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SAILORS ENGINEERING ASSOCIATES, INC.

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1675 SPECTRUM DRIVE • LAWRENCEVILLE, GEORGIA 30043 • TEL (770) 962-5922 • FAX 962-7964

May 24, 2004

Mr. Jay Betts  
United Corners  
525 Pharr Road  
Atlanta, Georgia 30305

RE: Interim Geotechnical Investigation Report  
Kroger - Newnan Crossing  
Newnan Crossing Blvd. at Lower Fayetteville Rd.  
Coweta County, Georgia  
SEA Job #041-160

Mr. Betts:

In accordance with your written authorization, Sailors Engineering Associates, Inc. has commenced the geotechnical investigation for the subject project and is pleased to submit this interim report with our conclusions and recommendations. After completion of the field and laboratory investigations, a copy of the completed geotechnical investigation report will be submitted.

**GENERAL**

The site under investigation is located along and to the north of Lower Fayetteville Road at the northeast corner of its intersection with Newnan Crossing Boulevard in Newnan, Coweta County, Georgia. The property is bordered on the east by undeveloped property and on the north by a large multi-use development currently being graded. Several underground and overhead utilities were observed along the adjoining roadways. No utilities were observed within the interior of the site.

Site topography consists of moderate to gentle slopes descending from a ridge extending to the central portion of the site from the northwest property corner. A ditch that drains to the east is located along the northern property boundary. Topographic relief across the property is approximately 50 feet, from an elevation of 946.0 feet along the ridge located in the northwestern and central portions of the site, to an elevation of 896.0 feet along the eastern property boundary. Site drainage is primarily to the east. Site vegetation consists of small to medium coniferous and deciduous trees with moderate to heavy underbrush. No structures were observed on the property.

A Kroger grocery store, approximately 200 feet by 350 feet in plan dimension, with adjoining shops and accompanying parking and driveway areas is proposed for the site. According to a preliminary grading plan provided by via email from Robertson/Loia/Roof on May 6, 2004, the finished floor elevation for the proposed structures is 922 feet with finished grades ranging from 912.0 to 942.0 feet. These elevations will result in cuts of up to 28 feet and fills of up to 35 feet.

The purpose of our investigation was to determine the presence of unsuitable soil conditions, near surface ground water or rock that would adversely affect construction costs, and to provide recommendations for site preparation and foundation design.

### **AREA GEOLOGY**

Coweta County, Georgia is located in the physiographic province known as the Piedmont which extends from the Hudson River at the north to Alabama at the south. The Piedmont is the least mountainous part of the Appalachian Highlands. The surface of the Piedmont can be described as a broadly undulating or rolling topography with low knobs or ridges, and valleys 30 to 300 feet thick. The underlying crystalline rocks of the Piedmont are metamorphic schists, gneisses, quartzites and slates, and igneous granites and gabbros. In the Newnan area, the base rock consists of sillimanite schist.

### **FIELD INVESTIGATION**

To date the field investigation consists of the thirteen soil test borings performed at the locations shown on the attached Boring Plan. An additional ten soil test borings are proposed for the subject site. The test borings were extended through soils by mechanical drilling procedures using continuous spiral hollow auger flights with a steel fingered Hawthorne bit as the cutting device. The consistencies of the underlying soils were determined by Standard Penetration Testing in accordance with ASTM Specification D1586. Samples were obtained with a standard 1.4 inch I.D., 2.0 inch O.D., split tube sampler as illustrated in the Appendix. The sampler was first seated 6.0 inches to penetrate any loose cuttings; then it was driven an additional foot with blows of a 140 pound hammer falling 30.0 inches. The number of hammer blows required to drive the sampler each 6.0 inch increment is recorded in the Boring Logs. The number of blows required to drive the sampler the final foot is the standard penetration resistance, an indicator of soil strength.

Water level observations were made during the drilling operations. The elevation of the water table fluctuates during the year and is directly related to the amount of rainfall in the months prior to observation.

The elevations shown on the Logs of Boring were interpolated from a two foot contour interval topographic map and are presumed accurate within +/- 1.0 feet. This map was provided via email from Robertson/Loia/Roof on May 6, 2004.

## SUBSURFACE CONDITIONS

The subsurface conditions encountered on site, as determined by our drilling program, were as follows:

Topsoil: A layer of topsoil ranging in thickness from 2.0 to 4.0 inches and consisting of brown silty sand with a little organics was encountered at all of the test boring locations.

Residual materials and saprolites: Beneath the topsoil and extending to penetration depth of all borings were reddish brown, brown, dark brown, light greyish brown, greyish brown, light grey and white sands with varying amounts of silt and silts with varying amounts of sand, some with varying amounts of rock fragments. These were residual materials and saprolites weathered in place from the parent rock. Standard penetration and drilling resistances in these materials were indicative of medium to hard consistency.

Ground water was not encountered in any of the test borings performed on site. Hard drilling materials and auger refusal were encountered as noted on the individual Logs of Boring and in the Conclusions and Recommendations section of this report.

## CONCLUSIONS AND RECOMMENDATIONS

1. All areas to receive pavement, structures or fill material should be stripped of organic material and topsoil prior to the commencement of construction. The topsoil should be stockpiled on-site for future use in landscaped areas (if approved by the owner), disposed of in a designated area on-site, or wasted off-site. Topsoil should not be used as structural fill.
2. All areas to remain at grade or to receive fill should be proof-rolled with a loaded tandem-axle dump truck in the presence of a representative of the Geotechnical Engineer. Cut areas should be proof-rolled once rough subgrade has been reached. Any soft soils encountered during proof-rolling should be stabilized by compaction or undercut and replaced with suitable compacted materials.

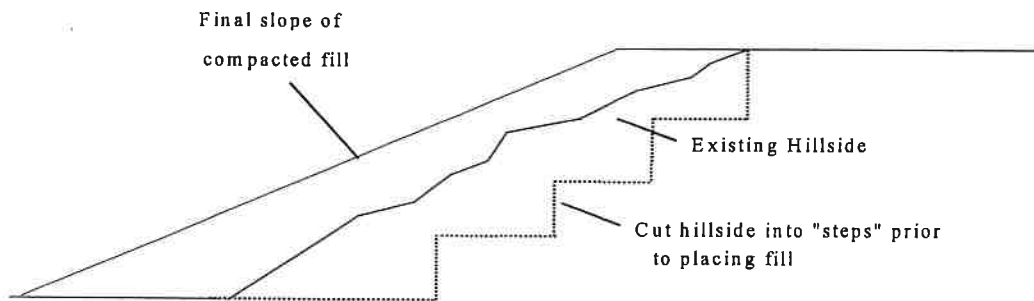
Some removal of soft surface soils is anticipated along the base of the drainage swale located along the northern property boundary.

3. All fill material to be utilized on the project should be free of organic or otherwise deleterious materials and compacted to minimum dry densities corresponding to 95% of maximum dry density, and at moisture contents within +/- 3% of optimum moisture content, as obtained by Standard Proctor, ASTM D698. The top 2.0 feet of all areas to receive pavement or structures should be compacted to 98% of its standard proctor value.

Fill should be placed in lifts not to exceed 6.0 inches in compacted fill thickness in mass fill areas, and as needed to obtain the required compaction in ditch lines and foundation wall backfill.

All soils encountered on site, with the exception of the topsoil, will be suitable for use as structural fill if they are at +/- 3% of their optimum moisture content and free of organic or otherwise deleterious materials.

4. Cut or fill slopes should not be steeper than 2.0H:1.0V. Fill slopes should be compacted in horizontal lifts not to exceed 6.0 inches in compacted thickness as fill is placed. Fill materials to be placed on existing slopes should be benched in as shown below.



5. All fill operations should be monitored by a representative of the Geotechnical Engineer. He should perform sufficient density tests to verify that specified compaction is obtained. Unless the developer or major tenant has more stringent testing frequency requirements, we recommend a density testing frequency as follows:
  - A. Underneath and extending 5.0 feet outside of building areas, tests should be performed at the rate of one test per 10,000 square feet per 6.0 inches of compacted fill thickness.
  - B. In parking areas and slopes, tests should be performed at the rate of one test per 40,000 square feet per 6.0 inches of compacted fill thickness.
6. Once the above site preparation items have been accomplished, the site will be suitable to receive the proposed building founded on spread and strip footings designed for a maximum net allowable soil bearing pressure of 3000 pounds per square foot. The maximum anticipated total and differential settlements for the structure are 1.0 inch and 0.5 inch respectively.

Footing widths should be in accordance with the structural engineer's design but should be no less than 18.0 inches for continuous footings and 24.0 inches for individual footings.

The prevailing building code for the subject site is the 2000 edition of the International Building Code with the Georgia Amendments. This code requires a minimum embedment

depth of 12.0 inches for perimeter foundations. The frost penetration depth for this area is less than 6.0 inches. The site class, as per Table 1615.1.1 of this code and standard penetration resistance values obtained in our soil test borings, is best described as a "C".

7. The base of all footings should be inspected by a representative of the Geotechnical Engineer immediately prior to the placement of reinforcing steel or concrete. He should verify that soil capable of supporting the design bearing pressure has been obtained in each case.
8. For this project we feel that a granular base under the floor slab to serve as a capillary barrier is not necessary, however, a vapor barrier should be placed on the building pad prior to concrete placement.
9. The following parameters should be used for retaining wall design:
  - a. Equivalent fluid pressure for walls not allowed to move: 65 pounds per cubic foot
  - b. Equivalent fluid pressure for walls allowed to move sufficiently to develop active conditions: 40 pounds per cubic foot
  - c. Equivalent fluid pressure for passive conditions for walls with soils behind and in front of them that will not be disturbed by future erosion or construction: 360 pounds per cubic foot
  - d. Maximum allowable bearing pressures for footing design: 3000 pounds per square foot
  - e. Coefficient of friction against sliding: 0.4
  - f. Drainage features such as weep holes and porous backfill should be utilized.
  - g. Compaction of backfill within 10.0 feet of walls should be performed with hand operated equipment, such as walk behind compactors and wacker packers.
  - h. If sloping backfill or toe conditions exist, the Geotechnical Engineer should be consulted for additional recommendations.

The soils encountered on site, with the exception of the topsoil, will be suitable materials for backfill against retaining walls. Compaction of materials against foundation walls should be performed using hand held compaction equipment.

10. All areas to receive pavement should be proof-rolled in the presence of a representative of the Geotechnical Engineer immediately prior to the placement of base course. Soft areas encountered during proof-rolling should be stabilized by compaction or undercut and replaced with suitable compacted fill.
11. At the time of this report, the California Bearing Ratio determinations had not been completed. After completion of the laboratory work and the additional soil test borings the geotechnical report submitted will include recommendations for flexible and rigid pavement sections designed in accordance with Kroger's criteria.

12. The ground water table was not encountered at any of the test boring locations and should not be of consequence during site grading.
13. Auger refusal, hard drilling materials and weathered rock were encountered in a few of the test borings performed on the site. The following table lists locations, depths of hard consistency soils and depths of penetration for each location. The table should be reviewed by the grading and utility contractor, the site design engineer and the foundation design engineer.

Boring No.	Hard		Auger		Penetration Without	
	Consistency Soil or Weathered Rock		Refusal		Refusal Being Encountered	
	Depth (ft)	Elevation (ft)	Depth (ft)	Elevation (ft)	Depth (ft)	Elevation (ft)
B-6	5.5	928.5	8.0	926.0	---	---
B-10	23.0	918.0	---	---	25.0	916.0
B-18	2.0	922.0	---	---	15.0	909.0

The hard drilling materials and auger refusal depths at boring location B-6 in the northern portion of the site are above the proposed final grades. Isolated areas of rock removal may be required in this portion of the site. The hard drilling materials at boring locations B-10 and B-18 are right at the anticipated final elevation. In general, excavation below hard drilling will be difficult and may require the use of a Caterpillar D-8 or equivalent with single tooth ripper. Trench excavations below hard drilling depths will be difficult and may require blasting.

Additional borings will be performed in the northern portion of the site near boring locations B-6 and B-10 to further evaluate the presence of rock.

If we can be of further service to you on this project, please contact us at your convenience.

Respectfully submitted,

SAILORS ENGINEERING ASSOCIATES, INC.



*Leland H. Schuman*  
 Leland H. Schuman, P.E.  
 Project Engineer

*Jim D. Sailors*  
 Jim D. Sailors, P.E.  
 Principal Engineer

**APPENDIX**

## SOIL CONSISTENCY DESIGNATIONS

(Based on results of Standard Penetration Tests performed according to ASTM Specification D-1586-84)

NUMBER OF BLOWS ("N"): Shall be defined as the number of blows of a 140 pound hammer falling free a distance of 30 inches required to drive a standard split spoon sampler (2" O.D. and 1.4" I.D.) 1 foot.

When the sample is primarily cohesionless, use the following consistency table:

<u>NUMBER OF BLOWS (N)</u>	<u>CONSISTENCY DESIGNATION</u>
0 - 4	Very Loose
5 - 10	Loose
11 - 30	Medium
31 - 50	Dense
51 or more	Very Dense

When the sample is primarily cohesive, use the following consistency table:

<u>NUMBER OF BLOWS (N)</u>	<u>CONSISTENCY DESIGNATION</u>
0 - 2	Very Soft
3 - 4	Soft
5 - 8	Medium
9 - 15	Stiff
16 - 30	Very Stiff
31 or more	Hard

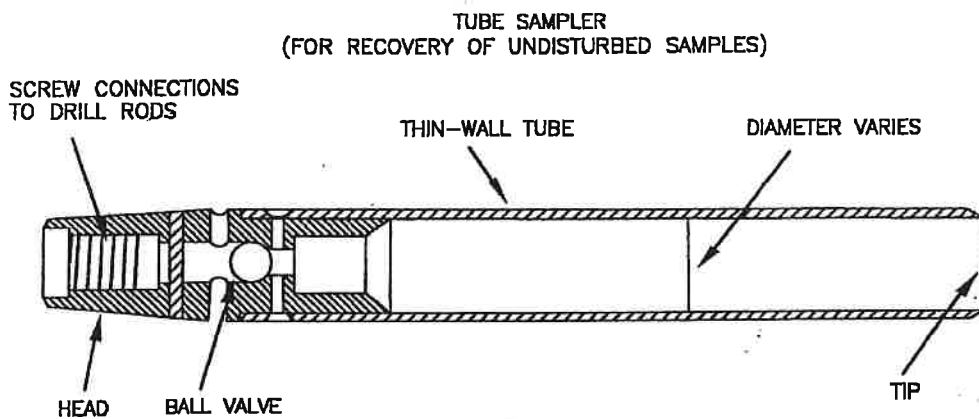
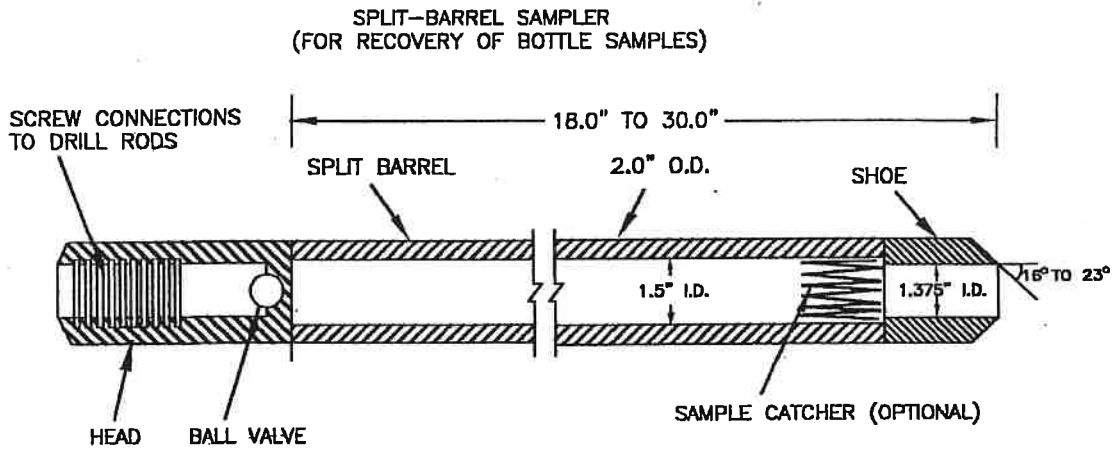


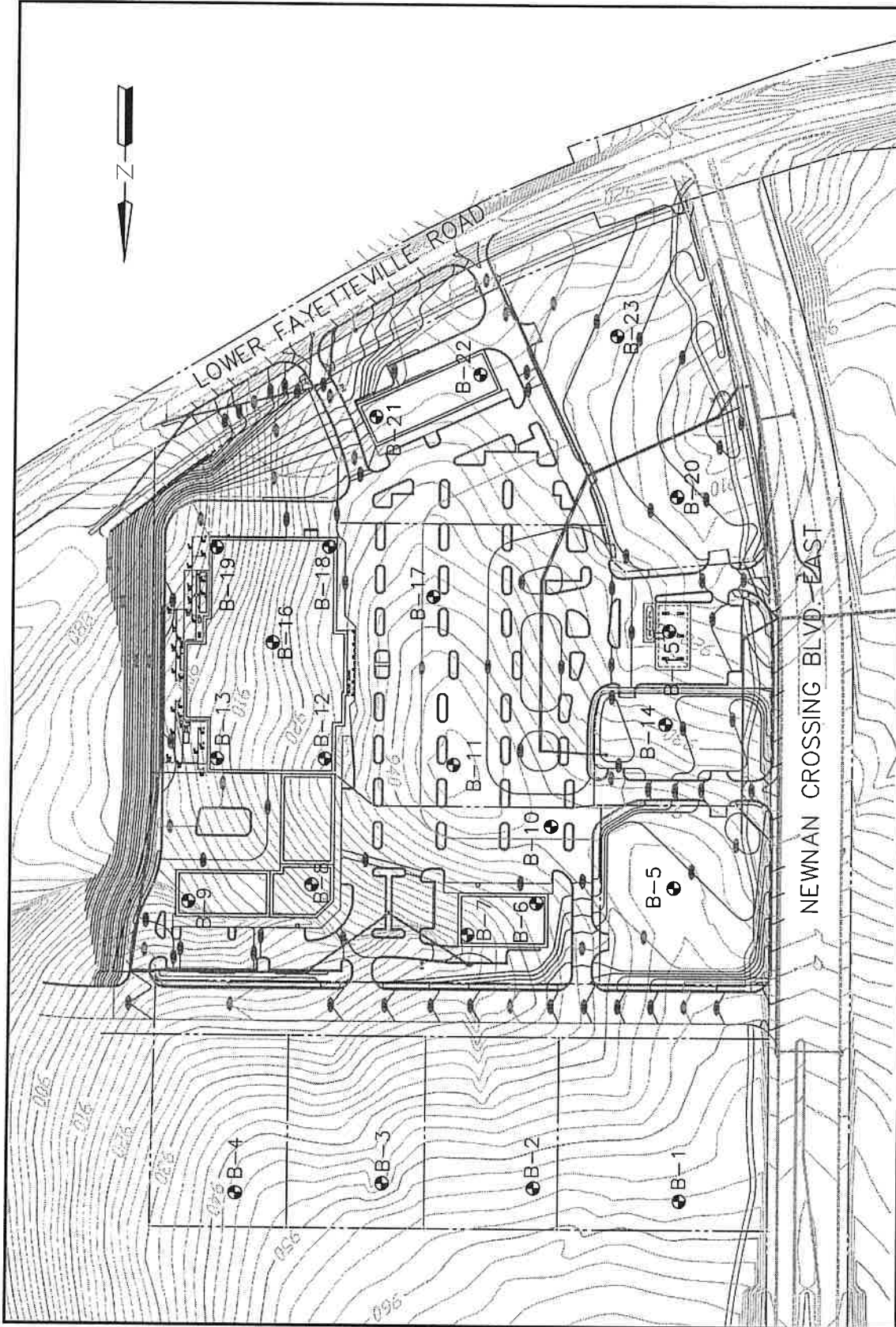
## SAMPLING PROCEDURES

Soil Sampling & Penetration Testing is performed in accordance with ASTM D1586-84.

The Standard Penetration Resistance is the number of blows of a 140 pound hammer falling 30 inches to drive a 2.0 inch O.D., 1.375 inch I.D. split barrel sampler one foot.

The Undisturbed Sampling Procedure is performed in accordance with ASTM Specification D1587-83.





**KROGER - NEWNAN CROSSING**  
 Newnan Crossing Boulevard at Lower  
 Fayetteville Road  
 Newnan, Georgia; Coweta County

Job No. 041-160

# BORING PLAN

● B- Boring Location  
 ● B- Remaining Boring Location

Scale: 1"=200'



# LOG OF BORING

SHEET 1 OF 1  
BORING NO.  
B-5

CONTRACTED WITH: UNITED CORNERS, INC.

JOB NO.      DATE:  
041-160      05/13/04

PROJECT NAME: Kroger - Newnan Crossing

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
945.0	Topsoil - 3.0" brown silty sand with a little organics					
920.0	Reddish brown silt with a little sand (residual)	1	1	SS	5-6-12	Drilling medium Drilling firm
		2				
		3	2	SS	8-9-11	Drilling medium
	4					
	Reddish brown sand with some silt (residual)	5				
		6	3	SS	8-7-6	
		7				
	Brown sand with a trace of silt (saprolite)	8				
		9	4	SS	5-5-6	
		10				
		11				
		12				
		13				
		14	5	SS	5-8-9	
		15				
	16					
	17					
	18					
	19	6	SS	5-6-6		
	20					
	21					
	22					
	23					
	24	7	SS	5-6-6		
25	Boring terminated at 25.0 feet				Note: hole plugged at 16.5 ft at 0 hrs - no water encountered above that depth	
26						
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SEA

# LOG OF BORING

SHEET 1 OF 1  
BORING NO.

CONTRACTED WITH: **UNITED CORNERS, INC.**

B-6

PROJECT NAME: **Kroger - Newnan Crossing**

JOB NO.  
041-160

DATE:  
05/14/04

LOCATION: **Coweta County, Georgia**

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
934.0	Topsoil - 3.0" brown silty sand with a little organics					
	Reddish brown silt with a little sand (residual)	1	1	SS	3-3-3	Drilling medium
		2				Drilling firm
		3	2	SS	7-11-13	
		4				
	Light grey sand with some rock fragments and a trace of silt (saprolite)	5				Drilling hard
		6	3	SS	8-50/3"	
926.0	Auger refusal at 8.0 feet	7				Note: hole plugged at 6.2 ft at 0 hrs - no water encountered above that depth
		8				
		9				
		10				
		11				
		12				
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SEA

# LOG OF BORING

SHEET 1 OF 1  
BORING NO.

CONTRACTED WITH: UNITED CORNERS, INC.

B-10

PROJECT NAME: Kroger - Newnan Crossing

JOB NO.  
041-160

DATE:  
05/14/04

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
941.0	Topsoil - 4.0" brown silty sand with a little organics					
916.0	Reddish brown sandy silt (residual)	1	1	SS	5-7-9	Drilling medium
		2				Drilling firm
		3				
		4	2	SS	10-16-22	
		5				
		6	3	SS	8-7-11	
		7				
	Dark brown sand with a little silt (saprolite)	8				
		9				
		10	4	SS	7-8-12	
		11				
		12				
		13				
		14	5	SS	11-7-11	
	Greyish brown sand with a trace of silt (saprolite)	15				
		16				
		17				
		18				
		19	6	SS	6-5-8	
		20				
		21				
	Boring terminated at 25.0 feet	22				Drilling hard
		23				
		24	7	SS	50/2"	
		25				
		26			Note: hole plugged at 19.7 ft at 0 hrs - no water encountered above that depth	
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**SEA**

# LOG OF BORING

SHEET 1 OF 1  
BORING NO.  
B-14

CONTRACTED WITH: UNITED CORNERS, INC.

JOB NO.      DATE:  
041-160      05/13/04

PROJECT NAME: Kroger - Newnan Crossing

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES	
			NO.	TYPE	BLOWS/6"		
929.0	Topsoil - 3.0" brown silty sand with a little organics						
914.0	Reddish brown silt with a little sand (residual)	1	1	SS	7-9-12	Drilling firm	
		2					
		3					
		4	2	SS	10-12-10		
		5					
	Boring terminated 15.0 feet	Brown sand with a little silt (saprolite)	6	3	SS	5-6-6	Drilling medium
			7				
			8				
			9	4	SS	3-4-5	
			10				
			11				
			12				
			13				
			14	5	SS	7-12-8	
			15				
16				Note: hole plugged at 11.9 ft at 0 hrs - no water encountered above that depth			
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SEA

# LOG OF BORING

SHEET 1 OF 1  
BORING NO.  
B-15

CONTRACTED WITH: UNITED CORNERS, INC.

JOB NO.      DATE:  
041-160      05/13/04

PROJECT NAME: Kroger - Newnan Crossing

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
920.0	Topsoil - 3.0" brown silty sand with a little organics					
	Reddish brown silt with a little sand (residual)	1	1	SS	5-6-7	Drilling medium  Drilling firm
	Brown sand with a little silt (saprolite)	2				
		3	2	SS	7-9-9	
		4				
		5				
		6	3	SS	7-7-10	
		7				
		8				
		9	4	SS	5-6-7	
		10				
		11				
		12				
		13				
		14	5	SS	8-9-12	
905.0	Boring terminated at 15.0 feet	15				
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		17				
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**SEA**

# LOG OF BORING

SHEET 1 OF 1  
BORING NO.

CONTRACTED WITH: UNITED CORNERS, INC.

B-16

PROJECT NAME: Kroger - Newnan Crossing

JOB NO.  
041-160

DATE:  
05/14/04

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
916.0	Topsoil - 3.5" brown silty sand with a little organics					
	Reddish brown sandy silt (residual)	1	1	SS	3-4-4	Drilling medium
	Brown sand with a little silt (saprolite)	2			6-7-8	
		3				
		4				
		5				
		6	3	SS	7-8-8	
		7				
		8				
		9				
		10	4	SS	7-6-6	
		11				
		12				
		13				
		14	5	SS	8-8-8	
901.0	Boring terminated at 15.0 feet	15				
		16				
		17				
		18				
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Note: hole plugged at 11.4 ft at 0 hrs - no water encountered above that depth

**SEA**



# LOG OF BORING

SHEET 1 OF 1  
BORING NO.

CONTRACTED WITH: UNITED CORNERS, INC.

B-17

PROJECT NAME: Kroger - Newnan Crossing

JOB NO.  
041-160

DATE:  
05/14/04

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
937.0	Topsoil - 3.5" brown silty sand with a little organics					
912.0	Reddish brown silt with a little sand (residual)	1	1	SS	4-7-8	Drilling medium
		2				Drilling firm
	Brown sand with a little silt (saprolite)	3	2	SS	8-12-14	Drilling medium
		4				
		5				
		6	3	SS	5-6-8	
		7				
		8				
		9	4	SS	4-4-6	
		10				
		11				
		12				
		13				
		14	5	SS	3-5-6	
		15				
		16				
		17				
		18				
		19	6	SS	5-5-6	
		20				
		21				
		22				
		23				
		24	7	SS	4-5-5	
	25				Note: hole plugged at 19.1 ft at 0 hrs - no water encountered above that depth	
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	40					
	Boring terminated at 25.0 feet					

**SEA**

# LOG OF BORING

SHEET 1 OF 1  
BORING NO.

CONTRACTED WITH: UNITED CORNERS, INC.

JOB NO.  
041-160

B-18  
DATE:  
05/13/04

PROJECT NAME: Kroger - Newnan Crossing

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
924.0	Topsoil - 3.0" brown silty sand with a little organics					
909.0	Reddish brown silt with a little sand (residual)	1	1	SS	6-7-9	Drilling medium
		2				Drilling hard
	Dark brown sand with some silt and rock fragments (saprolite)	3	2	SS	33-38-30	
		4				
	Brown sand with a little silt (saprolite)	5	3	SS	7-8-11	Drilling firm
		6				
		7				
		8				Drilling medium
		9				
		10	4	SS	3-4-5	
		11				
		12				
		13				
		14	5	SS	6-7-8	
		Boring terminated at 15.0 feet	15			
		16				
		17				
		18				
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Note: no water encountered

**SEA**

# LOG OF BORING

SHEET 1 OF 1  
BORING NO.  
B-19

CONTRACTED WITH: UNITED CORNERS, INC.

JOB NO. DATE:  
041-160 05/14/04

PROJECT NAME: Kroger - Newnan Crossing

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
894.0	Topsoil - 4.0" brown silty sand with a little organics					
	Reddish brown silt with a little sand (residual)	1	1	SS	3-4-7	Drilling medium
		2				Drilling firm
		3	2	SS	11-20-27	
		4				
	Greyish brown sand with some silt (saprolite)	5				
		6	3	SS	6-11-17	
	Brown sand with some silt (saprolite)	7				
		8				
		9	4	SS	7-18-18	
		10				
		11				
		12				Drilling medium
		13				
		14	5	SS	4-5-7	
879.0	Boring terminated at 15.0 feet	15				
		16				
		17				
		18				
		19				
		20				
		21				
		22				
		23				
		24				
		25				
		26				
		27				
		28				
		29				
		30				
		31				
		32				
		33				
		34				
		35				
		36				
		37				
		38				
		39				
		40				

Note: hole plugged at 10.7 ft at 0 hrs - no water encountered above that depth

**SEA**

LOG OF BORING

SHEET 1 OF 1  
BORING NO.  
B-20

CONTRACTED WITH: UNITED CORNERS, INC.

PROJECT NAME: Kroger - Newnan Crossing

JOB NO.  
041-160

DATE:  
05/13/04

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
912.0	Topsoil - 3.0" brown silty sand with a little organics					Drilling firm
	Reddish brown silt with a little sand (residual)	1	1	SS	9-6-10	
	Reddish brown sand with some silt (saprolite)	2				
		3	2	SS	6-7-10	
		4				
		5				
		6	3	SS	4-7-7	
		7				
		8				
		9	4	SS	6-7-10	
	Brown sand with a little silt (saprolite)	10				
		11				
		12				
		13				
897.0	Boring terminated at 15.0 feet	14	5	SS	5-6-10	
		15				
		16				
		17				
		18				
		19				
		20				
		21				
		22				
		23				
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					
	32					
	33					
	34					
	35					
	36					
	37					
	38					
	39					
	40					

Note: hole plugged at 11.1 ft at 0 hrs - no water encountered above that depth

**SEA**



# LOG OF BORING

SHEET 1 OF 1  
BORING NO.  
B-22

CONTRACTED WITH: UNITED CORNERS, INC.

PROJECT NAME: Kroger - Newnan Crossing

JOB NO.  
041-160

DATE:  
05/14/04

LOCATION: Coweta County, Georgia

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
922.0	Topsoil - 4.0" brown silty sand with a little organics					
	Reddish brown silt with a little sand (residual)	1	1	SS	4-3-5	Drilling medium
		2				
	Brown sand with a little silt (saprolite)	3	2	SS	7-8-9	
		4				
		5				
		6	3	SS	4-6-8	
		7				
		8				
		9				
		10	4	SS	4-5-7	
		11				
	Light greyish brown sand with a trace of silt (saprolite)	12				
		13				
		14	5	SS	4-7-9	
907.0	Boring terminated at 15.0 feet	15				
		16				
		17				
		18				
		19				
		20				
		21				
		22				
		23				
		24				
		25				
		26				
		27				
		28				
		29				
		30				
		31				
		32				
		33				
		34				
		35				
		36				
		37				
		38				
		39				
		40				

Note: hole plugged at 11.1 ft at 0 hrs - no water encountered above that depth

**SEA**

# LOG OF BORING

SHEET 1 OF 1  
BORING NO.  
B-23

CONTRACTED WITH: **UNITED CORNERS, INC.**

PROJECT NAME: **Kroger - Newnan Crossing**

JOB NO.  
041-160

DATE:  
05/12/04

LOCATION: **Coweta County, Georgia**

ELEV. (ft)	DESCRIPTION	DEPTH IN FEET	SAMPLES			NOTES
			NO.	TYPE	BLOWS/6"	
916.0	Topsoil - 2.0" brown silty sand with a little organics					
	Reddish brown silt with a little sand (residual)	1	1	SS	6-6-9	Drilling medium
		2				
	Reddish brown sand with a little silt (residual)	3	2	SS	9-9-12	Note: hole plugged at 10.7 ft at 0 hrs - no water encountered above that depth
		4				
	White sand with a trace of silt and rock fragments (saprolite)	5	3	SS	9-10-11	
		6				
		7				
		8				
		9	4	SS	5-9-9	
		10				
		11				
		12				
		13				
		14	5	SS	9-10-14	
901.0	Boring terminated at 15.0 feet	15				
		16				
		17				
		18				
		19				
		20				
		21				
		22				
		23				
		24				
		25				
		26				
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		40				

**SEA**