418096

D H E C
PROMOTE PROTECT PROSPER

Seaber, Karen <seaberke@dhec.sc.gov>

monitoring well network application - simpsonville site

1 message

Robert Workman <rworkman@crbgeo.net> Wed, Oct 10, 2012 at 11:16 AM
To: seaberke@dhec.sc.gov

Good Morning Karen,

I've attached a request for a permit for some Phase II assessment wells at a site in Simpsonville. Please feel free to email any questions/reply back to me.

Thank you for your assistance.

Rob

--

Robert Workman, PG
Project Manager
CRB Geological & Environmental Services, Inc.
5000 Old Buncombe Road, Suite 27-281
Greenville, SC 29617
Tel: (864) 283-2000
rworkman@crbgeo.net

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2012 Oct 9 Monitoring Well Network Application.pdf - Adobe Acrobat.pdf
908K

(1)

CRB
GEOLOGICAL & ENVIRONMENTAL SERVICES, INC.

October 10, 2012

Mr. Jonathan McInnis
SCDHEC EQC Bureau of Land & Waste Management
State Site Assessment Office
2600 Bull Street, Columbia, SC 29201

Re: Monitoring Well Network Application
Woven Electronics, 1001 Old Stage Road, Simpsonville, South Carolina 29681

Dear Mr. McInnis:

On behalf of Woven Electronics, Inc, CRB Geological & Environmental Services, Inc. (CRB) requests your approval of the attached monitoring well network application in order to perform a Phase II Environmental Site Assessment at the Woven Electronics property referenced above (the "Site").

If you have any questions or comments please don't hesitate to contact one of us at (864) 283-2000.

Sincerely,
CRB Geological & Environmental Services, Inc.

Frederick R. Baddour, P.G.
Senior Project Manager

Robert Workman, P.G.
Project Manager

Attachment

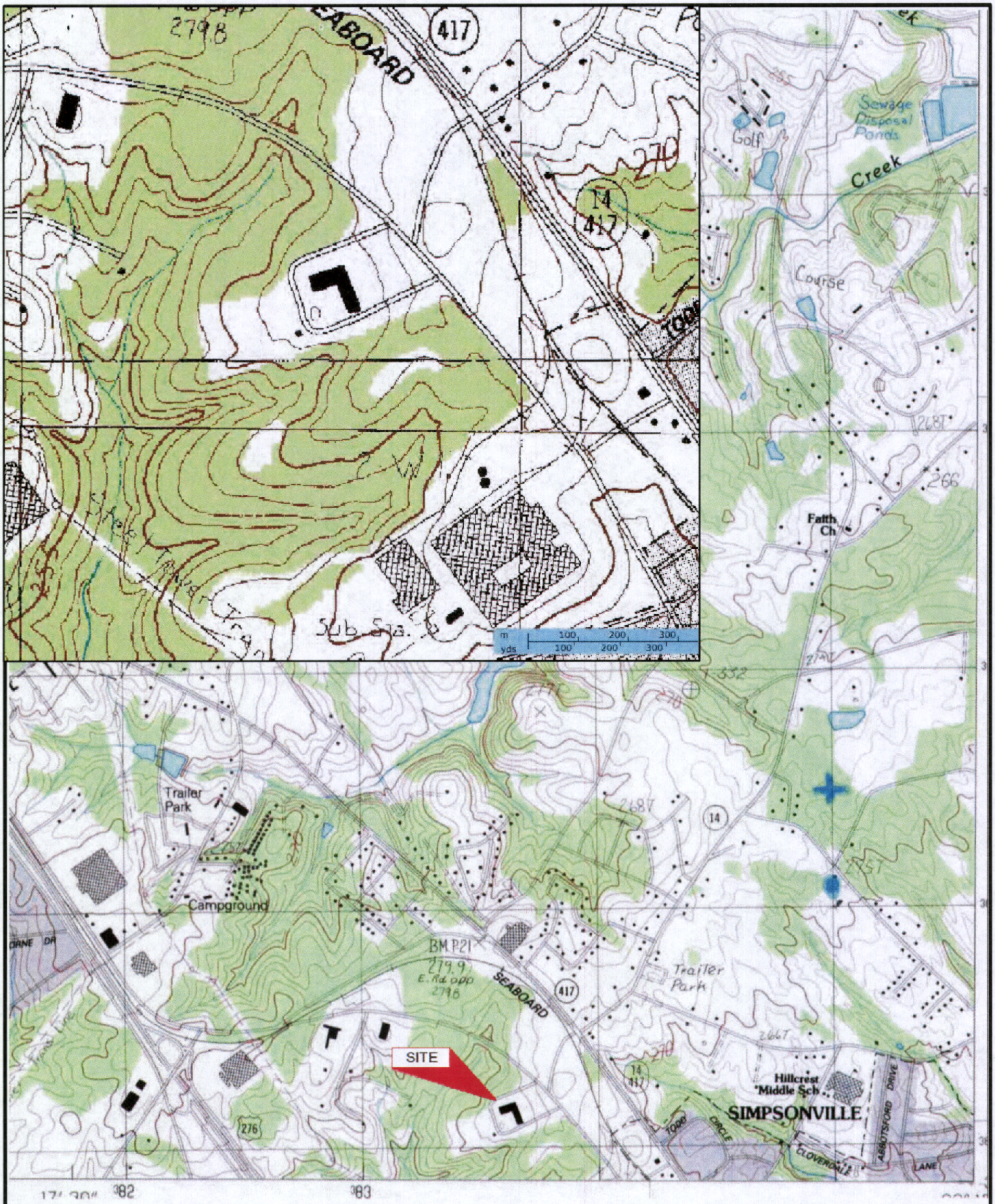
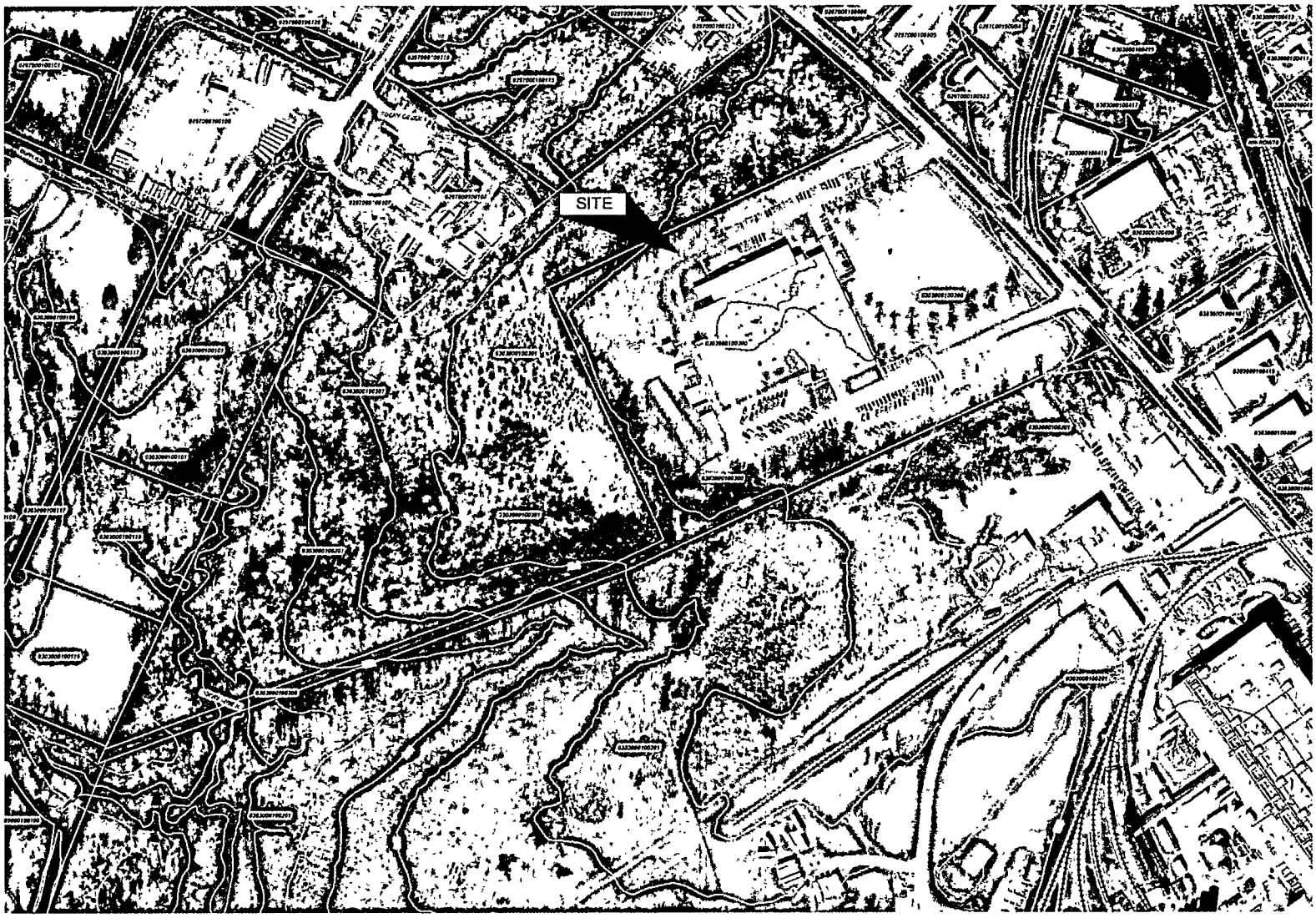
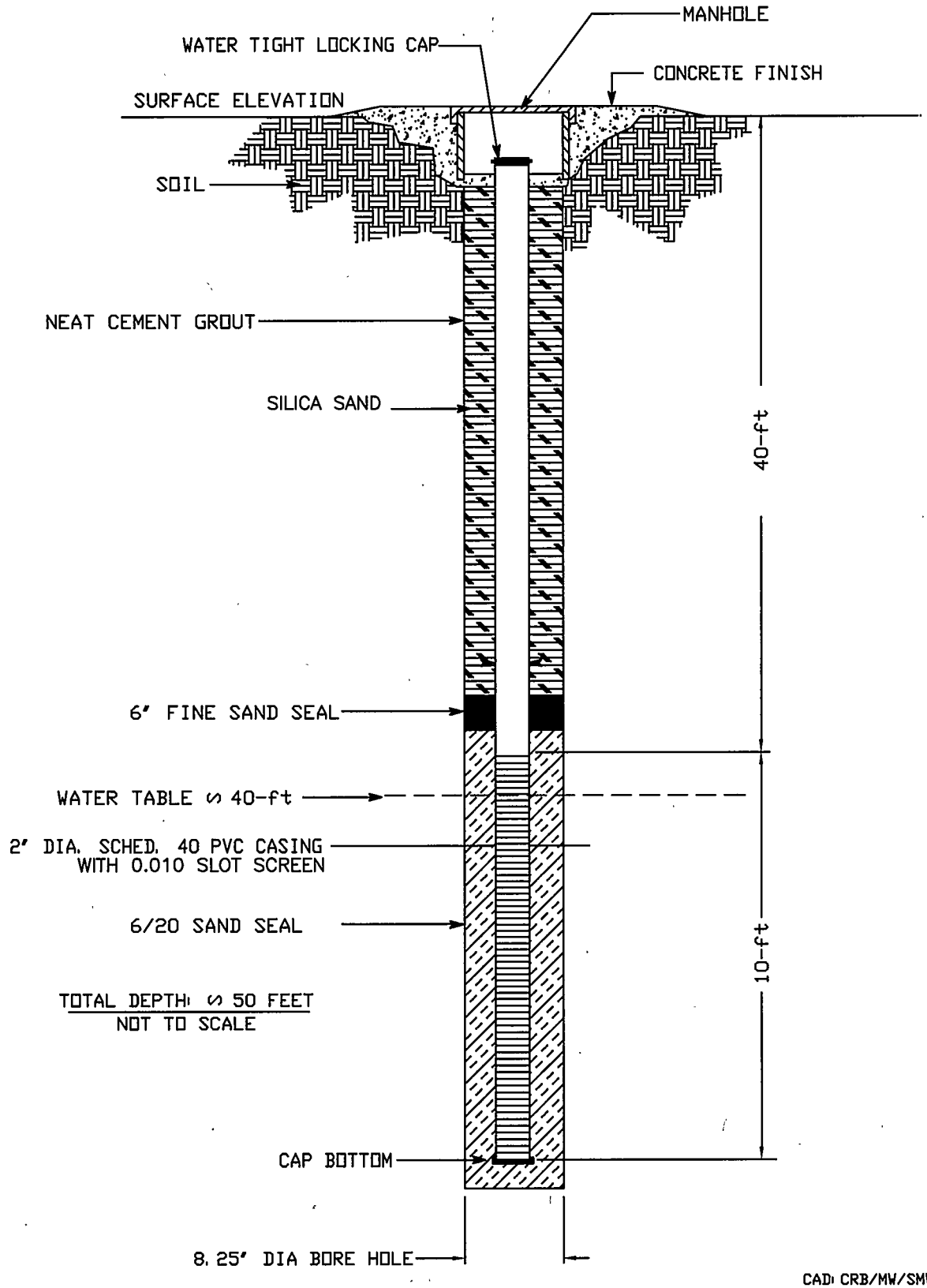


Figure 1

Site Location Map
Woven Electronics
1005 Old Stage Road, Simpsonville, SC

CRB


SITE

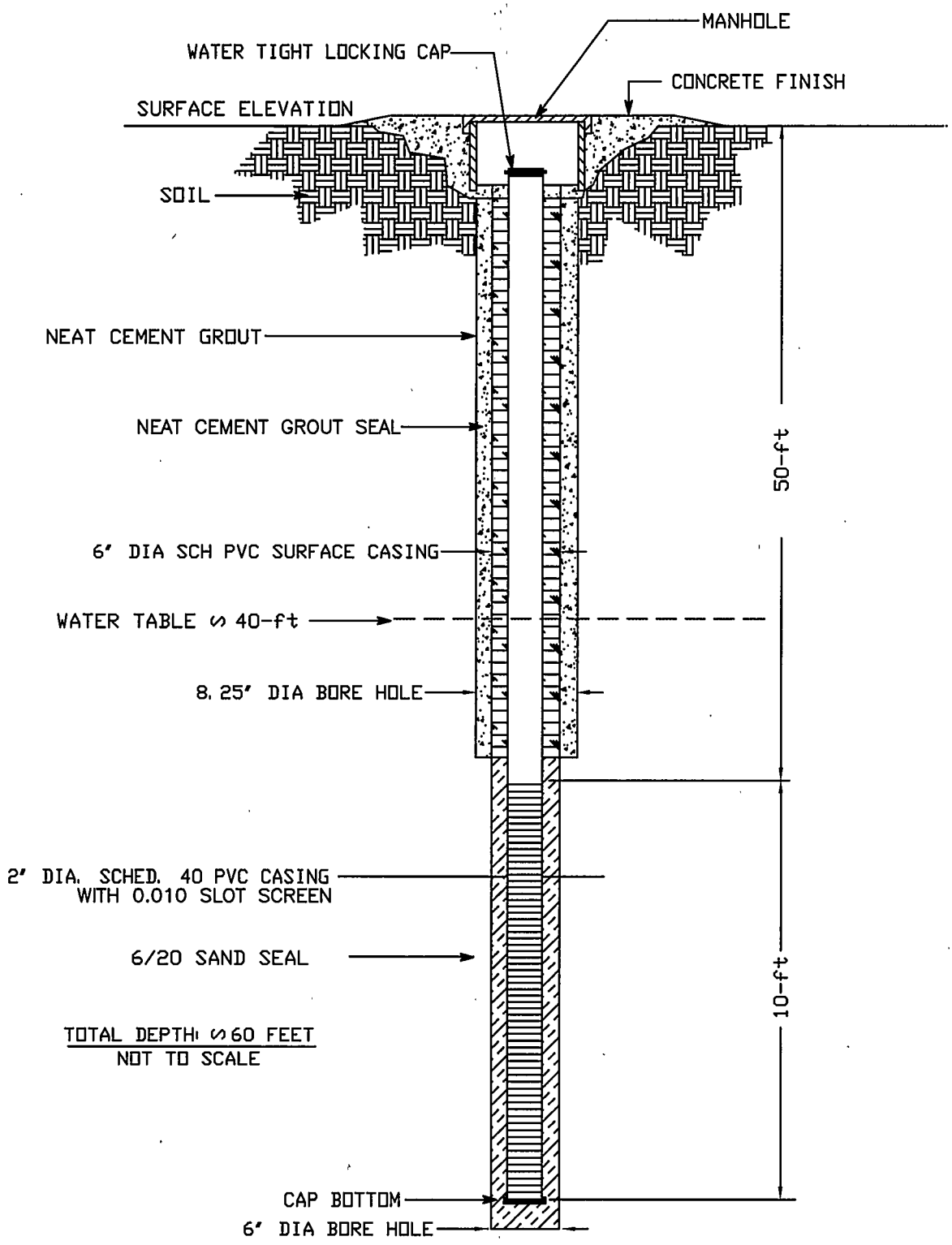


CAD: CRB/MW/SMWMH.DWG

FIGURE 2

SHALLOW MONITORING WELL ASSEMBLY WITH MANHOLE CONSTRUCTION DIAGRAM

CRB



CAD: CRB/MW/SMWMH.DWG

FIGURE 3	DEEP MONITORING WELL ASSEMBLY WITH MANHOLE CONSTRUCTION DIAGRAM	CRB

South Carolina Department of Health and Environmental Control (SCDHEC) summary of standards for monitoring well construction (per South Carolina Well Standards and Regulations R. 61-71)

Approval and License Requirements

Prior Department approval is required for the installation or abandonment of all monitoring wells including direct push, geoprobe or other temporary type monitoring wells. The attached monitoring well approval document should be completed, submitted and approved prior to construction of any monitoring well. A monitoring well is any well used to obtain water samples for water quality analyses or to measure groundwater levels. There are no fees for approvals. All monitoring wells must be drilled by a driller that is registered in South Carolina with the Board of Certification of the Environmental Systems Operators. If any of the information on the application including the proposed drilling date, well construction details or well placement changes, the Department (i.e. project manager issuing the well approval) must be notified 24 hours prior to well construction.

Location

Due to the nature and purpose of a monitoring well, the depth and location requirements in respect to surface water bodies, potential contamination sources, etc., are variable, and shall be approved on a case by case basis by the Department.

Construction and Material

Casing should be of sufficient strength to withstand normal forces encountered during and after well installation and be composed of material so as to minimally affect water quality analyses. Casing should have a sufficient diameter to allow for efficient sample collection (i.e., to provide access for sampling equipment). The diameter of the drilled hole needs to be large enough on all sides (1.5 inches of annular space) to allow forced injection of grout through a tremie pipe. All monitoring wells should have a cement pad or aggregate reinforced concrete at the ground surface which extends at least six inches beyond the bore hole diameter and six inches below ground surface to prevent infiltration between the surface casing and the bore hole. All monitoring wells should be grouted from the top of the bentonite seal to the surface with a neat cement, high solids bentonite or neat cement, bentonite mixture approved by the Department. A hydrated bentonite seal with a minimum thickness of 12 inches is to be placed above the filter pack to prevent infiltration of grout if the well has a filter pack. The monitoring well intake or screen design should minimize the amount of formational materials entering the well. The gravel
pack should be utilized opposite the well screen as appropriate so that parameters analyses will be minimally affected. All monitoring wells should have a locking cap or other security device to prevent damage and/or vandalism. Any monitoring well which is destroyed, rendered unusable or is abandoned should be reported to the Department and be properly abandoned, revitalized or replaced as appropriate or required by permit or regulation.

Development

Monitoring wells shall be properly developed. Development shall include the removal of
formation cuttings and drilling fluids from the well bore hole. Development shall be complete when the well produces water typical of the aquifer being monitored.

Reporting Requirements

A monitor well record form (1903) or equivalent to include the following should be completed and submitted to the Department within 30 days after completion of the monitoring wells:

Name and address of facility/owner;
Surveyed or global positioning system location of monitor well(s) on a scaled map or plat;
Driller and certification number;
Date drilled;
Driller's or Geologist's log;
Total depth;
Screened interval;
Diameter and construction details;
Depth to water table with date and time measured;
Surveyed elevation of measuring point with respect to established benchmark;
Monitoring well approval number issued by the Department.

Additionally, the groundwater and soil (if taken) analytical results should be submitted to the Department within 30 days of receipt from the laboratory.

Abandonment

All monitoring wells shall be properly abandoned, when deemed appropriate by the Department. Any well that acts as a source of contamination shall be repaired or permanently abandoned immediately after receipt of notice from the Department. Abandonment shall be by forced injection of grout or pouring through a tremie pipe starting at the bottom of the well and proceeding to the surface in one continuous operation. The well shall be filled with either neat cement, bentonite-cement, or 20% high solids sodium bentonite grout, from the bottom of the well to the land surface.

* This summary of standards for monitoring well construction may not include a listing of all information necessary to obtain an approval to install monitoring wells. Final approval of monitoring well installation will be dependant upon the regulatory requirements for the Department program area for which the monitoring wells are to be installed.

* Some areas of the Department may require a detailed justification of the placement of monitoring wells and the depth of monitoring well screened zones prior to granting installation approval.

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Monitoring Well Application

1. Proposed Location of Monitoring Well(s):

   Street Address: **1001 Old Stage Rd**

   City (including Zip): **Simpsonville 29681**

   County: **Greenville**

   Please attach Scaled Map or Plat

2. Well Owner's Information:

   Name (Last then First):

   Company: **Woven Electronics, Inc.**

   Complete Address: **1001 Old Stage Rd**
   Simpsonville SC 29681

   Telephone Number: **(864) 863-5131**

3. Property Owner's Information:

   ☑ Check if same as Well Owner

   Name (Last then First):

   Company:

   Address:

   Telephone Number:

4. Proposed Drilling Date: **10/24/2012**

5. Intended Purpose of Well(s):

   Pre-Purchase ☐

   Investigation ☑

   NOTE: If this request is for an existing DHEC project, please enter the Program area and ID number below.

   Program Area:
   Project or Site ID #:

6. Proposed number of monitoring wells: **10**

7. Proposed parameters to be analyzed (check all that apply), please specify analytical method beside check box:

VOCs	☑
BTEX	☐
MtBE	☐
Naphthalene	☐
PAHs	☐
Metals	☐
Nitrates	☐
Base, Neutral & Acid Ex.	☐
Pesticides/Herbicides	☐
Phenols	☐
Radionuclides	☐
PCBs	☐
Other (specify below)	☐

8. Proposed construction details (complete and attach proposed monitoring well schematics):

   up to nine Type II & one Type III
   flush-completion 2" PVC 10-ft screen depth
   ~40-50 feet

12/10/12