEL #: 115-172-05 ☐ PO

STREET ADDRESS: 3616 MARSHALL AVE

CITY: Charlotte

STATE: NC ZIP: 28208

LOT #: 0

TOWNSHIP: 01

General Comments:

WSW-4
Benzene > 2L

**BUILDING INFORMATION:**

DESCRIBE TYPE OF BUSINESS

☑ COMMERCIAL ☐ INDUSTRIAL

SQUARE FOOTAGE OF FACILITY: 0

NUMBER OF EMPLOYEES PER SHIFT: 0

NUMBER OF SHIFTS: 0

TYPE OF WASTEWATER:

☐ SEWAGE ☐ INDUSTRIAL PROCESS WASTEWATER

HOW WILL WATER BE USED IN THE FACILITY?:

☐ TOILETS/URINALS ☐ HANDSINK/S

☐ SHOWERS ☐ FLOOR DRAINS

☐ OTHER

IF PLANNING TO EXPAND / ALTER THE EXISTING SYSTEM, INFORMATION DOCUMENTING THE INCREASED WASTEWAER FLOW AND/OR A JUSTIFICATION FOR A SYSTEM ALTERATION WILL BE REQUIRED.

WATER SUPPLY:

☑ MUNICIPAL ☐ PRIVATE WELL ☐ PUBLIC WELL ☐ SHARED WELL ☐ OTHER

PROPOSED USE OF WELL:

◉ N/A ○ IRRIGATION ○ POTABLE (Drinking Water) ○ OTHER

PLEASE INDICATE AND RANK DESIRED SEPTIC SYSTEM TYPE(S) IN ORDER OF PREFERENCE *(1-MOST 5-LEAST DESIRED)*:

☐ N/A ☐ ANY TYPE ☐ CONVENTIONAL ☐ ACCEPTED ☐ INNOVATIVE ☐ ALTERNATIVE ☐ OTHER

RANK: 0 0 0 0 0

**ARE ANY OF THE FOLLOWING LOCATED ON THE PROPERTY? IF SO, PLEASE SHOW LOCATION ON SITE PLAN/PLAT.**

| | | | |
|---|---|---|---|
| BURIED CABLES, LANDFILLS, STUMPHOLES | ○ Yes ◉ No | GRADING/SOIL REMOVAL PERFORMED | ○ Yes ◉ No |
| EXISTING WASTEWATER SYSTEMS | ◉ Yes ○ No | JURISDICTIONAL WETLANDS | ○ Yes ◉ No |
| WELLS, SPRINGS, OR WATER LINES | ◉ Yes ○ No | APPROVAL REQ'RD BY OTHER AGENCY | ○ Yes ◉ No |
| EASEMENTS OR RIGHT-OF-WAYS | ○ Yes ◉ No | WASTEWATER OTHER THAN DOM. SEWAGE | ○ Yes ◉ No |
| CHEMICAL/PETROLEUM STORAGE TANKS | ◉ Yes ○ No | KNOWN UNDERGROUND CONTAMINATION | ◉ Yes ○ No |
| WASTE STORAGE | ◉ Yes ○ No | GROUNDWATER USE RESTRICTIONS/VARIANCES | ◉ Yes ○ No |

| PROPERTY OWNER: | | | | LEGAL AGENT FOR PROPERTY OWNER, IF APPLICABLE: | | | |
|---|---|---|---|---|---|---|---|
| NAME: | Richard J & Linda H Behr | | | NAME: | | | |
| ADDRESS: | P O Box 668272 | | | ADDRESS: | | | |
| CITY: | Charlotte | | | CITY: | | | |
| STATE: | NORTH CAROLINA | ZIP: | 28266 | STATE: | | ZIP: | |
| HOME PHONE: | | WORK: | | HOME PHONE: | | WORK: | |
| MOBILE: | 704-737-3357 | FAX: | | MOBILE: | | FAX: | |

WHAT DATE WAS THE PROPERTY ORIGINALLY DEEDED AND RECORDED? ☐ UNKNOWN

WHAT IS THE ANTICIPATED CLOSING DATE FOR THIS PROPERTY? ☐ N/A

PRINT Update Go to Front Counter Duplicate

EDMS Report for ARGU Review
3616 Marshall Ave.
Tax Parcel ID # 115-172-05
File # 8056
App. #4125

Public water supplied by CMU is available at this site.

4/1/09 (Wed.) – Received request for ARGU review for water supply abandonment at 3616 Marshall Ave., Charlotte.

4/2/09 (Thurs.) – Identified 6 MPL sites within 1,500 feet of the subject parcel.

MPL# 51 Airport Automotive
6100 Wilkinson Blvd., Charlotte, NC
NCDENR UST Inc. # 6951
Source: Petroleum UST

File review indicates that this is an active intermediate risk GW incident with free product.

MPL investigation completed in 2002. Seventeen wells were located and 9 were sampled with detections in 2 wells, located at 6101 Wilkinson Blvd. and 3604 Marshall Ave.

The WSW location is within 1,500' of the Airport Automotive site.

MPL# 1440 L&TA (Airport Express)
6020 Wilkinson Blvd., Charlotte, NC
NCDENR UST Inc. # 36360
Source: pet. LUST

File review indicates that this is an active site with an NORR for assessment.

MPL investigation completed in 2007. 14 wells located with 3 sampled for volatiles and detections in well at 5909 Wilkinson Blvd.

The WSW location is within 1,500'of the L&TA MPL.

MPL# 1245 Sam's Mart
2825 Little Rock Rd., Charlotte, NC
NCDENR UST Inc. 27825
Source: pet. LUST

File review indicates an intermediate risk site with free product in MWs.

MPL investigation completed in 2006. Seven wells were located and one was sampled with no detections. No record of sampling subject well.

The WSW location is within 1,500' of the Sam's Mart site.

MPL# 271 Hoover's Citgo/Reid Oil Co.

5900 Wilkinson Blvd.
NCDENR UST Inc.#23173 and NCDENR AP Inc.#4032
Source: pet. USTs and kerosene spill

File review of NCDENR UST Section database indicates high risk open UST file for release from pet. UST dispensers and lines. File review of NCDENR AP Section database indicated site not cleaned to standards, so SSE required, not submitted.

MPL investigation in 2006. Sixteen wells located with 9 sampled and detections of pet. Constituents in two wells. No record of sampling subject well.

The WSW location is within 1,500' of the Hoover's Citgo/Reid Oil Co. site.

---

MPL#1175 Thrifty Car Rental
3145 Little Rock Rd.
NCDENR UST Inc. #27258
Source: Pet. USTs

File review indicates NCDENR file should be reopened as high risk GW site based on WSWs within 1,000'. Records from NCDENR indicate benzene>2L in WSW-4, one of the wells at 3616 Marshall Ave.

MPL investigation completed in 2008. Twelve wells located and 3 sampled with one impacted well. Record of sampling subject well in 2007 indicates detections in well at 5909 Wilkinson Blvd.

The WSW location is within 1,500' of the Thrifty Car Rental MPL.

MPL#6 Petroleum World
5601 Wilkinson Blvd.
NCDENR UST Inc.#9813
Source: Petroleum USTs

File review of NCDENR DB indicates Intermediate Risk GW incident with concentrations in GW>GCLs.

MPL investigation completed. WSWs located. No record of sampling subject well.

Based on this ARGU review, the permit for a well abandonment at PID# 115-172-05, 3616 Marshall Ave., Charlotte is therefore approved requiring abandonment under the Mecklenburg Co. Groundwater Regulations dated Oct. 5, 2004. Because well sampling records indicate contamination in the well to be abandoned, the well requires abandonment under the Mecklenburg Co. Groundwater Regulations dated Oct. 5, 2004, Chapter II Construction, Repair and Abandonment for Private Water Supply Wells to include procedures for permanent abandonment of contaminated water supply wells from Chapter II, Section VIII, Paragraph 7 as follows:

7. Procedures for permanent abandonment of contaminated water supply wells.

a. All casing and screen materials may be removed prior to initiation of abandonment procedures if such removal will not cause or contribute to contamination of the groundwater. Any casing not grouted in accordance with 15A NCAC 2C .0107(e) shall be removed or properly grouted.

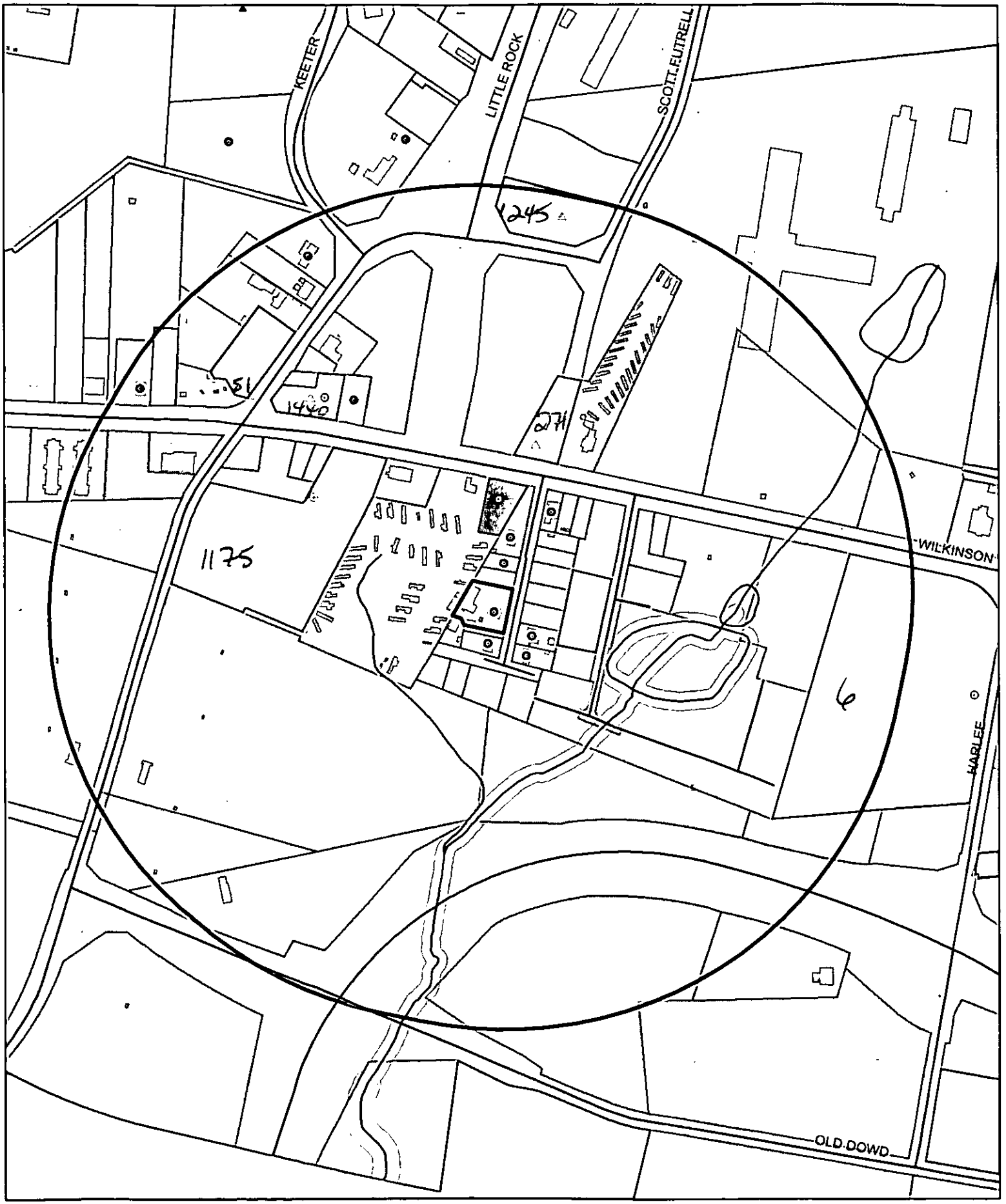
b. The entire depth of the water supply well shall be sounded before it is sealed to ensure freedom from obstructions that may interfere with sealing operations.

c. In the case of gravel-packed water supply wells in which the casing and screens have not been removed, neat-cement, or bentonite grout shall be injected into the water supply well completely filling it from the bottom of the casing to the top.

d. Water supply wells constructed in unconsolidated formations shall be completely filled with cement grout, or bentonite grout by introducing it through a pipe extending to the bottom of the water supply well which can be raised as the well is filled.

e. Water supply wells constructed in consolidated rock formations or that penetrate zones of consolidated rock shall be filled with cement grout or bentonite grout by introducing it through a pipe extending to the bottom of the well which can be raised as the well is filled. The top of the cement grout or bentonite grout shall extend up to land surface.

**ARGU File #8056**




Black radius-1,500'

0 335 670 1,340 Feet