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PRELIMINARY GEOTECHNICAL EXPLORATION

PROPOSED TOLEDO BLADE BOULEVARD PARCEL
NORTHEAST QUADRANT OF I-75 AND
TOLEDO BLADE BLVD.
SARASOTA COUNTY, FLORIDA

UES Order No.: B0797-001-01
UES Report No: 8644

Prepared for:

Jeffrey R. Anderson Real Estate, Inc.
3805 Edwards Rd., Suite 700
Cincinnati, OH 45209

Prepared by:

Universal Engineering Sciences
1748 Independence Blvd., Suite B-1
Sarasota, Florida 34234
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December 8, 2006

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December 8, 2006

Jeffrey R. Anderson Real Estate, Inc.
3805 Edwards Road, Suite 700
Cincinnati, OH 45209

Attention: Mr. Anthony Cook

Reference: **PRELIMINARY GEOTECHNICAL EXPLORATION**
Proposed Toledo Blade Parcel
Northeast Quadrant of I-75 and Toledo Blade Blvd
Sarasota County, Florida

Dear Mr. Cook:

Universal Engineering Sciences, Inc. (UES) has completed the preliminary subsurface exploration for the above referenced project. The scope of our exploration was planned in conjunction with and authorized by your company. This report contains the results of our preliminary explorations, an engineering interpretation of these with respect to the project characteristics described to us, and general recommendations to aid in evaluating foundation design, site preparation, fill suitability, excavation considerations and other considerations associated with the proposed development.

We appreciate the opportunity to have worked with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

Respectfully submitted,

UNIVERSAL ENGINEERING SCIENCES, INC.
Certificate of Authorization No. 549

Robert Gomez, P.E. #58348
Branch Manager

Cc: Kimley-Horn and Associates

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1.0 INTRODUCTION

1.1 GENERAL

In this report, we present the results of our preliminary geotechnical exploration for the proposed site development located at the northeast quadrant of I-75 and Toledo Blade Blvd in Sarasota County, Florida. Specifically, the site is located within Section 6, Township 39 South and Range 22 East. We have divided this report into the following sections:

SCOPE OF SERVICES - Defines what we did

FINDINGS - Describes what we encountered

RECOMMENDATIONS - Describes our evaluation of the soil conditions

LIMITATIONS - Describes the restrictions inherent in this report

SUMMARY - Reviews the material in this report

APPENDICES - Presents support materials referenced in this report.

2.0 SCOPE OF SERVICES

2.1 PROJECT DESCRIPTION

We understand that the project under consideration involves a mix use development on this site. Although currently only in the preliminary design stage, we understand the project will generally involve the construction of single family residential structures. No detailed structural loading information was available for our preliminary explorations. For the purpose of our preliminary foundation evaluation, we have assumed foundation, maximum wall and column loads on the order of 2 to 3 kips per linear foot and 35 kips, respectively.

Our preliminary evaluations and recommendations are based upon the above considerations. If any of this information is incorrect or if you anticipate any changes, inform Universal Engineering Sciences so that we may review our recommendations.

2.2 PURPOSE

The purposes of this exploration were:

- To explore the general subsurface conditions at the site;
- To interpret or review the subsurface conditions with respect to possible soil related impacts to the proposed residential development; and
- To provide general, preliminary geotechnical engineering recommendations to aid in evaluating foundation design, site preparation, fills suitability and excavation considerations associated with the proposed construction.

The exploration was conducted on a due diligence basis to provide an overview of the geotechnical project considerations and was not intended to develop specific soil related design recommendations for the various construction elements.

This report presents an evaluation of site conditions on the basis of traditional geotechnical procedures for site characterization. The recovered samples were not examined, either visually or analytically, for chemical composition or environmental hazards. Universal Engineering Sciences would be pleased to perform these services, if you so desire.

2.3 FIELD EXPLORATION

The subsurface conditions within the site was explored with ten (10) test borings advanced to a depth of 6 feet below existing grade while performing the Standard Penetration Test.

We performed the Standard Penetration Test according to the procedures of ASTM D-1586; however, we used continuous sampling to detect slight variations in the soil profile at shallow depths. The basic procedure for the Standard Penetration Test is as follows: A standard split-barrel sampler is driven into the soil by a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler 1 foot, after seating 6 inches, is designated the penetration resistance, or N-value; this value is an index to soil strength and density.

Consider the indicated boring locations and depths to be approximate. The boring locations were based on estimated distances and relationships to obvious landmarks and the aerial plan provided with the desired boring locations.

Jar samples of the soils encountered will be held in our laboratory for your inspection for sixty days unless we are notified otherwise.

The soil samples recovered from the soil test borings were returned to our laboratory and then one of our staff engineers visually examined and reviewed the field descriptions.

2.4 LABORATORY TESTING

The soil samples recovered from the soil test borings were returned to our laboratory and visually classified by a geotechnical staff member. We selected soil samples for laboratory testing consisting of four (4) gradation determinations (-200 wash) and moisture tests, and two (2) organic content tests.

We performed these tests to aid in classifying the soils and to help evaluate the general engineering characteristics of the site soils. See Appendix B: Summary of Laboratory Test Results and Description of Testing Procedures for further data and explanations.

3.0 FINDINGS

3.1 SURFACE CONDITIONS

A Universal Engineering Sciences representative performed a visual site inspection of the subject property to gain a "hands-on" familiarity with the project area.

Based on our field representative's observations, the overall parcel is relatively flat. The site is grassed and moderately vegetated. Several access shell and sandy surface roadways are located across the site. There are also three existing lakes on the site.

3.2 SOIL SURVEY

Based on the Sarasota County Soil Survey as prepared by the US Department of Agriculture Soil Conservation Service, the predominant soil types at the site are identified as EauGallie and Myakka soils (#10) soils. A summary of characteristics of this soil series as obtained from the Soil Survey is included in Table 1 below.

TABLE 1
Summary of Soil Survey Information

Soil Type	Constituents	Internal Drainage	Soil Permeability (Depth - In/Hr)	Seasonal Height Water *Under Natural Conditions*	Corrosion Potential	
					Steel	Concrete
EauGallie (10)	Fine Sand	Poorly Drained	0-22" 6.0 - 20 22-44" 0.6-6.0 44-48" 6.0-20 48-66" 0.06-0.6 66-80" 0.6-6.0	0.5 to 1.5 feet	High	Moderate
Myakka (10)	Fine Sand	Poorly Drained	0-24" 6.0-20 24-42" 0.6-6.0 42-80" 6.0-20	0.5 to 1.5 feet	High	High

3.3 SUBSURFACE CONDITIONS

The boring locations and detailed subsurface conditions are illustrated in Appendix C: Boring Location Plan and Log of Borings. The classifications and descriptions shown on the logs are generally based upon visual characterizations of the recovered soil samples. Also, see Appendix C: Soils Classification Chart, for further explanation of the symbols and placement data on the Log of Borings. Table 2: General Soil Profile, summarizes the soil conditions encountered.

TABLE 2
General Soil Profile

Typical depth (ft)		Soil Descriptions
From	To	
0	4	Loose and medium dense brown fine sand (SP)
4	18	Medium dense brown fine sand and fine sand with traces of clay (SP, SP-SC)
18	30*	Very loose, loose and medium dense brownish-gray fine sand with traces of phosphate and traces of clay (SP, SP-SC, SC)

* **Termination Depth of Deepest Boring**
() **Bracketed Text Indicates: Unified Soil Classification**

Variations in the depth, thickness and consistency of the aforementioned soil strata occurred at the individual test boring locations. We encountered groundwater at a depth of approximately 3 to 4 feet below existing grade at the time of our exploration. The apparent water table can be expected to fluctuate with seasonal rainfall.

4.0 PRELIMINARY RECOMMENDATIONS

4.1 GENERAL

The following preliminary recommendations and evaluations are made based upon a review of the attached soil test data, our understanding of the proposed construction and experience with similar projects and subsurface conditions. If the project characteristics or conceptual site plans change from those discussed previously, we request the opportunity to review and possibly amend our recommendations with respect to those changes.

Our field exploratory program consisted of performing ten (10) test borings across the site for the proposed mix use development. The actual subsurface conditions may differ between test boring locations. The following preliminary recommendations should be considered general in nature and are intended to aid in a due diligence evaluation of the site soil conditions and are not specific to the earthwork related design of the individual components (pavements, foundations, etc.) of the planned development. Additional borings will have to be performed as part of a final geotechnical exploration once the project characteristics are more clearly defined.

In this section of the report, we present our preliminary recommendations concerning building foundations, site preparation, fill suitability and excavation considerations.

4.2 GROUNDWATER CONTROL

The groundwater table will fluctuate seasonally depending upon local rainfall. The normal seasonal high groundwater level typically occurs in the August-September period at the end of the rainy season. The seasonal high groundwater level is affected by a number of factors, such as drainage characteristics of the soils; land surface elevation, relief points (i.e. drainage

ditches, lakes, rivers, swampy areas) and distance to relief points.

Several other factors influence the determination of the seasonal high water table (SHWT). When soils are subjected to alternating cycles of saturation and drying, discoloration or staining that is not part of the dominant soil color occurs. This is called mottling, and manifests itself in various shades of gray, brown, red or yellow. There are numerous processes that lead to this discoloration, including mineral accretions, oxidation, and bacteria growth within the soil. The presence of this discoloration indicates that groundwater has, at some point in time, reached that elevation and remained there long enough to cause any or all of these processes to occur. The SHWT elevation is assumed to be the highest point at which mottling is observed regardless of whether water is present at the time of observation. This estimate is independent of the actual location of the groundwater table.

Based upon our visual inspection of the recovered soil samples, review of information obtained from the soil survey of Sarasota County, existing site conditions and our knowledge of local and regional hydrology, our best estimate is that the seasonal high groundwater level could be on the order of 1 to 1.5 feet below the existing grade at the testing boring locations, on average. Water could be temporarily ponded in the ditches and other low lying areas of the overall site especially during periods of heavy rainfall.

It should be noted that the estimated seasonal high water levels do not provide any assurance that groundwater levels will not exceed these estimated levels during any given year in the future. Should the impediments to surface water drainage be present, or should rainfall intensity and duration, or total rainfall quantities, exceed the normally anticipated rainfall quantities, groundwater levels may exceed our seasonal high estimates. We recommend positive drainage be established and maintained on the site during construction. We further recommend permanent measures be constructed to maintain positive drainage from the site throughout the life of the project.

We anticipate sufficient quantities of fill will be placed in the building and pavement areas to mitigate the effect of groundwater on shallow excavations, such as foundations. Further, we recommend the bottom of the base course used in pavement construction be maintained at least 12 inches above the seasonal high water levels.

Temporary dewatering may be required during site preparation, especially if construction proceeds during the wet season or periods of heavy rainfall. Temporary dewatering may also be required for deeper excavations, such as utility trenches, the backfilling of the drainfield area and other excavations. We recommend that the contract documents provide for determining the groundwater level just prior to construction and for any dewatering measures which might be required. We recommend that the groundwater table be maintained at least 24 inches below all earthwork and compaction surfaces.

4.3 FOUNDATION SUPPORT

In general, the soil conditions encountered at this site appear suitable for conventional, shallow foundations to support typical single- and two-story buildings provided the site is properly prepared. On a preliminary basis, we anticipate an allowable bearing pressure of 2,500 pounds per square foot could be achieved through proper site preparation. A more detailed engineering evaluation and additional explorations would be required at the individual building sites once more detailed project characteristics become available.

4.4 SITE PREPARATION

It appears only normal, good practice site preparation procedures would be required to develop the site for slab-on-grade, foundation and pavement support based on the type of construction planned for this site. These procedures include: stripping the site of vegetation, roots, topsoil, and other deleterious material or debris; proof-rolling and proof-compacting the existing subgrade soils to a depth of 1 to 2 feet; and filling to grade with engineering fill. On a preliminary basis, we would recommend the existing soils to a depth of 1 foot in the building pads and pavement areas and any additional fill be compacted to at least 95 percent of the Modified Proctor maximum dry density. You should anticipate clearing and grubbing to depths of up to 12 inches in some areas.

4.5 PAVEMENT

A rigid or flexible pavement section could be used on this project. Flexible pavement combines the strength and durability of several layer components to produce an appropriate and cost-effective combination of available construction materials. Concrete pavement has the advantage of the ability to "bridge" over isolated soft areas, it requires less security lighting, and it typically has a longer service life than asphalt pavement. Disadvantages of rigid pavement include an initial higher cost and more difficult patching of distressed areas than occurs with flexible pavement. Recommendations for both rigid and flexible pavements shall be presented in our final geotechnical report.

The most prevalent flexible pavement base material in Sarasota County is bank run shell base material. As an alternative base course material, crushed concrete could be used. An advantage to using crushed concrete is a lower sensitivity to moisture than occurs with shell base. The main disadvantage is crushed concrete may not be available from local plants at the time of construction and is somewhat more difficult to fine grade and compact than bank run shell material.

4.6 FILL SUITABILITY

In general, the typical criteria for determining the acceptability of a material for use as structural fill is based on the percent "fines" in the soil matrix (e.g. material passing the No. 200 sieve). The following grouping system explains more fully the suitability of various soil types with respect to the amount of fines. For your convenience we have included the Group classification on the boring logs in Appendix C.

Group "A"

These soils consist of clean sands which have less than 5% soil fines. These soils are the most desirable for use as engineering fill because they drain freely when excavated from beneath the groundwater table and are not as susceptible to moisture related instability.

Group "B"

These soils consist of sand with silt which contains between 5% and 12% soil fines. These soils are good sources of engineered fill, but require some extra care during placement and compaction. The moisture content of these soils should not be higher than 2% above optimum

during placement and compaction in order to reduce the potential for moisture related instability. These soils drain fairly well, but will require some stockpiling and aeration time when excavated from below the groundwater table.

Group "C"

These soils consist of silty and clayey sands which contain between 12% and 20% soil fines. These soils are more difficult to use because they are moisture sensitive. The moisture content of these soils should be maintained at or below optimum in order to help mitigate the potential for moisture related instability during placement and compaction. Further, these soils will require significant stockpiling and aeration periods in order to reduce the moisture content if the soils are excavated from below the groundwater table. For similar reasons, we caution the use of these soils during the wet season in areas where groundwater might be encountered.

Group "D"

These soils consist of silty and clayey sands which have greater than 20% soil fines. These soils are not recommended for use as engineered fill because they will be too difficult to dry and work.

Onsite Soils

Typically, the borings encountered Group A and traces of Group B and C soils.

The Group A and B soils within the borings appear to be the best suitable soils to use as structural fill. The Group C soils will require more stockpiling and aeration to achieve the desired level of compaction.

Confining Layer

A true confining layer was not encountered at the boring termination depth of 30 feet.

4.7 EXCAVATION CONSIDERATIONS

We suggest the gradation of the excavated material be periodically checked to determine their suitability as fill. General mixing of the materials can be expected to result in material gradations different from the gradations obtained from our test samples.

It should be noted that other excavation considerations, such as temporary and long term slope stability, erosion control, etc. were beyond the scope of this study.

4.8 LAKE AREA BACKFILL RECOMMENDATION

We understand that one of the existing lakes will be backfilled for the development. The site preparation and backfilling within the existing lake area requires special procedures. Presented below are two potential alternatives for the preparation of the soils in the lake areas. The options include Deep Dynamic Compaction and filling the areas with properly engineered and compacted fill. This information will be included in our final geotechnical report.

1. One method to backfill the existing lake area would be to completely dewater the lake within the proposed lot areas and place and compact the backfill in a conventional manner. This approach will require the construction of a cofferdam, extensive dewatering and groundwater control likely including the use of a well point or horizontal dewatering system. The lake areas could be backfilled in sections to facilitate the dewatering process.

   Initially construct a cofferdam around the perimeter of the lot areas within the lake and lower and maintain the groundwater level within the area between the top of the lake bank and cofferdam to a depth of 2 feet below the existing lake bottom and side profile. Remove all vegetation and loose material along the lake banks and the sediments within the lake bottom. Place backfill in 12 inch loose layers and compact each layer to 98 percent of the Modified Proctor. The lake backfill should consist of a clean fine sand with less than 5 percent soil fines passing a number 200 sieve. Once the lake has been backfilled to the surrounding existing site grade, proceed with the remaining site preparation procedures outlined later in this report.

2. An alternative method to backfill the existing lake areas would be to fill the lake using select fill with limited compaction during placement and to use deep dynamic compaction procedures to compact the fill once it is in place. Under this method, only limited groundwater control will be required.

   Lower the water level in the lake to 4 to 5 feet above the mudline. Remove all vegetation and loose material along the banks of the lake. Beginning at one end, dump clean fine sand with less than 5 percent soil fines (passing the number 200 sieve size) into the lake until the fill mass is one to two feet above the lowered water level and can support construction equipment. Continue to place fill in a similar manner working from one end of the lake to the other using the previously placed backfill as a working platform to facilitate deposition and placement of the fill. The very loose bottom sediments displaced in front of the fill mass should be periodically removed as the fill mass moves forward to avoid significant build-up of silt below the fill layer. Once the lake has been floored in, place the remaining fill required to match the surrounding area grade in two feet layers compacted using the trafficking of construction equipment.

5.0 LIMITATIONS

During the early stages of most construction projects, geotechnical issues not addressed in this report may arise. Because of the natural limitations inherent in working with the subsurface, it is not possible for a geotechnical engineer to predict and address all possible problems. An Association of Engineering Firms Practicing in Geosciences (ASFE) publication, "Important Information About Your Geotechnical Engineering Report" appears in Appendix D and will help explain the nature of geotechnical issues.

Further, we present documents in Appendix D: Constraints and Restrictions, to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

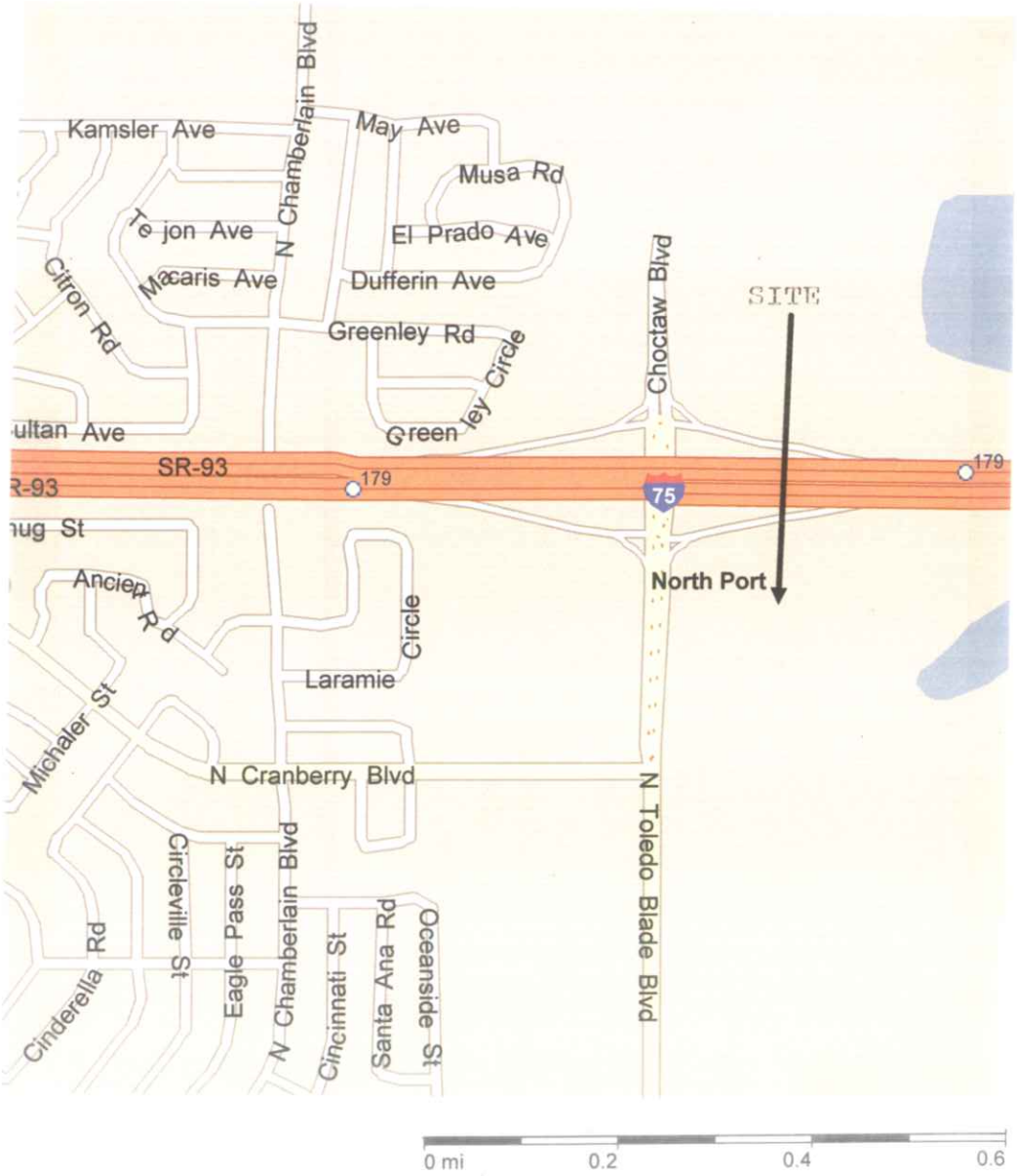
6.0 SUMMARY

In summary, we understand you are considering developing a single-family residential subdivision on this site. We have preliminary field explorations to provide preliminary geotechnical engineering evaluations of site preparation, foundation support, fill suitability and excavation considerations associated with the planned construction.

The soils encountered generally consisted of a stratum of loose and medium dense fine sands and fine sands with silt to a depth of 5 feet. Below and extending to 12 to 15 feet medium dense fine sand with clay and clayey sands were encountered. Beneath and extending to the maximum depth explored of 20 feet, medium dense and very dense clayey sand and clays with traces of shell fragments and phosphate were encountered.

We encountered groundwater at a depth of 6 feet below existing grade at the time of our exploration. Our best estimate is the seasonal high groundwater table would 1.0 to 1.5 feet below the average existing site grades

We hope this report meets your needs and discusses the soil conditions with respect to the proposed residential development. We would be pleased to meet with and discuss any geotechnical engineering aspects of this project and provide final geotechnical explorations and recommendations.



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PROPOSED TOLEDO BLADE PARCEL
NORTHEAST QUADRANT OF I-75 AND TOLEDO BLADE BLVD.
SARASOTA COUNTY, FLORIDA

SITE LOCATION PLAN

DRAWN BY: G.H.	DATE: DECEMBER 8, 2006	CHECKED BY: R.G.	DATE: DECEMBER 8, 2006
SCALE: NOT TO SCALE	PROJECT NO: B0797-001-01	REPORT NO: 8644	APPENDIX: A

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1748 Independence Blvd., Suite B-1 • Sarasota, FL 34234 • (941) 358-7410 • Fax (941) 358-7353

PROJECT :	TOLEDO BLADE PARCEL NORTH PORT, FLORIDA	PROJECT Nº :	B0797-001-01
CLIENT :	JEFFREY R. ANDERSON REAL ESTATE, INC.	REPORT Nº:	8644

BORING Nº Sample	SAMPLE DESCRIPTION	Nº 200, %	Water Content, %	LL	PL	PI	USCS Clasification	Type Sample
B- 1 2	Orange and brown fine sand with traces of silt	8.4	25.5				SP-SM	ASTM D 1586
B-2 3	Brown silty sand	15.3	17.5				SM	ASTM D 1586
B-3 3	Dark brown fine sand with traces of silt	12.9	20.5				SP-SM	ASTM D 1586
B-4 4	Brown clayey sand	18.8	20.0				SC	ASTM D 1586

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SUMMARY OF LABORATORY RESULTS

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REPORT ON ORGANIC CONTENT

Client: Jeffrey R. Anderson Real Estate, Inc.
Rookwood Tower
3805 Edwards Road, Suite 700
Cincinnati, OH 45209

Date: December 8, 2006
Sampled: December 1, 2006
Report #: 8644
Project #: B0797-001-01

Project: Proposed Toledo Blade Parcel

Laboratory Test Results

Test #	LOCATION	Soil Description	% Organic
1	B - 1, S - 1	Brown fine sand	1.4
2	B - 4, S - 1	Gray fine sand with silt	3.4

Robert Gomez, P.E. #58348
Branch Manager
UNIVERSAL ENGINEERING SCIENCES, INC.

APPENDIX: B

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PROPOSED TOLEDO BLADE PARCEL
NORTHEAST QUADRANT OF I-75 AND TOLEDO BLADE BLVD.
SARASOTA COUNTY, FLORIDA

BORING LOCATION PLAN

FOR: JEFFREY R. ANDERSON REAL ESTATE, INC.

DRAWN BY:	G.H.	DATE:	DECEMBER 8, 2006
CHECKED BY:	B.G.	DATE:	DECEMBER 8, 2006
REPORT NO:	8644	SCALE:	NOT TO SCALE
PROJECT NO:	B0797-001-01		

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BORING LOG

PROJECT NO.:	B0797-001-01
REPORT NO.:	8644
PAGE:	1

PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 1** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 3
DATE OF READING: 11/30/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Loose brown fine SAND with traces of natural roots (SP)						
		3-3-6	9	▼								1.4
		6-7-9	16			Medium dense orange and brown fine SAND with traces of silt (SP-SM)	8.4	25.5				
5		8-6-9	15									
		7-7-10	17									
		6-6-9	15									
10		10-11-12	23									
						Brown fine SAND with traces of clay (SP-SC)						
15		7-9-9	18									
						Loose gray and brownish-gray fine SAND with traces of phosphate (SP)						
20		3-3-4	7									
25		3-3-3	6									
						Medium dense gray fine SAND (SP)						
30		9-12-14	26									

BORING_LOG TOLEDO BLADE R 8644.GPJ UNIENGSC.GDT 12/8/06

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BORING LOG

PROJECT NO.:	B0797-001-01
REPORT NO.:	8644
PAGE:	2

PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 2** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 3
DATE OF READING: 11/30/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Medium dense light gray fine SAND (SP)						
		7-8-16	24	▼		Medium dense brown fine SAND (SP)						
		14-12-13	25			Medium dense brown silty SAND (SM)						
5		12-10-10	20				15.3	17.5				
		9-9-11	20									
		8-10-11	21									
10		11-11-9	20									
						Medium dense brown fine SAND with traces of clay (SP-SC)						
15		9-8-8	16									
						Very loose to loose gray fine SAND with traces of phosphate (SP)						
20		2-1-1	2									
25		3-3-4	7									
						Dense gray fine SAND with traces of phosphate (SP)						
30		10-15-20	35									

BORING_LOG TOLEDO BLADE R.8644.GPJ UNIENGSC.GDT 12/8/06

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BORING LOG

PROJECT NO.:	B0797-001-01
REPORT NO.:	8644
PAGE:	3

PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 3** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 3.8
DATE OF READING: 12/1/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Medium dense light brown and brown fine SAND (SP)						
		4-10-11	21									
		5-5-7	12	▼								
						Medium dense dark brown fine SAND with traces of silt (SP-SM)						
5		8-7-7	14				12.9	20.5				
						Medium dense gray fine SAND with traces of clay (SP-SC)						
		4-7-10	17									
						Medium dense brown fine SAND with traces of clay (SP-SC)						
		11-11-15	26									
10		10-8-8	16									
						Medium dense to very loose gray fine SAND with traces of phosphate and shell fragments (SP)						
15		7-6-5	11									
20		3-2-2	4									
						Loose brown clayey SAND with traces of phosphate (SC)						
25		2-3-4	7									
						Medium dense gray fine SAND with traces of phosphate (SP)						
30		10-13-14	27									

BORING_LOG TOLEDO BLADE R 8644.GPJ UNIENGSC.GDT 12/8/06

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

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REPORT NO.:	8644
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PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 4** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 3.5
DATE OF READING: 12/1/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0												
						Medium dense gray fine SAND with traces of silt and natural roots (SP-SM)						
		3-6-7	13									3.4
				▼		Medium dense brown fine SAND (SP)						
		5-6-6	12									
						Dark brown fine SAND with traces of silt (SP-SM)						
5		7-8-9	17									
		5-7-11	18			Medium dense brown clayey SAND (SC)	18.8	20.0				
10												

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REPORT NO.:	8644
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PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 5** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 3.5
DATE OF READING: 12/1/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Loose gray fine SAND with traces of silt and natural roots (SP-SM)						
		2-3-3	6			Medium dense light brown fine SAND (SP)						
		6-7-8	15	▼		Medium dense brown fine SAND with traces of silt (SP-SM)						
5		10-11-13	24									
		4-8-8	16			Medium dense brown fine SAND with traces of clay (SP-SC)						
10												

BORING_LOG TOLEDO BLADE R.8644.GPJ UNIENGSC.GDT 12/7/06

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	B0797-001-01
REPORT NO.:	8644
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PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 6** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 3.7
DATE OF READING: 12/1/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Loose gray fine SAND with traces of natural roots (SP)						
		2-3-4	7									
						Medium dense brown fine SAND with traces of silt (SP-SM)						
		7-7-9	16	▼								
						Medium dense dark brown fine SAND with traces of silt (SP-SM)						
5		11-11-8	19									
		5-7-10	17			Medium dense brown clayey SAND (SC)						
10												

BORING_LOG_TOLEDO BLADE R 8644.GPJ UNIENGSC.GDT 12/7/06

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	B0797-001-01
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PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 7** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 4
DATE OF READING: 12/1/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0												
		3-6-10	16			Medium dense gray fine SAND with traces of silt and organics (SP-SM)						
		15-15-14	29	▼		Medium dense light gray fine SAND (SP)						
5		10-12-14	26			Medium dense brown fine SAND (SP)						
		5-6-6	12									
10												

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BORING LOG

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PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 8** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate

LOCATION: See Boring Locaion Plan

REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 4
DATE OF READING: 12/1/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Medium dense brown fine SAND (SP)						
		5-7-15	22									
						Medium dense brown fine sand with traces of natural roots (SP)						
		9-10-12	22	▼								
						Medium dense white fine SAND (SP)						
5		12-12-14	26									
		10-9-6	15			Medium dense brown fine SAND with traces of clay (SP-SC)						
10												

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PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 9** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 3.4
DATE OF READING: 12/1/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0												
		5-5-6	11			Medium dense gray fine SAND with traces of silt and natural roots (SP-SM)						
		5-6-7	13	▼		Medium dense brown fine SAND (SP)						
5		5-7-8	15			Medium dense brown fine SAND with traces of silt (SP-SM)						
		5-6-6	12			Medium dense light brown fine SAND (SP)						
10												

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	B0797-001-01
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PAGE:	10

PROJECT: Toledo Blade Parcel
North Port, Florida

BORING DESIGNATION: **B - 10** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: Jeffrey R. Anderson Real Estate
LOCATION: See Boring Locaion Plan
REMARKS:

G.S. ELEVATION (ft):
WATER TABLE (ft): 3.3
DATE OF READING: 12/1/2006
EST. W.S.W.T. (ft):

DATE STARTED: 11/30/06
DATE FINISHED: 12/1/06
DRILLED BY: RT
TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N (BLOWS/ FT.)	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORG. CONT. (%)
0						Loose gray fine SAND with traces of natural roots (SP)						
		2-3-4	7	▼		Medium dense brown fine SAND (SP)						
		4-4-7	11			Medium dense orange fine SAND (SP)						
5		7-9-9	18									
		6-8-8	16			Medium dense brown fine SAND with traces of clay (SP-SC)						
10												