ATC Associates of North Carolina, PC

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August 15, 2011

Mr. Frank Fawcett
Primax Properties
1065 East Morehead Street
4th Floor
Charlotte, NC 28204-2812
FFawcett@primaxproperties.com

ATC Project No. 45.27739.0054

Reference: Report of Subsurface Exploration Services
Proposed Dollar General
South Gastonia, North Carolina

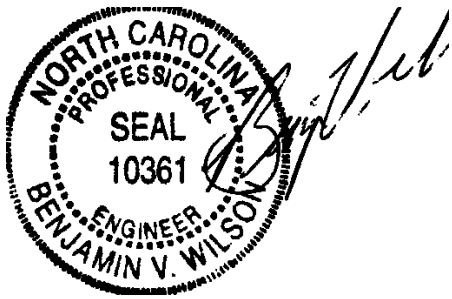
Dear Mr. Fawcett:

ATC Associates of North Carolina, PC is pleased to present this report of subsurface exploration and geotechnical analysis for the Proposed Dollar General in South Gastonia, NC. This report contains the results of our subsurface exploration, boring logs, and laboratory test information. It is expected that the findings of this exploration will aid in the design and construction of foundations, pavements, earthwork, and other soil related aspects of the construction.

We have enjoyed being of service to Primax Properties during the design phase of this project. If you should have any questions regarding the information and recommendations contained in the accompanying report or if we can be of further assistance, please do not hesitate to contact us.

Respectfully,

ATC ASSOCIATES OF NORTH CAROLINA, PC



Herbert L. "Tooie" Hales II, P.E.
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REPORT

PROJECT

Subsurface Exploration Services
Proposed Dollar General
South Gastonia, North Carolina

CLIENT

Mr. Frank Fawcett
Primax Properties
1065 East Morehead Street
4th Floor
Charlotte, NC 28204-2812

SUBMITTED BY

ATC Associates of North Carolina, PC
2725 E. Millbrook Road
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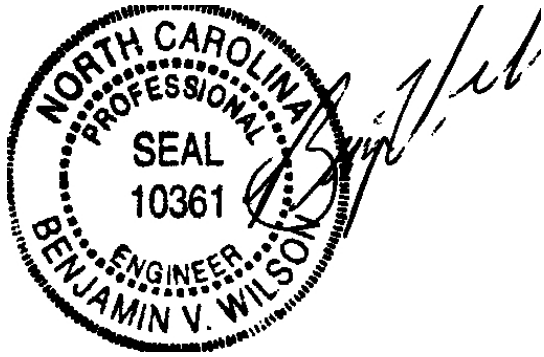


Benjamin V. Wilson, P.E.
North Carolina Registration # 10361

PROJECT
45.27739.0054

DATE: August 15, 2011

PROJECT OVERVIEW

Executive Summary

This report presents the results of our subsurface exploration and geotechnical engineering analysis for the proposed Dollar General to be located on the east side of York Highway/US 321 in South Gastonia, North Carolina.

Based on the information provided, the project will consist of the construction of a typical Dollar General Prototype Building consisting of a steel frame structure with steel and Concrete Masonry Unit (CMU) exterior and slab on grade, and associated parking areas and access.

The site is composed of approximately 2.8 acres of which approximately half will be developed for the Dollar General. The site has been graded to a level condidtion with apparent cut at the north end of the site and fill at the south. The site is mostly cleared with a thin gravel layer and grass cover. A small parking area is located at the site for an existing sales building. There is an existing dry pond at the west corner of the property that is wooded and overgrown with bamboo. The site slopes to the southwest (see attached photos and USGS topo).

The subsurface conditions at the site consist of a thin layer of gravel underlain by a Red-Brown SILT with clay and sand near the surface grading to a SILT with varying amounts of mica and fine sand with depth.

In summary, we recommend that the proposed building be supported on a shallow spread footing foundation system. The spread footings may be designed to bear on either compacted Engineered Fill or suitable natural soils. For footings designed as discussed herein, a net allowable soil bearing pressure of 3,000 pounds per square foot (psf) may be utilized for column and wall footings. In order to attain this allowable capacity, it will be necessary to adhere to the design and construction recommendations discussed in the text of this report. Based on the design bearing pressure and the anticipated structural loads, total settlements are anticipated to be

less than 3/4 inch with long term differential settlements of approximately one-half this amount.

Care should be taken to design the site for positive drainage to prevent saturation of the SILTS at the site. In addition it is IMPORTANT that the site not be graded during the wet periods of the year because of the moisture sensitivity of the fine grained SILT soils encountered at the site.

Further information regarding the subsurface exploration procedures used; groundwater conditions; foundations; floor slab and pavement design; building and pavement area earthwork operations; and construction considerations is included in the text of this report.

Scope of Work

The conclusions and recommendations contained in this report are based upon our field exploration, which consisted of a site visit by an engineer of this office and 7 soil test borings. Laboratory testing performed on several representative samples obtained during the field exploration aided in the evaluation of the field data.

Borings were located in the field by ATC representatives by measuring distances and estimating right angles from existing site features. The locations shown on the boring location diagram provided in the Appendix should be considered approximate.

The recommendations contained herein were developed from our interpretation of the subsurface data obtained from the soil test borings. The borings indicate subsurface conditions at specific locations at the time of the exploration. If, during the course of construction, variations appear evident, the Geotechnical Engineer should be informed so that the conditions can be addressed. Design recommendations were developed based on design criteria considered typical for this type of project. Should structural loading characteristics differ from those discussed herein, ATC should be contacted for review of these conditions and possible revisions to the recommendations of this report.

Purpose of Exploration

The purpose of this exploration was to explore the soil and groundwater conditions at the site and to develop engineering recommendations to aid the design and construction of the project. This was accomplished by drilling soil test borings, performing a site reconnaissance, performing laboratory testing on representative samples obtained from the borings, and analyzing the field and laboratory data to develop appropriate engineering recommendations regarding earthwork specifications and the design of foundations, slabs, and pavements.

Project Characteristics

Based on the information provided, the project will consist of the construction of a typical Dollar General Prototype Building consisting of a steel frame structure with steel and Concrete Masonry Unit (CMU) exterior and slab on grade, and associated parking areas and access.

Based on existing site characteristics we anticipate that minimal cut and fill operations will be required to bring the site to grade.

A storm water retention facility will be constructed at the rear of the property in the area of the existing storm water pond.

The preliminary proposed layout for the Dollar General construction is included in the drawings in the appendix to this report.

EXPLORATION PROCEDURES

Surface Exploration Procedures

A representative of ATC performed a reconnaissance of the project site and located the boring locations. The site was cleared by calling the North Carolina One-Call Center prior to drilling operations. During the site visit, visual observations of drainage and surface water conditions, vegetation, and shallow subgrade conditions were made. The results of this field visit are discussed under **Site Conditions**. Photos of the site are included in the appendix to this report.

Subsurface Exploration Procedures

In order to characterize the general subsurface conditions at the site, a total of 6 soil test borings were performed.

Four borings were performed in the proposed building area (B-1 through B-4) and one in the proposed parking and drive areas (B-5) and two in the proposed stormwater pond areas (B-6 and B-7). The borings were advanced to a depth of 20.0 feet below the ground surface in the building area and 10.0 feet in the parking area and pond area. All borings were performed with Truck-mounted drilling equipment utilizing continuous-flight, hollow-stem augers to advance the boreholes. Drilling fluid was not used in this process.

Representative soil samples were obtained by means of the split-barrel sampling procedure in accordance with ASTM Specification D-1586. In this procedure, a 2-inch O.D., split-barrel sampler is driven into the soil a distance of 24 inches by a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler through a 12-inch interval is termed the Standard Penetration Test (SPT), N-value and is indicated for each sample on the boring logs. This value can be used as a qualitative indication of the in-place relative density of cohesionless soils. In a

less reliable way, it also indicates the consistency of cohesive soils. Many factors can significantly affect the Standard Penetration resistance value and prevent a direct correlation between drill crews, drill rigs, drilling procedures, and hammer-rod-sampler assemblies. Samples were taken at 2.5 feet intervals to a depth of 10 feet and at 5-foot intervals thereafter.

After recovery, each sample was removed from the sampler and placed in sealed containers. The samples were taken to our laboratory for a visual classification and laboratory testing.

Laboratory Testing Program

Representative soil samples from the borings were selected and tested in our laboratory to substantiate visual classifications and to determine pertinent engineering properties. The laboratory testing program included moisture content tests, Atterberg Limits tests, a grain size analysis, and Calibrated Penetrometer tests on representative soil samples and a Standard Proctor Compaction with a California Bearing Ratio (CBR) test on the bulk sample obtained at the site. The results of all laboratory testing performed are included in the Appendix of this report.

An experienced Soils Engineer classified each soil sample on the basis of texture and plasticity in accordance with the Unified Soil Classification System. The group symbols for each soil type are indicated in parentheses following the soil descriptions on the boring logs. A brief explanation of the Unified System is included with this report. The Soils Engineer grouped the various soil types into the major zones noted on the boring logs. The stratification lines designating the interfaces between earth materials on the boring logs are approximate; in-situ, the transitions may be gradual.

The soil samples will be retained in our laboratory for a period of 60 days, after which they will be discarded unless other instructions are received as to their disposition.

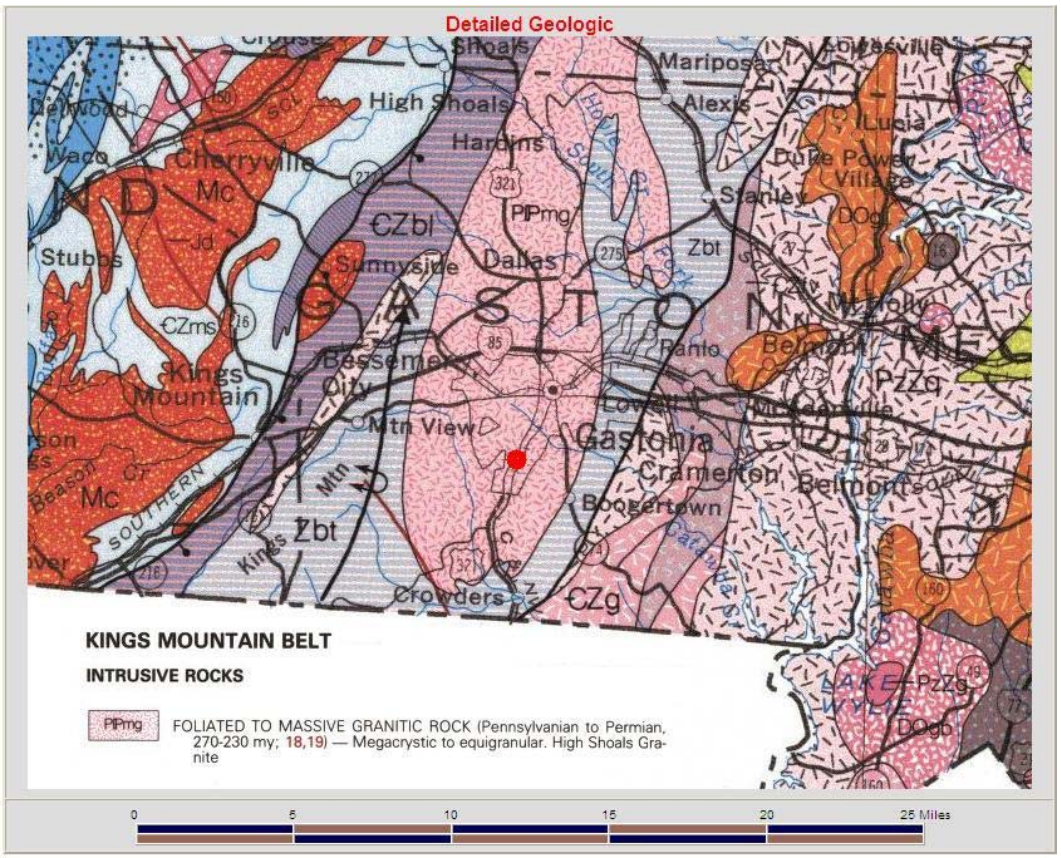
EXPLORATION RESULTS

Site Conditions

The site is composed of approximately 1.73 acres and is mostly cleared with a well established grass cover and some large trees at the middle of the site. The site slopes to the northeast (see attached photos).

Regional Geology

The project site lies in the Piedmont Physiographic Province, in the Kings Mountain Belt geologic area. The soils in this area consist of silts, sandy silts, and clayey silts weathered from the underlying Granitic rock.



Subsurface Conditions

Boring logs describing the soil conditions encountered in the soils borings are included in the appendix of this report. A general description is included in the table below:

Generalized Profile

DEPTH (ft)	SOIL DESCRIPTION	Density or Consistency	Calibrated Penetrometer (TSF)	SPT Values (Blows/Ft)
0 to 0.1	1.0 inch +/- Gravel	N/A		N/A
0.1 to 3.0-6.0	CLAYEY SILT or SILT with some Clay and Mica Tan and Brown Note: Fill at south end of site (ML)	Stiff	2.0 to 3.5	5-14
3.0-6.0 to 8.0-12.0	SILT with varying amounts of Mica and Fine Sand , Tan, Grey Brown and Red (ML) Note Very hard layer or boulders at 6 feet in G-2 and G-3	Loose to Medium Dense		6-15 50+ at 6 feet In borings G-2 and G-3
8.0-12.0 to 12.5 to 20.0	SILT with varying amounts of Mica and Fine Sand , Tan, Brown and Red (ML)	Medium Dense		9-19
12.5-17.5	Rock encountered in Borings G-2 and G-3	Extra Dense		50+

Groundwater Observations

Observations for groundwater were made during sampling and upon completion of the drilling operations at each boring location. In auger drilling operations, water is not introduced into the boreholes, and the groundwater position can often be determined by observing water flowing into or out of the boreholes. Furthermore, visual observation of the soil samples retrieved during the auger drilling exploration can often be used in evaluating the groundwater conditions.

Groundwater was not observed any of the borings. The borings generally had dry cave in at 6 to 20 feet below the existing ground surface and the soil samples were not noted to be saturated in any of the borings. Based on these observations it appears the groundwater level at this site is in excess of 15 feet below the existing ground surface.

ANALYSIS AND RECOMMENDATIONS

Seismic Site Classification

Based on the results of our exploration with the presence of shallow rock, we calculate that the SEISMIC SITE CLASSIFICATION will be B for this site under the 2009 NC Building Code (IBC).

Foundations

Based on the results of our exploration, we anticipate that the proposed structure can be supported by shallow spread footing foundation systems placed to bear on the existing natural soils or compacted engineered fill soils.

We recommend that the proposed building be supported on a shallow spread footing foundation system. The spread footings may be designed to bear on either compacted Engineered Fill or suitable natural soils. For footings designed as discussed herein, a net allowable soil bearing pressure of 3,000 pounds per square foot (psf) may be utilized for column and wall footings. In order to attain this allowable capacity, it will be necessary to adhere to the design and construction recommendations discussed in the text of this report. Based on the design bearing pressure and the anticipated structural loads, total settlements are anticipated to be less than 3/4 inch with long term differential settlements of approximately one-half this amount.

The net allowable soil bearing pressure refers to that pressure which may be transmitted to the foundation bearing soils in excess of the final minimum surrounding overburden pressure. The bearing capacity at the final footing elevation should be verified in the field by an experienced Soils Engineer to assure that the in-situ bearing capacity at the bottom of each footing excavation is adequate for the design loads.

Care should be taken to design the site for positive drainage to prevent saturation of the SILTS at the site. In addition it is IMPORTANT that the site not be graded during

the wet periods of the year because of the moisture sensitivity of the soils encountered at the site.

Provided the foundation design and construction recommendations discussed herein are employed, the total settlement for the proposed structures is estimated to be less than 3/4 inch with differential settlements estimated to be a maximum of 1/2 inch between column footings and wall footings, or along 50-foot lengths of wall.

Footings should be positioned so as to avoid bearing above or in close proximity to any deep utilities or storm drains.

Slab on Grade Design

Prior to slab construction after fill placement, all exposed subgrades should be evaluated by the geotechnical engineer. If encountered in slab areas, any unsuitable materials should be undercut and either replaced with engineered fill or recompacted in accordance with the recommendations of this report. The stripped area should be observed by an experienced Soils Engineer during the time of construction in order to aid in locating all such unsuitable materials.

All lifts of engineered fill should be compacted to a minimum 95 percent of the maximum dry density obtained in accordance with ASTM Specification D-698, Standard Proctor Method. Engineered Fill material required to reach the design floor slab subgrade elevation should consist of an approved inorganic material classified as ML, SM, SC, SP or better and free of debris.

We recommend that the floor slab be isolated from the foundation footings so differential settlement of the structure will not induce shear stresses in the floor slab. Also, in order to minimize the crack width of any shrinkage cracks that may develop near the surface of the slab, we recommend mesh reinforcement be included in the design of the floor slab. The mesh should be in the top half of the slab to be effective.

We recommend the slabs-on-grade be underlain by a minimum of 6 inches of clean, angular gravel (crushed stone) having a maximum aggregate size of 1.5 inches. No. 57 Stone is considered suitable for this purpose. This porous fill layer will facilitate the fine grading of the building pad, provide more uniform bearing conditions, and help prevent the rise of water to the bottom of the slab (capillary action). As an alternate, should select off site borrow be readily available on this project, the porous fill layer can consist of 12 inches of relatively clean Sand classified as SP, SW or better with a maximum 5% passing the No. 200 sieve. Before placement of concrete, a polyethylene vapor barrier should be placed on top of the granular material to provide additional moisture protection. Slabs supported by well-compacted on site borrow or firm, natural subgrades treated as discussed herein can be designed assuming a Modulus of Subgrade Reaction (K_S) of 100 pounds per cubic inch.

Below Grade Walls

At this time there is no indication that retaining walls will be used at the project.

Drainage

As indicated previously groundwater is not expected to be an issue.

Positive drainage should be provided around the perimeter of the buildings to minimize moisture infiltration into the foundation soils. We recommend landscaped areas adjacent to the buildings or pavements be provided with a fall of at least 3 to 5% for the first 10 feet outward from the wall.

Additional drainage recommendations are provided under **Exterior Pavements.**

Exterior Pavements

For the construction of exterior pavements, we recommend that topsoil and any other soft or unsuitable materials be removed from the paved areas prior to fill placement. The stripped or filled surfaces should be proofrolled and carefully observed at the time of construction immediately prior to placement of the Stone Base in order to aid in identifying any localized soft or unsuitable materials. Such materials should be removed prior to Stone placement.

The grading information provided indicates that most of the proposed pavement areas will be supported on slight fill or existing fills. Based on topographic data and anticipated grading requirements for the site, soil classification performed on the on site materials, we estimate soaked CBR values of 3.5 in a saturated condition and 10.2 in a dry condition at 95 percent compaction. These values have been utilized in our evaluation using the Dollar General minimum pavement design sections compared with AASHTO pavement design standards. The following minimum pavement sections are recommended on this project:

Heavy Duty Pavements
EAL = 150,000
(Main traffic and truck access lanes if applicable)

Subgrade: Stable and compacted to a dry density of at least 95% of that soil's Standard Proctor maximum dry density (ASTM D-698).

Aggregate Base: 8.0 inches Aggregate Base (NCDOT Aggregate Base Course)

Asphalt Base: 2.0 inches Asphalt Concrete Base (NCDOT Superpave B-25.0B or equivalent).

Asphalt Surface: 2.0 inches Asphalt Concrete Surface (NCDOT Superpave SF-9.5B or equivalent).

Standard Duty Pavements

EAL = 30,000

(Automobile access and parking stalls)

Subgrade: Stable and compacted to a dry density of at least 95% of that soil's Standard Proctor maximum dry density (ASTM D-698).

Aggregate Base: 6.0 inches Aggregate Base (NCDOT Aggregate Base Course)

Asphalt Base: 1.5 inches Asphalt Concrete Base (NCDOT Superpave B-25.0B or equivalent).

Asphalt Surface: 1.5 inches Asphalt Concrete Surface(NCDOT Superpave SF-9.5B or equivalent).

It is noted that large, front loading trash trucks frequently impose concentrated front-wheel loads on pavement during trash pick-up. This type of loading typically results in rutting of the pavement and ultimately pavement failures. Therefore, we recommend that the pavement in trash pickup areas consist of a minimum 6-inch thick, mesh reinforced concrete slab supported on at least a 6.0 inch layer of Aggregate Base Material.

Fill Design and Construction

Soils available on site will consist of SILT (ML) and may be used in the building areas and parking areas if fill is required.

Soils available from off-site sources for use as Engineered Fill will be primarily granular in nature consisting of low plasticity SILTS (ML), or silty and clayey fine SANDS (SC, SM) or SANDS (SP, SW).

Building Pad fill should be designed to extend generally horizontally outward from the edge of the footings or pavement a distance of at least 10 feet.

Subgrade Preparation and Earthwork Operations

The near-surface soils at the site are medium stiff to stiff fine grained medium to low plasticity SILT and should provide adequate support at grade. However, there may be isolated areas where clay content and plasticity may exceed typical levels. Some areas may require some undercutting and/or re-compaction.

Care should be taken to design the site for positive drainage to prevent saturation of the SILTS at the site. In addition it is IMPORTANT that the site not be graded during the wet periods of the year because of the moisture sensitivity of the soils encountered at the site.

The soils observed in our borings are fine grained and are moisture sensitive. We recommend that the grading operations at this site be performed during the drier periods of the year (April 1st to November 30th). If grading is attempted during the wet winter months, extra cost for undercutting of saturated soils may be incurred. However, during the drier periods of the year, the moisture content of these soils may be adjusted using discing or other drying procedures to achieve moisture contents consistent with good compaction results.

After stripping to the desired grade and prior to fill placement, the stripped surface should be observed by an experienced Soils Engineer or his authorized representative. Proof-rolling using a dump truck or other construction equipment loaded to one-half capacity is recommended because of the proximity of the existing building. Any soft or unsuitable materials encountered during this proof rolling should be removed and replaced with engineered fill.

Following stripping, proof rolling, and subgrade preparation procedures, Engineered Fill can be placed. Subgrades which are clean and stable and to be covered by Engineered Fill need not be compacted. Fill used to support any part of the proposed foundation system and pavements should be placed in lifts not exceeding 8 inches in loose thickness, moisture conditioned to within +/- 3% of the optimum moisture content and compacted to at least 95% of the maximum dry density obtained in accordance with ASTM Specification D-698, Standard Proctor Method.

Field density testing of subgrades and each lift of fill should be performed at a rate of no less than one test per 5,000 square feet in the building area and one test per 10,000 square feet in the pavement areas.

It is recommended that the construction contract include a unit rate for undercut and backfill below subgrade elevations. The construction contract should also provide for a unit price for importation of a clean fill for placement to design subgrades.

The following fill types are recommended for use on this project:

Engineered Fill (on site): Soil Material obtained on site classified as ML or MH, SM, SC or better. (MH soils should not be used as within the building area or within 10 feet of the building footprint.

Engineered Fill (imported): Soil Material obtained off site classified as ML, SP, SW, SM, SC or better.

Porous Fill: Clean crushed gravel (No. 57 Stone) with a maximum aggregate size of 1.5 inches placed in a minimum 6 inch layer or clean Sand classified as SP, SW, or better with a maximum 5% passing the No. 200 Sieve placed in a minimum 12 inch layer.

Aggregate Base: Aggregate Base Course.

Difficult Excavation and Rock Excavation

Rock was encountered in our borings at the site. However, because of the minimum amount of cut and fill anticipated at the site rock may not be encountered at the site grading elevations. Therefore, we do not anticipate that rock excavation will be a significant issue at this site. However, it is possible that some rock will be encountered in utility trenches and possibly in the footing areas.

Construction Considerations

Proper compaction control of fill is an essential aspect of this project. Therefore, we recommend that all cut and fill operations be observed full-time by a qualified Soil Technician to determine if minimum earthwork and compaction requirements are being met.

Closing

We recommend that the construction activities be monitored full time by a qualified geotechnical engineering firm to provide the necessary overview and to check the suitability of the subgrade soils for supporting the footings. We would be most pleased to provide these services.

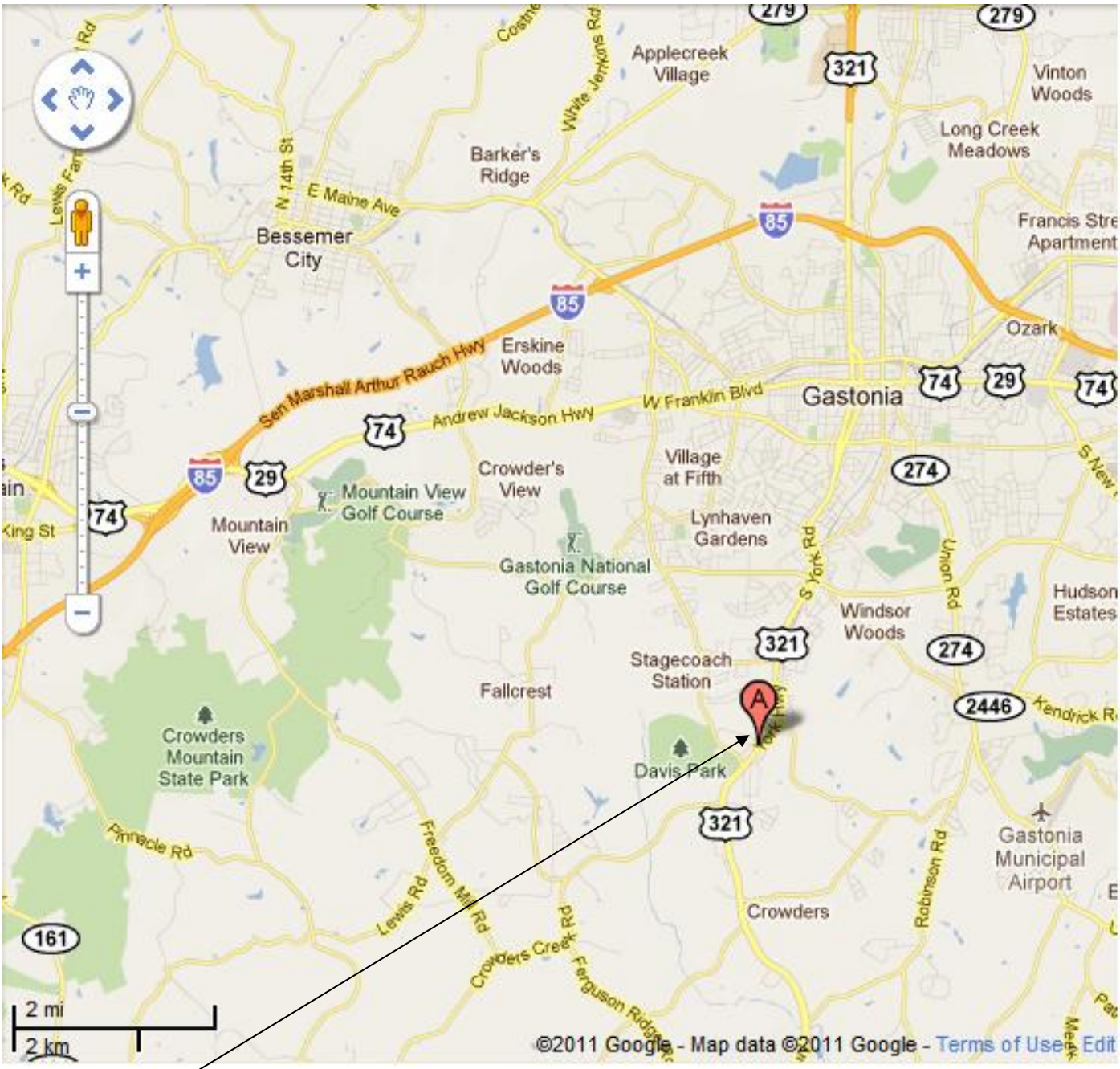
This report has been prepared in order to aid in the evaluation of this property and to assist the architect and/or engineer in the design of this project. The scope is limited to the specific project and locations described herein and our description of the project represents our understanding of the significant aspects relative to soil and foundation characteristics. In the event that any change in the nature or location of the proposed construction outlined in this report are planned, we should be informed so that the changes can be reviewed and the conclusions of this report modified or approved in writing by the soil and foundation engineer. It is recommended that all construction operations dealing with earthwork and foundations be reviewed by an experienced soils engineer to provide information on which to base a decision as to whether the design requirements are fulfilled in the actual construction. If you wish, we would welcome the opportunity to provide field construction services for you during construction.

The analysis and recommendations submitted in this report are based upon the data obtained from the soil borings and tests performed at the locations as indicated on

the Boring Location Diagram and other information referenced in this report. This report does not reflect any variations which may occur between the borings. In the performance of the subsurface exploration, specific information is obtained at specific locations at specific times. However, it is a well known fact that variations in soil and rock conditions exist on most sites between boring locations and also such situations as groundwater levels vary from time to time. The nature and extent of variations may not become evident until the course of construction. If variations then appear evident, it will become necessary for a reevaluation of the recommendations for this report after performing on-site observations during the construction period and noting characteristics and variations.

APPENDIX I

SITE LOCATION AND AERIAL PHOTOS



SITE - SOURCE: Google

SITE LOCATION

Subsurface Exploration Services
Proposed Dollar General
South Gastonia, North Carolina

ATC PROJECT NO.
45.27739.0056
SCALE: NOTED

SITE AERIAL WITH APPROXIMATE BORING LOCATIONS

NORTH

SOURCE: Gaston County GIS Aerial Photo

SITE AERIAL PHOTO

Subsurface Exploration Services
Proposed Dollar General
South Gastonia, North Carolina

ATC PROJECT NO.
45.27739.0056
SCALE: NOTED

SITE TOPO - PRIOR TO SITE GRADING FOR SALES LOT FROM USGS

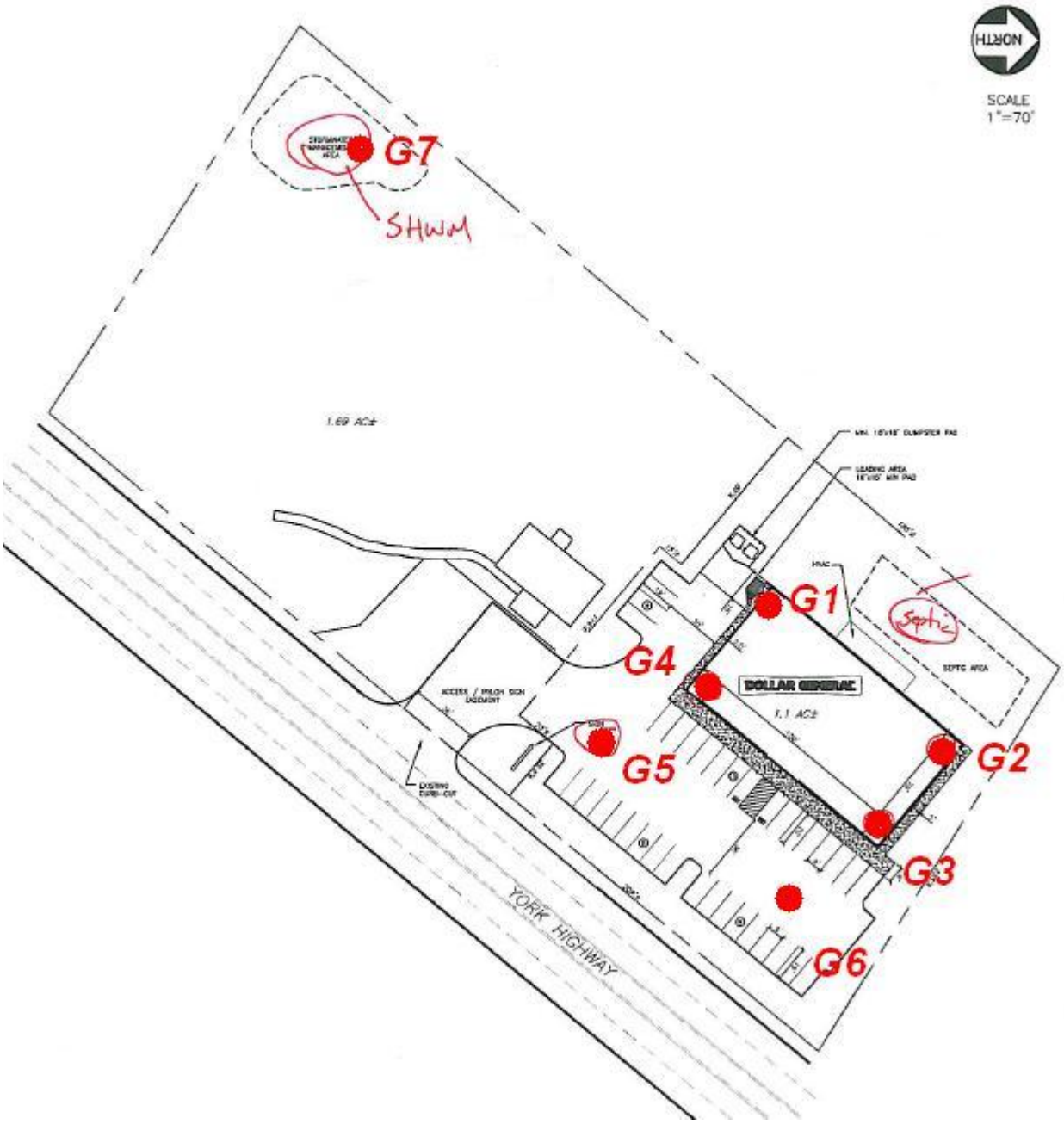
SOURCE: National Map Viewer

SITE TOPO		
Subsurface Exploration Services Proposed Dollar General South Gastonia, North Carolina	ATC PROJECT NO. 45.27739.0056 SCALE: NOTED	ATC

APPENDIX II

BORING LOCATION DIAGRAM

AND SITE LAYOUT PLANS



PROPOSED SITE LAYOUT AND BORING LOCATIONS

SOURCE: Primax Properties

SITE LAYOUT

Subsurface Exploration Services
Proposed Dollar General
South Gastonia, North Carolina

ATC PROJECT NO.
45.27739.0056
SCALE: NOTED

APPENDIX III

SOIL BORING LOGS

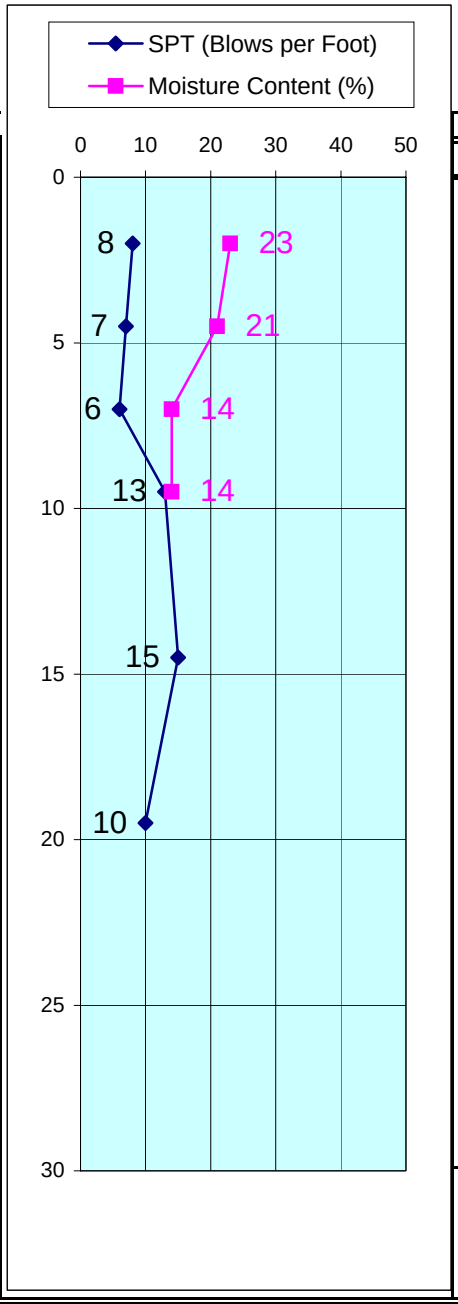
ATC Associates of North Carolina, PC

2725 E. Millbrook Road Suite 121 Phone: (919) 871-0999
Raleigh, North Carolina 27604 Fax: (919) 871-0335

LOG OF BORING G-1

Project Name: Dollar General
Project Location: South Gastonia, NC
Client: PRIMAX
ATC Project # : 45.27739.0056
Engineer: BVW

Depth (Ft)	Elev. (Ft)	Sample Number	SAMPLE DESCRIPTION	Depth Change (Ft)	Water Level & Lab Test Results
0			1.0 inch gravel	0.1	
		1	CLAYEY SILT, Some Sand, Trace Mica Red Brown, Stiff (ML)	3.0	
5		2	SILT, Some Mica Brown and Grey Loose to Medium Dense (ML) Note: Saprolite		
		3			
10		4			Dry Cave in 11.5 at 6 hrs
				12.0	
15		5	SANDY SILT, Some Mica Grey, Tan, and White, Medium Dense (ML)		
20		6			
			Boring Terminated at 20.0 Feet Hollow Stem Auger Used Full Depth	21.0	
25		7			
30					



Date Started: 7/27/2011
Date Completed: 7/27/2011
Driller: J&L

Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Page: 1 of 1

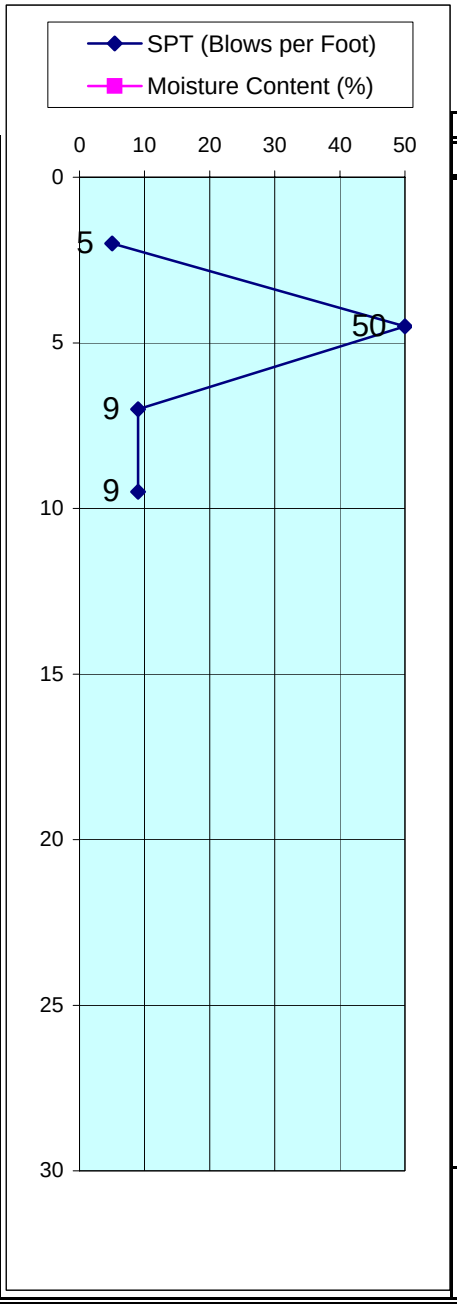
ATC Associates of North Carolina, PC

2725 E. Millbrook Road Suite 121 Phone: (919) 871-0999
Raleigh, North Carolina 27604 Fax: (919) 871-0335

LOG OF BORING G-2

Project Name: Dollar General
Project Location: South Gastonia, NC
Client: PRIMAX
ATC Project # : 45.27739.0056
Engineer: BVW

Depth (Ft)	Elev. (Ft)	Sample Number	SAMPLE DESCRIPTION	Depth Change (Ft)	Water Level & Lab Test Results
0			1.0 inch gravel	0.1	
5		1 2	SILT, Some Mica Brown and Grey Note-Saprolite Loose to Extra Dense (ML) Note: Boulder at 5.0 feet Offset twice to advance boring.		50/0.3 ft
10		3 4	SANDY SILT, Some Mica Grey, Tan, and White, Loose (ML) Note: Saprolite	6.0	Dry Cave in at 9 ft at 6 hrs
15		5	Weathered Rock 12-12.5 feet Auger Refusal at 12.5 feet Hollow Stem Auger Used Full Depth	12.0	
20		6			
25		7		21.0	
30					



Date Started: 7/27/2011
Date Completed: 7/27/2011
Driller: J&L

Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Page: 1 of 1

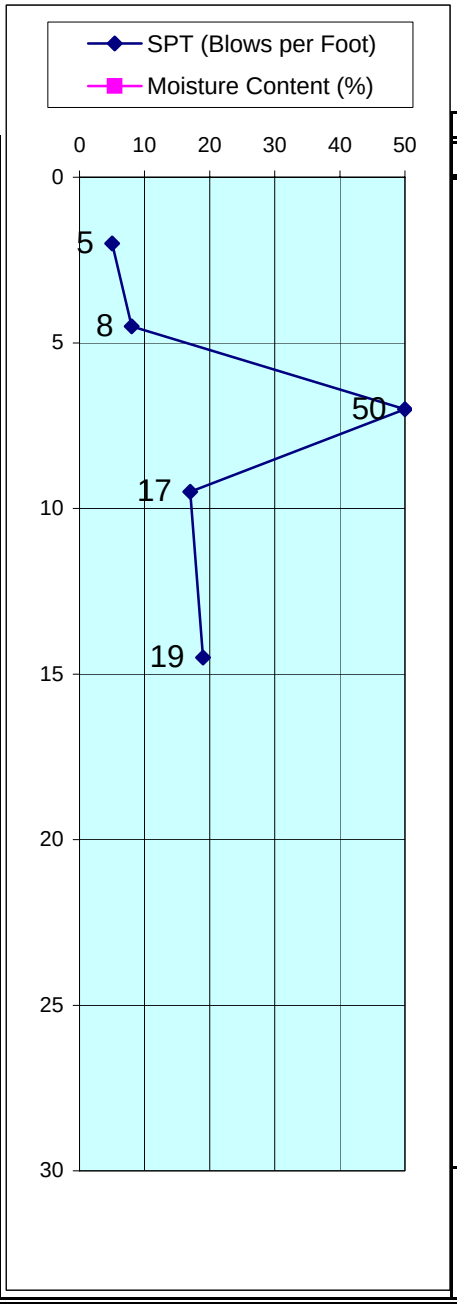
ATC Associates of North Carolina, PC

2725 E. Millbrook Road Suite 121 Phone: (919) 871-0999
Raleigh, North Carolina 27604 Fax: (919) 871-0335

LOG OF BORING G-3

Project Name: Dollar General
Project Location: South Gastonia, NC
Client: PRIMAX
ATC Project # : 45.27739.0056
Engineer: BVW

Depth (Ft)	Elev. (Ft)	Sample Number	SAMPLE DESCRIPTION	Depth Change (Ft)	Water Level & Lab Test Results
0			1.0 inch gravel	0.1	
5		1 2	SANDY SILT, Some Clay, Trace Mica Red Brown, Stiff (ML)		
10		3 4	SILT, Some Mica Brown and Grey Medium Dense to Extra Dense (ML) Note: Saprolite Very hard layer at 6 feet	6.0	50/0.4 ft Dry Cave in 10.5 at 4 hrs
15		5			
20		6	Weathered Rock at 16-17.5 ft Auger Refusal at 17.5 feet Hollow Stem Auger Used Full Depth	16.0	.
25		7			
30					



Date Started: 7/27/2011
Date Completed: 7/27/2011
Driller: J&L

Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Page: 1 of 1

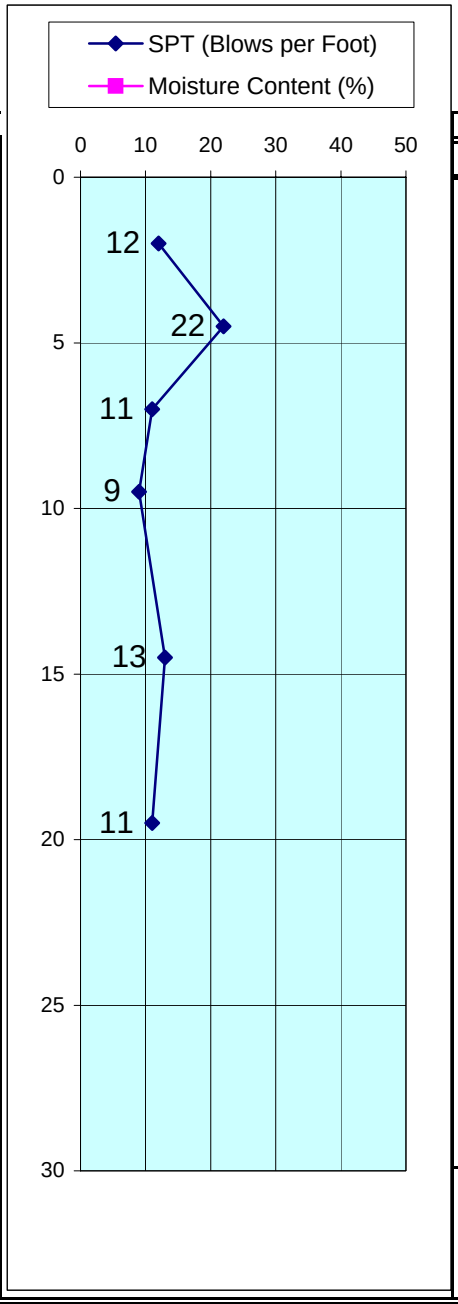
ATC Associates of North Carolina, PC

2725 E. Millbrook Road Suite 121 Phone: (919) 871-0999
Raleigh, North Carolina 27604 Fax: (919) 871-0335

LOG OF BORING G-4

Project Name: Dollar General
Project Location: South Gastonia, NC
Client: PRIMAX
ATC Project # : 45.27739.0056
Engineer: BVW

Depth (Ft)	Elev. (Ft)	Sample Number	SAMPLE DESCRIPTION	Depth Change (Ft)	Water Level & Lab Test Results
0			1.0 inch gravel	0.1	
		1	SANDY SILT, Some Clay, Trace Mica Red Brown, Stiff (ML)	3.0	
5		2	SILT, Some Mica Brown and Grey		
		3	Loose to Medium Dense (ML) Note: Saprolite		
10		4			Dry Cave in at 12 ft at 4 hrs
				12.0	
15		5	SANDY SILT, Some Mica Grey, Tan, and White,		
			Medium Dense (ML)		
20		6			
			Boring Terminated at 20.0 Feet		
			Hollow Stem Auger Used	21.0	
25		7	Full Depth		
30					



Date Started: 7/27/2011
Date Completed: 7/27/2011
Driller: J&L

Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Page: 1 of 1

ATC Associates of North Carolina, PC

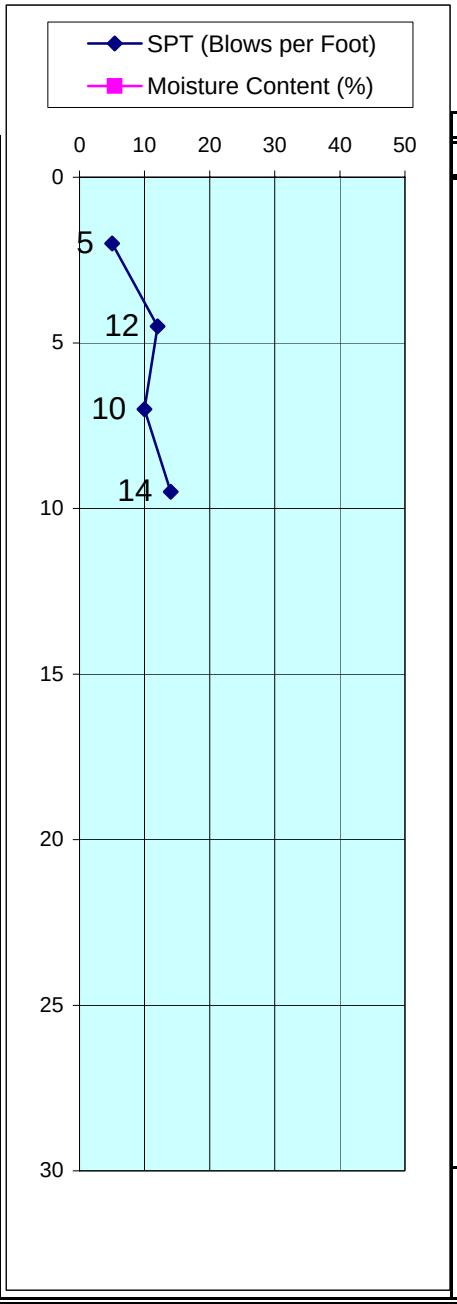
2725 E. Millbrook Road Suite 121 Phone: (919) 871-0999

Raleigh, North Carolina 27604 Fax: (919) 871-0335

LOG OF BORING G-5

Project Name: Dollar General
Project Location: South Gastonia, NC
Client: PRIMAX
ATC Project # : 45.27739.0056
Engineer: BVW

Depth (Ft)	Elev. (Ft)	Sample Number	SAMPLE DESCRIPTION	Depth Change (Ft)	Water Level & Lab Test Results
0			1.0 inch gravel	0.1	
5		1 2	SANDY SILT, Trace Clay and Mica Tan and Brown, Loose to Medium Dense (ML) Note: FILL		
10		3 4	SILT, Some Clay and Mica Red Brown and Grey Medium Dense (ML) Note: Saprolite	6.0	Dry Cave in 7.0 ft at 4 hrs
15		5	Boring Terminated at 10.0 Feet Hollow Stem Auger Used Full Depth		
20		6			
25		7			
30					



Date Started: 7/27/2011
Date Completed: 7/27/2011
Driller: J&L

Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Page: 1 of 1

ATC Associates of North Carolina, PC

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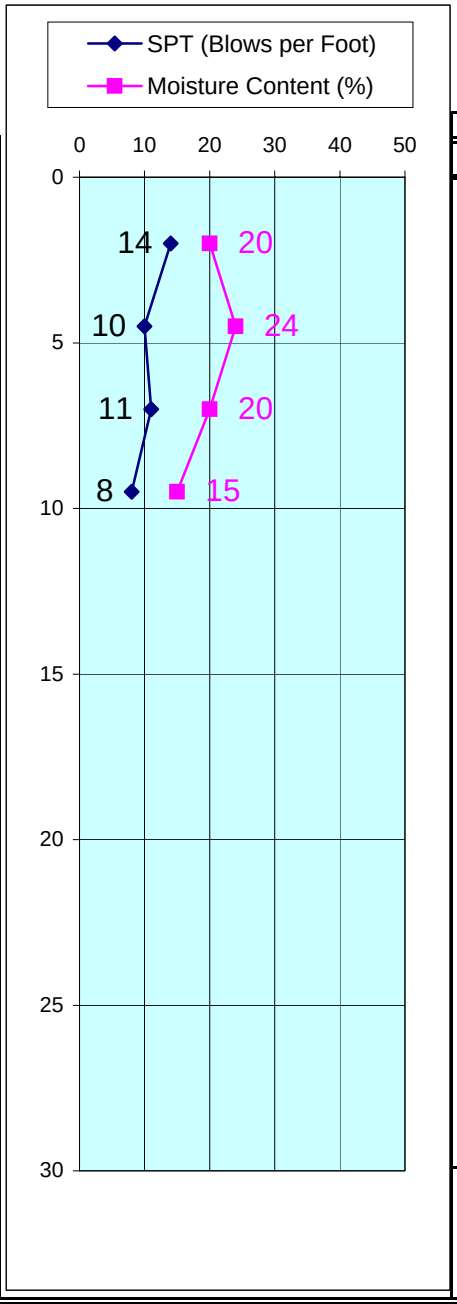
LOG OF BORING G-6

Project Name: Dollar General
Project Location: South Gastonia, NC
Client: PRIMAX
ATC Project # : 45.27739.0056
Engineer: BVW

Depth (Ft)	Elev. (Ft)	Sample Number	SAMPLE DESCRIPTION	Depth Change (Ft)	Water Level & Lab Test Results
0			1.0 inch gravel	0.1	
		1	SILT, Some Clay Trace Mica Reddish Brown, Medium Dense, (ML)		
5		2	FINE SANDY SILT, Trace Mica Red Brown and Grey Medium Dense (ML)	3.0	
		3	Note: Saprolite		Dry Cave in 6.5 ft at 3 hrs
10		4			
			Boring Terminated at 10.0 Feet Hollow Stem Auger Used Full Depth		
15		5			
20		6			
25		7			
30					



Date Started: 7/27/2011
Date Completed: 7/27/2011
Driller: J&L

Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Page: 1 of 1

ATC Associates of North Carolina, PC

2725 E. Millbrook Road Suite 121 Phone: (919) 871-0999

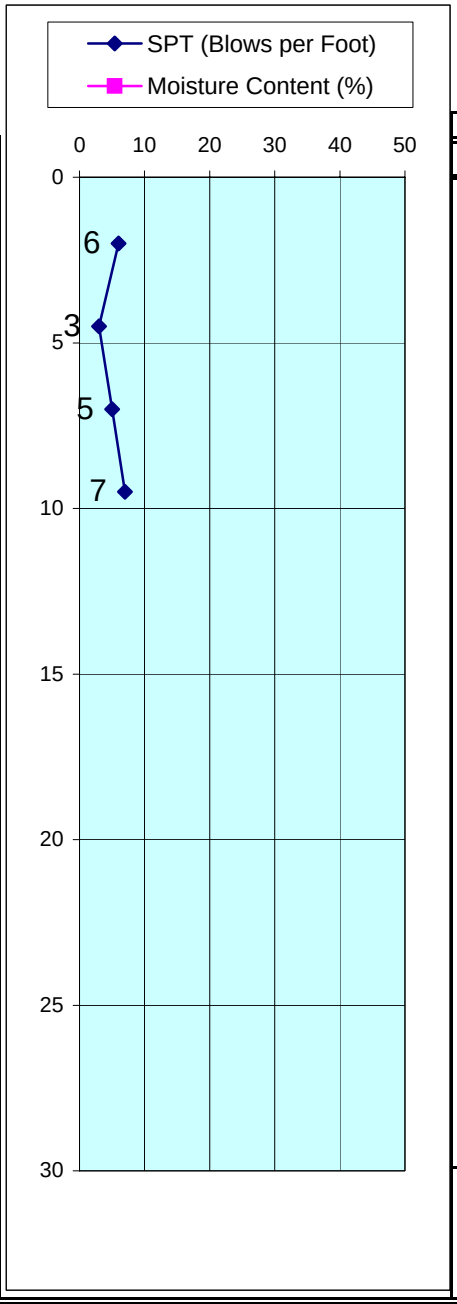
Raleigh, North Carolina 27604 Fax: (919) 871-0335

LOG OF BORING G-7

Project Name: Dollar General
Project Location: South Gastonia, NC
Client: PRIMAX

ATC Project # : 45.27739.0056
Engineer: BVW

Depth (Ft)	Elev. (Ft)	Sample Number	SAMPLE DESCRIPTION	Depth Change (Ft)	Water Level & Lab Test Results
0			1.0 inch gravel	0.1	
5		1 2	CLAYEY SILT, Trace Mica Red Brown and Brown, Medium Stiff (ML) Note: FILL		
10		3 4	SILTY SAND, Some Clay and Mica Brown and Grey, Loose Wet, (SM)	8.0	Dry Cave in 7.0 ft at 4 hrs Wet soil at 9 ft
15		5	Boring Terminated at 10.0 Feet Hollow Stem Auger Used Full Depth		
20		6			
25		7			
30					



Date Started: 7/27/2011
Date Completed: 7/27/2011
Driller: J&L

Drilling Method: Hollow Stem Auger
Sampling Method: Split Spoon
Page: 1 of 1

APPENDIX IV

LABORATORY TEST DATA

ATC Associates of North Carolina PC
2725 E. Millbrook Rd
Suite 121
Raleigh, NC 27604

ASTM D 2216- Determination of Water Content of Soil and Rock by Mass

ATC Project Name:	**Dollar General Kernersville**	Test By:	**LAF**
Project Number:	**45.27739.0052**	ATC PM:	**BVW**
Test Date:	**8/14/11**	Date Sample In:	**8/2/11**
In- House:	**Yes**	Deviations:	**None**
Sample Collected by:	**JDL**		

Boring Number	Sample Number	Depth (Ft)	Moist. Cont. (%)	Tons/ SF
G-1	S1	1.0-2.5	23.3	
	S2	3.5-5.0	20.5	
	S3	6.0-7.5	14.3	
	S4	8.5-10	13.7	
G-6	S1	1.0-2.5	20.0	
	S2	3.5-5.0	24.1	
	S3	6.0-7.5	19.7	
	S4	8.5-10	15.0	

ATC Associates of North Carolina PC
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ATC Project Name	**Dollar General S. Gastonia**				
Project Job #	**45.27739.0056**			Date In	**8/2/11**
Boring #	**G1/S1**	Depth (Ft)	**1.0-2.5**	Date Test	**8/14/11**
Natural water content	**23.3%**			Test By	**BVW**
ASTM Test Method	**4318**			ATC PM	**TH**
Sample description	**Red Brown CLAYEY SILT, Some Sand and Mica (MH)**				
Deviations	**None**	In House	**Yes**	Sampled by	**JL Drillers**

Plastic Limit

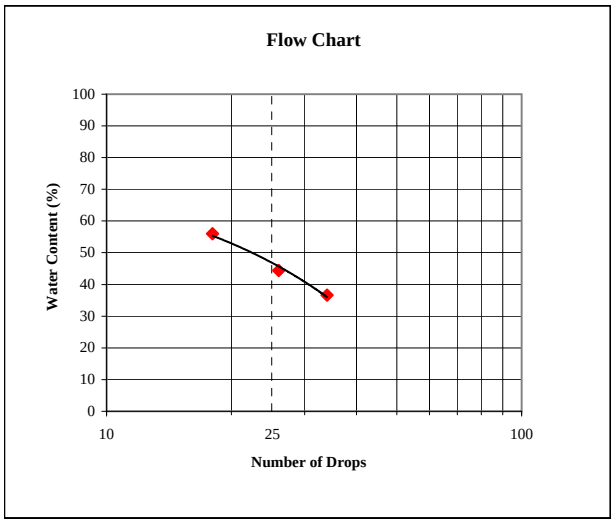
Tare #	Q	16	13	
Tare weight	21.5	14.24	14.24	
Tare + Wet Soil	26.22	18.34	17.22	
Tare + Dry Soil	25.02	17.34	16.49	
Weight of water	1.2	1	0.73	
Weight of dry soil	3.52	3.1	2.25	
Water content	34.1	32.3	32.4	33

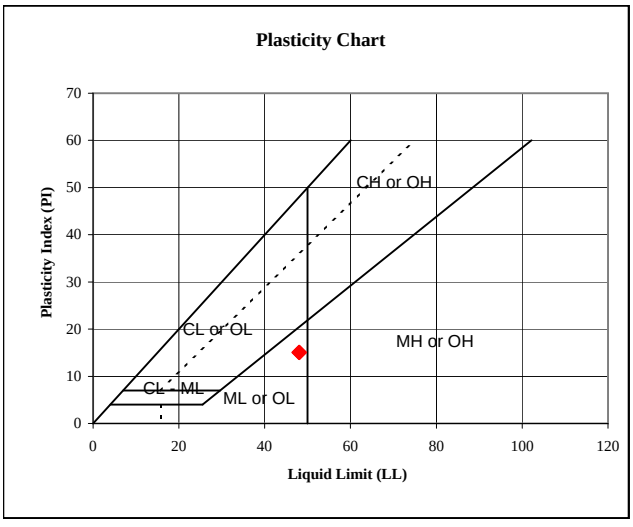
<= Plastic Limit

Liquid Limit

Tare #	L	E	18	
Tare weight	21.2	14.27	14.16	
Tare + Wet Soil	27.54	23.67	22.49	
Tare + Dry Soil	25.84	20.78	19.5	
Weight of water	1.7	2.89	2.99	
Weight of dry soil	4.64	6.51	5.34	
Water content	36.6	44.4	56.0	
Number of blows	34	26	18	
Water content at 25 blows			48	

<= Liquid Limit



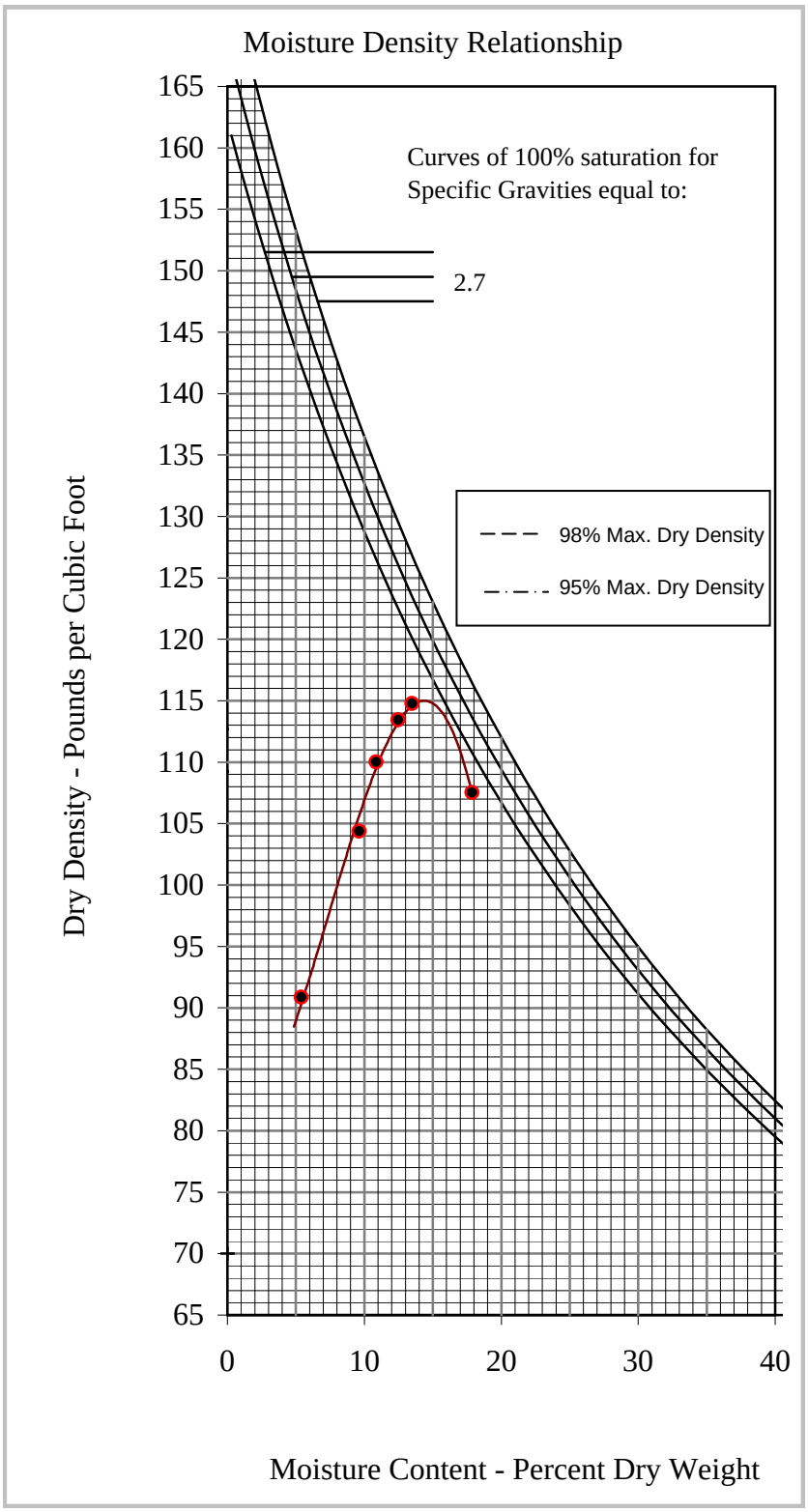


Liquid Limit	48	**Natural water content**	23.3%
Plastic Limit	33	**Classification**	ML
Plasticity Index	15		

Job Name
Dollar General - S. Gastonia
Sample No.
G-5 1 to 5 ft
Sample Description
Red Brown Fine Sandy SILT, Some Clay (ML)
Maximum Dry Density (lb. / cu. ft.)
115.0
Optimum Moisture (%)
14.5

Job Number
Not Yet Assigned
Date
August 17, 2011

Test Method
ASTM D698
Test Procedure
C



APPENDIX V

SITE PHOTOS

Proposed Dollar General
South Gastonia, North Carolina
Photos from August, 2011

Photo 1: View looking southwest along front of property from northeast corner.

Photo 2: View looking south from north corner of property.

Photo 3: View of rock at ground surface at north half of the site..

Photo 4: Water flowing from possible broken pipe at north end of site.

Photo 5: Looking north with existing pavement in the foreground.

Photo 6: Looking west to existing storm dry pond overgrown with bamboo.