CONSTRUCTION MATERIALS SERVICES, INC.
105 Park 42 Drive Suite A; Locust Grove, GA 30248-2545
Phone: (770) 914-1744 Fax: (770) 914-0412
Email: info@cmsnatl.com

Geotechnical Engineering - Materials Testing - Asphalt Mix Design - Soil Surveys – Environmental

November 28, 2016

Mr. Charles Penny
Paragon Consulting Group
118 North Expressway
Griffin, Georgia 30223-2050

RE: Preliminary Geotechnical Subsurface Investigation
12th St. /Wheeler Rd. Culvert
CMS # 16-189

Dear Mr. Penny:

Construction Materials Services, Inc. (CMS) has completed a preliminary geotechnical study for the above subject project. All borings were located in the field by our personnel. A boring location sketch is attached which indicates the approximate location of our test borings. If needed, we recommend our boring locations be confirmed by your surveyor and placed on the final site plan. As part of this study, two (2) borings were made at the selected test locations. Rock, in the form of auger refusal, was encountered at two (2) locations at the depths drilled as indicated below:

Boring Location	Depth to Rock from Existing Surface (ft)	Attempted Depth of Boring from Surface (ft)
B-1	12.5	15.0
B-2*	6.5/ 5.0	15.0

*Two attempts made at this location

Immediate ground water table (GWT) was not measured in each boring. The ground water elevation can be expected to fluctuate with the season of the year, the surrounding ground surface conditions, subsurface conditions, and recent rainfall amounts. Thus, ground water elevations should be considered valid only for the date of observation.

Basic boring logs have been prepared and are attached which provide a visual classification of the soils encountered during this study.

Due to the shallow presence of rock at this site, we recommend that the foundation be extended to and keyed into the encountered rock formations. If you desire, we can prepare your foundation design.

However, at this time, we recommend additional testing which will include rock coring to determine in situ rock quality.

If additional information, sampling, and/or testing is required, once final site plan is established and approved, please contact us.

Qualifications of Our Findings: The recommendations offered in this report are based on our interpretation of the data obtained from our investigation. It should be noted soil conditions may vary from boring to boring and in areas where borings were not made. With this in mind, we recommend site preparation and foundation construction be closely monitored. If the soil conditions deviate from those presented in this report, we will be glad to furnish any additional analysis and/or recommendations that may be needed.

This report was made to determine the geotechnical properties of the site and is not intended to serve as a wetland survey or an environmental site assessment. No effort has been made to delineate or designate any area as wetlands or an area of environmental concern or contamination. Any reference to low areas, poorly drained areas, etc. is related to geotechnical applications. Any recommendations regarding drainage and earthwork are made on the basis that such work can be permitted and performed in accordance with current laws pertaining to wetlands, storm water runoff, and environmental contamination.

If you have any questions, please contact me at (770) 914-1744.

Respectfully submitted,

Andrew Johnson, P. E.
President
Construction Materials Services, Inc.

AJ:au

Attachment

Project No: 16-189

Project: 12th Street / Wheeler Road Culvert

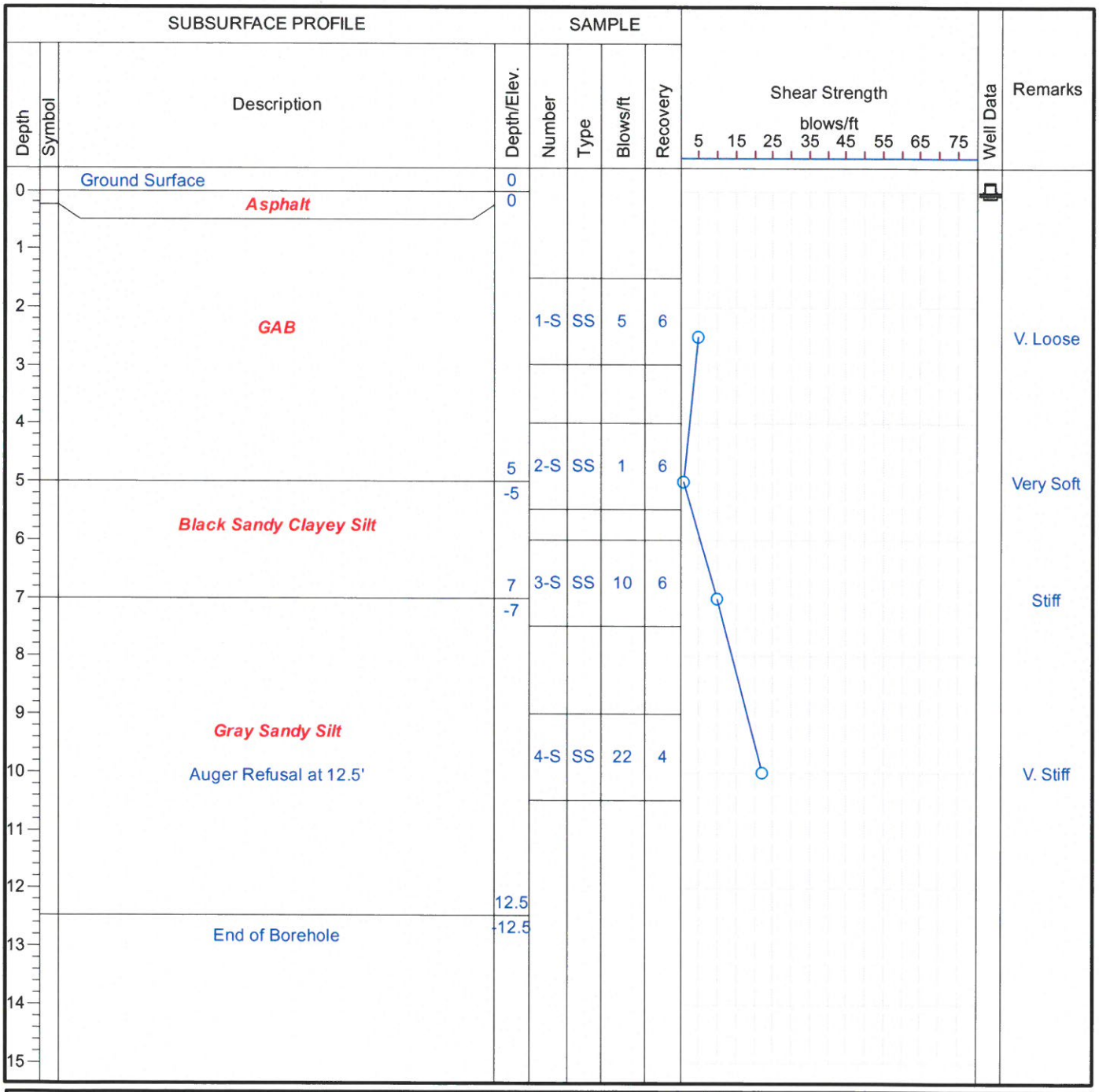
Client: Paragon Consulting

Location: Griffin, Spalding County, Georgia

Borehole #: 1 NBL (35' South of Culvert)

Enclosure:

Engineer: Andrew Johnson



Drilled By: PS, JP, CW

Drill Method: 4" Auger

Drill Date: 11/21/16

Construction Materials
Services, Inc.
105 Park 42 Drive, Suite A
Locust Grove, GA 30248-2545

Hole Size: 4"

Datum:

Sheet: 1 of 1

Project No: 16-189

Project: 12th Street / Wheeler Road Culvert

Client: Paragon Consulting

Location: Griffin, Spalding County, Georgia

Borehole #: 2 SBL (2 Attempts)

Enclosure:

Engineer: Andrew Johnson

SUBSURFACE PROFILE				SAMPLE						
Depth	Symbol	Description	Depth/Elev.	Number	Type	Blows/ft	Recovery	Shear Strength blows/ft (5 15 25 35 45 55 65 75)	Well Data	Remarks
0		Ground Surface	0							
		Asphalt	0							
1		*Reddish Brown Silty Clayey Sand*								
2			2.5	1-S	SS	12	10			Stiff
			-2.5							
3		*Reddish Brown and Yellow Sandy Silt*								
4		Moved 23' North of Culvert - Auger Refusal @ 6.5'								
		Moved 33' North of Culvert - Auger Refusal @ 5.0'		2-S	SS	13	10			Hard
5		@ 5.0 - 13 Blows for 8" hammer bounced @ 8"								
		Exposed rock in bottom of stream 250' up stream.								
6			6.5							
		End of Borehole	-6.5							
7										
8										
9										
10										

Drilled By: PS, JP, CW

Drill Method: 4" Auger

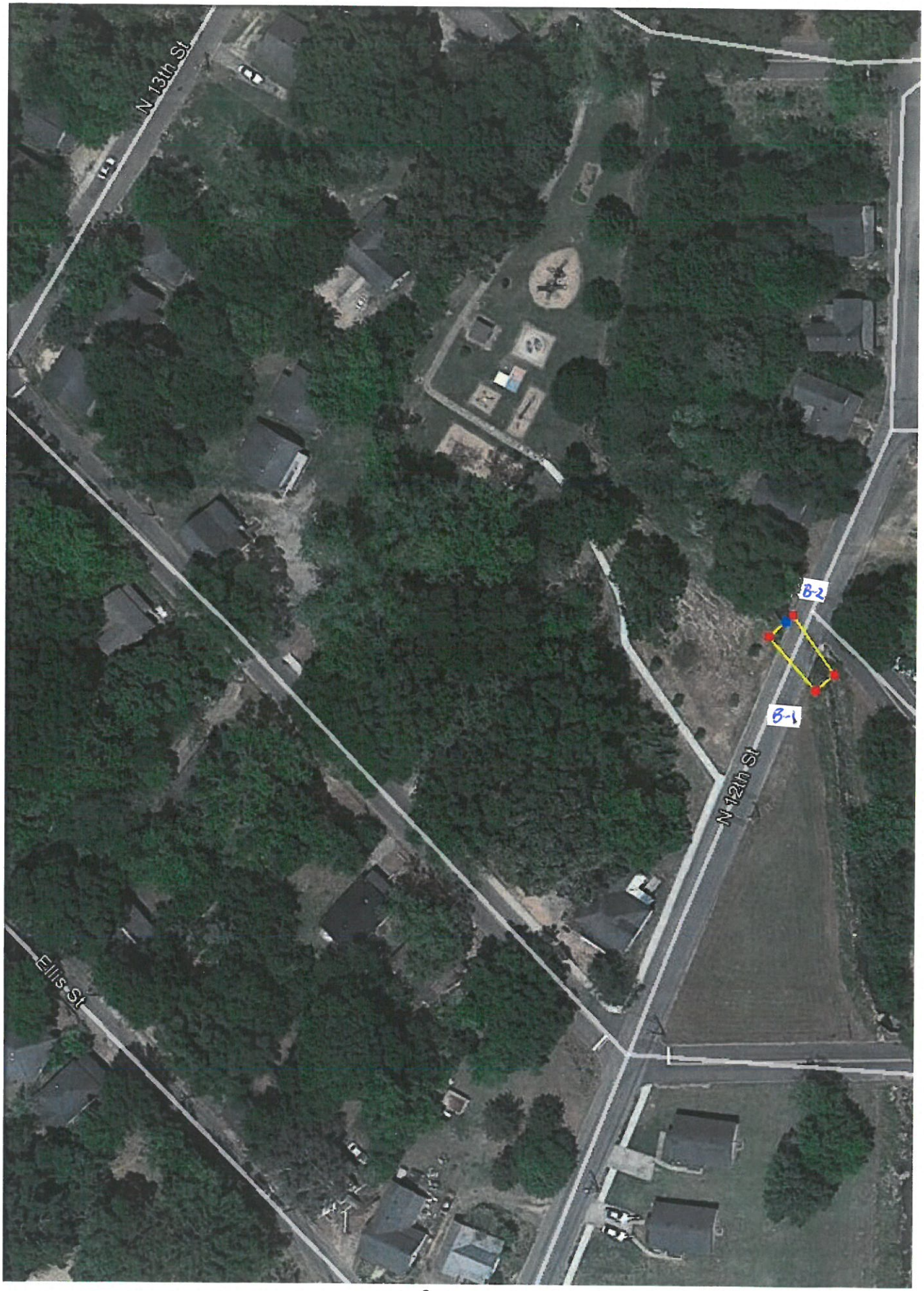
Drill Date: 11/21/16

Construction Materials Services, Inc.
105 Park 42 Drive, Suite A
Locust Grove, GA 30248-2545

Hole Size: 4"

Datum:

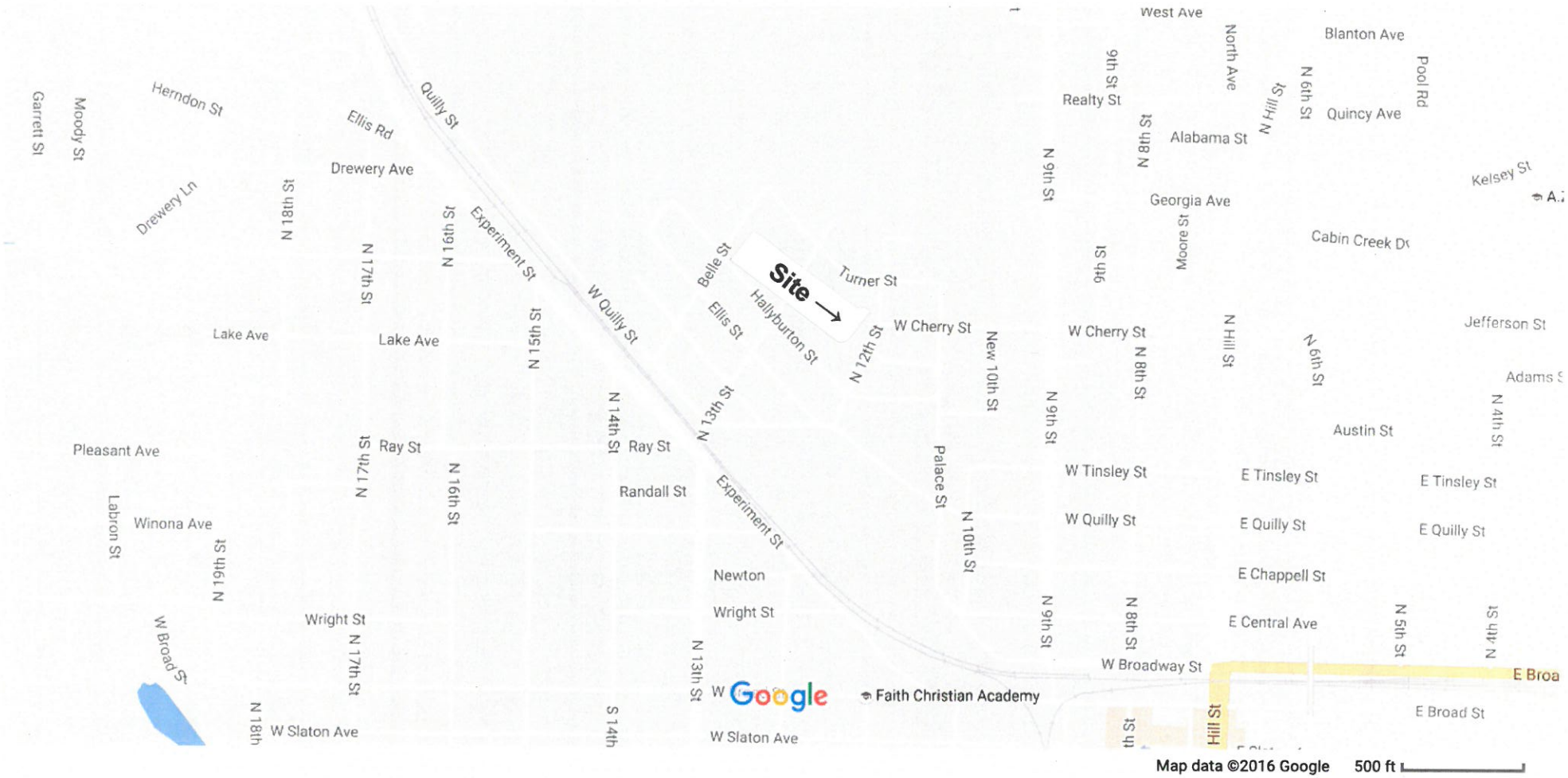
Sheet: 1 of 1

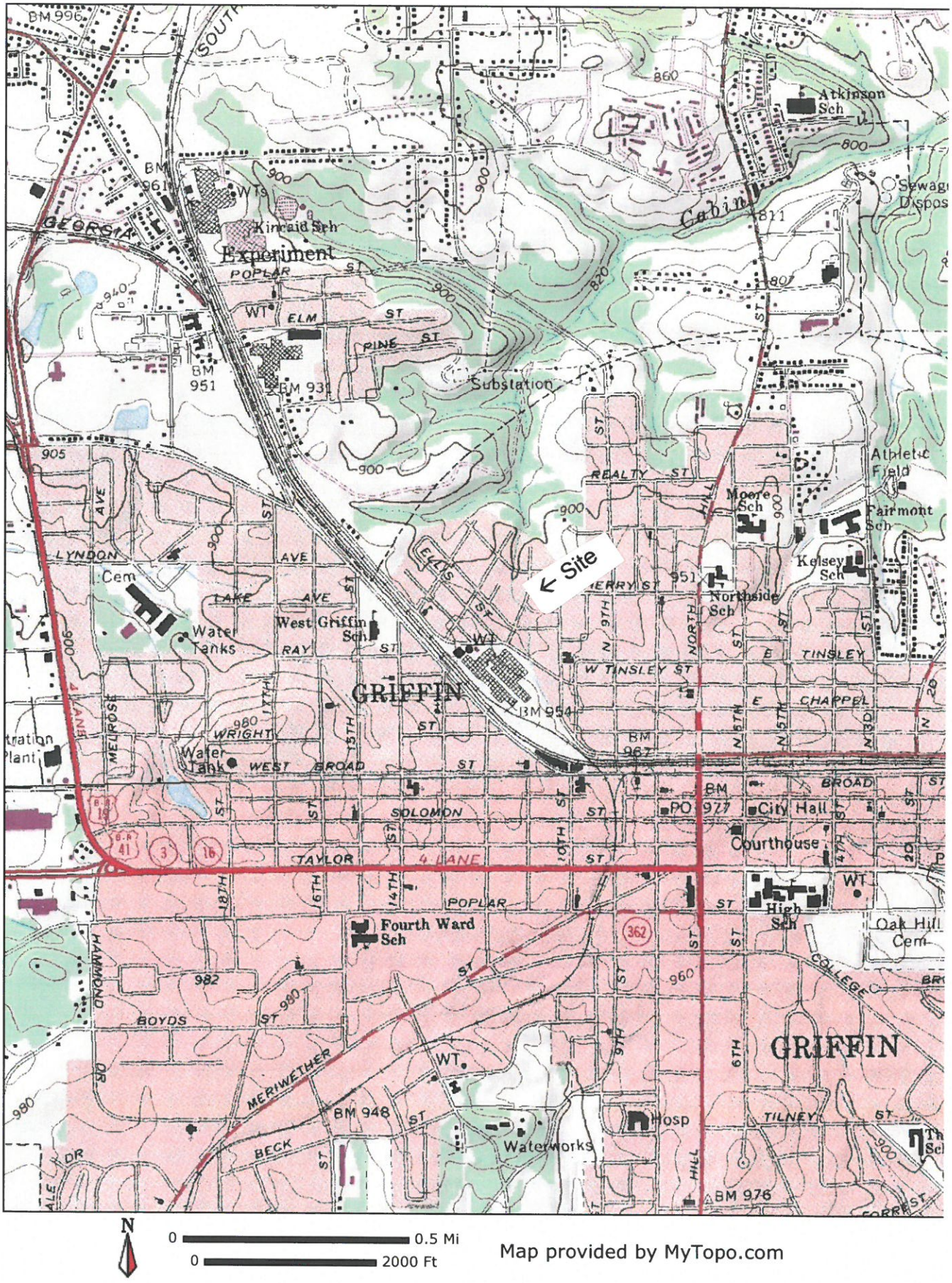


North

BORING LOCATION SKETCH (n.t.s.)

Google Maps


Site
Turner St
Belle St
Ellis St
Hallyburton St
N 12th St
W Cherry St
New 10th St
Palace St
N 10th St
N 13th St
Experiment St
W Quilly St
N 14th St
Ray St
Randall St
Newton
Wright St
W Slaton Ave
S 14th
N 15th St
N 16th St
N 17th St
N 18th St
N 19th St
Lake Ave
Pleasant Ave
Winona Ave
Labron St
W Broad St
Drewery Ln
Drewery Ave
Ellis Rd
Quilly St
Herndon St
Garrett St
Moody St
Realty St
9th St
North Ave
West Ave
Blanton Ave
Pool Rd
N 6th St
N Hill St
Quincy Ave
Alabama St
N 8th St
N 9th St
Georgia Ave
Moore St
Kelsey St
Cabin Creek Dr
Jefferson St
Adams St
N 4th St
Austin St
E Tinsley St
W Tinsley St
E Quilly St
W Quilly St
E Chappell St
E Central Ave
W Broadway St
E Broad St
N 5th St
N 4th St
Faith Christian Academy
Google
Map data ©2016 Google
500 ft



Map provided by MyTopo.com