DATE 05/14/2009

Columbia County Building Permit

This Permit Must Be Prominently Posted on Premises During Construction

PERMIT
000027813

APPLICANT THERESA LASTINGER PHONE 755-8887

ADDRESS 295 NW COMMONS LOOP LAKE CITY FL 32025

OWNER FAISAL FAMILY LTD PARTNERSHIP PHONE

ADDRESS 1289 SW SR 47 LAKE CITY FL 32025

CONTRACTOR BRIAN CRAWFORD PHONE 755-8887

LOCATION OF PROPERTY 47S, 4TH LOT ON LEFT PAST MICHIGAN

TYPE DEVELOPMENT FOUNDATION ONLY ESTIMATED COST OF CONSTRUCTION 65000.00

HEATED FLOOR AREA TOTAL AREA 11794.00 HEIGHT STORIES 15

FOUNDATION CONC WALLS ROOF PITCH FLOOR SLAB

LAND USE & ZONING CI MAX. HEIGHT

Minimum Set Back Requirments: STREET-FRONT 20.00 REAR 15.00 SIDE 5.00

NO. EX.D.U. 0 FLOOD ZONE X DEVELOPMENT PERMIT NO.

PARCEL ID 07-4S-17-08130-003 SUBDIVISION

LOT BLOCK PHASE UNIT TOTAL ACRES 2.04

		CGC1515491		
Culvert Permit No.	Culvert Waiver	Contractor's License Number		Applicant/Owner/Contractor
FDOT APPROVAL	X09-126	BK	HD	N
Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident

COMMENTS: SDP 08-9, ELEVATION CONFIRMATION LETTER REQUIRED AT SLAB

NOC ON FILE

Check # or Cash 11004037

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power date/app. by Foundation date/app. by Monolithic date/app. by

Under slab rough-in plumbing date/app. by Slab date/app. by Sheathing/Nailing date/app. by

Framing date/app. by Insulation date/app. by

Rough-in plumbing above slab and below wood floor date/app. by Electrical rough-in date/app. by

Heat & Air Duct date/app. by Peri. beam (Lintel) date/app. by Pool date/app. by

Permanent power date/app. by C.O. Final date/app. by Culvert date/app. by

Pump pole date/app. by Utility Pole date/app. by M/H tie downs, blocking, electricity and plumbing date/app. by

Reconnection date/app. by RV date/app. by Re-roof date/app. by

BUILDING PERMIT FEE $ 325.00 CERTIFICATION FEE $ 58.97 SURCHARGE FEE $ 58.97

MISC. FEES $ 0.00 ZONING CERT. FEE $ 50.00 FIRE FEE $ 0.00 WASTE FEE $

FLOOD DEVELOPMENT FEE $ FLOOD ZONE FEE $ 25.00 CULVERT FEE $ **TOTAL FEE** 517.94

INSPECTORS OFFICE CLERKS OFFICE CH

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OT THE PREVIOUS INSPECTION.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Columbia County Building Permits Application

Application # 0905-16

Property ID Number 07-4S-17-08130-003 Septic Permit No. 4-126

Subdivision Name N/A Lot ____ Block ____ Unit ____ Phase ____

Construction of FOUNDATION ONLY Cost of Construction 65,000.

Mobile Home Permit - New or Used (Circle One) Year ____ Length ____ Width ____

Name of the Authorized Person Signing the Permit Theresa Lastinger

Phone (386) 755-8887 Fax (386) 755-1919

Address 295 nw commons loop Ste 115-391 LC, FL 32055

Owners Name Faisal Family LTD Partnership Phone

911 Address 1289 SW SR 47 Lake City, FL 32025

Relationship to Property Owner AGENT Is this Home Replacing an Existing Home no

Contractors Name Brian Crawford Phone 386-755-8887

Company Name Concept Construction Fax 386 755 1919

Address 295 nw commons loop Ste 115-391 LC, FL 32025

Fee Simple Owner Name & Address

Bonding Co. Name & Address

Architect/Engineer Name & Address Brett Crews / Crews Eng Svc, LLC

Mortgage Lenders Name & Address CASH

Driving Directions to the Property Take 47 South toward Interstate 75. Site is appt 5 mile before Interstate on left side of road 4th lot on left past Michigan

Lot Size ____ Total Acreage 2.04 Building across lot numbers ____

Actual Distance of Structure from Property Lines – Front/Road 72 Left Side 205 Right Side 54 Rear 160

Number of Stories 1 1/2 Heated Floor Area 9293 Total Floor Area 11794 Roof Pitch 6/12

Circle the correct power company - FL Power & Light - (Clay Elec.) - Suwannee Valley Elec.

Progress Energy - Slash Pine Electric

Do you currently have an: Existing Drive or Private Drive or need a Culvert Permit or Culvert Waiver

*FDOT

(Currently using) (Blue Road Sign) (Putting in a Culvert) (No Culvert but do not need a Culvert)

Both Pages Must be Submitted to obtain a Building Permit.

Revised 12-30-08

0904.02

Inst. Number: 200912004927 Book: 1169 Page: 2667 Date: 3/27/2009 Time: 11:19:00 AM Page 1 of 3

27 - 10 - Cert. copies 37 -

27813

Prepared by and return to:
Carpenter & Roscow, P.A.
5608 NW 43rd Street
Gainesville, Florida 32653
352-373-7788
Permit No. _____
Tax Folio No. **R08130-003**

Inst 200912004927 Date:3/27/2009 Time:11 19 AM
DC,P DeWitt Cason,Columbia County Page 1 of 3 B 1169 P 2667

NOTICE OF COMMENCEMENT

The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. Description of improvement (legal description of the property, and street address, if available): **SEE EXHIBIT "A" ATTACHED HERETO.**
   Street Address: **1283 SW State Road 47, Lake City, Florida**
2. General description of the improvement: **Medical Office Facility**
3. Owner information:
   a. Name and Address: **FAISAL FAMILY LIMITED PARTNERSHIP**
      P.O. Box 3009, Lake City, FL 32056
   b. Interest in property: **Fee Simple**
   c. Name and address of fee simple titleholder (if other than Owner): N/A
   d. Phone number (of Owner): (386) 758-5985
4. Name /address of Contractor: **CONCEPT CONSTRUCTION OF NORTH FLORIDA, INC., Attn: Brian S. Crawford, 295 NW Commons Loop, Suite 115-391, Lake City, FL 32055**
5. Surety: n/a
6. Name and address of Lender: **COMPASS BANK**
   2814 S.W. 34th Street
   Gainesville, Florida 32608
7. Name and address of persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a)7., Florida Statutes: **Mohammad A. Faisal, Managing Member of M.A. FAISAL, M.D., L.L.C., as General Partner of FAISAL FAMILY LIMITED PARTNERSHIP, P.O. Box 3009, Lake City, FL, 32056**
8. In addition to the above, Owner designates **ANDY HARDIN, COMPASS BANK, 2814 SW 34th Street, Gainesville, Florida, 32608**, to receive a copy of the lienor's Notice as provided in Section 713.13(1)(b), F.S.
   a. Phone number: (352) 367-5076
9. Expiration date of notice of commencement (the expiration date is one (1) year from the date of recording unless a different date is specified): _____

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, §713.13, FLA.STAT., AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

Owner:
FAISAL FAMILY LIMITED PARTNERSHIP
A Florida Limited Partnership, by its
General Partner, M.A. FAISAL, M.D., L.L.C.,
a Florida Limited Liability Company

By: _____
Mohammad A. Faisal, Managing Member

STATE OF FLORIDA
COUNTY OF COLUMBIA

SWORN TO and subscribed before me this 24th day of March, 2009, by MOHAMMAD A. FAISAL, as Managing Member of M.A. FAISAL, M.D., L.L.C., a Florida limited liability company, as General Partner of FAISAL FAMILY LIMITED PARTNERSHIP, a Florida limited partnership, (X) who is personally known to me, or ( ) who produced a driver's license as identification.

_____
Notary Public State of Florida: Diane S. Edenfield
My commission expires: Commission # DD514461
Expires May 26, 2010
Bonded Troy Fain Insurance, Inc 800-385-7019

Verification Pursuant to §92.525, Florida Statutes

UNDER PENALTIES OF PERJURY, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

_____
Signature of Natural Person Signing Above

Inst. Number: 200912004927 Book: 1169 Page: 2669 Date: 3/27/2009 Time: 11:19:00 AM Page 3 of 3

EXHIBIT "A"

TOWNSHIP 4 SOUTH - RANGE 17 EAST

SECTION 7: COMMENCE at the Southeast corner of the Northeast 1/4 of the Southeast 1/4 of Section 7, Township 4 South, Range 17 East, Columbia County, Florida, and run South 86°34'30" West along the South line of said Northeast 1/4 of the Southeast 1/4 a distance of 930.30 feet to the POINT OF BEGINNING; thence continue South 86°34'30" West still along said South line 50.00 feet; thence North 03°25'30" West 191.34 feet; thence North 86°34'30" East parallel to the South line of the Northeast 1/4 of the Southeast 1/4 a distance of 19.87 feet; thence North 03°25'30" West 139.52 feet; thence South 86°34'30" West parallel to the South line of the Northeast 1/4 of the Southeast 1/4 a distance of 538.98 feet to a point on the Easterly Right-of-way line of State Road No. 47, said point being on the arc of a curve concave to the East having a radius of 11,409.20 and a central angle of 00°00'17", said curve also having a Chord bearing and distance of North 19°29'00" East 0.97 feet; thence Northerly along the arc of said curve, being also said Easterly Right-of-way line of State Road No. 47 a distance of 0.97 feet to the point of tangency of said curve; thence North 19°29'09" East still along said Easterly Right-of-Way line 150.09 feet; thence North 86°34'30" East parallel to the South line of the Northeast 1/4 of the Southeast 1/4 a distance of 510.30 feet; thence South 03°25'30" East 470.00 feet to the POINT OF BEGINNING.

TOGETHER WITH a non-exclusive perpetual easement for ingress, egress and utilities over and across a strip of land 15 feet in width lying South of a line described as follows:

COMMENCE at the Southeast corner of the Northeast 1/4 of the Southeast 1/4 of Section 7, Township 4 south, Range 17 East, Columbia County, Florida, and run South 86°34'30" West along the South line of said Northeast 1/4 of the Southeast 1/4 a distance of 930.30 feet; thence continue South 86°34'30" West still along said South line 50.00 feet; thence North 03°25'30" West 191.34 feet; thence North 86°34'30" East parallel to the South line of the Northeast 1/4 of the Southeast 1/4 a distance of 19.87 feet; thence North 03°25'30" West 139.52 feet to the POINT OF BEGINNING of said line; thence South 86°34'30" West parallel to the South line of the Northeast 1/4 of the Southeast 1/4 a distance of 538.98 feet to a point on the Easterly Right-of-Way line of State Road No. 47, said point being on the arc of a curve concave to the East having a radius of 11,409.20 and a central angle of 00°00'17", said curve also having a chord bearing and distance of North 19°29'00" East 0.97 feet and the Point of Termination of said line.

EXHIBIT "A"

Columbia County Building Permits Application

Application #_____

TIME LIMITATIONS OF *APPLICATIONS*: An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

TIME LIMITATIONS OF *PERMITS*: Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment: According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE: **YOU ARE HEREBY NOTIFIED:** as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

OWNERS CERTIFICATION: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.

M. A. Jeen

Owners Signature

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit including all application and permit time limitations.

Contractor's Signature (Permitee)

Contractor's License Number CGC1515491
Columbia County
Competency Card Number_____

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 11 **day of** May **20**09

Personally known ✓ **or Produced Identification**_____

Theresa Lastinger

State of Florida Notary Signature (For the Contractor)

SEAL:

THERESA LASTINGER
MY COMMISSION # DD866574
EXPIRES: March 03, 2013
Fl. Notary Discount Assoc. Co.

Both Pages Must be Submitted to obtain a Building Permit.

Revised 12-30-08

FAX MEMORANDUM

MEMORANDUM

FLORIDA DEPARTMENT OF TRANSPORTATION

To: Mr. John Kerce, Dept. Director Columbia Co. Building & Zoning Dept. **Fax No: 386-758-2160**	**From:** Dale L. Cray, FDOT Permits Insp. **Date: 5-13-2009** Fax **No. 386-961-7183** **Attention: Col Co. Building Zoning Dept.**

( ) Sign and return. ( ) For your files. ( ) Please call me. **(XX)** FYI ( ) For Review

REF: Ex Comm. Driveway
PROJECT: Faisal Family LTD Partnership
PARCEL ID No: 17-4S-17-08130-003 Permit No : N/A Sec No : 29020
MILE POST: N/A

Mr. Kerce

Please accept this as our legal notice of final passing inspection for (Faisal Family LTD Partnership) for an existing commercial driveway. The project addresses C/O Mohammad A. Faisal P.O. Box 3009 Lake City, Fl.320256.

The existing Access has been inspected and (Approved) and, meets FDOT Standard Requirements.

If further information is required on this project please do not hesitate to contact this office for additional access permitting information details. My office number is 961-7193 or 961-7146.

Sincerely,

Dale L. Cray
Access Permits Inspector

FLORIDA DEPARTMENT OF STATE
DIVISION OF CORPORATIONS

Sunbiz

Detail by Entity Name

Florida Limited Partnership

FAISAL FAMILY LIMITED PARTNERSHIP

Filing Information

Document Number	A97000001269
FEI/EIN Number	593428462
Date Filed	06/05/1997
State	FL
Status	ACTIVE
Last Event	AMENDMENT
Event Date Filed	05/13/2005
Event Effective Date	NONE

Principal Address

1283 SW STATE RD 47
SUITE 104
LAKE CITY FL 32025

Changed 03/01/2004

Mailing Address

P. O. BOX 3009
LAKE CITY FL 32056-3009

Registered Agent Name & Address

FAISAL, MOHAMMAD A
1283 SW STATE RD 47
STE 104
LAKE CITY FL 32025 US

Name Changed: 01/12/2009

Address Changed: 03/01/2004

General Partner Detail

Name & Address

Document Number L03000019033

M.A. FAISAL, M.D., L.L.C.
1283 SW STATE RD 47, SUITE 104
LAKE CITY FL 32025

Annual Reports

Report Year	Filed Date
2007	01/19/2007

Columbia County Property Appraiser

DB Last Updated: 3/5/2009

2009 Preliminary Values

Tax Record | Property Card | Interactive GIS Map | Print

Parcel: 07-4S-17-08130-003

Search Result: 1 of 1

Owner & Property Info

Owner's Name	FAISAL FAMILY LTD PARTNERSHIP		
Site Address	STATE ROAD 47		
Mailing Address	C/O MOHAMMAD A FAISAL P O BOX 3009 LAKE CITY, FL 32056		
Use Desc. (code)	PROFESSION (001900)		
Neighborhood	7417.00	**Tax District**	2
UD Codes	MKTA06	**Market Area**	06
Total Land Area	2.040 ACRES		
Description	COMM SE COR OF NE1/4 OF SE1/4, RUN W 930.30 FT FOR POB, CONT W 50 FT, N 191.34 FT, E 19.87 FT, N 139.52 FT, W 538.98 FT TO E R/W SR-47, NE ALONG R/W 150.09 FT, E 510.3 FT, S 470 FT TO POB. ORB 777-2068, 845-1220, WD 1120-2543(CORR)		

GIS Aerial

Property & Assessment Values

Mkt Land Value	cnt: (1)	$55,080.00
Ag Land Value	cnt: (0)	$0.00
Building Value	cnt: (1)	$397,112.00
XFOB Value	cnt: (2)	$19,788.00
Total Appraised Value		$471,980.00

Just Value	$471,980.00
Class Value	$0.00
Assessed Value	$471,980.00
Exempt Value	$0.00
Total Taxable Value	$471,980.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale Vlmp	Sale Qual	Sale RCode	Sale Price
9/8/1997	845/1220	WD	V	U	03	$21,700.00
7/13/1993	777/2068	WD	V	U	33	$43,000.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
1	OFFICE MED (005200)	1997	Common BRK (19)	7386	7530	$397,112.00
	Note: All S.F. calculations are based on exterior building dimensions.					

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
0166	CONC,PAVMT	1997	$3,450.00	2300.000	0 x 0 x 0	(.00)
0260	PAVEMENT-A	0	$16,338.00	18153.000	0 x 0 x 0	(.00)

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
001900	PROF BLDG (MKT)	2.040 AC	1.00/1.00/1.00/1.00	$27,000.00	$55,080.00

COLUMBIA COUNTY 9-1-1 ADDRESSING

P. O. Box 1787, Lake City, FL 32056-1787
PHONE: (386) 758-1125 * FAX: (386) 758-1365 * Email: ron_croft@columbiacountyfla.com

Addressing Maintenance

To maintain the Countywide Addressing Policy you must make application for a 9-1-1 Address at the time you apply for a building permit. The established standards for assigning and posting numbers to all principal buildings, dwellings, businesses and industries are contained in Columbia County Ordinance 2001-9. The addressing system is to enable Emergency Service Agencies to locate you in an emergency, and to assist the United States Postal Service and the public in the timely and efficient provision of services to residents and businesses of Columbia County.

DATE REQUESTED: 3/4/2009 **DATE ISSUED:** 3/6/2009

ENHANCED 9-1-1 ADDRESS:

1289 SW STATE ROAD 47

LAKE CITY FL 32025

PROPERTY APPRAISER PARCEL NUMBER:

07-4S-17-08130-003

Remarks:

2ND LOCATION ON PARCEL, ADDRESS MUST BE POSTED ON BLDG AND AT ACCESS FROM SW STATE ROAD 47

Address Issued By: signed / RONAL N. CROFT
Columbia County 9-1-1 Addressing / GIS Department

NOTICE: THIS ADDRESS WAS ISSUED BASED ON LOCATION INFORMATION RECEIVED FROM THE REQUESTER. SHOULD, AT A LATER DATE, THE LOCATION INFORMATION BE FOUND TO BE IN ERROR, THIS ADDRESS IS SUBJECT TO CHANGE.

1392

New Construction Subterranean Termite Soil Treatment Record

OMB Approval No. 2502-0525

This form is completed by the licensed Pest Control Company.

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This information is mandatory and is required to obtain benefits. HUD may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.
Section 24 CFR 200.926d(b)(3) requires that the sites for HUD insured structures must be free of termite hazards. This information collection requires the builder to certify that an authorized Pest Control company performed all required treatment for termites, and that the builder guarantees the treated area against infestation for one year. Builders, pest control companies, mortgage lenders, homebuyers, and HUD as a record of treatment for specific homes will use the information collected. The information is not considered confidential.

This report is submitted for informational purposes to the builder on proposed (new) construction cases when soil treatment for prevention of subterranean termite infestation is specified by the builder, architect, or required by the lender, architect, FHA, or VA.

27813

All contracts for services are between the Pest Control Operator and builder, unless stated otherwise.

Section 1: General Information (Treating Company Information)

Company Name: Aspen Pest Control, Inc.
Company Address: P.O. Box 1795 City Lake City State FL Zip 32056
Company Business License No. JB109476 Company Phone No. 386-755-3611 • 352-494-5761
FHA/VA Case No. (if any)

Section 2: Builder Information

Company Name: Concept Construction Company Phone No. 755-8887

Section 3: Property Information

Location of Structure(s) Treated (Street Address or Legal Description, City, State and Zip) M.A. Faisal, MD
1289 SW SR 47
Lake City, FL 32024

Type of Construction (More than one box may be checked) ☒ Slab ☐ Basement ☐ Crawl ☐ Other
Approximate Depth of Footing: Outside 1' Inside 1' Type of Fill Sand

Section 4: Treatment Information

Date(s) of Treatment(s) 6/1/09
Brand Name of Product(s) Used Biflex XTS
EPA Registration No. 53883-189
Approximate Final Mix Solution % .6%
Approximate Size of Treatment Area: Sq. ft. 9293 Linear ft. 442 Linear ft. of Masonry Voids 442
Approximate Total Gallons of Solution Applied 1195 gals.
Was treatment completed on exterior? ☐ Yes ☒ No
Service Agreement Available? ☒ Yes ☐ No
Note: Some state laws require service agreements to be issued. This form does not preempt state law.

Attachments (List)
Comments

Name of Applicator(s) C. Lacey / Z. Hannage / S. Gray Certification No. (if required by State law) JF104376

The applicator has used a product in accordance with the product label and state requirements. All treatment materials and methods used comply with state and federal regulations.

Authorized Signature Date 6/1/09

Warning: HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010. 1012; 31 U.S.C. 3729, 3802)

27813

Donald F. Lee & Associates, Inc.

Surveyors & Engineers

140 NW Ridgewood Avenue
Lake City, Florida 32055
(386) 755-6166
Fax (386) 755-6167
donald@dfla.com

Tuesday, June 02, 2009

TO: Columbia County Building Department

CC: Brian Crawford - Concept Construction

RE: Floor Elevation Check – Dr. Faisal Property – State Rd. 47
Owners: Faisal Family Limited Partnership
Section 7, Township 4 South, Range 17 East – 2.04 acre.

Elevations (based on project benchmarks) were obtained on the finished floor of an office building under construction on the above referenced property. The results are as follows:

Building Floor (at stemwall): 117.05'

SIGNED: Timothy A Delbene

Timothy A. Delbene, PLS
Florida Reg. Cert. No. 5594

DATE: 6/2/2009

Brett Crews

From: Cray, Dale [Dale.Cray@dot.state.fl.us]
Sent: Tuesday, February 17, 2009 4:51 PM
To: Miles, Neil; Brett Crews
Cc: Johnson, Jefferson
Subject: RE: Faisal Medical Building: Joint Use Driveway, SR 47 South

Brett, upon review of the existing commercial driveway , for the above proposed project it will meet FDOT standards. If any question please call.

From: Miles, Neil
Sent: Tuesday, February 17, 2009 4:33 PM
To: Cray, Dale
Subject: FW: Faisal Medical Building: Joint Use Driveway, SR 47 South

Dale:

This is the one!

Neil

From: Brett Crews [mailto:brett@crewsengineeringservices.com]
Sent: Tuesday, February 17, 2009 10:55 AM
To: Miles, Neil
Subject: Faisal Medical Building: Joint Use Driveway, SR 47 South

Neil,

Here is the proposed site plan for Faisal Medical Building. We have received Site Plan Approval from the County and an ERP from SRWMD.

As discussed, we do not want any issues to come up with the building permit since they will most likely notify FDOT when this one comes through building and zoning.

Please review and let me know of any issues the Department may have with the proposed driveway use.

In the future I will be sure to contact the Department earlier in the design process.

Thanks for your help.

Brett A. Crews, P.E.
Crews Engineering Services, LLC
P.O. Box 970
Lake City, FL 32056
Phone: 386.754.4085

GEOTECHNICAL EXPLORATION
FAISAL MEDICAL BUILDING
LAKE CITY, COLUMBIA COUNTY, FLORIDA
CTI PROJECT NO. 09-00134-01

--- Prepared for ---

Concept Construction, Inc.
295 NW Commons Loop, Suite 115-391
Lake City, Florida 32055

--- Prepared by ---

Cal-Tech Testing, Inc.
P. O. Box 1625
Lake City, Florida 32056-1625

April 6, 2009

Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

P.O. Box 1625 • Lake City, FL 32056 Tel. (386) 755-3633 • Fax (386) 752-5456

4784 Rosselle Street • Jacksonville, FL 32254 Tel. (904) 381-8901 • Fax (904) 381-8902

April 6, 2009

Concept Construction, Inc.
295 NE Commons Loop, Suite 115-391
Lake City, Florida 32055

Attention: Mr. Brian Crawford

Subject: Report of Geotechnical Exploration
Proposed Faisal Medical Building
Lake City, Columbia County, Florida
CTI Project No. 09-00134-01

Dear Mr. Crawford:

Cal-Tech Testing, Inc. (CTI) has completed the subsurface exploration for the proposed Faisal Medical Building. Our work was planned and performed in general accordance with our proposal dated March 26, 2009. Authorization to this work was provided by you on March 27, 2009. This report briefly outlines our understanding of the planned construction, describes the field exploration, presents the collected data, and provides our geotechnical engineering evaluation of the subsurface conditions, with respect to the planned construction. Also included in this report are our recommendations for the design and construction of the building foundations.

Introduction

The subject site is located approximately 350 feet east of SR 47 and about 1,100 feet south of Michigan Street in Lake City, Columbia County, Florida. It is our understanding the proposed development will consist of constructing an approximately 9,075 SF, one-story building for use as medical office space. We assume the building will be structural steel or wood framed with brick veneer. Structural loading information for the building is not available at this time; however, we anticipate that column loads will be no greater than 25 kips and wall loads no greater than 3 kips per lineal foot.

The existing site conditions were observed by the author of this document on April 2, 2009. At the time of our site visit, the ground surface was cleared of topsoil and appears relatively level.

Field Program

Our field program consisted of performing four (4) Standard Penetration Test (SPT) borings within the proposed building area. The SPT borings were performed on April 2, 2009 and extended 15 feet below the existing ground surface. The borings were performed at the approximate locations shown on the attached Field Exploration Plan. These locations were determined in the field and measured by tape and approximating right angles from existing features (property corners). Therefore, the borings location should be considered only as accurate as the means and methods by which they were obtained.

Sampling and penetration procedures of the SPT borings were accomplished in general accordance with ASTM D-1586, "*Penetration Test and Split-Barrel Sampling of Soils*", using a power rotary drill rig (BK-51 with a manual hammer). The standard penetration tests were performed by driving a standard 1-3/8" I.D. and 2" O.D. split spoon sampler with a 140 pound hammer falling 30 inches. The number of hammer blows required to drive the sampler a total of 18 inches, in 6 inch increments, were recorded. The penetration resistance or "*N*" value is the summation of the last two 6 inch increments and is illustrated on the attached boring logs adjacent to their corresponding sample depths. The penetration resistance is used as an index to derive soil parameters from various empirical correlations.

The attached record of boring logs presents the descriptions of the subsurface conditions encountered at the time of our field program, and also provide the penetration resistances recorded during the drilling and sampling process. The stratification lines and depth designations on the boring record represent the approximate boundaries between the various soils encountered, as determined in the field by our personnel. In some cases, the transition between the various soils may be gradual.

Subsurface Conditions

The soil profile as disclosed by SPT borings B-1 through B-4 initially consisted of about 2½ to 3 feet of grayish tan silty fine sand (SP-SM). The surface layer is underlain by alternating layers of light gray to white fine sand (SP), light gray and reddish brown mottled clayey fine sand (SC), gray silty clayey fine sand (SC-SM), gray sandy clay (CL) or grayish green clay (CH). In general, the relative density of the sandy soils vary from loose to very dense with penetration resistance or "*N*" values ranging from 5 to 60 Blows Per Foot (BPF). The clayey soils vary from very stiff to hard in consistency with "*N*" values ranging from 16 to 33 BPF.

Groundwater Conditions

The depth to the groundwater was measured at the borings location at the time of completion of drilling. The groundwater table was not encountered in any of the test borings. We note that due to the relatively short time frame of the field exploration, the groundwater may not have had sufficient time to stabilize. For a true "stabilized" groundwater level reading, piezometers may be required. In any event, fluctuation in groundwater levels should be anticipated due to seasonal climatic conditions, construction activities, rainfall variations, surface water runoff, and other site-specific factors.

General Area Geology/Sinkhole Potential

Published information regarding the geology in this area of Columbia County, Florida indicates the site is situated along the interface of areas designated as Undifferentiated Quaternary Sediments (**Qu**) of the Pleistocene and Holocene epochs; and the Statenville Formation (**Ths**) of the Hawthorn Group. Typically, the Undifferentiated Quaternary sediments consist of siliciclastics, organics and freshwater carbonates. The siliciclastics are light gray, tan, brown to dark, unconsolidated to poorly consolidated, clean to clayey, silty, fossiliferous, variably organic-bearing sands to blue green to olive green, poorly to moderately consolidated, sandy, silty, clays. Freshwater carbonates "*marls*" are buff colored to tan, unconsolidated to poorly consolidated, fossiliferous (mollusks) carbonate muds containing organics.

The Statenville Formation is of the Miocene epoch and mainly consists of interbedded sands, clays and dolostones with common to very abundant phosphate grains. The sands are predominate and are light gray to olive gray, poorly indurated, phosphatic, fine to coarse grained with scattered gravel and with minor occurrences of fossils. Clays are yellowish gray to olive gray, poorly consolidated, variably sandy and phosphatic, and variably dolomitic. The dolostones are yellowish gray to light orange, poorly to well indurated, sandy, clayey and phosphatic with scattered mollusk molds and casts.

The limestone in this area consists of carbonate rock and its weathered residuum. In this area of Columbia County, Florida, the limestone is marked by solution features (sinkholes) associated with *karst* terrains. Areas underlain by karst terrains are prone to sinkhole activities. The sinkholes are primarily caused by an advanced state of internal soil erosion or raveling action, which under certain circumstances can lead to ground subsidences. This internal soil erosion is a very slow process by which soil particle usually migrate under the influence of a hydraulic gradient to underlying karsted and/or fractured limestone formation. There are several indicators generally associated with an advanced state of long term internal soil erosion such as noticeable surface depressions and very loose to soft soil zones just above the rock formation.

Based on our review of the test borings, it is our opinion the proposed development on this site will have no greater risk of damage due to sinkhole activity than the development of structures in other areas within the immediate vicinity of the subject site.

Foundation Recommendations

Based on the data obtained during this exploration, and the anticipated structural loading and grading conditions, it is our opinion the proposed building can be supported on a conventional shallow foundation system. This shallow foundation system may be designed using a maximum allowable soil bearing pressure of 2,500 psf. A detailed settlement analysis was beyond the scope of this exploration. However, based on our experience, the assumed loads, and the available site and subsurface information, we anticipate the building will experience total and differential settlements of less than 1 and ½-inch, respectively. We note that these settlement estimates are based on the structural loading and site grading assumptions stated previously. If the grading or structural assumptions are incorrect, we should be notified so that we can reevaluate our recommendations.

Foundation Size and Bearing Depth

The minimum width recommended for isolated spread-type footings and continuous wall footings is 24 and 18 inches, respectively. All exterior footings should bear at a depth of at least 18 inches below the exterior final grades. Interior footings should bear at a depth of at least 18 inches below the interior floor slab. These recommended minimum-bearing depths should provide the necessary confinement for the foundation bearing level soils.

Bearing Material

The foundations should bear in either natural soils, or in compacted structural fill/backfill. Sandy soils should be compacted to densities equivalent to 95 percent of the modified Proctor maximum dry density (ASTM D 1557). Compaction should not be attempted on clayey soils at the footing bearing level (if any encountered). Rather they should be excavated using a smooth bucket/shovel, and replaced with a working platform of 10 to 12-inches of coarse aggregate (such as ASTM No. 57) or two to three inches of lean concrete mud mat.

Ground Floor Slab Support

The ground floor slab for the proposed building may be constructed directly on a re-compacted fine sand subgrade. Structural fill soils placed beneath the slab should be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (ASTM D-1557). Proper jointing should be installed around columns and walls to allow slabs and foundations to settle differentially.

Site & Fill Compaction

We recommend that exposed and underlying soils be compacted to densities equivalent to 95 percent of the modified Proctor maximum dry density (ASTM D-1557). To compact the exposed and underlying soils, we recommend using a vibratory roller that has a static at-drum weight on the order of four to five tons and a drum diameter on the order of four feet. The initial compaction operations should also consist of at least eight overlapping passes of the roller in each direction. This compaction effort should help improve the overall uniformity and bearing conditions of the near-surface soils.

Using a roller meeting the above requirements, structural fill required to raise the site to the planned finish grades may then be placed in loose lifts not exceeding 12 inches in thickness, and should then be compacted to densities similar to those recommended above. For ease of construction and compaction, we recommend that structural fill consist of a non-plastic, inorganic, granular soil containing less than 10 percent material passing the 200 mesh sieve (i.e., relatively clean sand). The upper fine sands encountered in our boring should meet this criteria. **The upper 12 inches of the exposed soils should be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (ASTM D-1557) prior to placement of any new fill.**

Report Limitations

This report has been prepared for the exclusive use of **Concept Construction, Inc. of Lake City, Florida** for the specific application to the project discussed herein. Our conclusions and recommendations have been rendered using generally accepted standards of geotechnical engineering practice in the State of Florida, no other warranty is expressed or implied. **CTI** is not responsible for the interpretations, conclusions, opinions, or recommendations of others based on the data contained herein. We note that assessment of environmental conditions for the presence of pollutants in the at the subject site was beyond the scope of this exploration.

Closing

We appreciate the opportunity to work with you on this project, and look forward to serving as your geotechnical and construction materials testing consultant for the remainder of this and future projects. Should you have any questions and / or comments concerning this report, please contact our office at 386-755-3633.

Very truly yours,
Cal-Tech Testing, Inc.

David B. Brown
Executive Vice President

Nabil O. Hmeidi, P.E. 3/6/09
Senior Geotechnical Engineer
Licensed, Florida No. 57842

COPY

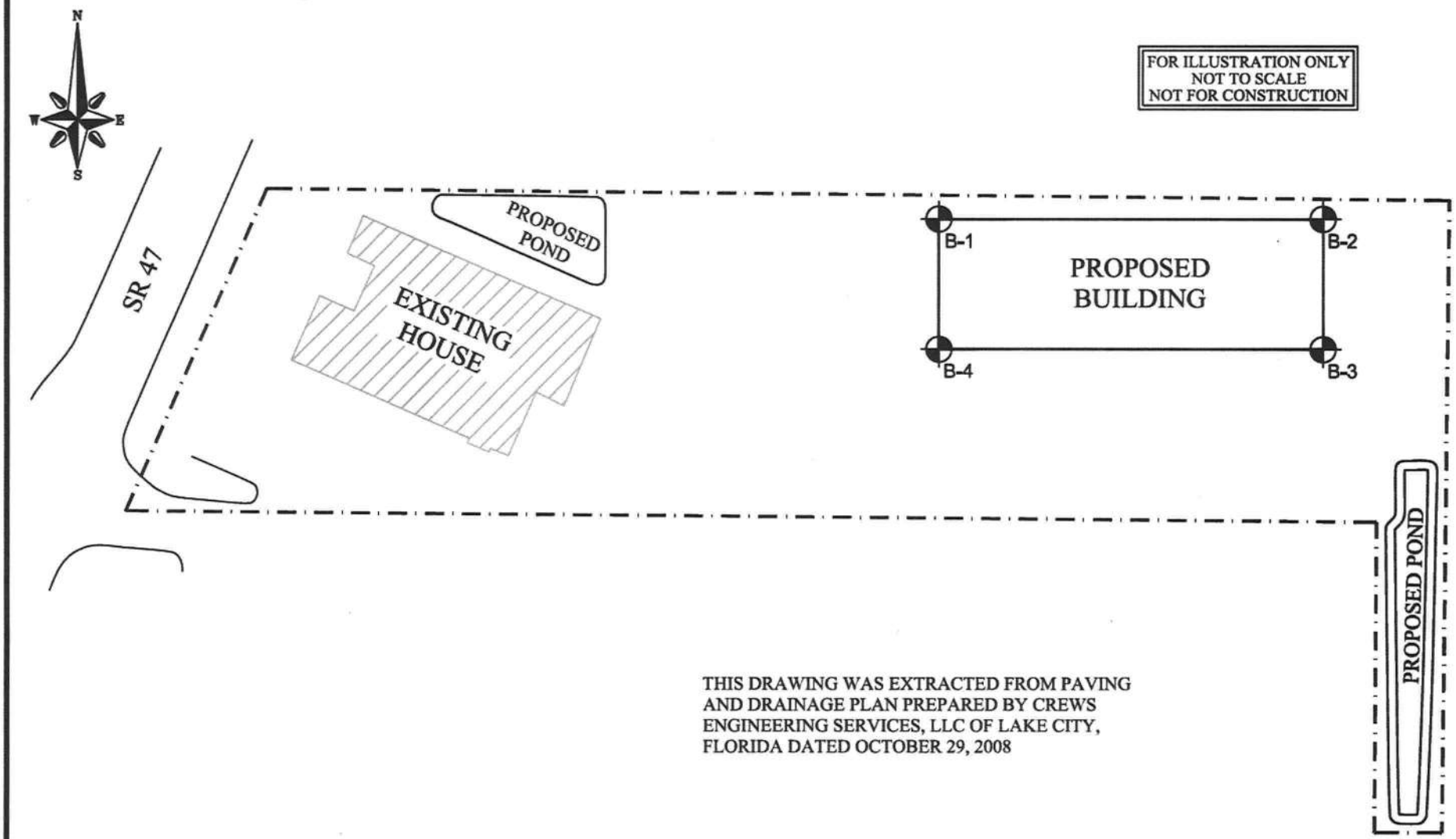
Distribution: *File (1 copy)*
Addressee (2 copies)

Attachments: *Vicinity Map (1 page)*
Field Exploration Plan (1 page)
Record Boring Logs (4 pages)
Subsurface Diagram (1 page)
Unified Soil Classification System (1 page)
Key To Test Data (1 page)

ATTACHMENTS

CAL-TECH TESTING, INC. **P.O. Box 1625** **Lake City, Florida 32056-1625** **Phone: (386) 755-3633** **Fax: (386) 752-5456**	**VICINITY MAP** **Faisal Medical Building – SR 47** **Lake City, Columbia County, Florida** **Cal-Tech Testing Project No. 09-00134-01**

Figure 1



Standard Penetration Test Borings Performed by CTI on April 2, 2009

SUBSURFACE EXPLORATION FAISAL MEDICAL BUILDING LAKE CITY, COLUMBIA COUNTY, FLORIDA	**CAL-TECH TESTING, INC.** **P.O. Box 1625** **Lake City, Florida 32056-1625** **Phone: (386) 755-3633** **Fax: (386) 752-5456**	FIELD EXPLORATION PLAN Project No. 09-00134-01 | DATE: 04/03/2009 | FIGURE: 2 APPROVED: | SCALE: N.T.S.

0,0

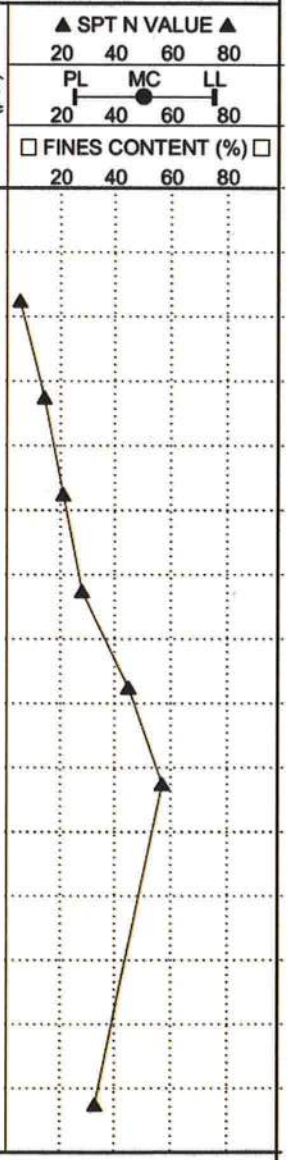
CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-1

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 116.3 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)					
			SPT 1		2-2-3 (5)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		5-8-6 (14)		
5		MEDIUM DENSE DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		5-10-11 (21)		
			SPT 4		10-13-15 (28)		
			SPT 5		18-20-25 (45)		
10		VERY DENSE, gray, silty clayey fine sand (SC-SM)	SPT 6		17-25-32 (57)		
		HARD, gray, sandy clay (CL)					
15			SPT 7		9-15-18 (33)		

Bottom of borehole at 15.0 feet.



CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-2

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 116 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)	SPT 1		2-3-4 (7)		
		LOOSE to VERY DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 2		4-4-5 (9)		
5			SPT 3		5-10-15 (25)		
			SPT 4		10-15-20 (35)		
			SPT 5		15-20-25 (45)		
10			SPT 6		20-28-32 (60)		
		VERY STIFF, grayish green, clay (CH)	SPT 7		7-10-12 (22)		
15		Bottom of borehole at 15.0 feet.					

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

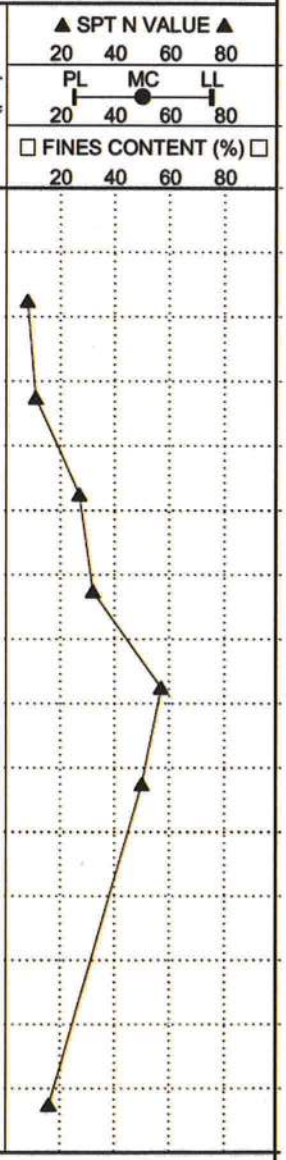
CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-3

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 115.7 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)					
			SPT 1		3-4-4 (8)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		4-5-6 (11)		
		MEDIUM DENSE to VERY DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		6-12-15 (27)		
5			SPT 4		10-15-17 (32)		
			SPT 5		20-25-32 (57)		
10			SPT 6		20-25-25 (50)		
		VERY DENSE, gray, silty clayey fine sand (SC-SM)					
		VERY STIFF, grayish green, clay (CH)	SPT 7		5-7-9 (16)		
15							

Bottom of borehole at 15.0 feet.



CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-4

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 115.3 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		MEDIUM DENSE, grayish tan, silty fine sand (SP-SM)	SPT 1		4-5-6 (11)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		6-8-8 (16)		
5		MEDIUM DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		6-9-11 (20)		
			SPT 4		8-11-8 (19)		
			SPT 5		8-10-13 (23)		
10			SPT 6		12-14-15 (29)		
		VERY STIFF, grayish green, clay (CH)					
15			SPT 7		5-9-9 (18)		

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

Bottom of borehole at 15.0 feet.

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

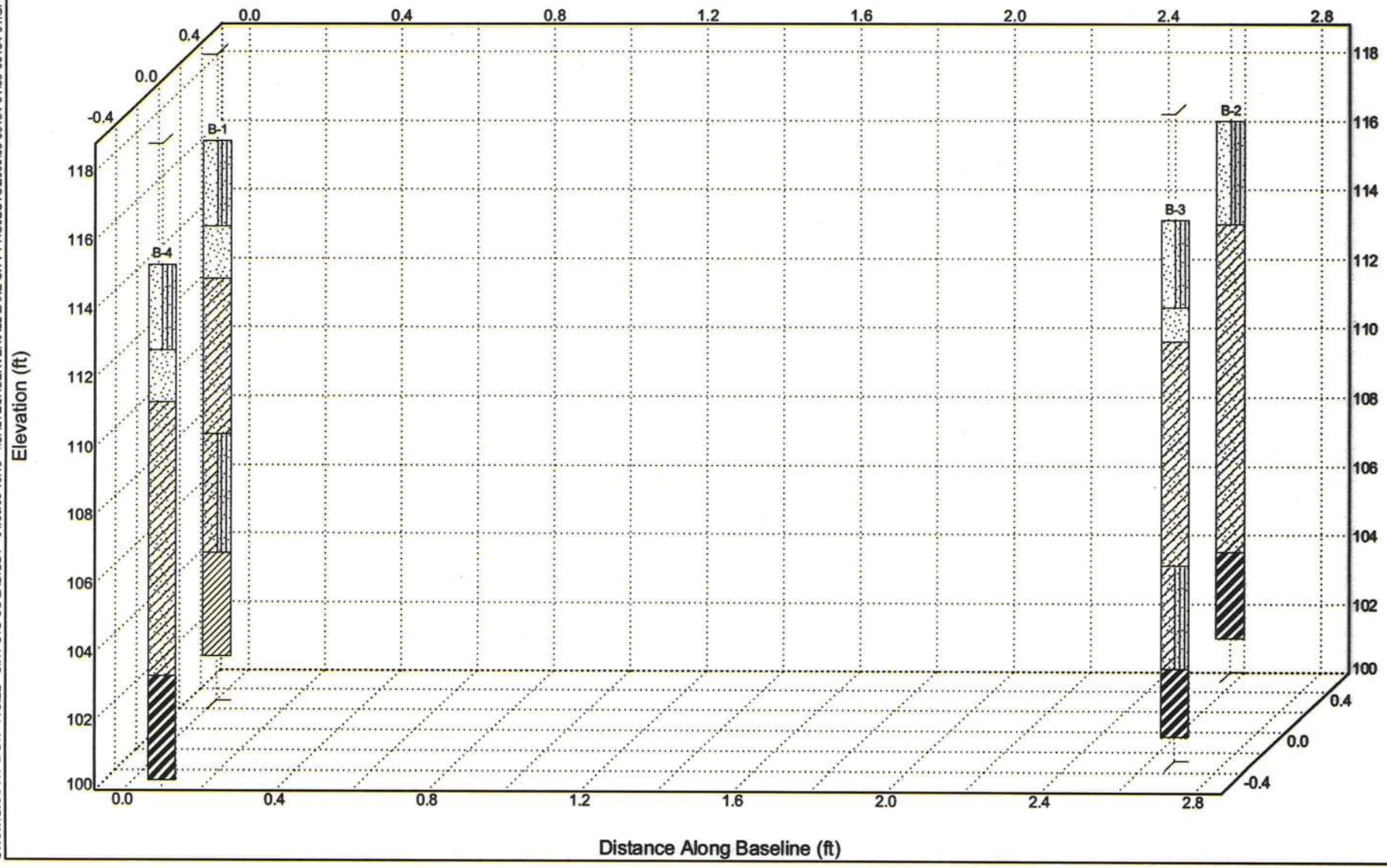
SUBSURFACE DIAGRAM

CLIENT Concept Construction, Inc.

PROJECT NUMBER 09-00134-01

PROJECT NAME Faisal Medical Building

PROJECT LOCATION Lake City, Columbia County, Florida

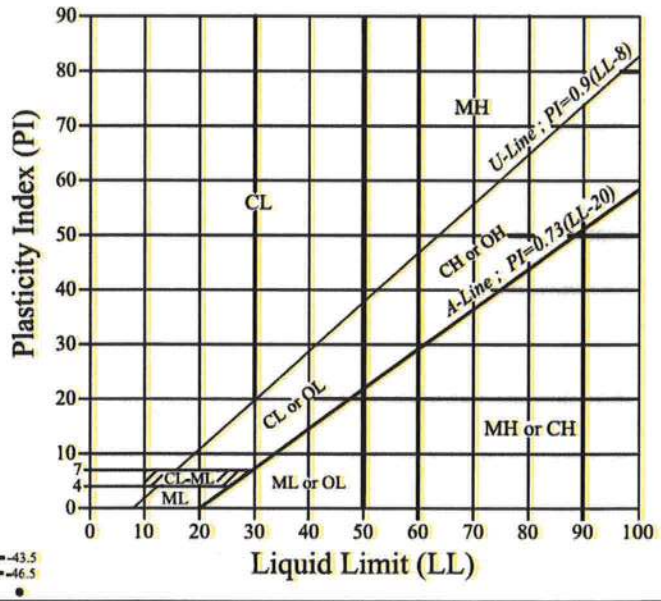


UNIFIED SOIL CLASSIFICATION SYSTEM
ASTM DESIGNATION D-2487

MAJOR DIVISIONS			GROUP SYMBOL	TYPICAL NAMES	LABORATORY CLASSIFICATION CRITERIA	
COARSE GRAINED SOILS (More than half of the material is larger than No. 200 sieve)	Gravels (more than half of the coarse fraction is larger than No. 4 sieve)	Clean gravels	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.	Determine percentage of sand and gravel from grain size curve Depending on percentage of fines (fraction smaller than No. 200 Sieve size), coarse grained soils are classified as follows: Less than 5% ..... GW, GP, SW, SP More than 12% ... GM, GC, SM, SC 5 to 12% ..... Borderline cases requiring dual symbols	$C_u = \frac{D_{60}}{D_{10}} > 4 \;;\; 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$
			GP	Poorly graded gravels, gravel-sand mixture, little or no fines.		Not meeting all gradation requirments of GW
		Gravel with fines	GM	Silty gravels, gravel-sand-silt mixtures.	Atterberg Limits below A-Line or PI less than 4	Above A-Line with PI between 4 and 7 are borderline cases requiring the use of dual symbols.
			GC	Clayey gravels, gravel-sand-clay mixtures.	Atterberg Limits above A-Line or PI greater than 7	
	Sands (more than half of the coarse fraction is smaller than No. 4 sieve)	Clean sands	SW	Well-graded sands, gravelly sands, little or no fines.		$C_u = \frac{D_{60}}{D_{10}} > 6 \;;\; 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$
			SP	Poorly graded sands, gravelly sands, little or no fines.		Not meeting all gradation requirments of SW
		Sands with fine	SM	Silty sands, sand-silt mixtures.	Atterberg Limits below A-Line or PI less than 4	Limits plotting in hatched zone with PI between 4 and 7 are borderline cases requiring the use of dual symbols.
			SC	Clayey sands, sand-clay mixtures.	Atterberg Limits above A-Line or PI greater than 7	
FINE GRAINED SOILS (More than half of the material is finer than No. 200 sieve)	Silts and Clays (LL less than 50)		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity.		
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clay.		
			OL	Organic silts and organic silty clays of low plasticity.		
	Silts and Clays (LL greater than 50)		MH	Inorganic silts, micaceous or diato-maceous fine sandy or silty soils, elastic silts.		
			CH	Inorganic clays of high plasticity, fat clay.		
			OH	Organic clays of medium to high plasticity, organic silts.		
	Highly Organic Soils		Pt	Peat and other highly organic soils.		

PLASTICITY CHART

1. Plot intersection of PI as determined by the Atterberg Limits tests.
2. Points plotted above the A-Line indicate clay soils.
3. Points plotted below the A-Line indicate silt.



LL=-43.5
PI=-46.5

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve ..... SP
5% - 12% Passing the U.S. No. 200 Sieve ..... SP-SM
12% - 50% Passing the U.S. No. 200 Sieve ..... SM/SC

KEY TO TEST DATA

STANDARD PENETRATION TEST:
Soil sampling and penetration testing is performed in accordance with ASTM D-1586. The standard penetration resistance ("*N*") is the number of blows of a 140-pound hammer falling 30 inches to drive a 2-inch O.D., 1.4-inch I.D. split spoon sampler one foot.

ROCK CORE DRILLING:
Rock sampling and core drilling is performed in accordance with ASTM D-2113. The rock quality designation percentage (RQD) is determined by summing only pieces of core that are at least 4 inches long, and dividing by the "run" length.

Relation of RQD and In-situ Rock Quality

RQD (%)	Rock Quality
90 -100	Excellent
75 - 90	Good
50 -75	Fair
25 - 50	Poor
0 - 25	Very Poor

RELATIVE DENSITY (SANDS):

Very loose - less than 4 blows/ft.
Loose - 5 to 10 blows/ft.
Medium - 11 to 30 blows/ft.
Dense - 31 to 50 blows/ft.
Very dense - over 50 blows/ft.

CONSISTENCY (SILTS & CLAYS):

Very soft - less than 2 blows/ft.
Soft - 3 to 4 blows/ft.
Medium stiff - 5 to 8 blows/ft.
Stiff - 9 to 15 blows/ft.
Very stiff - 16 to 30 blows/ft.
Hard - 31 to 50 blows/ft.
Very hard - over 50 blows/ft.

HARDNESS (ROCKS):

Soft - Rock core crumbles when handled.
Medium - Can break core with hands.
Moderately hard - Thin edges of rock core can be broken with fingers.
Hard - Thin edges of core can not be broken with fingers.
Very hard - Can not be scratched with knife.

GROUNDWATER:
Water levels shown on boring logs are taken immediately upon completion of boring, and are intended for general information. The apparent level may have been altered by the drilling process. Groundwater levels, if desired, can be monitored over a long time interval.

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve ..... SP
5% - 12% Passing the U.S. No. 200 Sieve ..... SP-SM
12% - 50% Passing the U.S. No. 200 Sieve ..... SM/SC

Cal-Tech Testing, Inc.
• Engineering P.O. Box 1625 • Lake City, FL 32056-1625 • Tel(386)755-3633 • Fax(386)752-5456
• Geotechnical 6919 Distribution Ave. S., Unit #5, Jacksonville, FL 32257 • Tel(904)262-4046 • Fax(904)4047
• Environmental 2230 Greensboro Hwy • Quincy, FL 32351 • Tel(850)442-3495 • Fax(850)442-4008
Laboratories

DATE: 5-28-09
JOB NO.: 09-200

REPORT OF IN-PLACE DENSITY TEST - Page 2

* 29813

PROJECT: Dr. Faisal's Office
CLIENT: Concept Const.
By: Chad Day

ASTM METHOD	SOIL USE
Nuclear	Building Full

SPECIFICATION REQUIREMENTS: 95% - Building Full

TEST NO.	TEST LOCATION	TEST DEPTH	WET DENSITY (lb/ft³)	MOISTURE PERCENT	DRY DENSITY (lb/ft³)	PROCTOR TEST NO.	PROCTOR VALUE	% MAXIMUM DENSITY
1	S.W. Corner 10' N x 16' E	12"	121.7	10.0	110.6	1	109	101
2	N.W. Corner 16' E x 15' S.	12"	124.9	14.1	109.5	1	109	100
3	N.W. Corner 165' E x 20' S	12"	126.4	15.8	109.2	1	109	100
4	S.E. Corner 160' W x 20' N	12"	124.0	15.6	107.3	1	109	98
5	N.E. Corner 14' W x 14' S	12"	121.3	13.0	107.4	1	109	99
6	S.E. Corner 23' W x 10' N	12"	121.9	10.3	110.5	1	109	101

REMARKS:

PROCTORS

PROCTOR NO.	SOIL DESCRIPTION	MAXIMUM DRY UNIT WEIGHT (lb/ft³)	OPT. MOIST.	TYPE
1	09-121 Dark Brown Fine Sand	109	12.0	Mod.

GEOTECHNICAL EXPLORATION
FAISAL MEDICAL BUILDING
LAKE CITY, COLUMBIA COUNTY, FLORIDA
CTI PROJECT NO. 09-00134-01

--- Prepared for ---

Concept Construction, Inc.
295 NW Commons Loop, Suite 115-391
Lake City, Florida 32055

--- Prepared by ---

Cal-Tech Testing, Inc.
P. O. Box 1625
Lake City, Florida 32056-1625

April 6, 2009

Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

P.O. Box 1625 • Lake City, FL 32056 Tel. (386) 755-3633 • Fax (386) 752-5456

4784 Rosselle Street • Jacksonville, FL 32254 Tel. (904) 381-8901 • Fax (904) 381-8902

April 6, 2009

Concept Construction, Inc.
295 NE Commons Loop, Suite 115-391
Lake City, Florida 32055

Attention: Mr. Brian Crawford

Subject: Report of Geotechnical Exploration
Proposed Faisal Medical Building
Lake City, Columbia County, Florida
CTI Project No. 09-00134-01

Dear Mr. Crawford:

Cal-Tech Testing, Inc. (CTI) has completed the subsurface exploration for the proposed Faisal Medical Building. Our work was planned and performed in general accordance with our proposal dated March 26, 2009. Authorization to this work was provided by you on March 27, 2009. This report briefly outlines our understanding of the planned construction, describes the field exploration, presents the collected data, and provides our geotechnical engineering evaluation of the subsurface conditions, with respect to the planned construction. Also included in this report are our recommendations for the design and construction of the building foundations.

Introduction

The subject site is located approximately 350 feet east of SR 47 and about 1,100 feet south of Michigan Street in Lake City, Columbia County, Florida. It is our understanding the proposed development will consist of constructing an approximately 9,075 SF, one-story building for use as medical office space. We assume the building will be structural steel or wood framed with brick veneer. Structural loading information for the building is not available at this time; however, we anticipate that column loads will be no greater than 25 kips and wall loads no greater than 3 kips per lineal foot.

The existing site conditions were observed by the author of this document on April 2, 2009. At the time of our site visit, the ground surface was cleared of topsoil and appears relatively level.

Field Program

Our field program consisted of performing four (4) Standard Penetration Test (SPT) borings within the proposed building area. The SPT borings were performed on April 2, 2009 and extended 15 feet below the existing ground surface. The borings were performed at the approximate locations shown on the attached Field Exploration Plan. These locations were determined in the field and measured by tape and approximating right angles from existing features (property corners). Therefore, the borings location should be considered only as accurate as the means and methods by which they were obtained.

Sampling and penetration procedures of the SPT borings were accomplished in general accordance with ASTM D-1586, "*Penetration Test and Split-Barrel Sampling of Soils*", using a power rotary drill rig (BK-51 with a manual hammer). The standard penetration tests were performed by driving a standard 1-3/8" I.D. and 2" O.D. split spoon sampler with a 140 pound hammer falling 30 inches. The number of hammer blows required to drive the sampler a total of 18 inches, in 6 inch increments, were recorded. The penetration resistance or "*N*" value is the summation of the last two 6 inch increments and is illustrated on the attached boring logs adjacent to their corresponding sample depths. The penetration resistance is used as an index to derive soil parameters from various empirical correlations.

The attached record of boring logs presents the descriptions of the subsurface conditions encountered at the time of our field program, and also provide the penetration resistances recorded during the drilling and sampling process. The stratification lines and depth designations on the boring record represent the approximate boundaries between the various soils encountered, as determined in the field by our personnel. In some cases, the transition between the various soils may be gradual.

Subsurface Conditions

The soil profile as disclosed by SPT borings B-1 through B-4 initially consisted of about 2½ to 3 feet of grayish tan silty fine sand (SP-SM). The surface layer is underlain by alternating layers of light gray to white fine sand (SP), light gray and reddish brown mottled clayey fine sand (SC), gray silty clayey fine sand (SC-SM), gray sandy clay (CL) or grayish green clay (CH). In general, the relative density of the sandy soils vary from loose to very dense with penetration resistance or "*N*" values ranging from 5 to 60 Blows Per Foot (BPF). The clayey soils vary from very stiff to hard in consistency with "*N*" values ranging from 16 to 33 BPF.

Groundwater Conditions

The depth to the groundwater was measured at the borings location at the time of completion of drilling. The groundwater table was not encountered in any of the test borings. We note that due to the relatively short time frame of the field exploration, the groundwater may not have had sufficient time to stabilize. For a true "stabilized" groundwater level reading, piezometers may be required. In any event, fluctuation in groundwater levels should be anticipated due to seasonal climatic conditions, construction activities, rainfall variations, surface water runoff, and other site-specific factors.

General Area Geology/Sinkhole Potential

Published information regarding the geology in this area of Columbia County, Florida indicates the site is situated along the interface of areas designated as Undifferentiated Quaternary Sediments (**Qu**) of the Pleistocene and Holocene epochs; and the Statenville Formation (**Ths**) of the Hawthorn Group. Typically, the Undifferentiated Quaternary sediments consist of siliciclastics, organics and freshwater carbonates. The siliciclastics are light gray, tan, brown to dark, unconsolidated to poorly consolidated, clean to clayey, silty, fossiliferous, variably organic-bearing sands to blue green to olive green, poorly to moderately consolidated, sandy, silty, clays. Freshwater carbonates "*marls*" are buff colored to tan, unconsolidated to poorly consolidated, fossiliferous (mollusks) carbonate muds containing organics.

The Statenville Formation is of the Miocene epoch and mainly consists of interbedded sands, clays and dolostones with common to very abundant phosphate grains. The sands are predominate and are light gray to olive gray, poorly indurated, phosphatic, fine to coarse grained with scattered gravel and with minor occurrences of fossils. Clays are yellowish gray to olive gray, poorly consolidated, variably sandy and phosphatic, and variably dolomitic. The dolostones are yellowish gray to light orange, poorly to well indurated, sandy, clayey and phosphatic with scattered mollusk molds and casts.

The limestone in this area consists of carbonate rock and its weathered residuum. In this area of Columbia County, Florida, the limestone is marked by solution features (sinkholes) associated with *karst* terrains. Areas underlain by karst terrains are prone to sinkhole activities. The sinkholes are primarily caused by an advanced state of internal soil erosion or raveling action, which under certain circumstances can lead to ground subsidences. This internal soil erosion is a very slow process by which soil particle usually migrate under the influence of a hydraulic gradient to underlying karsted and/or fractured limestone formation. There are several indicators generally associated with an advanced state of long term internal soil erosion such as noticeable surface depressions and very loose to soft soil zones just above the rock formation.

Based on our review of the test borings, it is our opinion the proposed development on this site will have no greater risk of damage due to sinkhole activity than the development of structures in other areas within the immediate vicinity of the subject site.

Foundation Recommendations

Based on the data obtained during this exploration, and the anticipated structural loading and grading conditions, it is our opinion the proposed building can be supported on a conventional shallow foundation system. This shallow foundation system may be designed using a maximum allowable soil bearing pressure of 2,500 psf. A detailed settlement analysis was beyond the scope of this exploration. However, based on our experience, the assumed loads, and the available site and subsurface information, we anticipate the building will experience total and differential settlements of less than 1 and ½-inch, respectively. We note that these settlement estimates are based on the structural loading and site grading assumptions stated previously. If the grading or structural assumptions are incorrect, we should be notified so that we can reevaluate our recommendations.

Foundation Size and Bearing Depth

The minimum width recommended for isolated spread-type footings and continuous wall footings is 24 and 18 inches, respectively. All exterior footings should bear at a depth of at least 18 inches below the exterior final grades. Interior footings should bear at a depth of at least 18 inches below the interior floor slab. These recommended minimum-bearing depths should provide the necessary confinement for the foundation bearing level soils.

Bearing Material

The foundations should bear in either natural soils, or in compacted structural fill/backfill. Sandy soils should be compacted to densities equivalent to 95 percent of the modified Proctor maximum dry density (ASTM D 1557). Compaction should not be attempted on clayey soils at the footing bearing level (if any encountered). Rather they should be excavated using a smooth bucket/shovel, and replaced with a working platform of 10 to 12-inches of coarse aggregate (such as ASTM No. 57) or two to three inches of lean concrete mud mat.

Ground Floor Slab Support

The ground floor slab for the proposed building may be constructed directly on a re-compacted fine sand subgrade. Structural fill soils placed beneath the slab should be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (ASTM D-1557). Proper jointing should be installed around columns and walls to allow slabs and foundations to settle differentially.

Site & Fill Compaction

We recommend that exposed and underlying soils be compacted to densities equivalent to 95 percent of the modified Proctor maximum dry density (ASTM D-1557). To compact the exposed and underlying soils, we recommend using a vibratory roller that has a static at-drum weight on the order of four to five tons and a drum diameter on the order of four feet. The initial compaction operations should also consist of at least eight overlapping passes of the roller in each direction. This compaction effort should help improve the overall uniformity and bearing conditions of the near-surface soils.

Using a roller meeting the above requirements, structural fill required to raise the site to the planned finish grades may then be placed in loose lifts not exceeding 12 inches in thickness, and should then be compacted to densities similar to those recommended above. For ease of construction and compaction, we recommend that structural fill consist of a non-plastic, inorganic, granular soil containing less than 10 percent material passing the 200 mesh sieve (i.e., relatively clean sand). The upper fine sands encountered in our boring should meet this criteria. **The upper 12 inches of the exposed soils should be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (ASTM D-1557) prior to placement of any new fill.**

Report Limitations

This report has been prepared for the exclusive use of **Concept Construction, Inc. of Lake City, Florida** for the specific application to the project discussed herein. Our conclusions and recommendations have been rendered using generally accepted standards of geotechnical engineering practice in the State of Florida, no other warranty is expressed or implied. **CTI** is not responsible for the interpretations, conclusions, opinions, or recommendations of others based on the data contained herein. We note that assessment of environmental conditions for the presence of pollutants in the at the subject site was beyond the scope of this exploration.

Closing

We appreciate the opportunity to work with you on this project, and look forward to serving as your geotechnical and construction materials testing consultant for the remainder of this and future projects. Should you have any questions and / or comments concerning this report, please contact our office at 386-755-3633.

Very truly yours,
Cal-Tech Testing, Inc.

David B. Brown
Executive Vice President

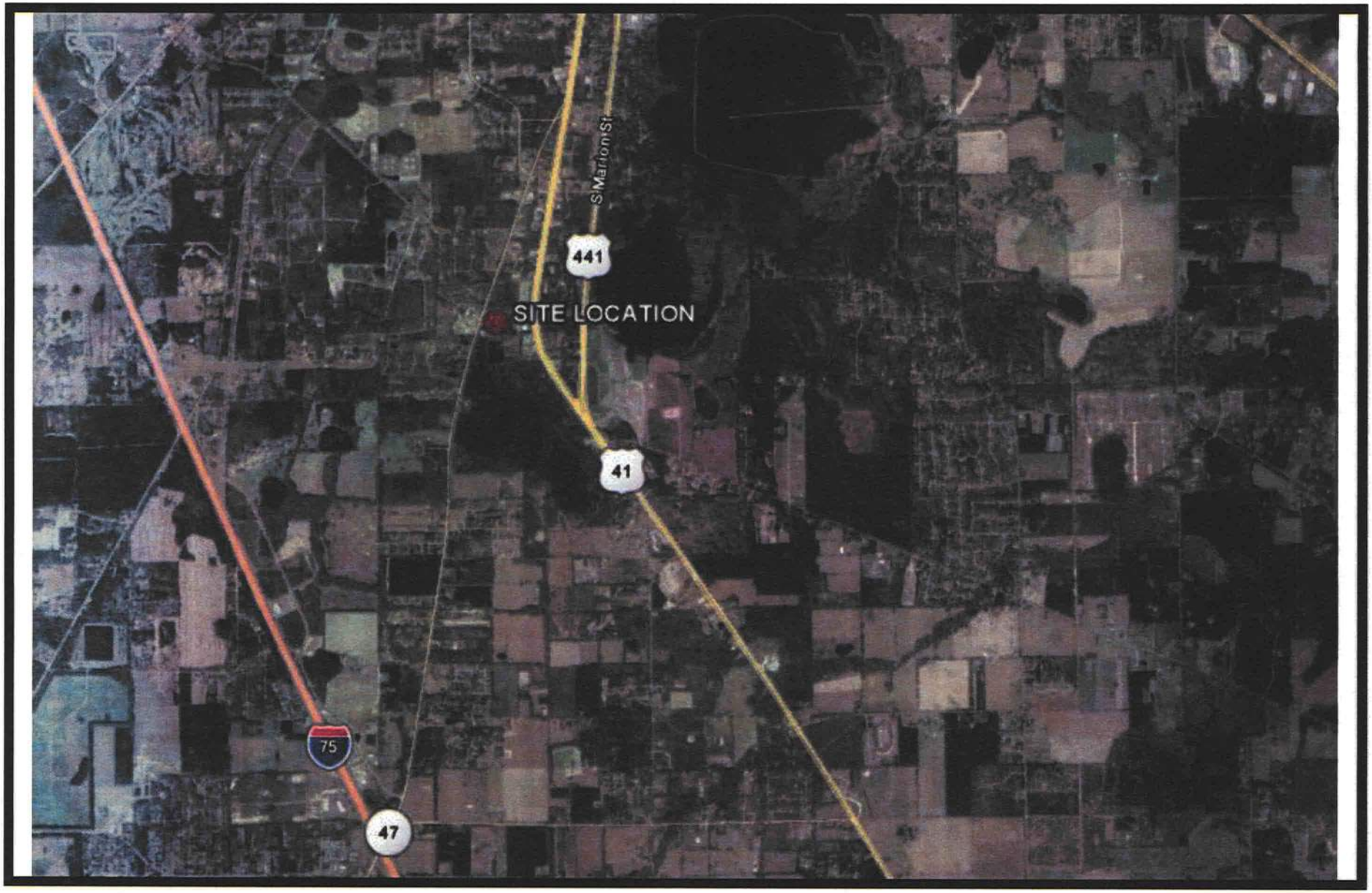
COPY

Nabil O. Hmeidi, P.E. 3/6/09
Senior Geotechnical Engineer
Licensed, Florida No. 57842

Distribution: *File (1 copy)*
Addressee (2 copies)

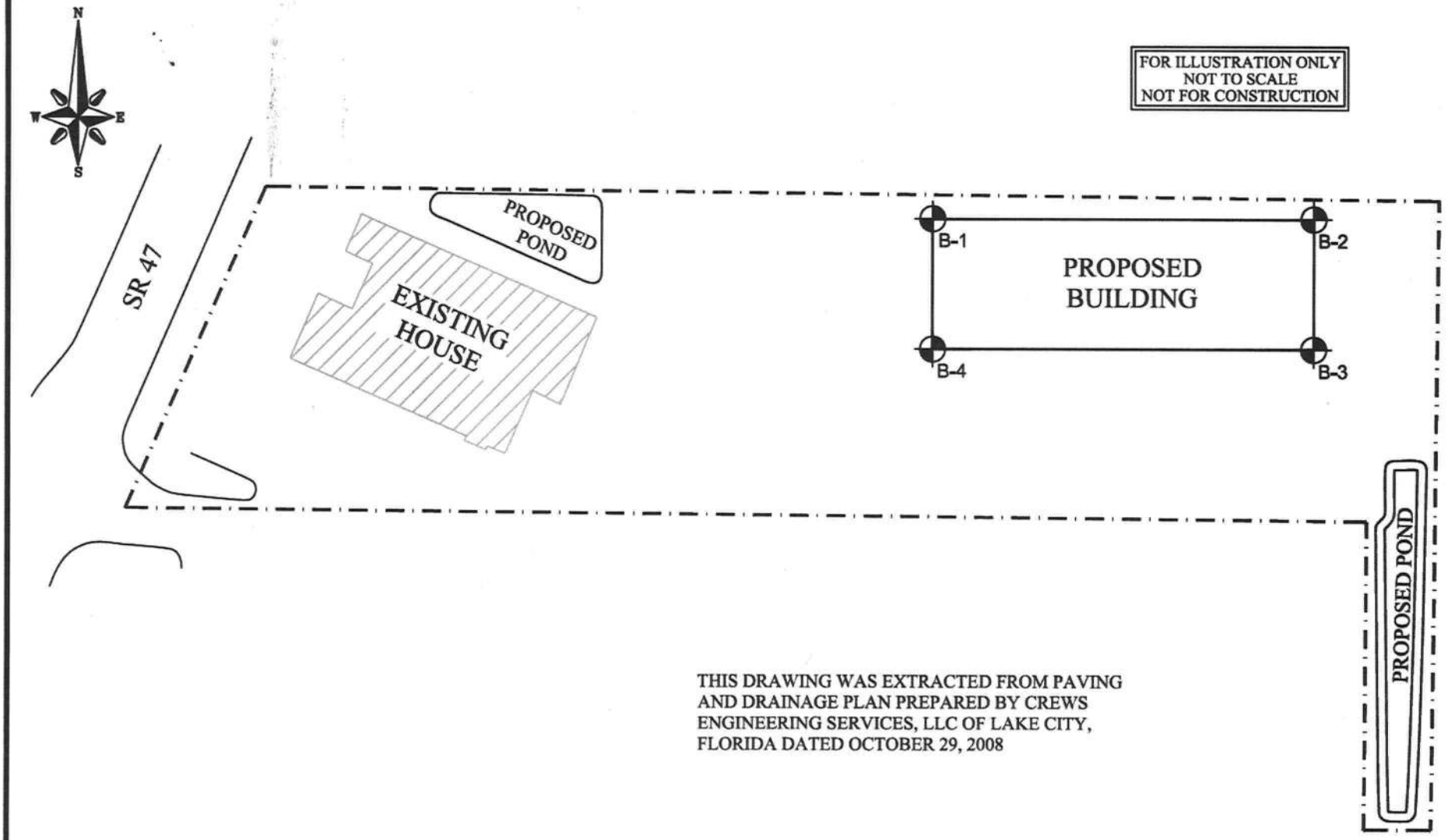
Attachments: *Vicinity Map (1 page)*
Field Exploration Plan (1 page)
Record Boring Logs (4 pages)
Subsurface Diagram (1 page)
Unified Soil Classification System (1 page)
Key To Test Data (1 page)

ATTACHMENTS



CAL-TECH TESTING, INC. **P.O. Box 1625** **Lake City, Florida 32056-1625** **Phone: (386) 755-3633** **Fax: (386) 752-5456**	**VICINITY MAP** **Faisal Medical Building – SR 47** **Lake City, Columbia County, Florida** **Cal-Tech Testing Project No. 09-00134-01**

Figure 1



Standard Penetration Test Borings Performed by CTI on April 2, 2009

SUBSURFACE EXPLORATION FAISAL MEDICAL BUILDING LAKE CITY, COLUMBIA COUNTY, FLORIDA	**CAL-TECH TESTING, INC.** **P.O. Box 1625** **Lake City, Florida 32056-1625** **Phone: (386) 755-3633** **Fax: (386) 752-5456**	FIELD EXPLORATION PLAN Project No. 09-00134-01 | DATE: 04/03/2009 | FIGURE: 2 APPROVED: | SCALE: N.T.S.

0,0

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-1

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 116.3 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)					
			SPT 1		2-2-3 (5)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		5-8-6 (14)		
5		MEDIUM DENSE DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		5-10-11 (21)		
			SPT 4		10-13-15 (28)		
			SPT 5		18-20-25 (45)		
10		VERY DENSE, gray, silty clayey fine sand (SC-SM)	SPT 6		17-25-32 (57)		
		HARD, gray, sandy clay (CL)					
15			SPT 7		9-15-18 (33)		

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

Bottom of borehole at 15.0 feet.

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-2

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 116 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)					
			SPT 1		2-3-4 (7)		
		LOOSE to VERY DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 2		4-4-5 (9)		
5			SPT 3		5-10-15 (25)		
			SPT 4		10-15-20 (35)		
			SPT 5		15-20-25 (45)		
10			SPT 6		20-28-32 (60)		
		VERY STIFF, grayish green, clay (CH)					
15			SPT 7		7-10-12 (22)		

▲ SPT N VALUE ▲ 20 40 60 80
PL MC LL 20 40 60 80
☐ FINES CONTENT (%) ☐ 20 40 60 80

Bottom of borehole at 15.0 feet.

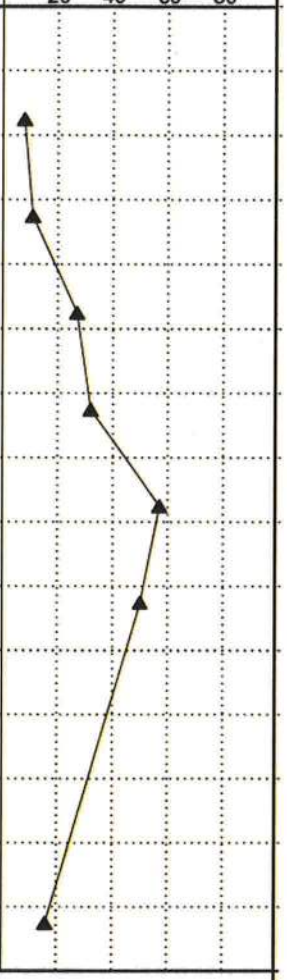
CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-3

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 115.7 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)	SPT 1		3-4-4 (8)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		4-5-6 (11)		
5		MEDIUM DENSE to VERY DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		6-12-15 (27)		
			SPT 4		10-15-17 (32)		
			SPT 5		20-25-32 (57)		
10			SPT 6		20-25-25 (50)		
		VERY DENSE, gray, silty clayey fine sand (SC-SM)					
		VERY STIFF, grayish green, clay (CH)	SPT 7		5-7-9 (16)		
15							

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



Bottom of borehole at 15.0 feet.

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-4

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 115.3 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		MEDIUM DENSE, grayish tan, silty fine sand (SP-SM)	SPT 1		4-5-6 (11)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		6-8-8 (16)		
5		MEDIUM DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		6-9-11 (20)		
			SPT 4		8-11-8 (19)		
			SPT 5		8-10-13 (23)		
10			SPT 6		12-14-15 (29)		
		VERY STIFF, grayish green, clay (CH)					
15			SPT 7		5-9-9 (18)		

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

Bottom of borehole at 15.0 feet.

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

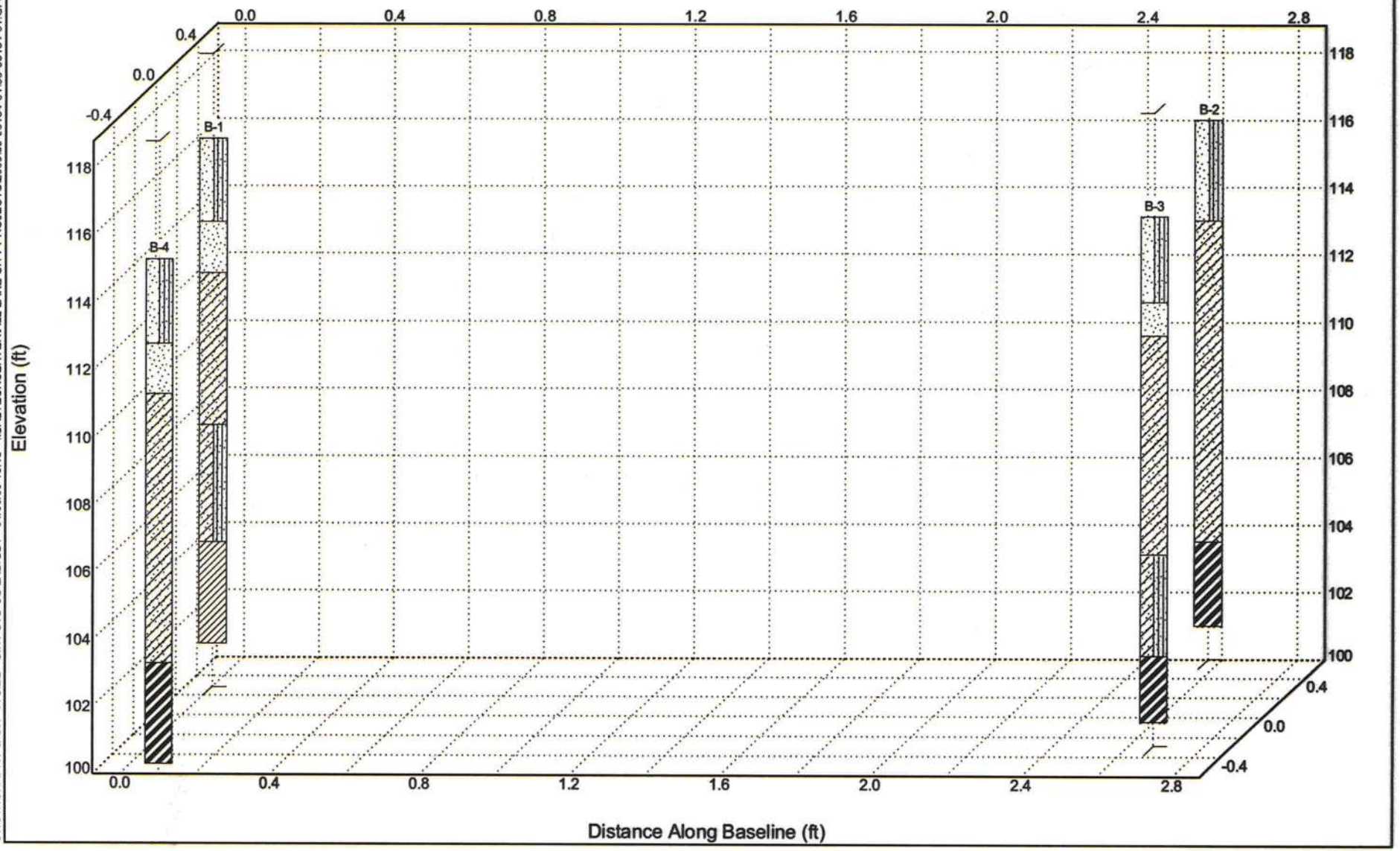
SUBSURFACE DIAGRAM

CLIENT Concept Construction, Inc.

PROJECT NUMBER 09-00134-01

PROJECT NAME Faisal Medical Building

PROJECT LOCATION Lake City, Columbia County, Florida



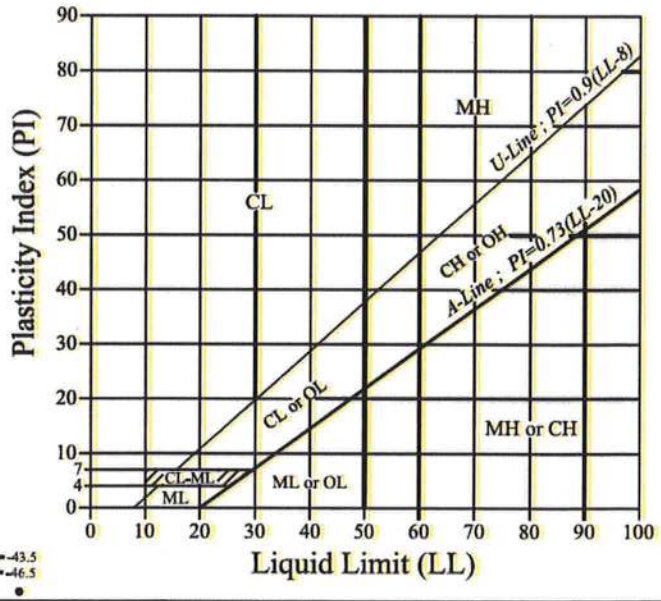
UNIFIED SOIL CLASSIFICATION SYSTEM
ASTM DESIGNATION D-2487

MAJOR DIVISIONS			GROUP SYMBOL	TYPICAL NAMES	LABORATORY CLASSIFICATION CRITERIA
COARSE GRAINED SOILS (More than half of the material is larger than No. 200 sieve)	Gravels (more than half of the coarse fraction is larger than No. 4 sieve)	Clean gravels	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.	$C_u = \frac{D_{60}}{D_{10}} > 4 \;;\; 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$
			GP	Poorly graded gravels, gravel-sand mixture, little or no fines.	Not meeting all gradation requirments of GW
		Gravel with fines	GM	Silty gravels, gravel-sand-silt mixtures.	Atterberg Limits below A-Line or PI less than 4 — Above A-Line with PI between 4 and 7 are borderline cases requiring the use of dual symbols.
			GC	Clayey gravels, gravel-sand-clay mixtures.	Atterberg Limits above A-Line or PI greater than 7
	Sands (more than half of the coarse fraction is smaller than No. 4 sieve)	Clean sands	SW	Well-graded sands, gravelly sands, little or no fines.	$C_u = \frac{D_{60}}{D_{10}} > 6 \;;\; 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$
			SP	Poorly graded sands, gravelly sands, little or no fines.	Not meeting all gradation requirments of SW
		Sands with fine	SM	Silty sands, sand-silt mixtures.	Atterberg Limits below A-Line or PI less than 4 — Limits plotting in hatched zone with PI between 4 and 7 are borderline cases requiring the use of dual symbols.
			SC	Clayey sands, sand-clay mixtures.	Atterberg Limits above A-Line or PI greater than 7
FINE GRAINED SOILS (More than half of the material is finer than No. 200 sieve)	Silts and Clays (LL less than 50)		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity.	
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clay.	
			OL	Organic silts and organic silty clays of low plasticity.	
	Silts and Clays (LL greater than 50)		MH	Inorganic silts, micaceous or diato-maceous fine sandy or silty soils, elastic silts.	
			CH	Inorganic clays of high plasticity, fat clay.	
			OH	Organic clays of medium to high plasticity, organic silts.	
	Highly Organic Soils		Pt	Peat and other highly organic soils.	

Determine percentage of sand and gravel from grain size curve
Depending on percentage of fines (fraction smaller than No. 200 Sieve size), coarse grained soils are classified as follows:
Less than 5% ..... GW, GP, SW, SP
More than 12% ... GM, GC, SM, SC
5 to 12% ..... Borderline cases requiring dual symbols

PLASTICITY CHART

1. Plot intersection of PI as determined by the Atterberg Limits tests.
2. Points plotted above the A-Line indicate clay soils.
3. Points plotted below the A-Line indicate silt.



CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve ..... SP
5% - 12% Passing the U.S. No. 200 Sieve ..... SP-SM
12% - 50% Passing the U.S. No. 200 Sieve ..... SM/SC

KEY TO TEST DATA

STANDARD PENETRATION TEST:
Soil sampling and penetration testing is performed in accordance with ASTM D-1586. The standard penetration resistance ("*N*") is the number of blows of a 140-pound hammer falling 30 inches to drive a 2-inch O.D., 1.4-inch I.D. split spoon sampler one foot.

ROCK CORE DRILLING:
Rock sampling and core drilling is performed in accordance with ASTM D-2113. The rock quality designation percentage (RQD) is determined by summing only pieces of core that are at least 4 inches long, and dividing by the "run" length.

Relation of RQD and In-situ Rock Quality

RQD (%)	Rock Quality
90 -100	Excellent
75 - 90	Good
50 -75	Fair
25 - 50	Poor
0 - 25	Very Poor

RELATIVE DENSITY (SANDS):

Very loose - less than 4 blows/ft.
Loose - 5 to 10 blows/ft.
Medium - 11 to 30 blows/ft.
Dense - 31 to 50 blows/ft.
Very dense - over 50 blows/ft.

CONSISTENCY (SILTS & CLAYS):

Very soft - less than 2 blows/ft.
Soft - 3 to 4 blows/ft.
Medium stiff - 5 to 8 blows/ft.
Stiff - 9 to 15 blows/ft.
Very stiff - 16 to 30 blows/ft.
Hard - 31 to 50 blows/ft.
Very hard - over 50 blows/ft.

HARDNESS (ROCKS):

Soft - Rock core crumbles when handled.
Medium - Can break core with hands.
Moderately hard - Thin edges of rock core can be broken with fingers.
Hard - Thin edges of core can not be broken with fingers.
Very hard - Can not be scratched with knife.

GROUNDWATER:
Water levels shown on boring logs are taken immediately upon completion of boring, and are intended for general information. The apparent level may have been altered by the drilling process. Groundwater levels, if desired, can be monitored over a long time interval.

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve ..... SP
5% - 12% Passing the U.S. No. 200 Sieve ..... SP-SM
12% - 50% Passing the U.S. No. 200 Sieve ..... SM/SC

GEOTECHNICAL EXPLORATION
FAISAL MEDICAL BUILDING
LAKE CITY, COLUMBIA COUNTY, FLORIDA
CTI PROJECT NO. 09-00134-01

--- Prepared for ---

Concept Construction, Inc.
295 NW Commons Loop, Suite 115-391
Lake City, Florida 32055

--- Prepared by ---

Cal-Tech Testing, Inc.
P. O. Box 1625
Lake City, Florida 32056-1625

April 6, 2009

Cal-Tech Testing, Inc.

- Engineering
- Geotechnical
- Environmental

LABORATORIES

P.O. Box 1625 • Lake City, FL 32056 Tel. (386) 755-3633 • Fax (386) 752-5456

4784 Rosselle Street • Jacksonville, FL 32254 Tel. (904) 381-8901 • Fax (904) 381-8902

April 6, 2009

Concept Construction, Inc.
295 NE Commons Loop, Suite 115-391
Lake City, Florida 32055

Attention: Mr. Brian Crawford

Subject: Report of Geotechnical Exploration
Proposed Faisal Medical Building
Lake City, Columbia County, Florida
CTI Project No. 09-00134-01

Dear Mr. Crawford:

Cal-Tech Testing, Inc. (CTI) has completed the subsurface exploration for the proposed Faisal Medical Building. Our work was planned and performed in general accordance with our proposal dated March 26, 2009. Authorization to this work was provided by you on March 27, 2009. This report briefly outlines our understanding of the planned construction, describes the field exploration, presents the collected data, and provides our geotechnical engineering evaluation of the subsurface conditions, with respect to the planned construction. Also included in this report are our recommendations for the design and construction of the building foundations.

Introduction

The subject site is located approximately 350 feet east of SR 47 and about 1,100 feet south of Michigan Street in Lake City, Columbia County, Florida. It is our understanding the proposed development will consist of constructing an approximately 9,075 SF, one-story building for use as medical office space. We assume the building will be structural steel or wood framed with brick veneer. Structural loading information for the building is not available at this time; however, we anticipate that column loads will be no greater than 25 kips and wall loads no greater than 3 kips per lineal foot.

The existing site conditions were observed by the author of this document on April 2, 2009. At the time of our site visit, the ground surface was cleared of topsoil and appears relatively level.

Field Program

Our field program consisted of performing four (4) Standard Penetration Test (SPT) borings within the proposed building area. The SPT borings were performed on April 2, 2009 and extended 15 feet below the existing ground surface. The borings were performed at the approximate locations shown on the attached Field Exploration Plan. These locations were determined in the field and measured by tape and approximating right angles from existing features (property corners). Therefore, the borings location should be considered only as accurate as the means and methods by which they were obtained.

Sampling and penetration procedures of the SPT borings were accomplished in general accordance with ASTM D-1586, "*Penetration Test and Split-Barrel Sampling of Soils*", using a power rotary drill rig (BK-51 with a manual hammer). The standard penetration tests were performed by driving a standard 1-3/8" I.D. and 2" O.D. split spoon sampler with a 140 pound hammer falling 30 inches. The number of hammer blows required to drive the sampler a total of 18 inches, in 6 inch increments, were recorded. The penetration resistance or "*N*" value is the summation of the last two 6 inch increments and is illustrated on the attached boring logs adjacent to their corresponding sample depths. The penetration resistance is used as an index to derive soil parameters from various empirical correlations.

The attached record of boring logs presents the descriptions of the subsurface conditions encountered at the time of our field program, and also provide the penetration resistances recorded during the drilling and sampling process. The stratification lines and depth designations on the boring record represent the approximate boundaries between the various soils encountered, as determined in the field by our personnel. In some cases, the transition between the various soils may be gradual.

Subsurface Conditions

The soil profile as disclosed by SPT borings B-1 through B-4 initially consisted of about 2½ to 3 feet of grayish tan silty fine sand (SP-SM). The surface layer is underlain by alternating layers of light gray to white fine sand (SP), light gray and reddish brown mottled clayey fine sand (SC), gray silty clayey fine sand (SC-SM), gray sandy clay (CL) or grayish green clay (CH). In general, the relative density of the sandy soils vary from loose to very dense with penetration resistance or "*N*" values ranging from 5 to 60 Blows Per Foot (BPF). The clayey soils vary from very stiff to hard in consistency with "*N*" values ranging from 16 to 33 BPF.

Groundwater Conditions

The depth to the groundwater was measured at the borings location at the time of completion of drilling. The groundwater table was not encountered in any of the test borings. We note that due to the relatively short time frame of the field exploration, the groundwater may not have had sufficient time to stabilize. For a true "stabilized" groundwater level reading, piezometers may be required. In any event, fluctuation in groundwater levels should be anticipated due to seasonal climatic conditions, construction activities, rainfall variations, surface water runoff, and other site-specific factors.

General Area Geology/Sinkhole Potential

Published information regarding the geology in this area of Columbia County, Florida indicates the site is situated along the interface of areas designated as Undifferentiated Quaternary Sediments (**Qu**) of the Pleistocene and Holocene epochs; and the Statenville Formation (**Ths**) of the Hawthorn Group. Typically, the Undifferentiated Quaternary sediments consist of siliciclastics, organics and freshwater carbonates. The siliciclastics are light gray, tan, brown to dark, unconsolidated to poorly consolidated, clean to clayey, silty, fossiliferous, variably organic-bearing sands to blue green to olive green, poorly to moderately consolidated, sandy, silty, clays. Freshwater carbonates "*marls*" are buff colored to tan, unconsolidated to poorly consolidated, fossiliferous (mollusks) carbonate muds containing organics.

The Statenville Formation is of the Miocene epoch and mainly consists of interbedded sands, clays and dolostones with common to very abundant phosphate grains. The sands are predominate and are light gray to olive gray, poorly indurated, phosphatic, fine to coarse grained with scattered gravel and with minor occurrences of fossils. Clays are yellowish gray to olive gray, poorly consolidated, variably sandy and phosphatic, and variably dolomitic. The dolostones are yellowish gray to light orange, poorly to well indurated, sandy, clayey and phosphatic with scattered mollusk molds and casts.

The limestone in this area consists of carbonate rock and its weathered residuum. In this area of Columbia County, Florida, the limestone is marked by solution features (sinkholes) associated with *karst* terrains. Areas underlain by karst terrains are prone to sinkhole activities. The sinkholes are primarily caused by an advanced state of internal soil erosion or raveling action, which under certain circumstances can lead to ground subsidences. This internal soil erosion is a very slow process by which soil particle usually migrate under the influence of a hydraulic gradient to underlying karsted and/or fractured limestone formation. There are several indicators generally associated with an advanced state of long term internal soil erosion such as noticeable surface depressions and very loose to soft soil zones just above the rock formation.

Based on our review of the test borings, it is our opinion the proposed development on this site will have no greater risk of damage due to sinkhole activity than the development of structures in other areas within the immediate vicinity of the subject site.

Foundation Recommendations

Based on the data obtained during this exploration, and the anticipated structural loading and grading conditions, it is our opinion the proposed building can be supported on a conventional shallow foundation system. This shallow foundation system may be designed using a maximum allowable soil bearing pressure of 2,500 psf. A detailed settlement analysis was beyond the scope of this exploration. However, based on our experience, the assumed loads, and the available site and subsurface information, we anticipate the building will experience total and differential settlements of less than 1 and ½-inch, respectively. We note that these settlement estimates are based on the structural loading and site grading assumptions stated previously. If the grading or structural assumptions are incorrect, we should be notified so that we can reevaluate our recommendations.

Foundation Size and Bearing Depth

The minimum width recommended for isolated spread-type footings and continuous wall footings is 24 and 18 inches, respectively. All exterior footings should bear at a depth of at least 18 inches below the exterior final grades. Interior footings should bear at a depth of at least 18 inches below the interior floor slab. These recommended minimum-bearing depths should provide the necessary confinement for the foundation bearing level soils.

Bearing Material

The foundations should bear in either natural soils, or in compacted structural fill/backfill. Sandy soils should be compacted to densities equivalent to 95 percent of the modified Proctor maximum dry density (ASTM D 1557). Compaction should not be attempted on clayey soils at the footing bearing level (if any encountered). Rather they should be excavated using a smooth bucket/shovel, and replaced with a working platform of 10 to 12-inches of coarse aggregate (such as ASTM No. 57) or two to three inches of lean concrete mud mat.

Ground Floor Slab Support

The ground floor slab for the proposed building may be constructed directly on a re-compacted fine sand subgrade. Structural fill soils placed beneath the slab should be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (ASTM D-1557). Proper jointing should be installed around columns and walls to allow slabs and foundations to settle differentially.

Site & Fill Compaction

We recommend that exposed and underlying soils be compacted to densities equivalent to 95 percent of the modified Proctor maximum dry density (ASTM D-1557). To compact the exposed and underlying soils, we recommend using a vibratory roller that has a static at-drum weight on the order of four to five tons and a drum diameter on the order of four feet. The initial compaction operations should also consist of at least eight overlapping passes of the roller in each direction. This compaction effort should help improve the overall uniformity and bearing conditions of the near-surface soils.

Using a roller meeting the above requirements, structural fill required to raise the site to the planned finish grades may then be placed in loose lifts not exceeding 12 inches in thickness, and should then be compacted to densities similar to those recommended above. For ease of construction and compaction, we recommend that structural fill consist of a non-plastic, inorganic, granular soil containing less than 10 percent material passing the 200 mesh sieve (i.e., relatively clean sand). The upper fine sands encountered in our boring should meet this criteria. **The upper 12 inches of the exposed soils should be compacted to a minimum of 95 percent of the modified Proctor maximum dry density (ASTM D-1557) prior to placement of any new fill.**

Report Limitations

This report has been prepared for the exclusive use of **Concept Construction, Inc. of Lake City, Florida** for the specific application to the project discussed herein. Our conclusions and recommendations have been rendered using generally accepted standards of geotechnical engineering practice in the State of Florida, no other warranty is expressed or implied. **CTI** is not responsible for the interpretations, conclusions, opinions, or recommendations of others based on the data contained herein. We note that assessment of environmental conditions for the presence of pollutants in the at the subject site was beyond the scope of this exploration.

Closing

We appreciate the opportunity to work with you on this project, and look forward to serving as your geotechnical and construction materials testing consultant for the remainder of this and future projects. Should you have any questions and / or comments concerning this report, please contact our office at 386-755-3633.

Very truly yours,
Cal-Tech Testing, Inc.

David B. Brown
Executive Vice President

COPY

Nabil O. Hmeidi, P.E. 3/6/09
Senior Geotechnical Engineer
Licensed, Florida No. 57842

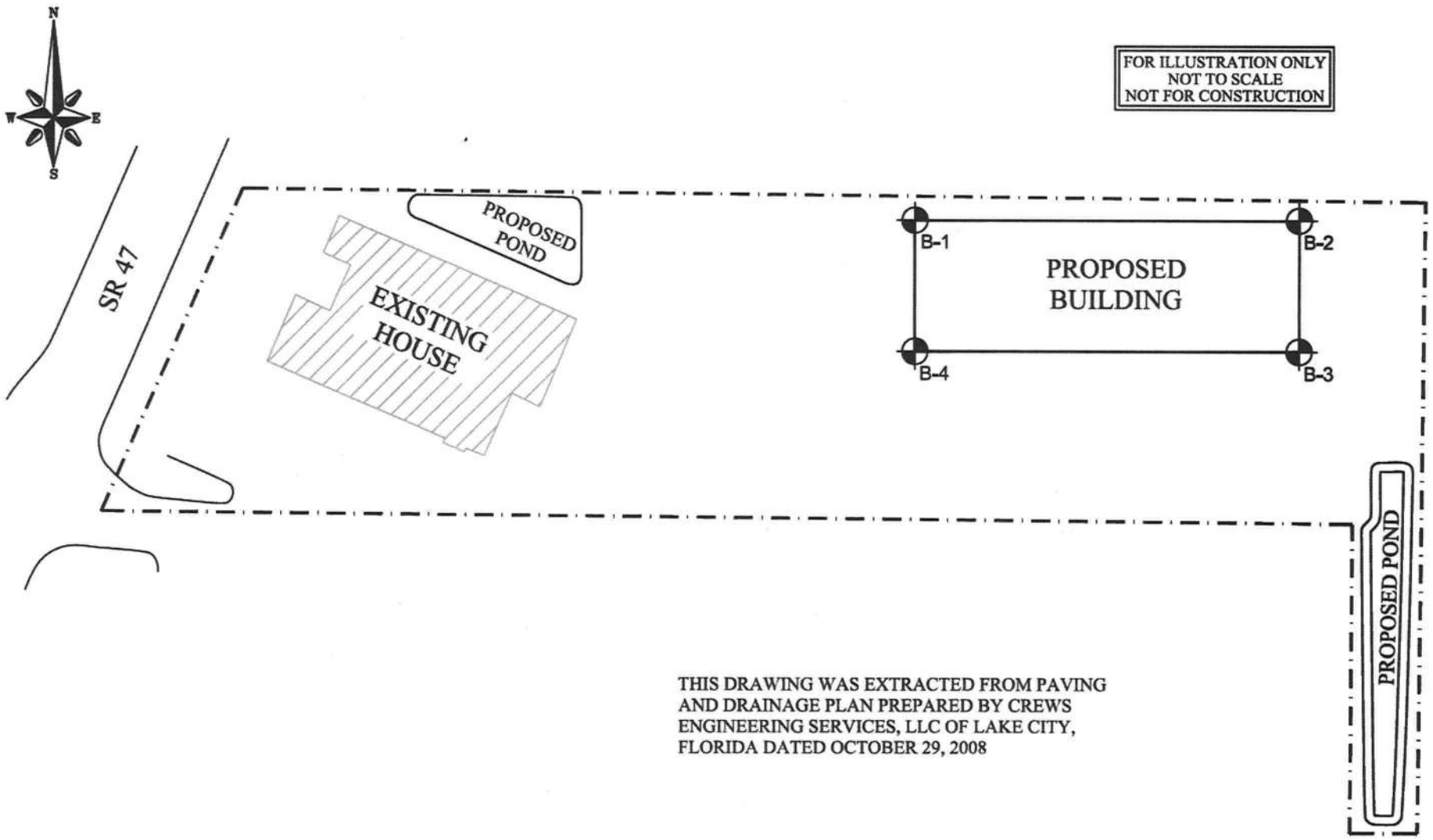
Distribution: *File (1 copy)*
Addressee (2 copies)

Attachments: *Vicinity Map (1 page)*
Field Exploration Plan (1 page)
Record Boring Logs (4 pages)
Subsurface Diagram (1 page)
Unified Soil Classification System (1 page)
Key To Test Data (1 page)

ATTACHMENTS

CAL-TECH TESTING, INC. **P.O. Box 1625** **Lake City, Florida 32056-1625** **Phone: (386) 755-3633** **Fax: (386) 752-5456**	**VICINITY MAP** **Faisal Medical Building – SR 47** **Lake City, Columbia County, Florida** **Cal-Tech Testing Project No. 09-00134-01**

Figure 1



Standard Penetration Test Borings Performed by CTI on April 2, 2009

SUBSURFACE EXPLORATION FAISAL MEDICAL BUILDING LAKE CITY, COLUMBIA COUNTY, FLORIDA	**CAL-TECH TESTING, INC.** **P.O. Box 1625** **Lake City, Florida 32056-1625** **Phone: (386) 755-3633** **Fax: (386) 752-5456**	FIELD EXPLORATION PLAN Project No. 09-00134-01 | DATE: 04/03/2009 | FIGURE: 2 APPROVED: | SCALE: N.T.S.

0,0

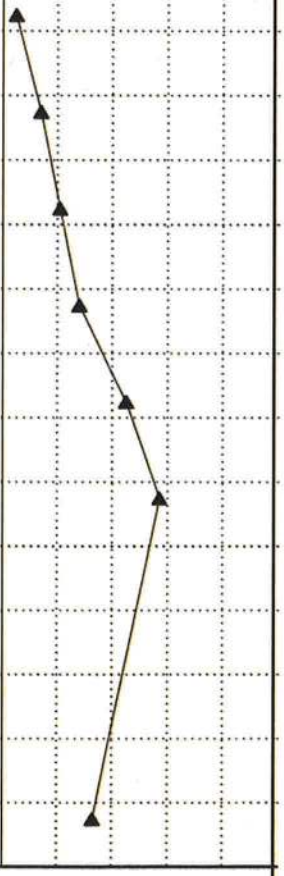
CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-1

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 116.3 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)	SPT 1		2-2-3 (5)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		5-8-6 (14)		
5		MEDIUM DENSE DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		5-10-11 (21)		
			SPT 4		10-13-15 (28)		
			SPT 5		18-20-25 (45)		
10		VERY DENSE, gray, silty clayey fine sand (SC-SM)	SPT 6		17-25-32 (57)		
		HARD, gray, sandy clay (CL)					
15			SPT 7		9-15-18 (33)		

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



Bottom of borehole at 15.0 feet.

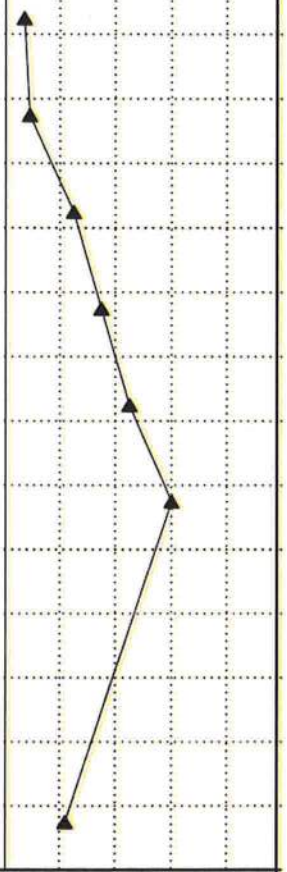
CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-2

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 116 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)					
			SPT 1		2-3-4 (7)		
		LOOSE to VERY DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 2		4-4-5 (9)		
5			SPT 3		5-10-15 (25)		
			SPT 4		10-15-20 (35)		
			SPT 5		15-20-25 (45)		
10			SPT 6		20-28-32 (60)		
		VERY STIFF, grayish green, clay (CH)					
15			SPT 7		7-10-12 (22)		

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80



Bottom of borehole at 15.0 feet.

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

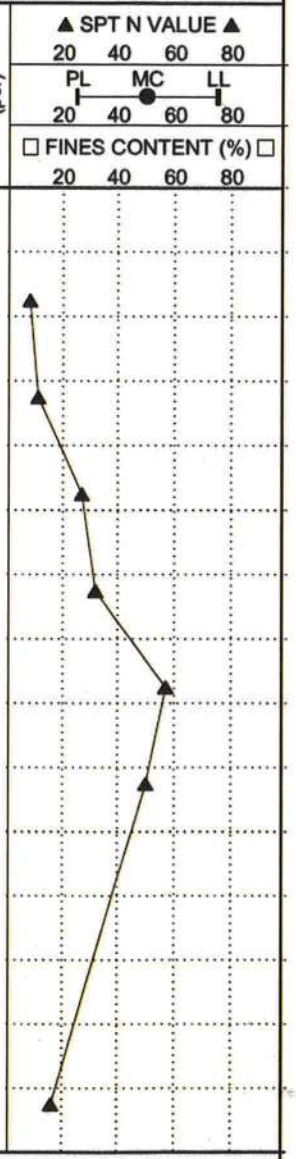
BORING NUMBER B-3

CLIENT Concept Construction, Inc.
PROJECT NUMBER 09-00134-01
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
DRILLING METHOD Continuous Flight Auger/Split Spoon
LOGGED BY N.H. **CHECKED BY**
NOTES BK-51 (manual hammer)

PROJECT NAME Faisal Medical Building
PROJECT LOCATION Lake City, Columbia County, Florida
GROUND ELEVATION 115.7 ft **HOLE SIZE**
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING --- Not Encountered
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		LOOSE, grayish tan, silty fine sand (SP-SM)					
			SPT 1		3-4-4 (8)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		4-5-6 (11)		
		MEDIUM DENSE to VERY DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		6-12-15 (27)		
5			SPT 4		10-15-17 (32)		
			SPT 5		20-25-32 (57)		
10			SPT 6		20-25-25 (50)		
		VERY DENSE, gray, silty clayey fine sand (SC-SM)					
		VERY STIFF, grayish green, clay (CH)	SPT 7		5-7-9 (16)		
15							

Bottom of borehole at 15.0 feet.



CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

BORING NUMBER B-4

CLIENT Concept Construction, Inc.
PROJECT NAME Faisal Medical Building
PROJECT NUMBER 09-00134-01
PROJECT LOCATION Lake City, Columbia County, Florida
DATE STARTED 04/02/09 **COMPLETED** 04/02/09
GROUND ELEVATION 115.3 ft **HOLE SIZE**
DRILLING CONTRACTOR Cal-Tech Testing, Inc.
GROUND WATER LEVELS:
DRILLING METHOD Continuous Flight Auger/Split Spoon
AT TIME OF DRILLING ---
LOGGED BY N.H. **CHECKED BY**
AT END OF DRILLING --- Not Encountered
NOTES BK-51 (manual hammer)
AFTER DRILLING ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY %	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)
0		MEDIUM DENSE, grayish tan, silty fine sand (SP-SM)	SPT 1		4-5-6 (11)		
		MEDIUM DENSE, light gray to white, fine sand (SP)	SPT 2		6-8-8 (16)		
5		MEDIUM DENSE, light gray and reddish brown, mottled, clayey fine sand (SC)	SPT 3		6-9-11 (20)		
			SPT 4		8-11-8 (19)		
			SPT 5		8-10-13 (23)		
10			SPT 6		12-14-15 (29)		
		VERY STIFF, grayish green, clay (CH)					
15			SPT 7		5-9-9 (18)		

▲ SPT N VALUE ▲
20 40 60 80
PL MC LL
20 40 60 80
☐ FINES CONTENT (%) ☐
20 40 60 80

Bottom of borehole at 15.0 feet.

CAL-TECH TESTING, INC.
3309 SW SR 247
Lake City, Florida 32024
Telephone: (386) 755-3633
Fax: (386) 752-5456

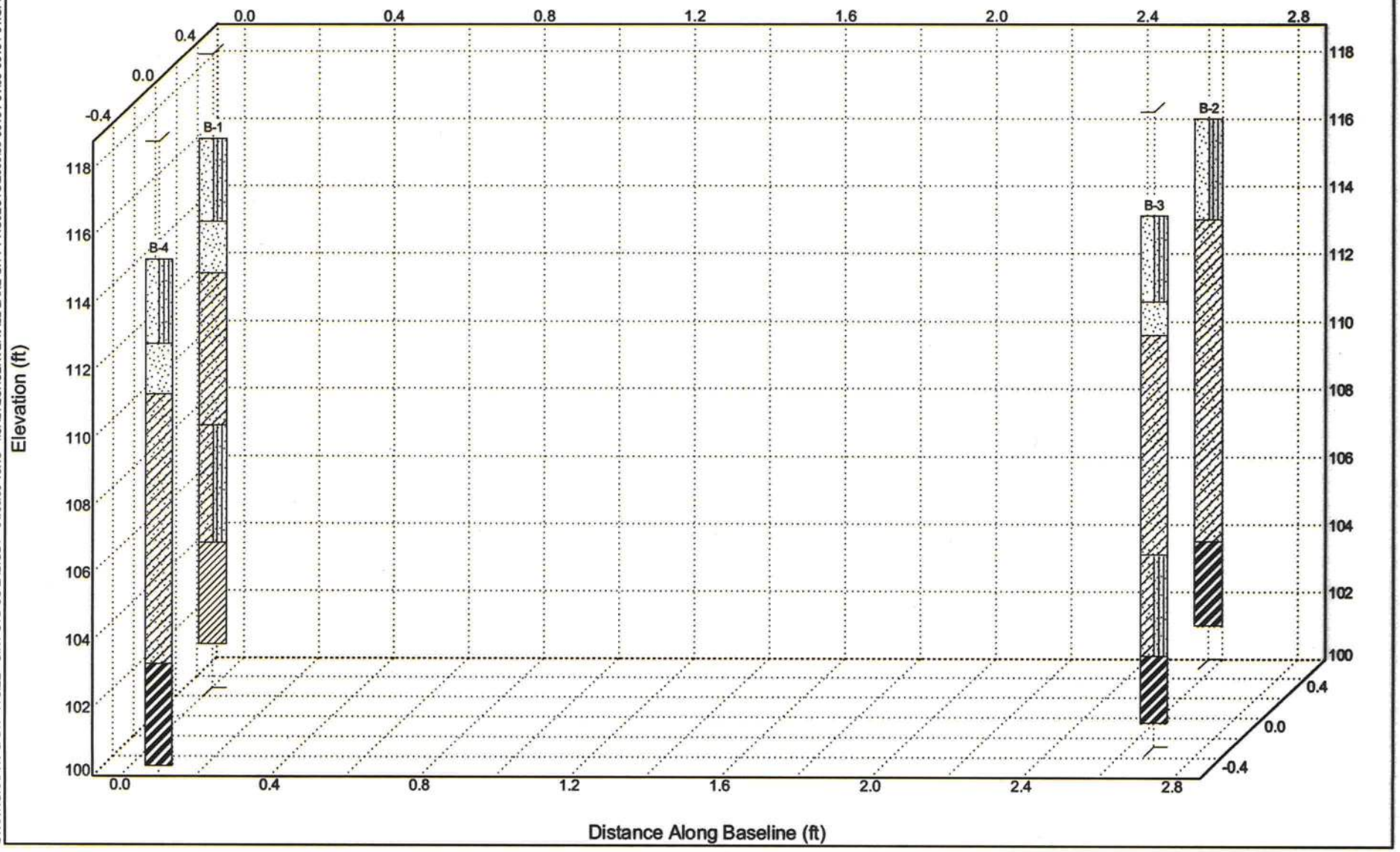
SUBSURFACE DIAGRAM

CLIENT Concept Construction, Inc.

PROJECT NUMBER 09-00134-01

PROJECT NAME Faisal Medical Building

PROJECT LOCATION Lake City, Columbia County, Florida

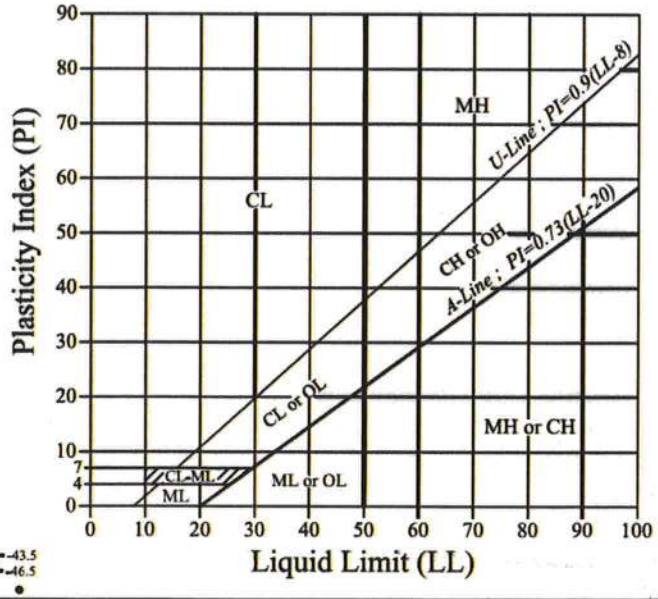


UNIFIED SOIL CLASSIFICATION SYSTEM
ASTM DESIGNATION D-2487

MAJOR DIVISIONS			GROUP SYMBOL	TYPICAL NAMES	LABORATORY CLASSIFICATION CRITERIA	
COARSE GRAINED SOILS (More than half of the material is larger than No. 200 sieve)	Gravels (more than half of the coarse fraction is larger than No. 4 sieve)	Clean gravels	GW	Well-graded gravels, gravel-sand mixtures, little or no fines.	Determine percentage of sand and gravel from grain size curve. Depending on percentage of fines (fraction smaller than No. 200 Sieve size), coarse grained soils are classified as follows: Less than 5% ..... GW, GP, SW, SP; More than 12% ... GM, GC, SM, SC; 5 to 12% ..... Borderline cases requiring dual symbols	$C_u = \frac{D_{60}}{D_{10}} > 4 \;;\; 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$
			GP	Poorly graded gravels, gravel-sand mixture, little or no fines.		Not meeting all gradation requirments of GW
		Gravel with fines	GM	Silty gravels, gravel-sand-silt mixtures.	Atterberg Limits below A-Line or PI less than 4	Above A-Line with PI between 4 and 7 are borderline cases requiring the use of dual symbols.
			GC	Clayey gravels, gravel-sand-clay mixtures.	Atterberg Limits above A-Line or PI greater than 7	
	Sands (more than half of the coarse fraction is smaller than No. 4 sieve)	Clean sands	SW	Well-graded sands, gravelly sands, little or no fines.		$C_u = \frac{D_{60}}{D_{10}} > 6 \;;\; 1 < C_c = \frac{(D_{30})^2}{D_{10} \times D_{60}} < 3$
			SP	Poorly graded sands, gravelly sands, little or no fines.		Not meeting all gradation requirments of SW
		Sands with fine	SM	Silty sands, sand-silt mixtures.	Atterberg Limits below A-Line or PI less than 4	Limits plotting in hatched zone with PI between 4 and 7 are borderline cases requiring the use of dual symbols.
			SC	Clayey sands, sand-clay mixtures.	Atterberg Limits above A-Line or PI greater than 7	
FINE GRAINED SOILS (More than half of the material is finer than No. 200 sieve)	Silts and Clays (LL less than 50)		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity.		
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clay.		
			OL	Organic silts and organic silty clays of low plasticity.		
	Silts and Clays (LL greater than 50)		MH	Inorganic silts, micaceous or diato-maceous fine sandy or silty soils, elastic silts.		
			CH	Inorganic clays of high plasticity, fat clay.		
			OH	Organic clays of medium to high plasticity, organic silts.		
	Highly Organic Soils		Pt	Peat and other highly organic soils.		

PLASTICITY CHART

1. Plot intersection of PI as determined by the Atterberg Limits tests.
2. Points plotted above the A-Line indicate clay soils.
3. Points plotted below the A-Line indicate silt.



LL=43.5
PI=46.5

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve ..... SP
5% - 12% Passing the U.S. No. 200 Sieve ..... SP-SM
12% - 50% Passing the U.S. No. 200 Sieve ..... SM/SC

KEY TO TEST DATA

STANDARD PENETRATION TEST:
Soil sampling and penetration testing is performed in accordance with ASTM D-1586. The standard penetration resistance ("*N*") is the number of blows of a 140-pound hammer falling 30 inches to drive a 2-inch O.D., 1.4-inch I.D. split spoon sampler one foot.

ROCK CORE DRILLING:
Rock sampling and core drilling is performed in accordance with ASTM D-2113. The rock quality designation percentage (RQD) is determined by summing only pieces of core that are at least 4 inches long, and dividing by the "run" length.

Relation of RQD and In-situ Rock Quality

RQD (%)	Rock Quality
90 -100	Excellent
75 - 90	Good
50 -75	Fair
25 - 50	Poor
0 - 25	Very Poor

RELATIVE DENSITY (SANDS):

Very loose - less than 4 blows/ft.
Loose - 5 to 10 blows/ft.
Medium - 11 to 30 blows/ft.
Dense - 31 to 50 blows/ft.
Very dense - over 50 blows/ft.

CONSISTENCY (SILTS & CLAYS):

Very soft - less than 2 blows/ft.
Soft - 3 to 4 blows/ft.
Medium stiff - 5 to 8 blows/ft.
Stiff - 9 to 15 blows/ft.
Very stiff - 16 to 30 blows/ft.
Hard - 31 to 50 blows/ft.
Very hard - over 50 blows/ft.

HARDNESS (ROCKS):

Soft - Rock core crumbles when handled.
Medium - Can break core with hands.
Moderately hard - Thin edges of rock core can be broken with fingers.
Hard - Thin edges of core can not be broken with fingers.
Very hard - Can not be scratched with knife.

GROUNDWATER:
Water levels shown on boring logs are taken immediately upon completion of boring, and are intended for general information. The apparent level may have been altered by the drilling process. Groundwater levels, if desired, can be monitored over a long time interval.

CAL-TECH TESTING, INC.
P.O. Box 1625
Lake City, Florida 32056-1625
Phone: 386-755-3633 Fax: 386-752-5456

5% Max. Passing the U.S. No. 200 Sieve ..... SP
5% - 12% Passing the U.S. No. 200 Sieve ..... SP-SM
12% - 50% Passing the U.S. No. 200 Sieve ..... SM/SC

Columbia County Building Permit Application

For Office Use Only Application # 0905-16 Date Received 5/8 By JW Permit # 27813

Zoning Official BLK Date 11.05.09 Flood Zone X Land Use Commercial Zoning CI

FEMA Map # N/A Elevation N/A MFE 117' per Eng. River N/A Plans Examiner HO Date 5-14-09

Comments SDP 08-9, Elevation confirmation letter required at slab

□ NOC ☑ EH □ Deed or PA □ Site Plan ☑ State Road Info □ Parent Parcel #

□ Dev Permit # □ In Floodway ☑ Letter of Auth. from Contractor □ F W Comp. letter

IMPACT FEES: EMS Fire Corr Road/Code

School = TOTAL

FAISAL MEDICAL BUILDING

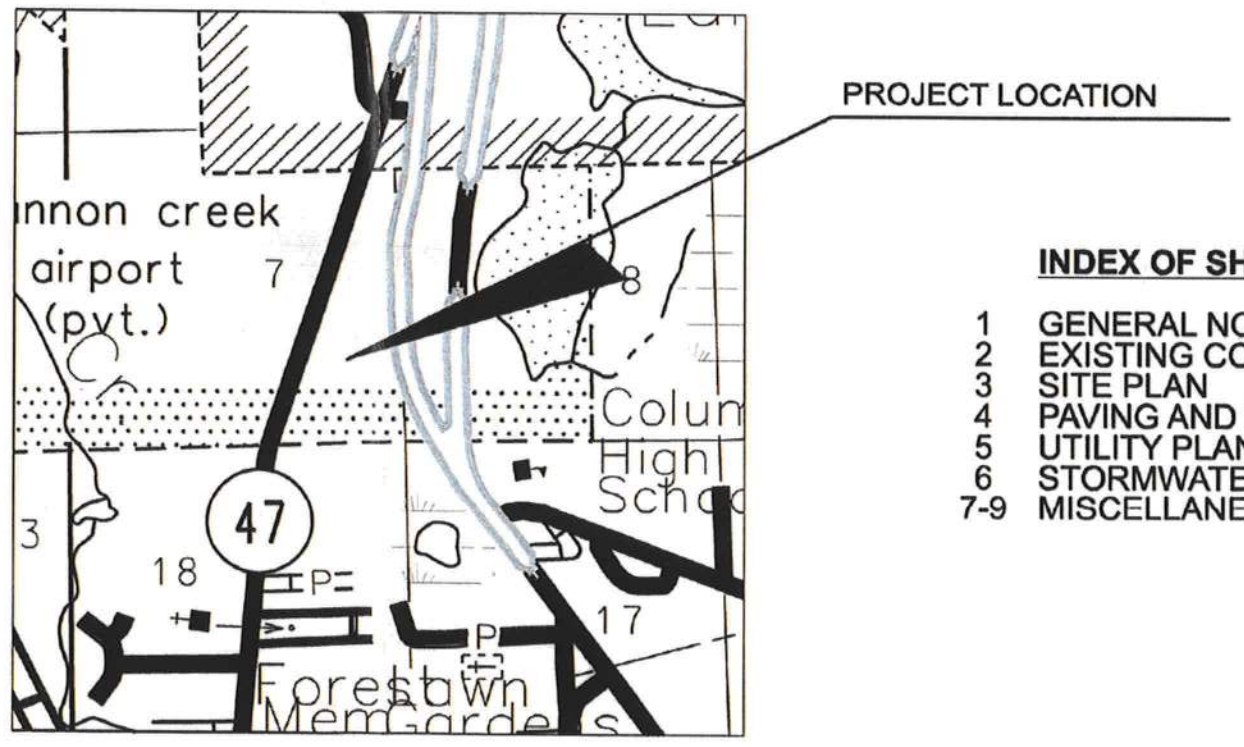
FOR:
DR. MOHAMMAD FAISAL
GENERAL MANAGER, FAISAL FAMILY LTD PARTNERSHIP
PO BOX 3009
LAKE CITY, FL 32056
PHONE: 386.758.5985

CES
Crews Engineering Services, LLC

P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085
www.crewsengineeringservices.com

CERTIFICATE OF AUTHORIZATION: NO. 28022

BRETT A. CREWS, P.E. 65592



LOCATION MAP

SECTION 7, TOWNSHIP 4 SOUTH, RANGE 17 EAST
COLUMBIA COUNTY, FLORIDA

PARCEL ID: 07-4S-17-08130-003

INDEX OF SHEETS

3-26-09

CES PROJECT ID:
2008-019

REVISIONS

10-29-2008 DESIGN CHANGE PER CLIENT
11-26-2008 RAI RESPONSE TO SRWMD
12-17-2008 RAI RESPONSE TO LCRU

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE TO INSURE THAT ALL NEW WORK WILL FIT IN THE MANNER INTENDED ON THE PLANS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF SUCH DIFFERENCES IMMEDIATELY & PRIOR TO PROCEEDING WITH THE WORK.
2. THE CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION SITE AT ALL TIMES IN A SECURE MANNER. ALL OPEN TRENCHES AND EXCAVATED AREAS SHALL BE PROTECTED FROM ACCESS BY THE GENERAL PUBLIC.
3. BOUNDARY AND TOPOGRAPHICAL SURVEY IS PROVIDED BY DUREN MARK D., PSM (#4706).
4. ANY PUBLIC LAND CORNER WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE CONTRACTOR SHOULD NOTIFY THE ENGINEER.
6. THE STORM WATER MANAGEMENT SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH SRWMD RULES AND REGULATIONS (CH. 40B-4 F.A.C).
7. THE PROPOSED STORM WATER BASIN SHALL BE CONSTRUCTED INITIAL TO SERVE AS A SEDIMENT TRAP DURING CONSTRUCTION.
7. EXISTING DRAINAGE STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED, UNLESS OTHERWISE SPECIFIED IN THE PLANS.
9. THE CONTRACTOR SHALL WASTE ALL EXCESS EARTH ON SITE AS DIRECTED BY THE ENGINEER.
10. ALL SITE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE COLUMBIA COUNTY LAND DEVELOPMENT REGULATIONS.
12. SITE CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER CONTRACTORS WITHIN PROJECT LIMITS.
13. ALL PROPOSED CONSTRUCTION SHALL CONFORM TO CURRENT FDOT DESIGN STANDARDS AND FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
14. ALL STORM WATER PIPES SHALL HAVE A MINIMUM COVER OF 6". LIMEROCK BACKFILL SHALL BE USED IF PIPE UNDER PAVEMENT HAS LESS THAN 12" COVER.
16. ALL SWALES, DEPRESSION AREAS AND RETENTION PONDS SHALL BE INSPECTED MONTHLY FOR SINKHOLE OCCURRENCE. SHOULD A SINKHOLE OCCUR, THE AREA SHOULD BE REPAIRED AS SOON AS POSSIBLE. IF A SOLUTION PIPE SINKHOLE FORMS WITHIN THE STORM WATER SYSTEM, THE SINKHOLE SHALL BE REPAIRED BY BACKFILLING WITH A LOW PERMEABILITY MATERIAL. A 2-FOOT CAP THAT EXTENDS 2 FEET BEYOND THE PERIMETER OF THE SINKHOLE SHALL BE CONSTRUCTED WITH CLAYEY SOILS. THE CLAYEY SOIL SHOULD HAVE AT LEAST 20% PASSING THE NUMBER 200 SIEVE, COMPACTED TO 95% OF STANDARD PROCTOR, AND COMPACTED IN A WET CONDITION WITH MOISTURE 2%-4% ABOVE OPTIMUM. THE CLAY SOIL CAP SHALL BE RE-GRADED TO PREVENT PONDING AND RE-VEGETATED.
17. ALL NEW TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVISES AND THE CURRENT FDOT DESIGN STANDARDS.
18. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH CURRENT FDOT DESIGN STANDARDS.
19. CONTRACTOR SHALL CONTACT COLUMBIA COUNTY BUILDING AND ZONING DEPARTMENT TO PERFORM THE FOLLOWING SITE INSPECTIONS:
    A) EROSION AND SEDIMENT CONTROL - PRIOR TO BEGINNING CONSTRUCTION
    B) SITE COMPLIANCE - ONCE BUILDING FOUNDATION IS POURED AND IMPROVEMENTS ARE STAKED OUT
    C) FINAL SITE COMPLIANCE - ONCE ALL IMPROVEMENTS ARE FINALIZED
20. CONTRACTOR SHALL CONTACT SRWMD AND ENGINEER OF RECORD 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

UTILITY NOTES

1. ALL EXISTING UTILITIES SHALL BE LOCATED PRIOR TO BEGINNING WORK. THIS INCLUDES VERIFYING LOCATION (HORIZONTAL AND VERTICAL) AT ANY CONNECTION POINT OF THE EXISTING UTILITY. THE ENGINEER SHALL BE NOTIFIED IMEDIATELY OF ANY DISCREPANCIES EXISTING BETWEEN THE CONSTRUCTION PLANS AND ACTUAL FIELD CONDITIONS. EXISTING UTILITIES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY AND SHALL BE VERIFIED IN THE FIELD BY NON-DESTRUCTIVE METHODS.
2. CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH ALL REQUIRED UTILITY CONNECTIONS PRIOR TO BIDDING. CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS REQUIRED TO COMPLETE CONNECTION TO THE EXISTING UTILITIES. THIS INCLUDES, BUT IS NOT LIMITED TO, MANHOLE CORING, WET TAPS, PAVEMENT REPAIRS AND DIRECTIONAL BORING.

UTILITY NOTES CONT.

3. POTABLE WATER AND SANITARY SEWER TO BE SUPPLIED BY CITY OF LAKE CITY.
4. CONTRACTOR SHALL CONTACT LAKE CITY REGIONAL UTILITIES (386.758.5492) PRIOR TO BEGINNING WORK TO COORDINATE INSPECTION OF UTILITY CONNECTIONS.
5. DEVELOPER WILL OWN, OPERATE AND MAINTAIN THE ENTIRE SANITARY SEWER SYSTEM WITHIN THE PROPERTY BOUNDARY.
6. WHERE FIRE HYDRANTS ARE PROPOSED WITHIN THE PROPERTY BOUNDARY, THE CITY WILL OWN, OPERATE AND MAINTAIN THE POTABLE WATER SYSTEM UP TO AND INCLUDING THE WATER METER.
7. THE CITY OF LAKE CITY SHALL MAINTAIN THE RIGHT OF ACCESS TO THE DEVELOPMENT TO ALLOW FOR THE INSPECTION AND MAINTENANCE OF THE PROPOSED UTILITIES CONNECTED TO THE CITY'S SYSTEM. RIGHT OF ACCESS SHALL BE PROVIDED WITH A UTILITY EASEMENT AS SHOWN ON THE UTILITY PLAN.
8. ALL UTILITY CONSTRUCTION SHALL CONFORM TO CURRENT CITY OF LAKE CITY UTILITY STANDARDS.
9. EXISTING WATER AND SANITARY SEWER SHOULD REMAIN IN SERVICE DURING CONSTRUCTION. THE CITY OF LAKE CITY SHALL BE NOTIFIED IN THE EVENT INTERRUPTIONS TO SERVICE ARE REQUIRED.
10. ALL NEW AND RELOCATED WATER MAIN PIPES, FITTINGS, APPURTENANCES AND PACKING AND JOINT MATERIALS SHALL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS AND/OR MANUFACTURES RECOMMENDATIONS.
11. SUFFICIENT VALVES SHALL BE PROVIDED IN NEW AND RELOCATED WATER AND SANITARY SEWER MAINS TO MINIMIZE INCONVENIENCE AND SANITARY HAZARDS DURING REPAIRS.
12. AT HIGH POINT WHERE AIR CAN ACCUMULATE IN NEW AND RELOCATED WATER MAINS, HYDRANTS OR AIR RELEASE VALVES SHALL BE PROVIDED TO REMOVE AIR.
13. AUTOMATIC AIR RELEASE VALVES ON NEW AND RELOCATED WATER MAINS SHALL NOT BE LOCATED WHERE FLOODING OF THE VALVE MANHOLE OR CHAMBER COULD OCCUR.
14. HYDRANT DRAINS, FLUSHING DEVICES, AIR RELEASE VALVES OR CHAMBERS, MANHOLES CONTAINING VALVES, BLOW-OFFS, METERS, OR OTHER APPURTENANCES PROVIDED IN CONJUNCTION WITH NEW AND RELOCATED WATER MAINS SHALL NOT BE CONNECTED DIRECTLY TO ANY SANITARY OR STORM SEWER.
15. STONES FOUND IN TRENCHES FOR NEW AND RELOCATED WATER AND SANITARY SEWER MAINS SHALL BE REMOVED TO A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF PIPE. CONTINUOS AND UNIFORM BEDDING SHALL BE PROVIDED IN THESE TRENCHES. THIS BACKFILL MATERIAL SHALL BE TAMPED IN LAYERS AROUND PIPE TO A SUFFICIENT HEIGHT ABOVE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE.
16. ALL TEES, BENDS, PLUGS, AND HYDRANTS IN NEW AND RELOCATED WATER MAINS SHALL BE PROVIDED WITH RESTRAINED JOINTS TO PREVENT MOVEMENT. MEGALUG MECHANICAL JOINT RESTRAINTS OR APPROVED ALTERNATIVE (NOT THRUST BLOCKS) SHALL BE USED WITH MANUFACTURES RECOMMENDATIONS. ALL RESTRAINED JOINTS SHALL BE LEFT OPEN UNTIL INSPECTED BY THE CITY.
17. A 24" MINIMUM COVER HEIGHT SHALL BE PROVIDED ABOVE ANY NEW OR RELOCATED WATER OR SANITARY SEWER MAIN CROSSING UNDER ANY SURFACE WATER. PROVIDE THE FOLLOWING FEATURES IF WIDTH OF SURFACE WATER IS GREATER THAN 15' AT THIS CROSSING:
    A) FLEXIBLE WATER TIGHT JOINTS THROUGHOUT THE CROSSING
    B) EASILY ACCESSIBLE VALVES LOCATED IN A MANHOLE
    C) PERMANENT TAPS ON EACH SIDE OF VALVE WITHIN THE MANHOLE TO ALLOW FOR SAMPLING AND INSERTION OF A SMALL METER TO DETERMINE LEAKAGE
18. PROPER BACKFLOW PREVENTION SHALL BE PROVIDED IN ACCORDANCE WITH RULE 62-555.360 F.A.C. (CROSS-CONNECTION CONTROL FOR PUBLIC WATER SYSTEMS.
19. THIS PROJECT SHALL NOT INCLUDE ANY INTERCONNECTION BETWEEN PREVIOUSLY SEPARATE PUBLIC WATER SYSTEMS HAVING SEPARATE WATER SUPPLY SOURCES.
20. ANY WATER NEW AND RELOCATED WATER LATERALS SHALL CROSS ABOVE SANITARY SEWER PIPE OR PROVIDE PROTECTION TO PREVENT CONTAMINATION AS REQUIRED BY FDEP AND OTHER APPLICABLE STANDARDS.
21. CONTRACTOR SHALL PROVIDE AN AS-BUILT SURVEY FOR WATER AND SANITARY SEWER EXTENSIONS.
22. CONTRACTOR SHALL PROVIDE TRACER WIRE ABOVE ALL NEW AND RELOCATED WATER AND SANITARY SEWER MAINS.
23. LOCATOR DEVICES SHALL BE PROVIDED AT WATER AND SANITARY SEWER TAP LOCATIONS.

EROSION CONTROL NOTES

5. CONTRACTORS SHALL ADHERE TO THE STORM WATER POLLUTION PREVENTION PLAN AND USE (AS A MINIMUM) THE MEASURES DESCRIBED ON THE EROSION CONTROL NOTES AND DETAILS SHEET.
6. ALL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED PRIOR TO CONSTRUCTION.
1. CONTRACTOR SHALL ADHERE TO EROSION AND SEDIMENT CONTROL REGULATIONS AS SET BY SRWMD AND OTHER GOVERNING AUTHORITIES.
2. SEDIMENT AND EROSION CONTROL PLAN AND STORM WATER MANAGEMENT FACILITIES SHALL BE INSTALLED PRIOR TO ANY OTHER CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING ADDITIONAL MEASURES AS REQUIRED FOR PROPER EROSION AND SEDIMENT CONTROL. THE CONTRACTOR SHOULD USE BMP'S IN THE FLORIDA EROSION AND SEDIMENT CONTROL INSPECTOR'S MANUAL TO IMPLEMENT A PLAN THAT WILL WORK AND MEET ACTUAL FIELD CONDITIONS.
4. SEDIMENT AND EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION IS COMPLETE AND UNTIL A PERMANENT GROUND COVER HAS BEEN ESTABLISHED.
5. ALL OPEN DRAINAGE SWALES SHALL BE GRASSED IMMEDIATELY AND RIP RAP SHALL BE PLACED AS REQUIRED TO CONTROL EROSION.
6. SILT FENCES SHALL BE LOCATED ON SITE TO PREVENT SEDIMENT AND EROSION FROM LEAVING PROJECT LIMITS.
7. SILT FENCE SHALL BE CLEANED OR REPLACED WHEN SILT BUILDS UP TO WITHIN ONE FOOT OF TOP OF SILT FENCE.
8. DURING CONSTRUCTION AND AFTER CONSTRUCTION IS COMPLETE, ALL STRUCTURES SHALL BE CLEANED OF ALL DEBRIS AND EXCESS SEDIMENT.
9. A PAD OF RUBBLE RIP RAP SHALL BE PLACED AT THE BOTTOM OF ALL COLLECTION FLUMES AND COLLECTION PIPE OUTLETS.
10. ALL DISTURBED AREAS SHALL BE STABILIZED IMMEDIATELY TO PREVENT EROSION.11. ALL SLOPES GREATER THAN 4H:1V SHALL BE STABILIZED WITH SOD. STAPLE SOD SHALL BE USED ON SLOPES GREATER THAN 2H:1V.
12. ALL DISTURBED AREAS NOT SODDED SHALL BE SEEDED WITH A MIXTURE OF LONG-TERM VEGETATION AND QUICK-GROWING SHORT-TERM VEGETATION FOR THE FOLLOWING CONDITIONS. FOR THE MONTHS FROM SEPTEMBER THROUGH MARCH, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG-TERM SEED AND 20 POUNDS PER ACRE OF WINTER RYE. FOR THE MONTHS OF APRIL THROUGH AUGUST, THE MIX SHALL CONSIST OF 70 POUNDS PER ACRE OF LONG-TERM SEED AND 20 POUNDS PER ACRE OF MILLET.
13. ALL STABILIZATION PRACTICES SHALL BE INITIATED AS SOON AS PRACTICABLE IN AREAS OF THE JOB WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY STOPPED, BUT IN NO CASE SHALL THE DISTURBED AREA BE LEFT UNPROTECTED FOR MORE THAN THREE (3) DAYS.
14. LOADED HAUL TRUCKS SHALL BE COVERED WITH TARPS AND EXCESS DIRT REMOVED DAILY.
15. THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE WATER QUALITY STANDARDS.
16. QUALIFIED PERSONNEL SHALL INSPECT THE STOCKPILE AREAS, SILT FENCE, CONSTRUCTION ENTRANCE, AND ALL DISTURBED AREAS THAT HAVE NOT BEEN FINALLY STABILIZED, AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER A STORM OF 0.5 INCHES OR GREATER. CORRECTIVE ACTIONS SHALL BE TAKEN IMMEDIATELY.
17. CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROLS DURING PROPOSED CONSTRUCTION.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

3-26-09
Brett A. Crews, P.E. 65592

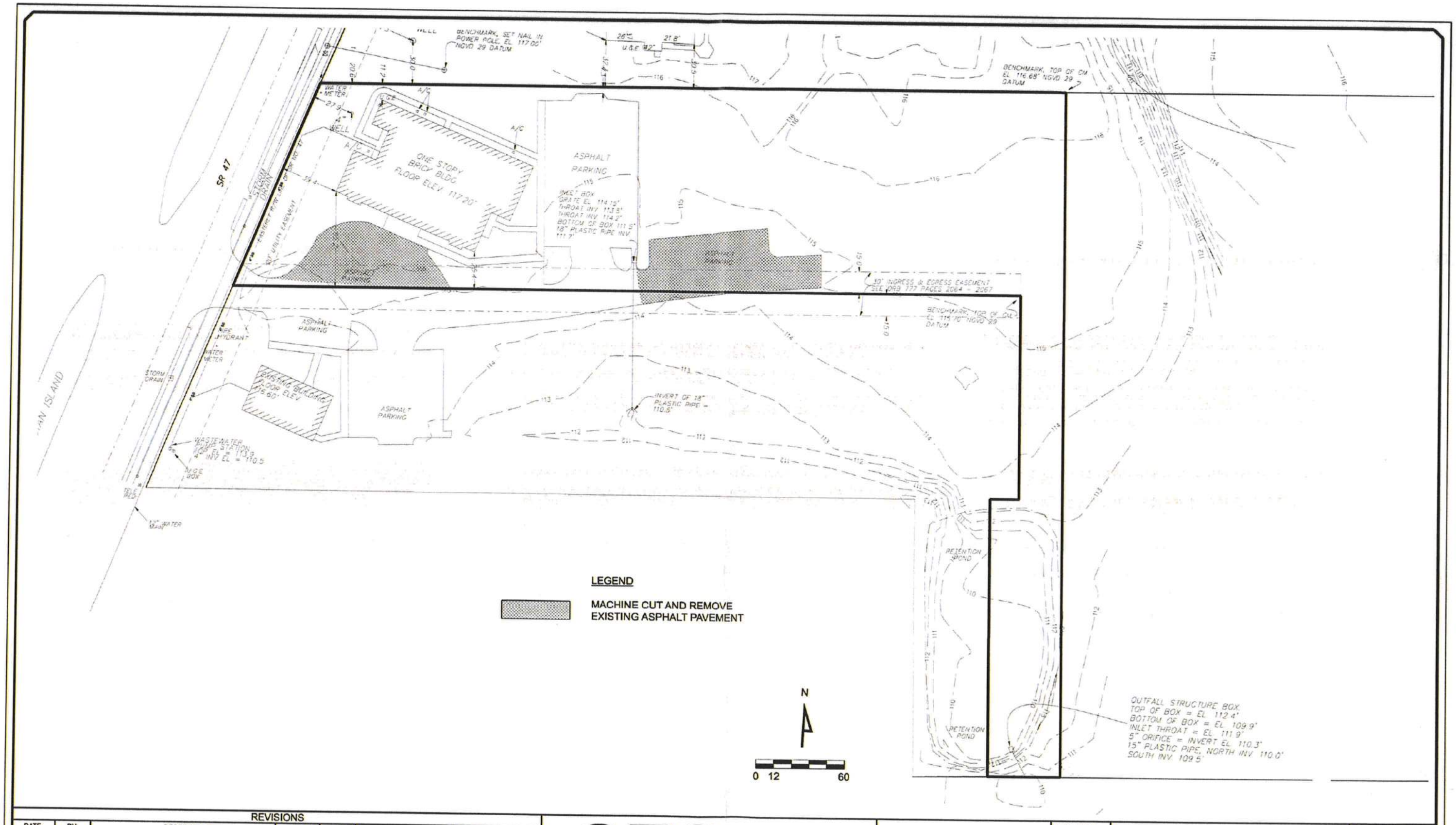
DRAWN BY: BC
APPROVED BY: BC

FAISAL MEDICAL BUILDING

GENERAL NOTES

CES PROJECT NO.: 2008-019
SHEET: 1

...\CAD\notes.dgn 3/24/2009 2:59:14 PM

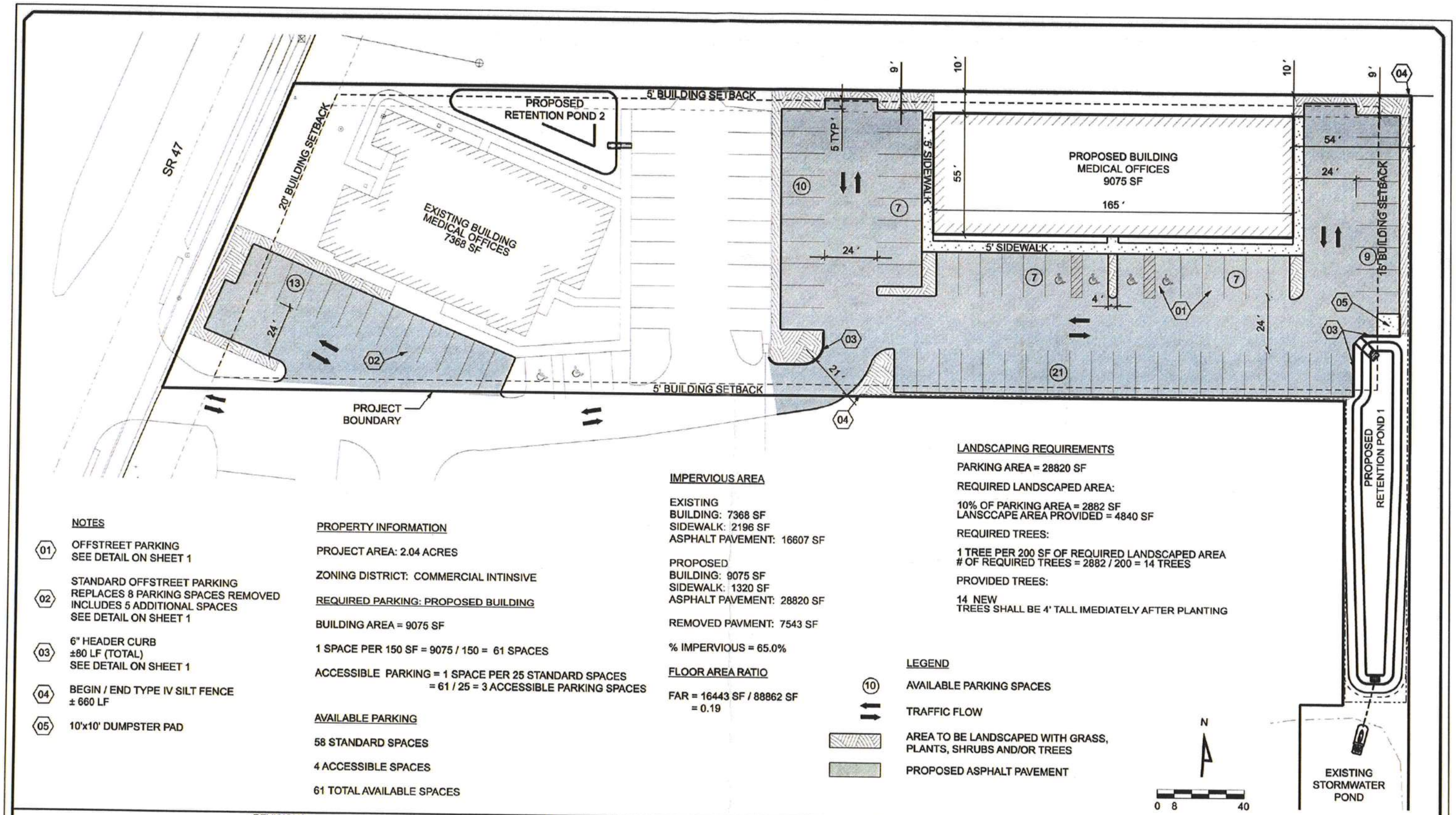


REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

Brett A. Crews 3-26-09
Brett A. Crews, P.E. 65592

DRAWN BY:	FAISAL MEDICAL BUILDING	CES PROJECT NO.:
BC		2008-019
APPROVED BY:	EXISTING CONDITIONS	SHEET:
BC		2



NOTES

01 OFFSTREET PARKING
SEE DETAIL ON SHEET 1

02 STANDARD OFFSTREET PARKING
REPLACES 8 PARKING SPACES REMOVED
INCLUDES 5 ADDITIONAL SPACES
SEE DETAIL ON SHEET 1

03 6" HEADER CURB
±80 LF (TOTAL)
SEE DETAIL ON SHEET 1

04 BEGIN / END TYPE IV SILT FENCE
± 660 LF

05 10'x10' DUMPSTER PAD

PROPERTY INFORMATION

PROJECT AREA: 2.04 ACRES

ZONING DISTRICT: COMMERCIAL INTINSIVE

REQUIRED PARKING: PROPOSED BUILDING

BUILDING AREA = 9075 SF

1 SPACE PER 150 SF = 9075 / 150 = 61 SPACES

ACCESSIBLE PARKING = 1 SPACE PER 25 STANDARD SPACES
= 61 / 25 = 3 ACCESSIBLE PARKING SPACES

AVAILABLE PARKING

58 STANDARD SPACES

4 ACCESSIBLE SPACES

61 TOTAL AVAILABLE SPACES

IMPERVIOUS AREA

EXISTING
BUILDING: 7368 SF
SIDEWALK: 2196 SF
ASPHALT PAVEMENT: 16607 SF

PROPOSED
BUILDING: 9075 SF
SIDEWALK: 1320 SF
ASPHALT PAVEMENT: 28820 SF

REMOVED PAVMENT: 7543 SF

% IMPERVIOUS = 65.0%

FLOOR AREA RATIO

FAR = 16443 SF / 88862 SF
= 0.19

LANDSCAPING REQUIREMENTS

PARKING AREA = 28820 SF

REQUIRED LANDSCAPED AREA:

10% OF PARKING AREA = 2882 SF
LANSCCAPE AREA PROVIDED = 4840 SF

REQUIRED TREES:

1 TREE PER 200 SF OF REQUIRED LANDSCAPED AREA
OF REQUIRED TREES = 2882 / 200 = 14 TREES

PROVIDED TREES:

14 NEW
TREES SHALL BE 4' TALL IMEDIATELY AFTER PLANTING

LEGEND

(10) AVAILABLE PARKING SPACES

TRAFFIC FLOW

AREA TO BE LANDSCAPED WITH GRASS, PLANTS, SHRUBS AND/OR TREES

PROPOSED ASPHALT PAVEMENT

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-29-08	BC	REMOVED GRAVEL PARKING AND REPLACED WITH ASPHALT.			
10-29-08	BC	ADDED RETENTION POND 2			
12-17-08	BC	ADDED DIMENSIONS			

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

Brett A. Crews
3-26-09
Brett A. Crews, P.E. 65592

DRAWN BY: BC
APPROVED BY: BC

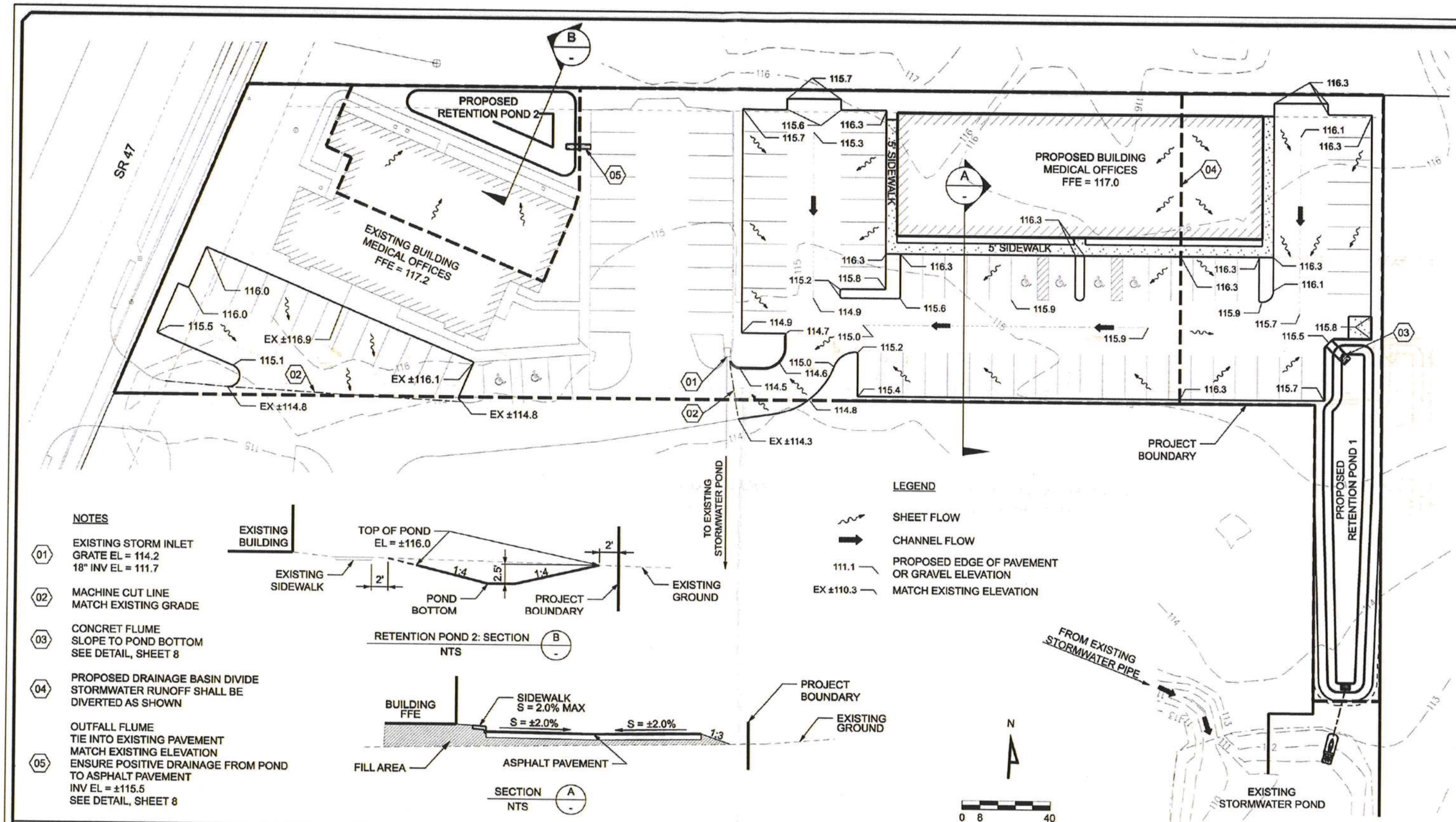
FAISAL MEDICAL BUILDING

SITE PLAN

CES PROJECT NO.: 2008-019

SHEET: 3

ICADsite.dgn 3/24/2009 2:46:21 PM



NOTES

01 EXISTING STORM INLET
GRATE EL = 114.2
18" INV EL = 111.7

02 MACHINE CUT LINE
MATCH EXISTING GRADE

03 CONCRET FLUME
SLOPE TO POND BOTTOM
SEE DETAIL, SHEET 8

04 PROPOSED DRAINAGE BASIN DIVIDE
STORMWATER RUNOFF SHALL BE
DIVERTED AS SHOWN

05 OUTFALL FLUME
TIE INTO EXISTING PAVEMENT
MATCH EXISTING ELEVATION
ENSURE POSITIVE DRAINAGE FROM POND
TO ASPHALT PAVEMENT
INV EL = ±115.5
SEE DETAIL, SHEET 8

RETENTION POND 2: SECTION B / NTS

SECTION A / NTS

LEGEND

- SHEET FLOW
- CHANNEL FLOW
- 111.1 — PROPOSED EDGE OF PAVEMENT OR GRAVEL ELEVATION
- EX ±110.3 — MATCH EXISTING ELEVATION

N

0 8 40

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-29-08	BC	REMOVE GRAVEL PARKING AND REPLACED WITH ASPHALT			
10-29-08	BC	ADD RETENTION POND 2			

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085
Brett A. Crews, P.E. 65592

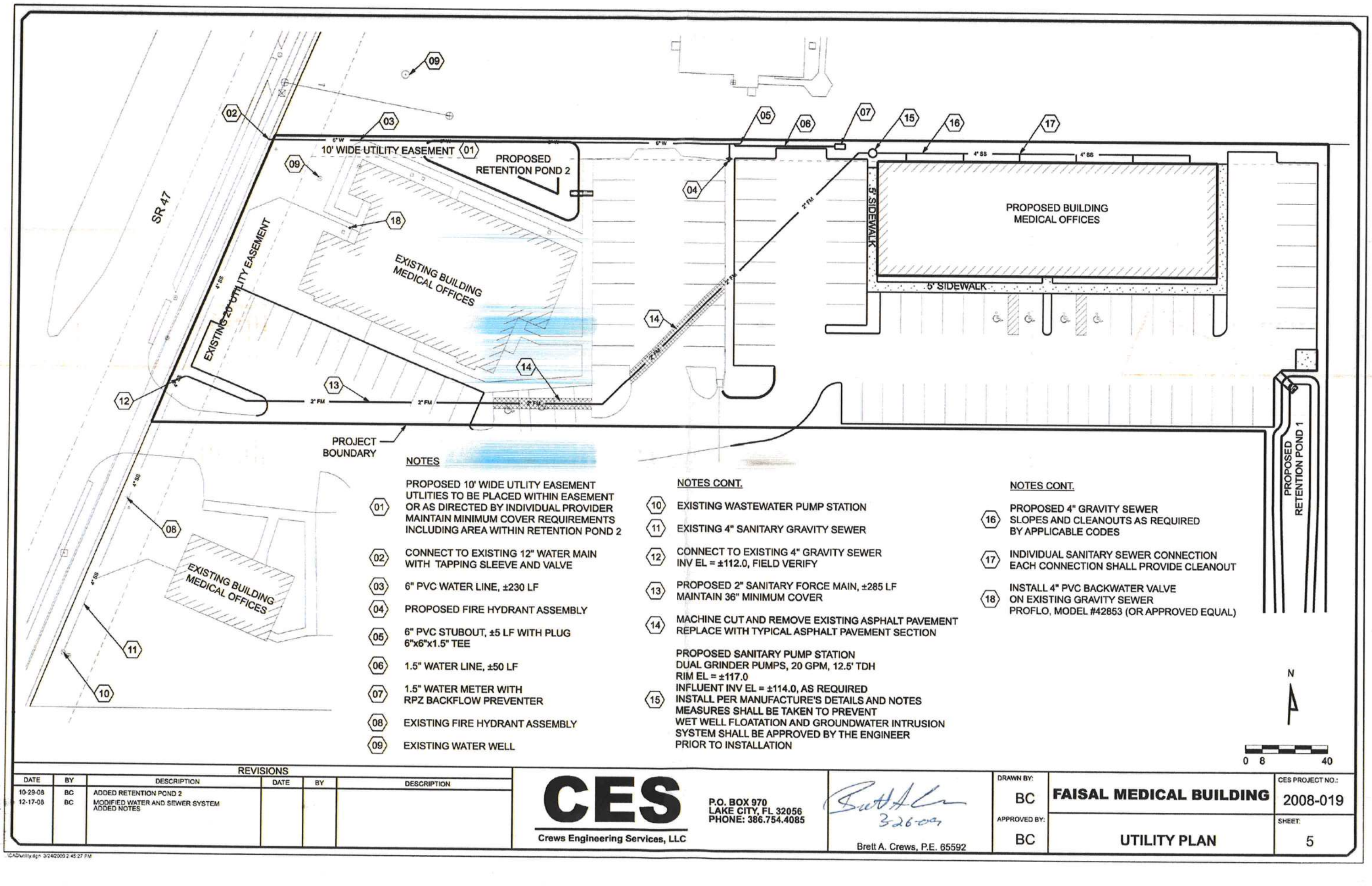
DRAWN BY: BC
APPROVED BY: BC

FAISAL MEDICAL BUILDING

PAVING AND DRAINAGE PLAN

CES PROJECT NO.: 2008-019

SHEET: 4



NOTES

01 PROPOSED 10' WIDE UTLITY EASEMENT UTLITIES TO BE PLACED WITHIN EASEMENT OR AS DIRECTED BY INDIVIDUAL PROVIDER MAINTAIN MINIMUM COVER REQUIREMENTS INCLUDING AREA WITHIN RETENTION POND 2

02 CONNECT TO EXISTING 12" WATER MAIN WITH TAPPING SLEEVE AND VALVE

03 6" PVC WATER LINE, ±230 LF

04 PROPOSED FIRE HYDRANT ASSEMBLY

05 6" PVC STUBOUT, ±5 LF WITH PLUG 6"x6"x1.5" TEE

06 1.5" WATER LINE, ±50 LF

07 1.5" WATER METER WITH RPZ BACKFLOW PREVENTER

08 EXISTING FIRE HYDRANT ASSEMBLY

09 EXISTING WATER WELL

NOTES CONT.

10 EXISTING WASTEWATER PUMP STATION

11 EXISTING 4" SANITARY GRAVITY SEWER

12 CONNECT TO EXISTING 4" GRAVITY SEWER INV EL = ±112.0, FIELD VERIFY

13 PROPOSED 2" SANITARY FORCE MAIN, ±285 LF MAINTAIN 36" MINIMUM COVER

14 MACHINE CUT AND REMOVE EXISTING ASPHALT PAVEMENT REPLACE WITH TYPICAL ASPHALT PAVEMENT SECTION

15 PROPOSED SANITARY PUMP STATION
DUAL GRINDER PUMPS, 20 GPM, 12.5' TDH
RIM EL = ±117.0
INFLUENT INV EL = ±114.0, AS REQUIRED
INSTALL PER MANUFACTURE'S DETAILS AND NOTES
MEASURES SHALL BE TAKEN TO PREVENT WET WELL FLOATATION AND GROUNDWATER INTRUSION
SYSTEM SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION

NOTES CONT.

16 PROPOSED 4" GRAVITY SEWER SLOPES AND CLEANOUTS AS REQUIRED BY APPLICABLE CODES

17 INDIVIDUAL SANITARY SEWER CONNECTION EACH CONNECTION SHALL PROVIDE CLEANOUT

18 INSTALL 4" PVC BACKWATER VALVE ON EXISTING GRAVITY SEWER PROFLO, MODEL #42853 (OR APPROVED EQUAL)

N

0 8 40

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-29-08	BC	ADDED RETENTION POND 2			
12-17-08	BC	MODIFIED WATER AND SEWER SYSTEM ADDED NOTES			

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

Brett A. Crews, P.E. 65592
3-26-09

DRAWN BY: BC
APPROVED BY: BC

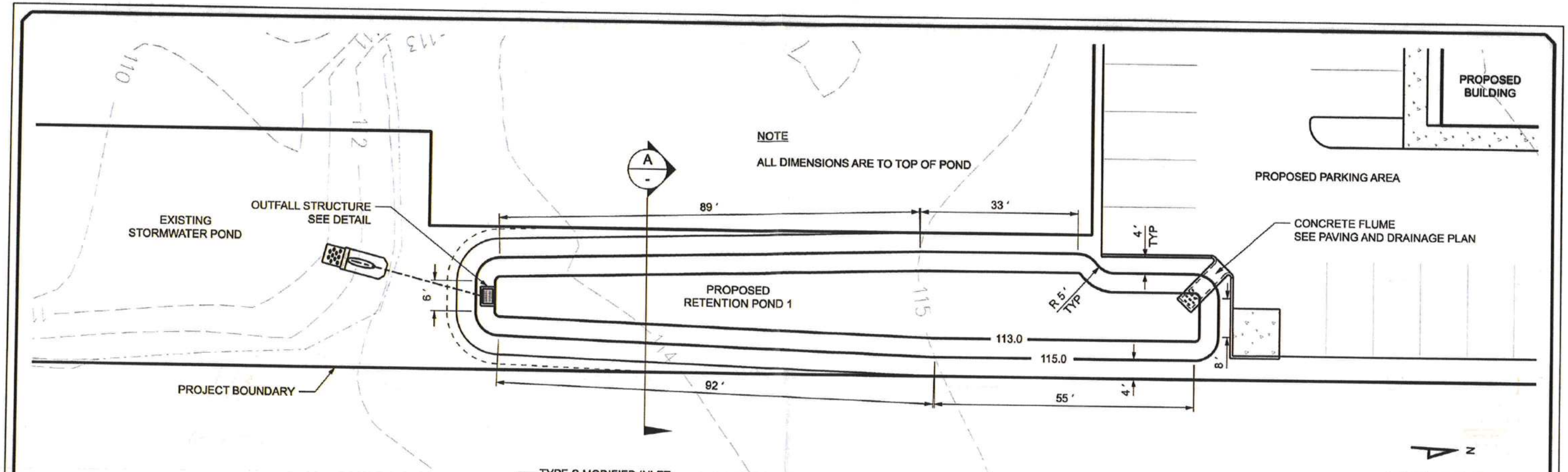
FAISAL MEDICAL BUILDING

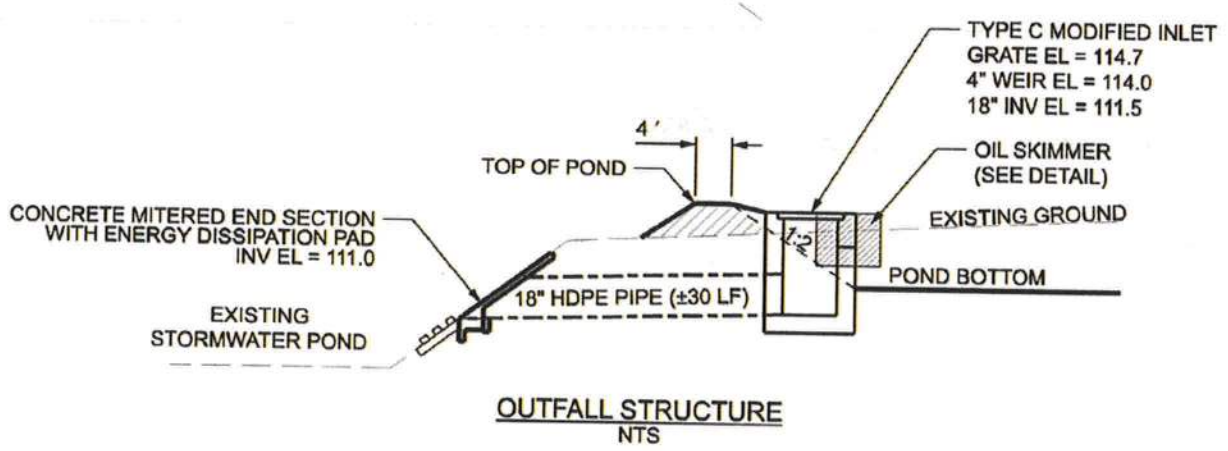
UTILITY PLAN

CES PROJECT NO.: 2008-019

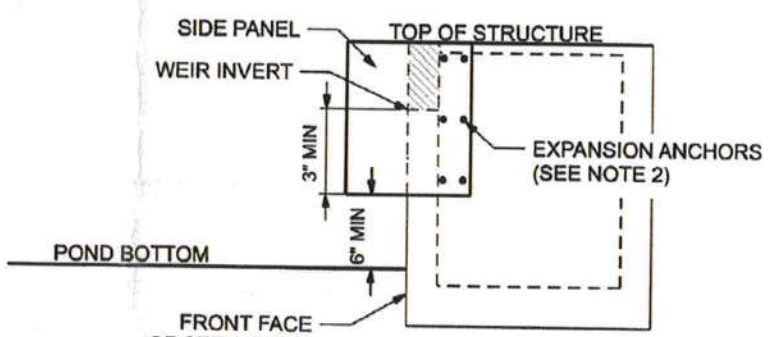
SHEET: 5

\CAD\utility.dgn 3/24/2009 2:45:27 PM

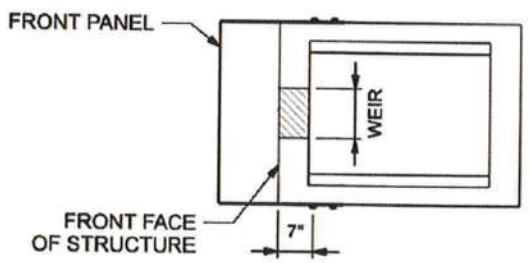




OUTFALL STRUCTURE
NTS



SIDE VIEW
NTS

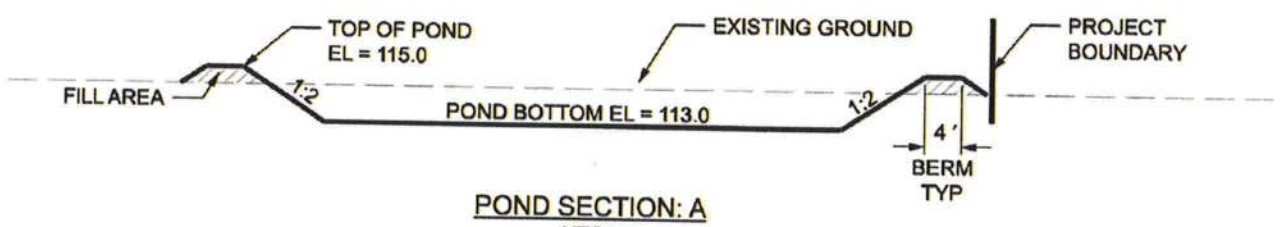


PLAN VIEW
NTS

NOTES:

1. LOCATION OF REINFORCING STEEL IN THESE STRUCTURES SHALL CONFORM TO THE APPLICABLE STANDARDS TO AVOID CONFLICT WITH THE EXPANSION ANCHORS USED TO ATTACH SKIMMERS.
2. EXPANSION ANCHORS SHALL BE PLACED IN LOCATIONS TO ENSURE THE OIL SKIMMER IS SECURLY FASTENED TO THE STRUCTURE.

ALUMNINUM OIL SKIMMER DETAIL
NTS



POND SECTION: A
NTS

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-29-08	BC	MODIFIED OUTFALL STRUCTURE			
11-26-08	BC	MODIFIED OUTFALL STRUCTURE, GRATE ELEVATION			

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

Brett A. Crews, P.E. 65592
11-26-08

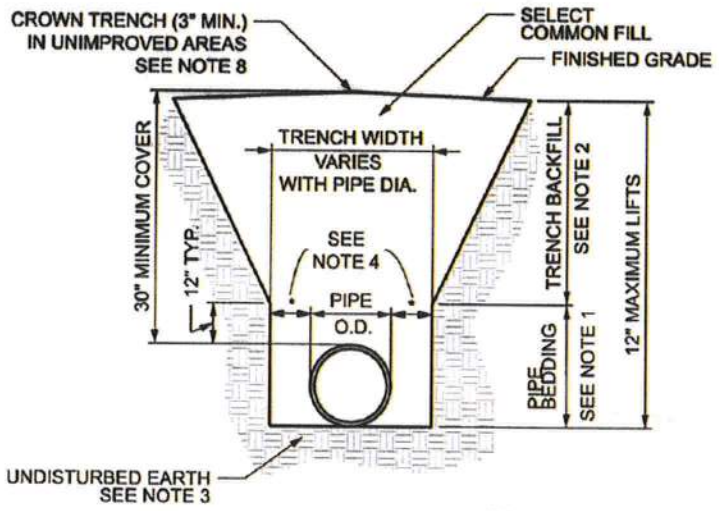
DRAWN BY: BC
APPROVED BY: BC

FAISAL MEDICAL BUILDING

STORMWATER POND 1

CES PROJECT NO.: 2008-019
SHEET: 6

\CAD\pond.dgn 3/24/2009 3:05:36 PM

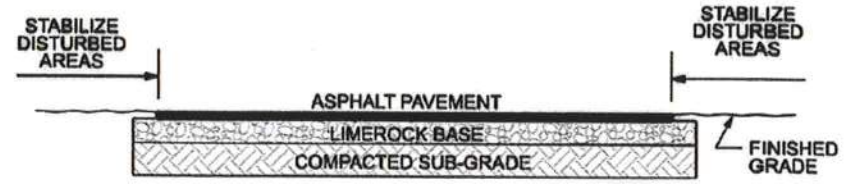


TRENCH AND BACKFILL DETAIL

NTS

NOTES

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 95% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK WILL BE REQUIRED IF OVER-EXCAVATION OCCURS.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. PROVIDE TRENCH SLOPING AND BRACING AS REQUIRED FOR SAFETY.
8. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES. SURFACE RESTORATION WITHIN PAVED AREAS SHALL COMPLY WITH THE REQUIREMENTS OF THE ROAD CONSTRUCTION SPECIFICATIONS.

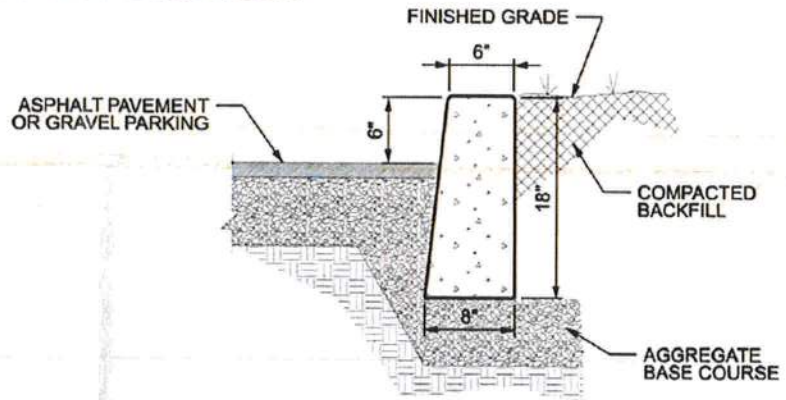


1.25" SUPERPAVE (12.5)
0.1 GAL/SY PRIME COAT
6" LIMEROCK BASE
8" COMPACTED SUB-GRADE

NOTE:
SUBGRADE SHALL BE COMPACTED TO 98% OF MAXIMUM DRY DENSITY AS ESTABLISHED BY ASTM T-99.

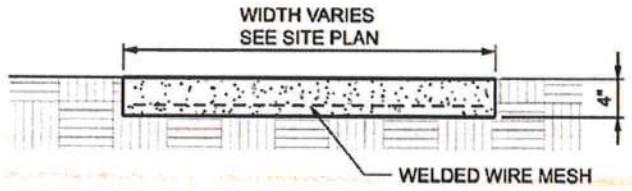
TYPICAL PAVEMENT SECTION

NTS



HEADER CURB DETAIL

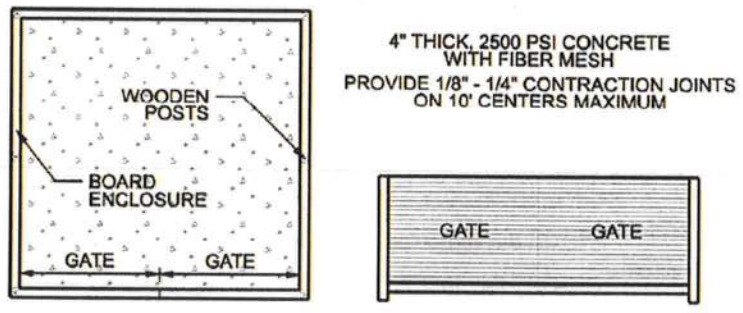
NTS



3000 PSI CONCRETE
REINFORCED WITH 6x6x10/10 WELDED WIRE MESH
PROVIDE 1/8"-1/4" CONTRACTION JOINTS AT 10' CENTERS (MAXIMUM)

STANDARD SIDEWALK DETAIL

NTS



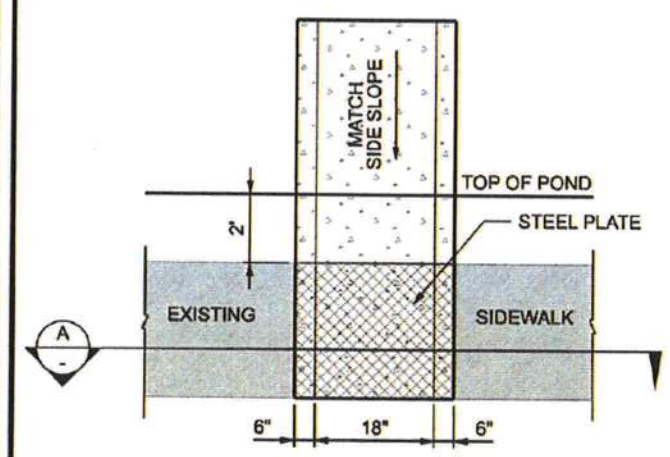
4" THICK, 2500 PSI CONCRETE WITH FIBER MESH
PROVIDE 1/8" - 1/4" CONTRACTION JOINTS ON 10' CENTERS MAXIMUM

PLAN VIEW

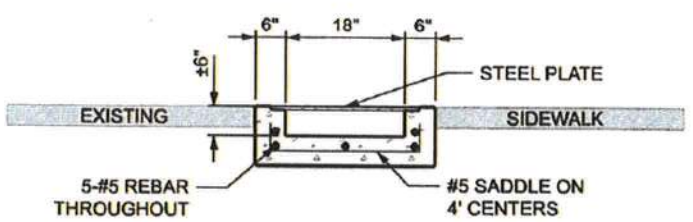
SECTION

DUMPSTER PAD DETAIL

NTS



PLAN



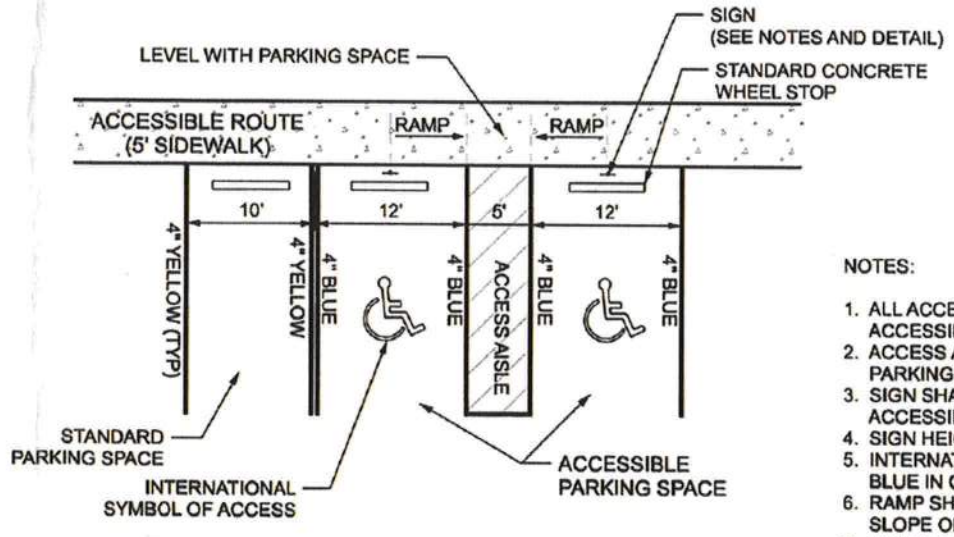
PROVIDE 1/8"-1/4" CONTRACTION JOINTS 10' CENTERS MAXIMUM.

2500 PSI CONCRETE W/ FIBER MESH

SECTION A-A

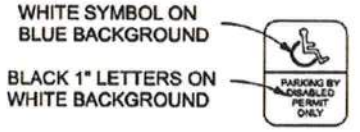
OUTFALL FLUME DETAIL

NTS



TYPICAL OFF-STREET PARKING DETAIL

NTS



SIGN DETAIL

NOTES:

1. ALL ACCESSIBLE ROUTES SHALL MEET ADA STANDARDS FOR ACCESSIBLE DESIGN.
2. ACCESS AISLE MAY BE PLACED ON RIGHT OR LEFT SIDE OF PARKING STALL.
3. SIGN SHALL BE PLACED IN FRONT OF ALL DESIGNATED ACCESSIBLE PARKING SPACES.
4. SIGN HEIGHT SHALL BE 7' FROM PAVEMENT TO BOTTOM OF SIGN.
5. INTERNATIONAL SYMBOL OF ACCESS SHALL BE 3 - 5 FT HIGH AND BLUE IN COLOR.
6. RAMP SHALL PROVIDE NON-SLIP FINISH AND HAVE A MAXIMUM SLOPE OF 1:12.
7. PAINT EDGE OF SIDEWALK WITH CONTRASTING PAINT AT RAMP TRANSITION. 3" WIDTH ON TOP AND ON FACE OF TRANSITION.
6. SEE SITE PLAN FOR ADDITIONAL PARKING SPACEL DIMENSIONS.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
12-17-08	BC	REVISED GENERAL NOTES			
12-17-06	BC	REVISED DETAILS			

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

Brett A. Crews 3-26-09
Brett A. Crews, P.E. 65592

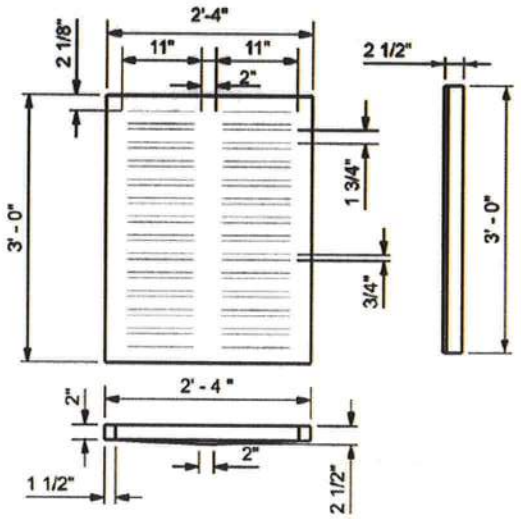
DRAWN BY: BC
APPROVED BY: BC

FAISAL MEDICAL BUILDING

CES PROJECT NO.: 2008-019

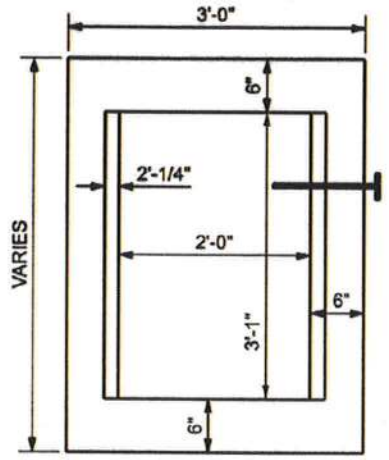
MISCELLANEOUS NOTES AND DETAILS

SHEET: 7

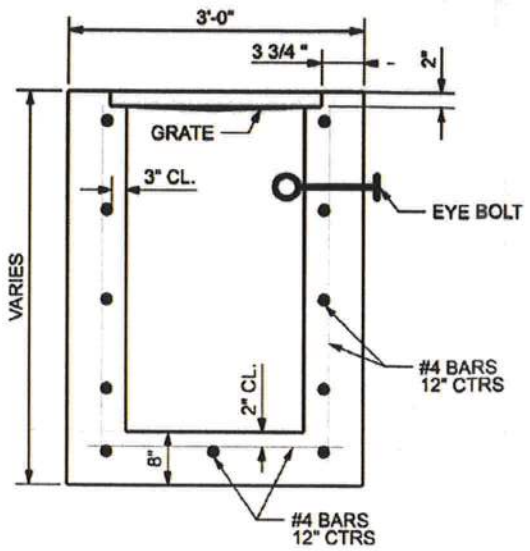


APPROX. WEIGHT 235 Lbs.

GRATE



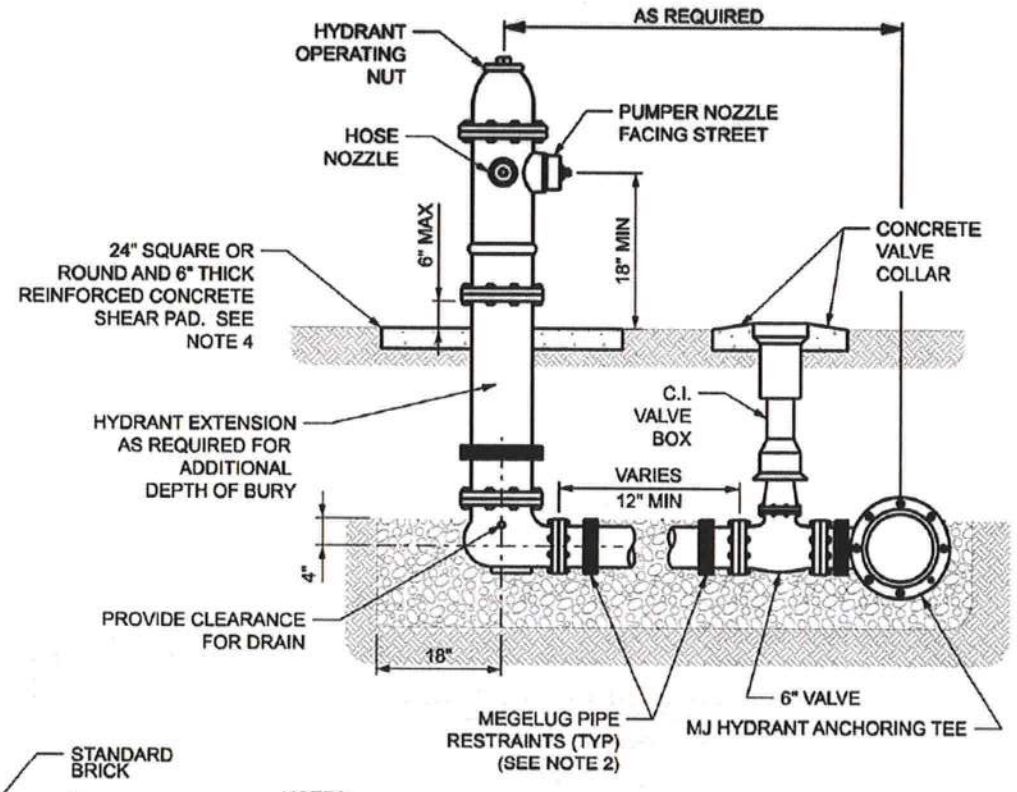
PLAN



SECTION

TYPE C INLET DETAIL

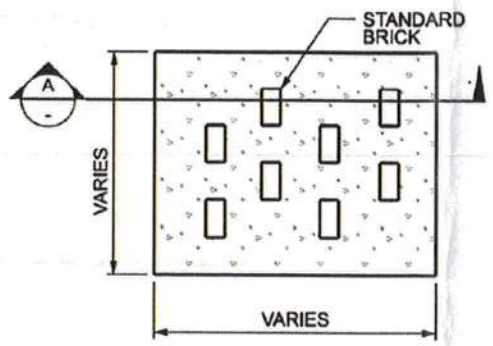
NTS



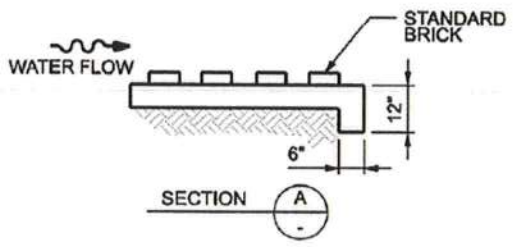
NOTES:
1) GRAVEL TO BE PLACED AROUND DRAIN
2) ALL MECHANICAL JOINTS SHALL BE RESTRAINED BY MEGELUG RESTRAINTS OR APPROVED EQUAL.
3) THE DEVELOPER MAY INSTALL THE SHEAR PAD RECESSED UP TO 4 INCHES BELOW FINISHED GRADE AND SOD THE RECESSED SECTION

FIRE HYDRANT ASSEMBLY DETAIL

NTS

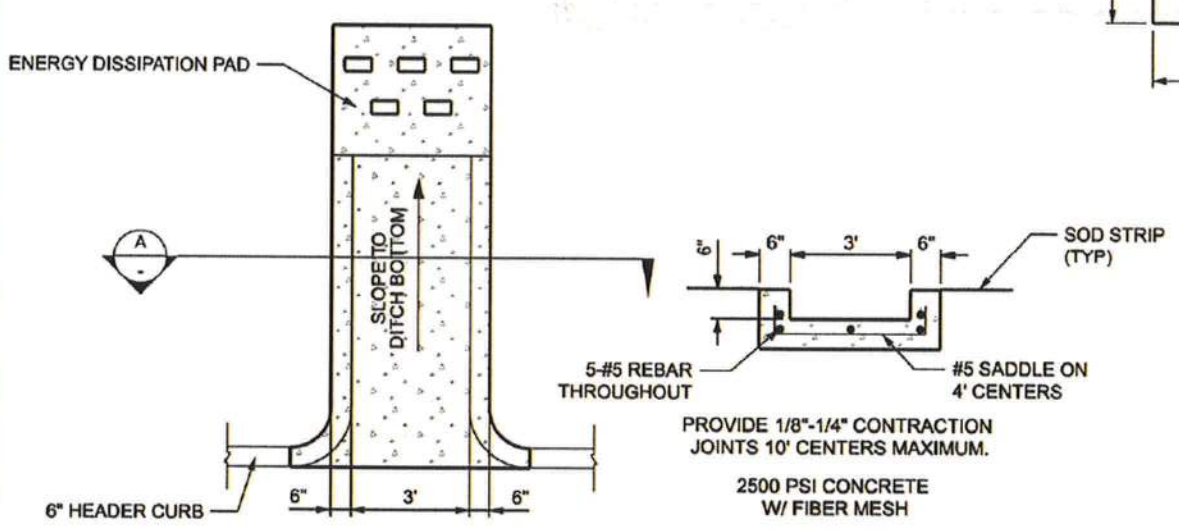


PLAN



ENERGY DISSIPATION PAD DETAIL

NTS



PLAN

SECTION A-A

CONCRETE FLUME DETAIL

NTS

PIPE RESTRAINT NOTES

1. DUCTILE IRON (DI) FITTINGS TO BE RESTRAINED TO PVC (C900) PIPE WITH SERIES OF 2000PV MECHANICAL RESTRAINT GLANDS AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL. DI FITTINGS TO BE RESTRAINED TO DIP PER CURRENT DIPRA STANDARDS.
2. WATER MAIN OR FORCE MAIN TO BE RESTRAINED EACH SIDE OF FITTINGS FOR LENGTHS AS NOTED IN TABLE BELOW. RESTRAINT SHALL BE ACCOMPLISHED WITH DUCTILE IRON RESTRAINT HARNESSES FOR PVC CONFORMING TO ASTM A-536. RESTRAINT HARNESSES TO BE SERIES 1600 AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL. RESTRAINT FOR DIP SHALL BE BY INTERNAL RESTRAINT GASKETS PER CURRENT DIPRA STANDARDS.
3. THE TABLE BELOW SHOWS TYPICAL NUMBERS, IN 20'-SECTIONS, OF PIPE TO BE RESTRAINED FOR THE FOLLOWING ASSUMPTIONS: (1) DEPTH OF COVER = 36", (2) TEST PRESSURE = 150 psi , (3) SAFETY FACTOR = 1.5, (4) LAYING CONDITIONS = PIPE EMBEDDED IN LOOSE CLEAN SAND AND COMPACTED TO TOP OF PIPE (APPROXIMATELY 90% STANDARD PROCTOR).

MINIMUM NUMBER OF RESTRAINED JOINTS IN 20' STRAIGHT PIPE, EACH SIDE OF RESTRAINED FITTING.

	PIPE SIZE					
	6"	8"	10"	12"	16"	20"
90° BEND	1	1	2	2	2	2
45° BEND	0	1	1	1	1	1
22-1/2° BEND	0	0	0	0	1	1
11-1/4° BEND	1	1	2	2	3	4
PLUG OR BRANCH OF TEE	2	3	3	4	5	6

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-29-08	BC	ADD OUTFALL FLUME DETAIL			
12-17-08	BC	REVISED DETAILS			

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

3-26-09

Brett A. Crews, P.E. 65592

DRAWN BY: BC

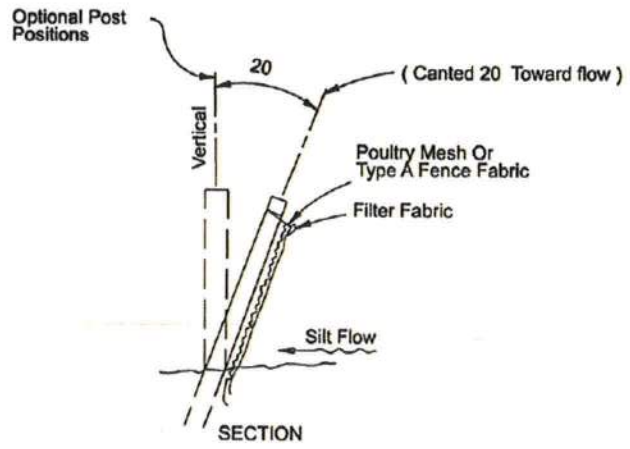
APPROVED BY: BC

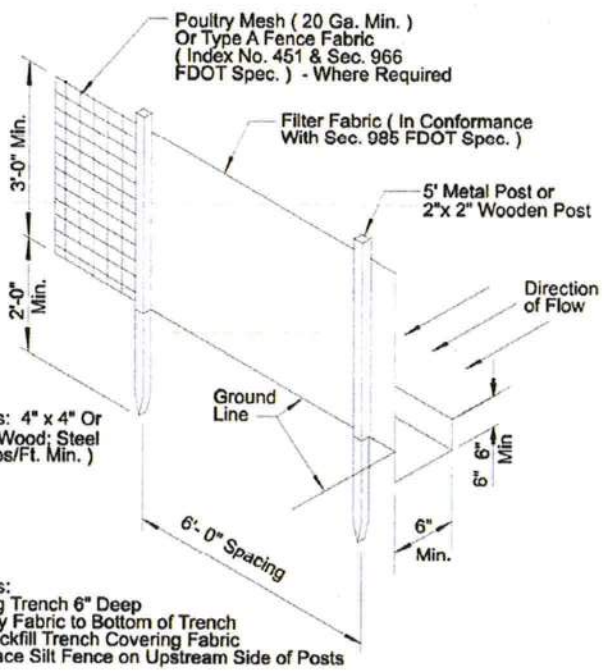
FAISAL MEDICAL BUILDING

MISCELANEOUS NOTES AND DETAILS

CES PROJECT NO.: 2008-019

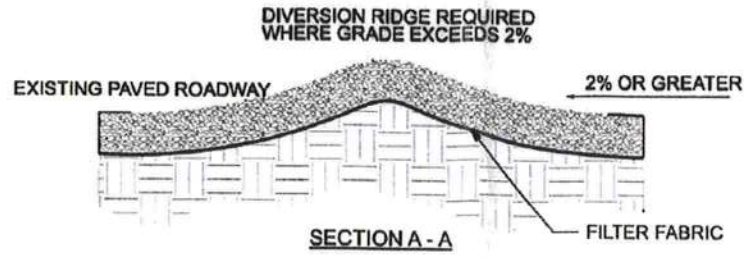
SHEET: 8



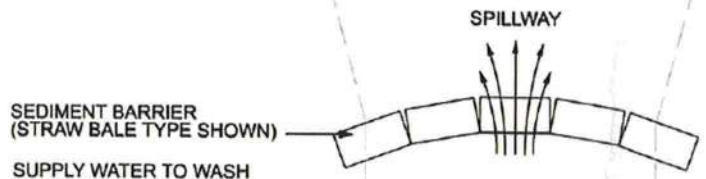


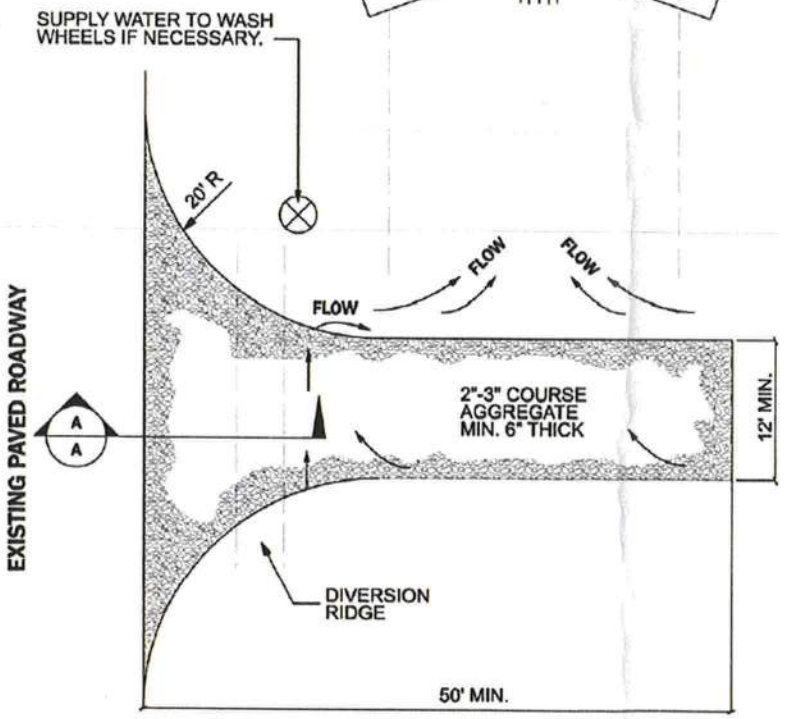
TYPE IV SILT FENCE

AS COMPARED TO TYPE III SILT FENCE, TYPE IV FENCE HAS GREATER STRENGTH AND HEIGHT WHICH REDUCES THE POSSIBILITY OF SEDIMENT AND WATER FROM OVERTOPPING THE FENCE. AS A RESULT, AVOID USING TYPE IV FENCE IN AREAS WHERE THE DETAINED WATER WOULD BACK INTO TRAVEL LANES OR OFF THE RIGHT OF WAY.



NOTE:
USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.





PLAN

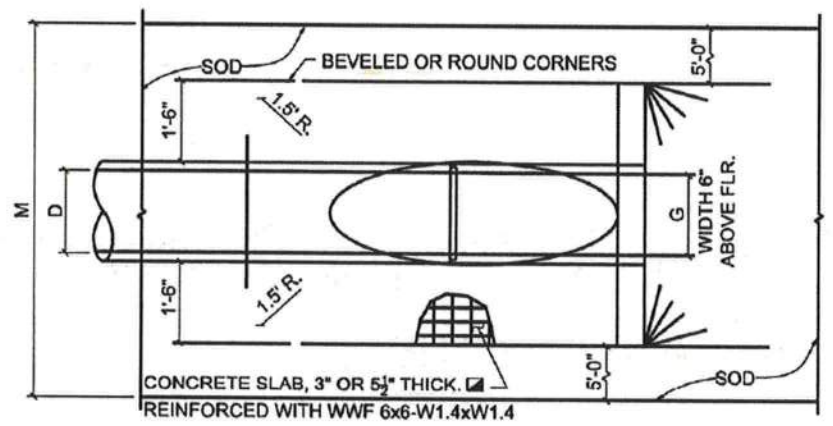
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE

NTS

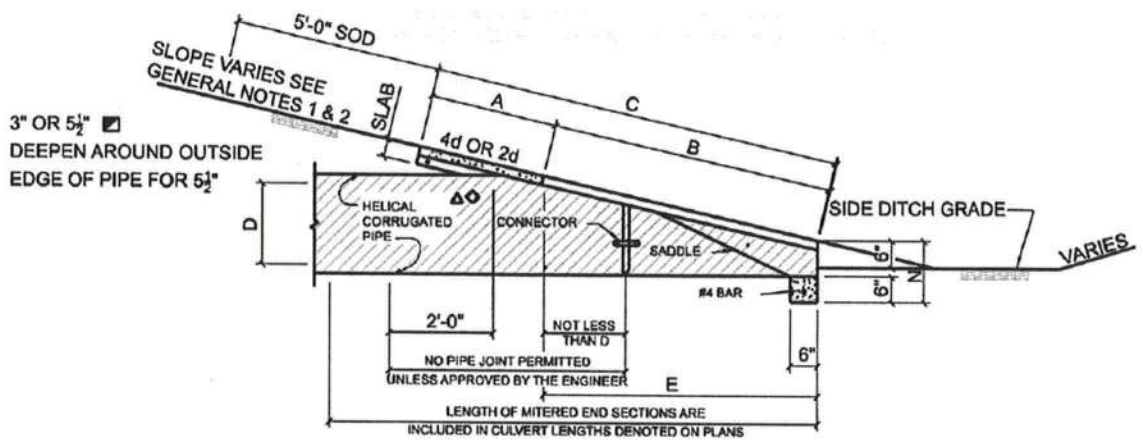
NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS ONTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

DIMENSIONS AND QUANTITIES

4d SLOPE	D	X	A	B	C	E	F	G	M SINGLE PIPE	N	CONC. (cy) SINGLE PIPE	CONC. (sy) SINGLE PIPE
	15"	2'-7"	2.5'	3.09'	5.59'	3.0'	7'	1.23'	4.33'	1.04'	0.44	22
	18"	2'-10"	2.5'	4.12'	6.62'	4.0'	8'	1.41'	4.58'	1.04'	0.49	24
	24"	3'-5"	2.5'	6.18'	8.68'	6.0'	10'	1.73'	5.08'	1.04'	0.65	27



TOP VIEW - SINGLE PIPE



SECTION

* SLOPE: 4d MITER: TO C.L. PIPE FOR PIPES 16" AND SMALLER.
2d FOR PIPES 24" AND LARGER.
2d MITER: TO C.L. PIPE FOR PIPES 18" AND SMALLER.
1d FOR PIPES 24" AND LARGER.

CONCRETE MITERED END SECTION DETAIL

NTS

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
12-17-08	BC	REVISED DETAILS			

CES
Crews Engineering Services, LLC
P.O. BOX 970
LAKE CITY, FL 32056
PHONE: 386.754.4085

3-26-07
Brett A. Crews, P.E. 65592

DRAWN BY: BC
APPROVED BY: BC

FAISAL MEDICAL BUILDING

MISCELLANEOUS NOTES AND DETAILS

CES PROJECT NO.: 2008-019
SHEET: 9