001117

RESOLUTION NO. _____

PASSED _____

A Resolution approving the final plat of "Walnut Creek, A Planned Development, Phase I", located in the vicinity of the south side of N.W. 39th Avenue between N.W. 25th Court and N.W. 27th Court; authorizing the Mayor and Clerk of the Commission to execute a Tri-Party Agreement and accepting a Letter of Credit for the construction of improvements; and providing an immediate effective date.

WHEREAS, the Development Review Board approved the design plat of "Walnut Creek, A Planned Development, Phase I" on February 8, 2001; and

WHEREAS, the owner of the plat has submitted a final plat which substantially conforms to the design plat as approved by the City Commission on March 26, 2001 and which incorporates all modifications and revisions specified in such approval; and

WHEREAS, the owner of the proposed subdivision has requested the City Commission to accept and approve the final plat as provided in Chapter 177 of the Florida Statutes and Chapter 30 of the Code of Ordinances of the City of Gainesville, Florida; and

WHEREAS, the City Commission finds that the final plat described herein is consistent with the City of Gainesville 1991-2001 Comprehensive Plan and the City of Gainesville 2000-2010 Comprehensive Plan as adopted by Resolution No. 002684.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF GAINESVILLE, FLORIDA;

Section 1. The final plat of "Walnut Creek, A Planned Development, Phase I" is accepted and approved by the City Commission on the following described property lying in the City of Gainesville, Alachua County, Florida:

(See Exhibit "A" attached hereto and made a part hereof as if set forth in full)

Section 2. The Mayor and Clerk of the Commission are authorized to execute a Tri-Party Agreement with a lending institution and the subdivider that deposits with the City the letter of credit that secures the construction and completion of the improvements required under the ordinances of the City of City of Gainesville, a copy of which agreement is attached hereto as Exhibit "B".

Section 3. The Clerk of the Commission is authorized and directed to affix his signature to the record plat on behalf of the City Commission and accept the dedication of public rights-of-way, easements, and other dedicated portions as shown on the plat.

Section 4. This resolution shall be effective immediately upon adoption.

PASSED AND ADOPTED this _____ day of _____, 2002.

_____
Thomas D. Bussing, Mayor

ATTEST:

APPROVED AS TO FORM AND LEGALITY:

_____
Kurt Lannon,
Clerk of the Commission

_____
Marion J. Radson, City Attorney

EXHIBIT "A"

A TRACT OF LAND SITUATED IN SECTION 25, TOWNSHIP 9 SOUTH, RANGE 19 EAST, ALACHUA COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 OF THE AFOREMENTIONED SECTION 25, TOWNSHIP 9 SOUTH, RANGE 19 EAST FOR THE POINT OF REFERENCE AND RUN S.00°57'04"E., ALONG THE WEST LINE OF SAID NORTHEAST 1/4, A DISTANCE OF 50.15 FEET TO THE SOUTH RIGHT OF WAY LINE OF N.W. 39th AVENUE (100 FOOT RIGHT OF WAY); THENCE RUN N.89°34'14"E., ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 440.13 FEET TO A CONCRETE MONUMENT (STAMPED PRM LS #3784) AND THE TRUE POINT OF BEGINNING; THENCE CONTINUE N.89°34'14"E., ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 880.35 FEET TO A CONCRETE MONUMENT (STAMPED: PRM L.S. #3784) AT THE NORTHWEST CORNER OF PALM GROVE SUBDIVISION AS PER PLAT RECORDED IN PLAT BOOK "T", PAGE 52 OF THE PUBLIC RECORDS OF ALACHUA COUNTY, FLORIDA; THENCE RUN S.00°56'22"E., ALONG THE WEST LINE OF SAID PALM GROVE SUBDIVISION, A DISTANCE OF 672.97 FEET TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784); THENCE RUN S.89°03'38"W., PERPENDICULAR TO SAID WEST LINE, A DISTANCE OF 20.00 FEET TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784) WHICH MARKS THE BEGINNING OF A CURVE CONCAVE SOUTHWESTERLY, SAID CURVE HAVING A RADIUS OF 20.00 FEET; THENCE RUN NORTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 89°29'24", AN ARC DISTANCE OF 31.24 FEET (CHORD BEARING AND DISTANCE BEING N.45°41'04"W., 28.16 FEET RESPECTIVELY) TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784) WHICH MARKS THE END OF SAID CURVE; THENCE RUN S.89°34'14"W., A DISTANCE OF 95.19 FEET TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784); THENCE RUN S.00°56'22"W., A DISTANCE OF 14.97 FEET TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784); THENCE RUN S.89°34'14"E., A DISTANCE OF 262.54 FEET TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784) WHICH MARKS THE BEGINNING OF A CURVE CONCAVE NORTHEASTERLY, SAID CURVE HAVING A RADIUS OF 100.00 FEET; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 32°57'54", AN ARC DISTANCE OF 57.53 FEET (CHORD BEARING AND DISTANCE BEING N.73°56'49"W., 56.74 FEET RESPECTIVELY) TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784); THENCE RUN S.00°29'21"E., A DISTANCE OF 88.39 FEET TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784) WHICH IS LOCATED ON THE NORTH LINE OF HIDDEN PINES SUBDIVISION AS PER PLAT RECORDED IN PLAT BOOK "H", PAGE 63 OF SAID PUBLIC RECORDS; THENCE RUN S.89°30'39"W., ALONG THE NORTH LINE OF SAID HIDDEN PINES SUBDIVISION, A DISTANCE OF 435.02 FEET TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784) AT THE NORTHEAST CORNER OF LOT 1 OF SAID HIDDEN PINES SUBDIVISION; THENCE RUN N.00°22'59"W., A DISTANCE OF 741.01 FEET TO THE TRUE POINT OF BEGINNING, CONTAINING 14.238 ACRES, MORE OR LESS.

AGREEMENT
WALNUT CREEK, PHASE I

SUNTRUST BANK, NORTH CENTRAL FLORIDA, has issued a letter of credit to the City of Gainesville on behalf of LUTHER E. BLAKE, JR. & IRENE BLAKE CAUDLE, hereinafter known as "Blake & Caudle", hereinafter together with GEORGE E. FLETCHER & GLORIA W. FLETCHER, shall be referred to as the "Developer", which letter of credit (a copy of which is attached hereto as Exhibit "A") is issued pursuant to §30-186, Gainesville Code, as security for the construction of improvements for the installation of street, drainage, alleys and other improvements on Walnut Creek, Phase I.

W.G. Johnson & Son, Inc., hereinafter referred to as the Contractor, has contracted for a total contract price of $600,000.00 to install and pave the streets, necessary drainage, wastewater collection system, water distribution system and other improvements required under applicable law. The letter of credit is issued as security to pay for the completion of these improvements.

The applicable ordinances of the City of Gainesville require that assurances be given before a subdivision is platted; that the proposed improvements will be completed within a reasonable time to the standards required by the City Engineer for acceptance and maintenance by the City after completion and as a condition of the acceptance of the plan of this proposed subdivision for recording.

As a condition of the acceptance of the plat of this proposed subdivision for recording, the City has reviewed the Contract and the Contract price relating to these improvements to establish that such sum is sufficient for normally anticipated costs.

A letter of credit for $720,000.00 (120% of the Director of Public Works-approved estimate of the costs of the improvements) is irrevocably issued as security for the completion and payment for construction of the required subdivision improvements and may not be used for any other purpose until such improvements are in place and accepted by the City. The letter of credit shall be security commencing with final plat approval until completion of the improvements and accepted by the City Director of Public Works or until 5:00 p.m. Eastern Daylight Savings Time, on a date one (1) year from final plat approval, whichever first occurs.

Should the Contractor default in performance under this Contract, the Developer agrees to engage another Contractor within thirty (30) days to complete these improvements. The selection of the other Contractor will be subject to approval by the City. Should the Developer not proceed to relet the Contract within such time period of a default by the present Contractor, the City shall be entitled, but shall not be obligated, to complete the improvements so that the City will accept permanent maintenance and use, for the purpose of paying for such completion, the letter of credit attributable to this Contract shall be used to pay to complete the improvements.

No payments shall be made to the Contractor without the prior approval of the Department of Public Works for the City of Gainesville. Any payments shall be for a sum equal to labor and materials to the date less a 10% retainage.

This Agreement may be substituted by other appropriate security provided in Section 30-186 Gainesville Code upon approval of form by the City Attorney.

The completion may be by another Contractor or by the City directly, whichever shall be determined by the City to be most appropriate for an early completion of the improvements and final acceptance by the City.

The Developer and the Contractor agree to prosecute the construction of these improvements in a reasonably diligent manner to assure completion within 150 days from recording of the plat. If in the judgment of the City Director of Public Works, the progress of construction is falling behind schedule, the City Director of Public Works may so advise the Developer who shall then be bound to take corrective measures.

Should the City have to take over and complete or have completed the subdivision improvements required by City ordinances, then the obligation of the Lender pursuant to the letter of credit to pay a sum equal to the cost of such improvements to the City or make such sum available shall exist independent of and regardless of whether or not the Developer may be in default on its agreement.

This Agreement executed at Gainesville, Florida, this _____ day of _____, 2002.

Witness:

SunTrust Bank, North Central Florida

_____ By: _____

Printed Name: _____ Its:

_____

Printed Name: _____

W.G. Johnson & Son, Inc.

_____ By: _____

Printed Name: _____ Its:

_____

Printed Name: _____

_____ _____

Printed Name: _____ Luther E. Blake, Jr.

_____ _____

Printed Name: _____ Irene Blake Caudle

_____
Printed Name:_____

_____
Printed Name:_____

_____
George E. Fletcher

_____
Gloria W. Fletcher

City of Gainesville

_____
Printed Name:_____

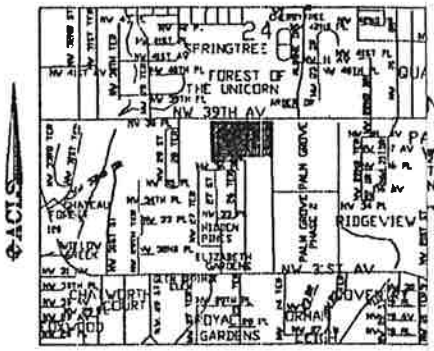
_____
Printed Name:_____

By: _____
Its:

NOTICE:

THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE [illegible] SUBDIVIDED LANDS DESCRIBED HEREON AND WILL IN NO [illegible] AUTHORITY BY ANY OTHER GRAPHIC OR DIGITAL FORM OF [illegible]

THERE MAY BE ADDITIONAL RESTRICTIONS THAT ARE NOT [illegible] BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY.



VICINITY MAP AT NO SCALE

LEGAL DESCRIPTION:

A TRACT OF LAND SITUATED IN SECTION 25, TOWNSHIP 9 SOUTH [illegible] COUNTY, FLORIDA, SAID TRACT OF LAND BEING MORE PARTICULARLY D

COMMENCE AT THE NORTHWEST CORNER OF THE NORTHEAST 1/4 SECTION 25, TOWNSHIP 9 SOUTH, RANGE 19 EAST FOR THE POINT OF 57'04"E., ALONG THE WEST LINE OF SAID NORTHEAST 1/4, A DISTANCE RIGHT OF WAY LINE OF N.W. 39th AVENUE (100 FOOT RIGHT OF WAY); ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 440.13 FEET (STAMPED PRM LS #3784) AND THE TRUE POINT OF BEGINNING; THENC ALONG SAID SOUTH RIGHT OF WAY LINE, A DISTANCE OF 880.35 FEET (STAMPED: PRM L.S. #3784) AT THE NORTHWEST CORNER OF PALM G RECORDED IN PLAT BOOK "I", PAGE 52 OF THE PUBLIC RECORDS OF THENCE RUN S.00°58'22"E., ALONG THE WEST LINE OF SAID PALM GRO 672.97 FEET TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784); PERPENDICULAR TO SAID WEST LINE, A DISTANCE OF 20.00 FEET TO A (STAMPED: PRM LS #3784) WHICH MARKS THE BEGINNING OF A CURVE SAID CURVE HAVING A RADIUS OF 20.00 FEET; THENCE RUN NORTHWE SAID CURVE, THROUGH A CENTRAL ANGLE OF 89°29'24", AN ARC DIST BEARING AND DISTANCE BEING N.45°41'04"W., 28.18 FEET RESPECTIVEL (STAMPED: PRM LS #3784) WHICH MARKS THE END OF SAID CURVE; T DISTANCE OF 95.19 FEET TO A CONCRETE MONUMENT (STAMPED: PRM S.00°58'22"W., A DISTANCE OF 14.97 FEET TO A CONCRETE MONUMENT THENCE RUN S.88°36'14"E., A DISTANCE OF 282.54 FEET TO A CONCR LS #3784) WHICH MARKS THE BEGINNING OF A CURVE CONCAVE NORTH A RADIUS OF 100.00 FEET; THENCE RUN NORTHWESTERLY ALONG THE A CENTRAL ANGLE OF 32°57'54", AN ARC DISTANCE OF 57.53 FEET (C BEING N.73°58'49"W., 56.74 FEET RESPECTIVELY) TO A CONCRETE MON #3784); THENCE RUN S.00°79'21"E., A DISTANCE OF 85.39 FEET TO A (STAMPED: PRM LS #3784) WHICH IS LOCATED ON THE NORTH LINE OF PER PLAT RECORDED IN PLAT BOOK "H", PAGE 83 OF SAID PUBLIC RE 30'39"W., ALONG THE NORTH LINE OF SAID HIDDEN PINES SUBDIVISION, TO A CONCRETE MONUMENT (STAMPED: PRM LS #3784) AT THE NORTH SAID HIDDEN PINES SUBDIVISION; THENCE RUN N.00°22'59"W., A DISTAN TRUE POINT OF BEGINNING, CONTAINING 14.238 ACRES, MORE OR LESS.

LEGEND:

▫	FOUND 4"x4" CONCRETE MONUMENT (NO IDENTIFICATION)
▪	FOUND 4"x4" CONCRETE MONUMENT STAMPED PRM LS3784
•	SET 5/8" STEEL ROD AND CAP STAMPED LB2903
●	SET NAIL & CAP STAMPED PCP LS3784
PUE	PUBLIC UTILITIES EASEMENT
sq. ft.	SQUARE FEET
R	RADIUS OF CURVE
L	ARC LENGTH OF CURVE
Δ	CENTRAL ANGLE (DELTA) OF CURVE
CB	CHORD BEARING
C	CHORD
PRM	PERMANENT REFERENCE MONUMENT
BSL	BUILDING SETBACK LINE

SURVEYOR'S NOTES:

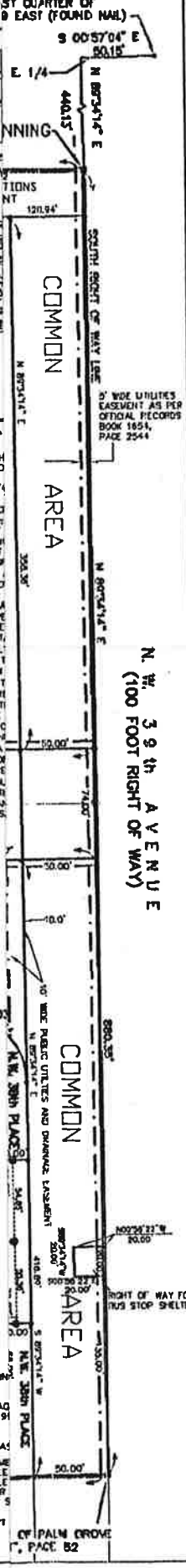
1. THE BEARINGS SHOWN HEREON ARE BASED ON AN ASSUMED BEARING LINE OF N.W. 39TH AVENUE AS MONUMENTED.

2. BASED UPON REVIEW OF THE FEDERAL EMERGENCY MANAGEMENT AG NUMBER 125107-0005C, WITH AN EFFECTIVE DATE OF FEBRUARY 17, 19 WITHIN ZONE "X" (AREAS OUTSIDE THE 500 YEAR FLOOD PLAIN).

3. THE HORIZONTAL ERROR FOR THE FIELD TRAVERSE THAT IS THE BAS

4. ALL PLATTED UTILITY EASEMENTS SHALL PROVIDE THAT SUCH EASEME CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE CONSTRUCTION, INSTALLATION, MAINTENANCE, AND OPERATION OF CABLE FACILITIES AND SERVICES OF AN ELECTRIC, TELEPHONE, GAS, OR OTHER COMPANY DAMAGES THE FACILITIES OF A PUBLIC UTILITY, IT SHALL BE S

5. ANY ADDITIONAL LOTS SHALL REQUIRE WATER MANAGEMENT DISTRICT



PLAT BOOK _____ PAGE _____

SHEET 1 OF 1

GRAPHIC SCALE

(IN FEET)
1 inch = 60 ft.

CERTIFICATION AND DEDICATION

BE, THE UNDERSIGNED DO HEREBY CERTIFY THAT WE ARE THE OWNERS OF THE HEREIN DESCRIBED LANDS TO BE KNOWN AS "WALNUT CREEK, A PLANNED DEVELOPMENT, PHASE I" AND DO DEDICATE TO THE CITY OF GAINESVILLE ITS SUCCESSORS AND ASSIGNS FOREVER THE ROADWAYS SHOWN HEREON AS "RIGHT OF WAY", THE PUBLIC UTILITIES EASEMENTS, THE DRAINAGE EASEMENTS AND THE RIGHT OF WAY FOR BUS STOP SHELTER AS SHOWN HEREON.

WITNESS: _____ LUTHER E. BLAKE, JR., AS PERSONAL REPRESENTATIVE OF THE ESTATE OF ALICE ROSENA BLAKE, DECEASED

WITNESS: _____

WITNESS: _____ IRENE BLAKE CAUDLE, AS PERSONAL REPRESENTATIVE OF THE ESTATE OF ALICE ROSENA BLAKE, DECEASED

WITNESS: _____

NOTARY:

COUNTY OF ALACHUA, STATE OF FLORIDA

I HEREBY CERTIFY THAT ON THIS DAY, PERSONALLY APPEARED BEFORE ME LUTHER E. BLAKE, JR. AND IRENE BLAKE CAUDLE WELL KNOWN TO ME TO BE THE PERSONS DESCRIBED HEREIN AND WHO EXECUTED THIS INSTRUMENT AS THEIR FREE ACT AND DEED

WITNESS MY HAND AND OFFICIAL SEAL THIS ___DAY OF _____, 2002 A.D.

NOTARY PUBLIC: _____

MY COMMISSION EXPIRES: _____

SEAL

CLERK OF THE COURT:

HEREBY RECEIVED AND FILED THIS PLAT FOR RECORD THIS ____DAY OF _____2002, A.D.

CLERK OF THE CIRCUIT COURT _____ DEPUTY CLERK

APPROVAL OF CITY:

WE THE UNDERSIGNED DO HEREBY CERTIFY THAT THIS PLAT CONFORMS TO THE REQUIREMENTS OF THE CITY OF GAINESVILLE, COUNTY OF ALACHUA, STATE OF FLORIDA ORDINANCES AND REGULATIONS AS FOLLOWS:

SURVEYING REQUIREMENTS: TO CHAPTER 177, PART 1 FLORIDA STATUTES _____ CITY SURVEYOR DATE

ENGINEERING REQUIREMENTS: _____ PUBLIC WORKS DIRECTOR DATE

ACCEPTED BY THE DEVELOPMENT REVIEW BOARD: _____ COMMUNITY DEVELOPMENT DIRECTOR DATE

LEGALITY OF DEDICATION: _____ CITY ATTORNEY DATE

UTILITY REQUIREMENTS: _____ UTILITY MANAGER DATE

AS CONFORMS TO THE LAWS OF THE STATE OF FLORIDA AND ADAPTABILITY TO CITY PLANS: _____ CITY MANAGER DATE

ACCEPTED BY CITY COMMISSION: _____ CLERK OF CITY COMMISSION DATE

SURVEYOR'S CERTIFICATE

I DO HEREBY CERTIFY THAT THIS PLAT ENTITLED "WALNUT CREEK, PHASE I, A PLANNED DEVELOPMENT" IS A TRUE AND CORRECT REPRESENTATION OF A SURVEY MADE OF THE HEREIN DESCRIBED LANDS, UNDER MY RESPONSIBLE DIRECTION AND SUPERVISION AND THAT THIS PLAT AND SURVEY COMPLIES WITH ALL REQUIREMENTS AS SET FORTH IN CHAPTER 177 OF THE FLORIDA STATUTES.

SIGNED: _____ DATE: _____

PRINTED: STACY A. HALL
REGISTERED FLORIDA SURVEYOR AND MAPPER CERTIFICATE NO. 3784

REVISED: 8/27/02 SAH
REVISED: 6/04/02 SJE
DRAWN: 2/25/02 SJE

DWG NO.: 20100IN.DWG

ALACHUA COUNTY LAND SURVEYORS, INC.
Professional Land Surveyors and Mappers L.B. #2903
8511 N.W. 1st BLVD - SUITE 200
Gainesville, Florida - 32609
phone (352) 376-1189

Jones Edmunds & Associates, Inc.
CONSULTING ENGINEERS AND SCIENTISTS JEA

June 14, 2002

Ms. Teresa Scott, P.E.
Director of Public Works
City of Gainesville
Public Works Department
Station 58
PO Box 490
Gainesville, FL 32602-0490

RE: Walnut Creek Subdivision
JEA Project No: 07100-002-01-0400
Ref: Investigation of Proposed Stormwater Management System

Dear Ms. Scott:

The scope of services for the independent review of the stormwater management system for the proposed Walnut Creek development consisted of the following three elements:

1. Review the existing documents to determine whether an independent Geotechnical Engineering Services report is necessary.
2. Review the proposed stormwater management plan to determine a) if it meets the City of Gainesville's requirements and b) if the stormwater basins will function as the design engineer certified.
3. Prepare a letter report of findings.

This letter report presents the results of our review for Tasks 1 and 2 and fulfills Task 3. Presented below are the results of our review and investigation of the proposed Walnut Creek Subdivision stormwater management system.

Since JEA staff had no prior experience in the vicinity of the proposed Walnut Creek Subdivision, a site visit was made to obtain a better understanding of subsurface soil conditions. The fieldwork performed during the site visit also allowed JEA to gather soil and hydrologic information that could be compared to data previously obtained by others. A discussion of the fieldwork is presented below.

FIELD WORK

On May 17, 2002 a site visit was made to the planned Walnut Creek Subdivision to perform hand auger borings. Representatives from Jones, Edmunds & Associates, Inc. (JEA) included Deb Segal and John Horvath; representatives/observers from Geoengineering & Testing, Inc.

(GTI) included Fred Rwebyogo and Yvonne (note that Fred was present during part of the first boring located near Pond E).

Three hand auger borings were performed corresponding to the locations of three of the proposed stormwater retention ponds (Ponds C, D & E). These borings were also in the vicinity of auger borings previously performed by GTI. Attachment 1 presents a site location map showing the approximate locations of the hand auger borings.

The primary purpose of performing hand auger borings was to estimate the seasonal high water table (SHWT). The understanding of the SHWT is a very important factor in design of a stormwater management system. SHWT is defined in the St. Johns River Water Management District's (SJRWMD's) *Applicant's Handbook: Regulation of Stormwater Management Systems* as "the highest level of the saturated zone in the soil in a year with normal rainfall". Therefore, the estimates for SHWT were based on an interpretation of the average annual high groundwater table location observed in the soil profile. Attachment 1 presents the hand auger boring results including soil descriptions, soil logs and estimated SHWT.

Table 1 presents a comparison between JEA's and GTI's SHWT estimates. The results indicate that JEA's SHWT values range from 21 to 28 inches less than GTI's. Based on our values, the proposed pond bottom elevations would intersect the SHWT during normal rainfall years at two of the three locations investigated (Ponds C & E). At the third location (Pond D), our SHWT is 0.4 feet below the pond bottom versus 2.0 feet used in the Kelley Engineering, Inc. (Kelley) design. Although hand auger borings were not performed in the direct vicinity of Ponds A & B, we would anticipate similar finding as those presented in Table 1.

Table 1. Comparison Between JEA and GTI SHWT Estimates

Location	SHWT Estimate (inches below existing ground surface)		
	JEA	GTI	Difference
Pond C	56"	84" *	28"
Pond D	53"	72"	21"
Pond E	54"	72"	20"

* The boring profiles presented in the GTI report gives a value of 84". Table 1 of the GTI report gives a value of 72". The Kelley Engineering, Inc. design uses 84".

REVIEW OF GTI & KELLEY ENGINEERING, INC. REPORTS

Table 1 of the GTI report presents recommended soil parameters that were used in design of the stormwater management system performed by Kelley. It is our opinion that the weighted

horizontal hydraulic conductivity estimates may not be representative of in-situ conditions. Reasoning for this statement is provided below:

GTI performed six shallow auger borings ranging in depths from 10 to 15 feet. At each location, two disturbed composite soil samples were gathered. One sample was representative of the upper 5 to 7 feet of sandy soils. The second sample was representative of the lower 5 to 10 feet of clayey sands. A total of 9 disturbed samples were recompacted in a laboratory and tested for unsaturated vertical infiltration. Of the 9 samples tested, it appears that 6 of the samples were from the upper sands and 3 of the samples were from the lower clayey sands. The results of the unsaturated vertical infiltration tests were multiplied by an empirical factor of 1.5 to estimate the horizontal hydraulic conductivity. A weighted horizontal hydraulic conductivity was then calculated based on the two estimated hydraulic conductivities for each auger boring.

The SJRWMD *Applicant's Handbook* does not recommend the use of disturbed samples for determining horizontal hydraulic conductivity. A laboratory test on an undisturbed sample is a SJRWMD recommended method. A pump test or slug test is also a recommended method if a higher level of accuracy is needed. At this time, a pump or slug test would not be appropriate until surficial aquifer groundwater levels rise to more normal levels. There are other SJRWMD recommended in-situ tests for estimating horizontal hydraulic conductivity but they also require normal groundwater levels.

The SJRWMD *Applicant's Handbook* recommends determining the unsaturated vertical infiltration using a double-ring infiltrometer test performed at the elevation of the proposed pond bottom or lower, if possible. If this type of test cannot be performed, then it is recommended that a laboratory vertical saturated hydraulic conductivity be obtained on an undisturbed sample and then multiplied by an empirical factor of 2/3 to obtain the unsaturated infiltration rate. If unsaturated infiltration rate is estimated from double-ring infiltrometer testing, then it should be valid to multiply the results by an empirical factor of 1.5 (inverse of 2/3) to obtain an estimate of vertical saturated hydraulic conductivity. This is similar to GTI's methodology except that testing was not performed on undisturbed samples or by an in-situ method such as a double-ring infiltrometer.

Other Observations

1. The depth to the confining layer for Pond B was modeled as 15' below grade. GTI's auger borings (boring HA-1) indicate the confining layer is at 10' below grade.

2. There appears to be a calculation error in the weighted horizontal hydraulic conductivity for boring HA-6 corresponding to Pond A, presented in GTI's 6/9/2001 geotechnical report. The value of 23.3 ft/day was used in the MODRET simulation for Pond A. Based on GTI's horizontal hydraulic conductivity values of 19.5 and 12 ft/day for boring HA-6, the correct weighted value is 15.5 ft/day.

3. The weighted horizontal hydraulic conductivity estimates presented in Table 1 of the GTI report, and used in the Kelley design, are based on the entire thickness of the boring profile, which begins at ground surface and advances down to 10 or 15 feet below existing ground

surface. Additional borings were taken to a depth of 30 feet at Ponds A, D, and E, after submittal of the GTI report, but samples from these borings were not considered in the hydraulic conductivity tests. The depth to the confining layer that was modeled by Kelley is between 15 and 25 feet below existing land surface, which assumes properties in up to 10 feet of aquifer that was untested in terms of hydraulic conductivity. Therefore, the hydraulic conductivity estimates may not be representative of the entire aquifer thickness.

4. The horizontal hydraulic conductivity estimates of the lower 5 to 15 feet below grade range from 12.0 to 15.0 ft/day, per GTI estimates. The estimated permeability presented in the *Alachua County Soil Survey* at a depth of 4.7 to 6.7 feet below grade ranges from 0.12 to 4.0 ft/day. Because of this discrepancy and other concerns noted above, additional field testing may be appropriate using a SJRWMD recommended method such as undisturbed sampling and/or double-ring infiltrometer testing.

5. The design drawings show an overflow structure in Pond A. The method of emergency overflow from the other four ponds is unclear.

STORMWATER RUNOFF ANALYSES

Three sets of stormwater simulations were performed to determine if the ponds meet the City of Gainesville's requirements and the ponds will function as the design engineer certified. The primary design criteria that were evaluated to determine if the ponds meet the City's requirements are as follows:

1. Will the ponds retain the 100-year critical duration event with 6 inches of freeboard for impoundment type ponds?
2. Will the ponds recover the treatment volume within 72 hours after a storm event?

Each pond was analyzed under three scenarios as follows:

Scenario 4A

Hydrographs were generated using the University of Florida-TREEO Center's "Stormwater Design and Permitting" software, as was used in the Kelley report. In the Kelley report, the software used to simulate the ability of the ponds to meet the 100-year retention requirement did not appear to account for potential groundwater mounding effects under the ponds. Therefore, JEA chose to use MODRET (Computer **MOD**EL to Design **RET**ENTION Ponds, Andreyev, 1990), which is the same model used in the Kelley report to compute recovery time of a slug load equal to the treatment volume. MODRET is an accepted model for simulating retention ponds and is capable of accounting for any potential groundwater mounding effects under the ponds. All model input parameters in this scenario were the same as those used in the Kelley report. Therefore, the only difference between this scenario and the one performed in the Kelley report was a difference in the model used to simulate the ponds. The 1-, 2- , 4-, 8-, and 24-hour duration events were simulated to determine the critical event. Based upon peak stages, the 24-hour event was determined to be the critical event for all five ponds (this applies to Scenarios 4B and 4C as well). Model output is included in Attachment 2.

Scenario 4B

In this scenario, stormwater simulations were performed using revised SHWTs and more conservative model input parameters that may be more representative of findings obtained using the recommended methodologies described previously. Model input parameters were revised from those in the Kelley report based on the findings from the 5/17/2002 field work and the soil properties presented in the *Alachua County Soil Survey*. The *Soil Survey* values were used due concerns previously discussed in how the input parameters in the Kelley report were developed. Additionally, the runoff coefficients for the areas tributary to each pond were increased slightly to account for the fact that the SHWT in this scenario is greater than the pond bottom for four of the five ponds and very near the pond bottom for the fifth pond, thus making the pond surface area unavailable for typical pervious area infiltration in unsaturated soils. The calculation for the revised runoff coefficients is shown in Table 2. In summary, the pond model, runoff coefficients, SHWTs, and hydraulic conductivities in this scenario all differed from the one in the Kelley report. Model output is included in Attachment 3.

Scenario 4C

This scenario is identical to Scenario 4B, except that the hydraulic conductivities from the Kelley report are used. Model output from this scenario is included in Attachment 4.

Table 2. Revised Rational Coefficient (C) Estimation

Description	Basin A Area (ac)	Basin B Area (ac)	Basin C Area (ac)	Basin D Area (ac)	Basin E Area (ac)	RATIONAL COEFFICIENT
Impervious	2.55	1.95	1.95	3.55	2.55	0.95
Pervious	2.49	2.99	2.63	4.34	4.30	0.20
Pond Bottom	0.38	0.30	0.25	0.63	0.31	0.95
TOTAL	5.41	5.24	4.83	8.53	7.16	
Composite C	0.61	0.52	0.54	0.57	0.50	

Table 3 presents a summary of the modeling results. Under Scenario 4A, two of the ponds meet the retention volume requirement and all five ponds meet the drawdown requirement. Under Scenario 4B, none of the ponds meet the volume requirement or the drawdown requirement. Under Scenario 4C, none of the ponds meet the volume requirement and two of the ponds meet the drawdown requirement.

SUMMARY

Based on the results on the analyses and the findings presented above, the following may be summarized:

1. All five ponds provide adequate water quality treatment volume.

2. Ponds A, D & E will not meet the City's 100-year retention volume requirement--even using the most favorable values—when groundwater mounding effects are considered. Therefore, it does not appear that they will function as designed.
3. Whether the ponds meet the City's drawdown requirement is sensitive to actual hydraulic conductivity values of the soils and the SHWTs. Using the values from the Kelley report, all five ponds meet the requirement. Using revised SHWTs and more conservative estimates of hydraulic conductivities, none of the ponds meet the City's drawdown requirement. Testing of hydraulic conductivities using one of the standard accepted methods discussed above may be advisable if the ponds are not redesigned in order to ensure that they will meet all City requirements.

If you have any questions, please call.

Sincerely,

6/14/02

John H. Horvath, P.E.
Vice President

6/14/02

Brett A. Cunningham
Project Manager

Attachments

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Table 3. Summary of Model Results

Pond	Simulation	Unsaturated Vertical Conductivity (ft/day)	Saturated Horizontal Conductivity (ft/day)	Rational Coefficient (C)	SHWT (ft)	Critical Storm	Max Water Elevation (ft)	Top Elevation (ft)	Freeboard (in)	Treatment Volume (ft3)		City's 100-year Volume Requirment ?	Meets City's Recovery Requirment?
										Estimated Recovery after 72 hrs	Required		
A	Run4A	8.0	23.3	0.55	163.50	100 yr 24 hr	168.56	169.00	5.3	65,970	21,389	No*	Yes
	Run4B	2.1	2.1	0.61	164.80		170.28		overtopped	5,500		No	No
	Run4C	8.0	23.3	0.61	164.80		169.42		overtopped	32,000		No	Yes
B	Run4A	10.0	28.1	0.48	169.00	100 yr 24 hr	172.91	174.00	13.1	66,185	18,358	Yes	Yes
	Run4B	2.1	2.1	0.52	170.30		174.89		overtopped	7,100		No	No
	Run4C	10.0	28.1	0.52	170.30		173.88		1.4	57,526		No*	Yes
C	Run4A	10.0	17.4	0.50	171.50	100 yr 24 hr	176.18	177.00	9.8	55,271	17,615	Yes	Yes
	Run4B	2.1	2.1	0.54	173.80		178.54		overtopped	3,200		No	No
	Run4C	10.0	17.4	0.54	173.80		177.75		overtopped	17,100		No	No
D	Run4A	11.2	22.5	0.51	171.50	100 yr 24 hr	177.59	176.50	overtopped	33,016	31,590	No	Yes
	Run4B	2.1	2.1	0.57	173.10		179.72		overtopped	2,500		No	No
	Run4C	11.2	22.5	0.57	173.10		178.80		overtopped	14,500		No	No
E	Run4A	10.0	22.2	0.47	172.00	100 yr 24 hr	178.40	177.30	overtopped	28,000	24,566	No	Yes
	Run4B	2.1	2.1	0.50	173.50		180.72		overtopped	3,400		No	No
	Run4C	10.0	22.2	0.50	173.50		179.41		overtopped	17,500		No	No

* The City's design criteria call for a minimum of 6 inches of freeboard for impoundment-type basins. Based on review of the Kelley Master Stormwater & Paving plans, there appears to be a bermed area around a portion of each pond. Therefore, the ponds were considered impoundment-type basins. However, the berm heights appear to be small (approximately 1 to 2 feet or less). So, it is unclear if the 6-inch freeboard is required for these ponds.

FORMAL QUASI-JUDICIAL HEARINGS
RULES OF PROCEDURE

1) **INTRODUCTION** (3 min.). The City Manager or designee shall read the case style and nature of the issue.

2) **AFFECTED PARTY DETERMINATION.**
A) AUTOMATIC IF ENTITLED TO ACTUAL WRITTEN NOTICE;
B) IF NOT ENTITLED TO ACTUAL WRITTEN NOTICE, CITY COMMISSION MUST DECIDE:

1. An affected party who is not entitled to actual written notice but who believes that they have a special interest or would suffer an injury distinct in kind and degree from that shared by the public at large may request affected party status by filing an application;
2. The application for affected party must be filed with the Clerk before the close of business at least seven (7) days prior to the City Commission meeting when the matter is scheduled to be heard.

3) **EX PARTE.** The City Commissioners shall disclose any ex parte communications that may have occurred.
The Petitioner and any affected party may ask questions to each Commissioner about these communications directed through the Mayor-Commissioner.

4) **SWEARING IN.** The Petitioner, staff and all witnesses shall be collectively sworn by the Clerk of the Commission.

* 5) **PETITIONER PRESENTS ITS CASE.** (20 min.) The Petitioner may include a description of the nature of the Petition if there is additional information that has not been previously provided by the City staff. The Petitioner may introduce any documentary evidence and elicit testimony through witnesses.

* 6) **STAFF PRESENTATION.** (10 min.) The Department of Community Development staff shall present any staff, board or other report on the matter. These reports shall include, but not be limited to, a description of the Petition; a description/background related to the Petition; and analysis which includes the consistency with the City's Comprehensive Plan, if applicable, and how the Petition does or does not meet the requirements of the City Code; a summary of the issues; and the staff and board(s) recommendations. These reports and any other documentary evidence shall become a part of the record. Evidence will be presented through oral testimony of witnesses and documentary evidence.

* 7) **AFFECTED PARTY FOR THE PETITION.** (10 min.) Any affected person will present its case clearly indicating if they are in support of the Petition. The

affected person may introduce any documentary evidence and elicit testimony through witnesses.

* 8) **AFFECTED PARTY AGAINST THE PETITION.** (10 min.) Any affected person will present its case clearly indicating if they are opposed to the Petition. The affected person may introduce any documentary evidence and elicit testimony through witnesses.

* 9) **ANY REBUTTAL BY PETITIONER.** (5 min.)

* 10) **ANY REBUTTAL BY STAFF.** (5 min.)

11) **CLOSE OF PRESENTATION BY PETITIONER, STAFF AND AFFECTED PARTIES.**

12) **PUBLIC HEARING.** (5 min. per person max.)

** 13) **CLOSE OF PUBLIC HEARING AND DELIBERATION AND VOTE OF THE COMMISSION.**

* GENERAL RULES AS TO WITNESSES:

After each witness testifies, any City Commission, the Petitioner, or any affected party is permitted to question the witness. All questions shall be directed through the Mayor-Commissioner, who shall ask the witness the proposed question, unless the Mayor-Commissioner deems the question to be irrelevant or immaterial. The Mayor-Commissioner may defer to the City Attorney to determine the scope of questioning. The questioning party is not permitted to make any statements, only to ask questions which are directly related to the testimony presented.

** The City Commission may, in its discretion, at any time during the hearing, continue the hearing, and may request further information from any party.

INSTRUCTIONS
CONSIDERATION OF THE EVIDENCE

In your deliberations, you should consider only the evidence-that is, the testimony of witnesses and the exhibits admitted in the record.

The Commission is not bound by strict rules of evidence, or limited to consideration of evidence which would be admissible in a court of law, but as you consider the evidence, both direct and circumstantial, you may make deductions and reach conclusions which reason and common sense lead you to make. The City Commission shall weigh all the competent, material and/or relevant evidence presented, giving each piece of evidence the weight he or she sees fit.

The Commission may exclude evidence or testimony which is not relevant, material or competent, or testimony which is unduly repetitious.

The Commission will determine the relevancy of evidence, and the Commission may ask the City Attorney for opinions on the relevancy of evidence.

Anything the lawyers say is not evidence in the case. It is your own recollection and interpretation of the evidence that controls

The public may provide input to the City Commission. The City Commission must not act merely because there is public sentiment for or against the petition. The Commission must base its decision on the facts and the competent evidence adduced at this hearing.

CREDIBILITY OF WITNESSES

You should decide whether you believe what each witness had to say, and how important that testimony was. In making that decision, you may believe or disbelieve any witnesses; in whole or in part. Also the number of witnesses testifying concerning any particular dispute is not controlling. You may decide that the testimony of a smaller number of witnesses concerning any fact in dispute is more believable than the testimony of a larger number of witnesses to the contrary.

You should also ask yourself whether there was evidence tending to prove that the witness testified falsely concerning some important fact; or, whether there was evidence that at some other time the witness said or did something, or failed to say or do something, which was different from the testimony he or she gave before you during the hearing.

EXPERT WITNESSES

When knowledge of a technical subject matter might be helpful, a person having special... training or experience in that technical field-one who is called an expert witness-is permitted to state his or her opinion concerning those technical matters.

Merely because an expert witness has expressed an opinion, however, does not mean that you must accept that opinion. The same as with any other witness, it is up to you to decide whether to rely upon it.

CITY OF GAINESVILLE

Department of Community Development

June 21, 2002

Ronald A. Carpenter
Carpenter & Parrish, P.A.
5608 Northwest 43rd Street
Gainesville, Florida 32653-8334

Via Fax Mail (373-1114)

Re: Walnut Creek

Dear Mr. Carpenter:

City Staff met with the City Attorney on June 11, 2002 to review the proposed Restrictive Covenants language of Walnut Creek for a proposed restricted common area along the Northwest 26th Street right-of-way of Walnut Creek, Phase II. Thomas D. Saunders, the Community Development Director, informed you after this meeting that the restrictive covenant language approach is unacceptable. After further consideration, it is staff's opinion that you can keep the restrictive covenant language and show on the plat, "restricted common area" as long as there is a note on the Plat stating that any additional lots shall require water management district approval. Please place a note on the Plat that states, "additional lots shall require water management district approval," and resubmit to Carolyn Morgan as soon as possible.

For the City Commission hearing, we will need an 11 x 17 print of the Phase I Final Plat and the Phase II Conditional Plat. Please submit to Carolyn Morgan as soon as possible.

Additionally, we also need revised language in the Phase I and Phase II Covenants that references the specific design requirements of the Planned Development Ordinance, Ordinance 991267. Please resubmit the revised covenants.

If you have any questions or concerns about this issue, please contact Thomas Saunders at (352) 334-5022.

Sincerely,

Ralph Hilliard/DW

Ralph Hilliard
Planning Manager

faxed "OK"
10:27 AM
on 6/21/02
DW

cc: Thomas Saunders
Carolyn Morgan
Marion Radson

P.O. Box 490 • Gainesville, FL 32602-0490
352.334.5022 • FAX 352.334.2282