



**Terra Firma, Inc.**

September 4, 2014

PROJECT MEMORANDUM

TO: Ima Y. Student  
Summer Intern

FROM: Vanessa Bateman  
Engineering Geology Section

PROJECT: Homework Assignment #2

SUBJECT: Desk Study and Preliminary Information for the R.Development Company

Discussion:

Our company has been retained by the R. Development Company to provide a preliminary investigation for a potential commercial development site in the Murfreesboro Area. This site will include a large multistory office development as well as luxury condominiums and a new recreation facility including a large pool. The multistory office buildings will need to have a foundation in solid rock. The luxury condos will be in buildings that are 1-3 stories. Attached to this memo is an aerial view of the site located along SR 99 (New Salem Highway) between Cason Lane and St.

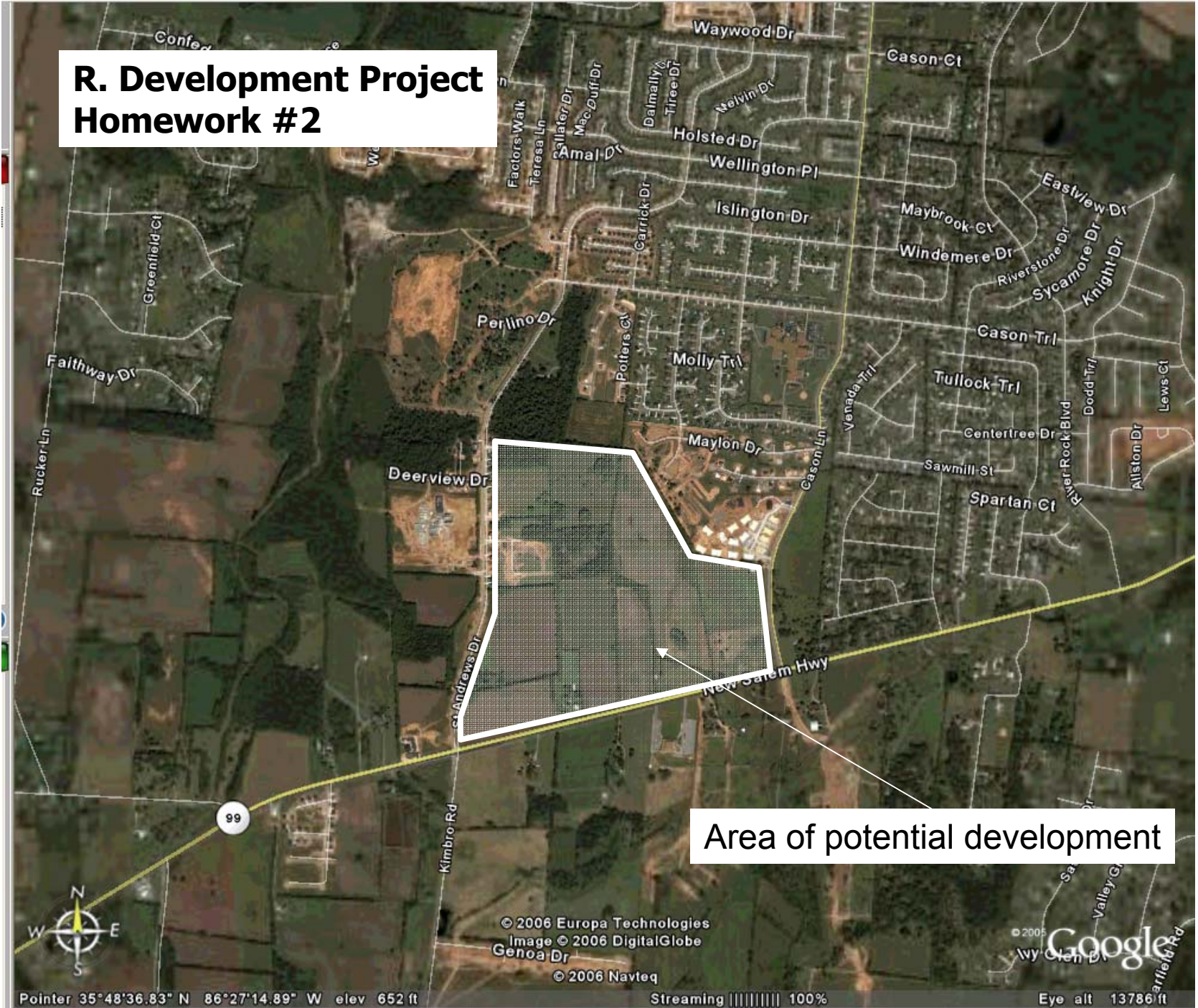
Andrews Drive. In order to better plan our potential services for the R. Development Company, I need the following information:

1. What types of engineering geological information would you recommend be investigated and evaluated? What information sources should we obtain? Please specify the material we may want to sample and the types of drilling we may want to do to obtain information for this project.
2. Are there any potential geohazards on the site that can be identified before field work begins? If there are, what is the nature of these hazards?
3. What is the underlying geological formation at the site and what is the general geological setting? Does rock appear to be deep or shallow?
4. Is the area suitable for a development of this kind? Please note that you should reference both the geology and soil survey maps. Soil survey data can also be obtained from the NCRS website soil survey at: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>
5. Please provide a topographic, geological and soil maps of this area with potential problems noted for our field geologist's initial survey work. Also, please mark any potential issues on the aerial survey map.

Please return your two to three page memo with any maps attached to me by September 11, 2014 as I have a meeting with our client on September 12, 2014 to discuss our scope of work for field investigations. Your work will have a direct bearing on the amount of drilling and investigation that we proposed to our client. Thank you very much for your help.

Vanessa C. Bateman  
Engineering Geology

# R. Development Project Homework #2



Area of potential development

Pointer 35°48'36.83" N 86°27'14.89" W elev 652 ft

Streaming | 100%

Eye alt 13786 ft



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