



UNIVERSITY OF KENTUCKY

November 8, 2010

Ms. Laura Darnell and Mr. Richard Clausen
Redwing Ecological Services
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Kentucky Geological Survey
Research
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**Re: Kentucky Highway 32 Reconstruction Project
Rowan and Elliott Counties, Kentucky**

Dear Ms. Darnell and Mr. Clausen:

I have received your letter of November 3rd requesting geologic information regarding groundwater and geologically significant areas for the KY 32 improvements. Because of liability issues and cost constraints, the Kentucky Geological Survey cannot perform interpretive analyses of site-specific projects such as Redwing's Project No. 09-076. However, we have gone to great lengths to make information available online that will assist you in answering the questions posed in your letter. A water-well and spring data search for the areas in question can be performed online at the following link:

<http://kgs.uky.edu/kgsweb/DataSearching/Water/WaterWellSearch.aspx>. Note that if there are public wells in the vicinity of your site(s), you must check with the Kentucky Division of Water to see whether the site is located within a well-head protection area. You will find DOW's wellhead protection program contact information at <http://water.ky.gov/groundwater/Pages/WellheadProtection.aspx>.

The geology of the site can be seen online by viewing the USGS 7.5-minute geologic quadrangle maps. Digital images of these maps may be viewed online at the Kentucky Department of Geographic Information website at <http://kymartian.ky.gov/gomaps/>. These maps are available in paper format from our Publication Sales office here at the Survey (859-257-3896 or toll-free at 877-778-7827).

The Rowan and Elliott County Groundwater Resource Reports by KGS summarize the occurrence and availability of groundwater in the county, and can be viewed (respectively) at <http://www.uky.edu/KGS/water/library/gwatlas/Rowan/Foreword.htm> and <http://www.uky.edu/KGS/water/library/gwatlas/Elliott/Foreword.htm>.

In addition to the above report, two older but still useful publications are the USGS Hydrologic Atlas 17 for Rowan County, which can be viewed at <http://kgs.uky.edu/kgsweb/download/wrs/ha17.pdf>, and HA 37 for Elliott County at <http://kgs.uky.edu/kgsweb/download/wrs/ha37.pdf>.

Finally, a "simplified geology for land-use map" has been completed for Rowan County in 2007 by KGS, and can be viewed online at http://kgs.uky.edu/kgsweb/olops/pub/kgs/mc154_12.pdf and for Elliott County at http://kgs.uky.edu/kgsweb/olops/pub/kgs/mc161_12.pdf. These maps provide general information about geologic bedrock conditions that may affect the selection of sites for construction and development purposes. Hard copies are available at the KGS Publication Sales Office.

We do not have records on caves, mine portals or adits. You may be able to find the latter two through the Kentucky Mine Mapping Information System at <http://minemaps.ky.gov/>.

As with any new construction site, it is strongly recommended that appropriate testing be conducted for geotechnical and engineering properties on all earth materials at the site. If you will send me your e-mail address, I will be glad to forward this letter via e-mail so that you can click on the links directly.

Sincerely,

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