## PROJECT-SPECIFIC CONSTRUCTION CONTRACT DR. JOSIE ROGERS HOUSE RELOCATION

THE PARTIES TO THIS CONTRACT are the City of Daytona Beach, a Florida municipal corporation, hereinafter the "CITY" or "OWNER," and AJS Building Moving & Leveling, Inc., a Florida profit corporation, hereinafter the "CONTRACTOR."

WITNESSETH, that the CONTRACTOR and the CITY agree as follows, for the mutual valuable consideration provided herein:

## ARTICLE I. SCOPE OF WORK

The CONTRACTOR will, at its sole cost and expense, provide, perform, and complete the construction project commonly known as "DR JOSIE ROGERS HOUSE RELOCATION" and more fully described in the Exhibit B, hereinafter the "Work".

#### ARTICLE II. CONTRACT DOCUMENTS

The Contract Documents are further described in the General Conditions. In addition, the Plans, dated 9/11/2019 and referenced herein are the plans or drawings prepared by Scott D. Hinrichs of Graef-USA, Inc. (the "Engineer/Architect" or "E/A"), provided by the CITY are a part of the Contract Documents. These Plans are physically attached hereto and are incorporated herein by reference. CONTRACTOR acknowledges receipt of all such Plans.

The Contract Documents are intended to include all information necessary for CONTRACTOR's proper prosecution and timely completion of the Work. CONTRACTOR will prosecute the Work as necessary to produce the results indicated by the Contract Documents. The Contract Documents are complementary, and what is required by one will be as binding as if required by all.

#### ARTICLE III. COMMENCEMENT AND COMPLETION

The CITY and the CONTRACTOR mutually agree that time is of the essence with respect to the dates and times set forth in the Contract Documents. To that end, the CONTRACTOR will commence the Work not later than the Notice to Proceed Date set forth in the General Conditions, and will diligently and continuously prosecute the Work at such a rate, and with sufficient forces as will allow the CONTRACTOR to achieve Substantial Completion within **45** days after the Notice to Proceed Date and Final Completion within **60** days after the Notice to Proceed Date, subject only to any adjustments in the Contract Time that may be authorized by Change Orders properly issued in accordance with the Contract Documents. In executing this Contract, CONTRACTOR affirms that the time set for completion is reasonable.

The CITY will suffer financial loss if Final Completion of the Work is not achieved within the Contract Time. Accordingly, and in lieu of actual damages or proof thereof, if CONTRACTOR fails to meet these deadlines, CONTRACTOR will be liable to the CITY for liquidated damages as follows:

In the amount of **\$964** for each and every day of unexcused delay in achieving Substantial Completion; and

In the amount of **\$482.50** for each and every day of unexcused delay from the date that Substantial Completion is achieved until Final Completion is achieved.

The CITY will have the right to offset such liquidated damages against any remaining portion of the Contract Price due CONTRACTOR, but will not be limited to the offset if it is insufficient. If the unpaid balance of the Contract Price is less than the amount of the Liquidated Damages, the CONTRACTOR or its Surety must pay the deficiency to the CITY upon demand.

## ARTICLE IV. CONTRACT PRICE

Subject to any adjustments that may be authorized pursuant to this Contract, the Contract Price due the CONTRACTOR is \$95,000.00 representing the Base Bid and Alternates 1 and 2, in accordance with Exhibit A, Fee Proposal, for work completed and accepted in accordance with the Contract Documents. The Contract Price represents the CONTRACTOR's sole compensation from the CITY for prosecution of the Work. The Contract Price will be paid in a series of Progress Payments and a Final Payment, and is subject to retainage, as further described in the Contract Documents.

## ARTICLE V. RESERVED

#### ARTICLE VI. INDEMNIFICATION

A. CONTRACTOR shall indemnify and hold harmless the City of Daytona Beach, its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct of the Contractor and persons employed or utilized by the Contractor in the performance of the construction contract. This indemnification agreement is separate and apart from, and in no way limited by, any insurance provided pursuant to this agreement or otherwise.

B. CONTRACTOR indemnifies the CITY against any claim of supplier's or subcontractor's lien (in cases where such payment is not already guaranteed by payment bond). If any claim or lien remains unsatisfied after all payments are made, CONTRACTOR must refund to the CITY all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

C. For purposes of the obligations stated in this Article, references to the CITY include the CITY's officers, employees, and agents.

D. CONTRACTOR's obligations under this Article are made without regard to the availability of insurance of the CITY or the Engineer/Architect.

#### ARTICLE VII. INSURANCE

A. Required Insurance. CONTRACTOR will purchase and maintain, at its own expense, the following types and amounts of insurance, primary and non-contributory with the CITY's own insurance, in form and companies satisfactory to the CITY. The City shall be exempt from, and in no way liable for, any sums of money that may represent a deductible in any insurance policy. The payment of such deductible shall be the sole responsibility of the Contractor or sub-contractor providing such insurance.

In the event any request for the performance of services presents exposures to the CITY not covered by the requirements set forth below, the CITY reserves the right to add insurance requirements that will cover such an exposure.

1. **Workers' Compensation Insurance** – As required by Florida Statutes, Chapter 440, Workers' Compensation Insurance, for all employees of CONTRACTOR employed at the project site or in any way connected with the Work.

The insurance required by this provision will comply fully with the Florida Workers' Compensation Law and include Employers' Liability Insurance with limits of not less than \$500,000 per accident. Any associated or subsidiary company involved in the service must be named in the Workers' Compensation coverage.

2. Liability insurance – Including Commercial General Liability coverage for operations, independent contractors, products-completed operations, broad form property damage, collapse and underground, and personal injury on an "occurrence" basis, insuring the CONTRACTOR and any other interests, including but not limited to any associated or subsidiary companies involved in the Work; and Automobile Liability coverage insuring claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle used by CONTRACTOR at the project site or in any way connected with the Work.

The limit of liability will be a combined single limit for bodily injury and property damage of no less than \$1,000,000 per occurrence. If insurance is provided with a general aggregate, the aggregate will be in an amount of no less than \$2,000,000. The Risk Manager may authorize lower liability limits for the automobile policy only, at the Risk Manager's sole discretion.

THE COMMERCIAL GENERAL LIABILITY INSURANCE POLICY WILL NAME THE CITY AS AN ADDITIONAL INSURED. CONTRACTOR'S Commercial General Liability insurance policy shall provide coverage to CONTRACTOR, and CITY when required to be named as an additional insured either by endorsement or pursuant to a blanket additional insured endorsement, for those sources of liability which would be covered by the latest edition of the standard Commercial General Liability Coverage Form (ISO Form CG 00 01) without the attachment of any endorsements excluding or limiting coverage for Products/Completed Operations, Independent Contractors, Property of CITY in Contractor's Care, Custody or Control or Property of CITY on which contracted operations are being performed, Explosion, Collapse or Underground hazards (XCU Coverage, Contractual Liability or Separation of Insureds). When CITY is added as additional insured by endorsement, ISO Endorsements CG 20 10 and CG 20 37 or their equivalent shall be used to provide such Additional Insured status.

Unless specifically waived hereafter in writing by the Risk Manager, CONTRACTOR agrees that the insurer will waive its rights of subrogation, if any, against the CITY on of the abovelisted types of required insurance coverage.

3. Unless specifically waived hereafter in writing by the CITY, CONTRACTOR agrees that the insurer shall waive its rights of subrogation, if any, against the City on each of the required insurance coverages listed above.

**B.** Subcontractors' Insurance. Each of CONTRACTOR's subcontractors will be required to provide insurance in substantially similar form to the insurance required of CONTRACTOR above based on the services they will provide to the project.

**C. Proof of Insurance.** CONTRACTOR will furnish proof of insurance acceptable to the CITY prior to or at the time of execution of this Contract. CONTRACTOR will not commence Work until all required insurance has been approved by the CITY. CONTRACTOR will furnish evidence of all required insurance in the form of certificates of insurance which will clearly outline all hazards covered as itemized above, the amounts of insurance applicable to each hazard and the expiration dates.

Upon request of the CITY, CONTRACTOR will also provide the CITY copies of the insurance contracts referenced by the certificates.

**D.** Cancellation and Replacement. CONTRACTOR will file replacement certificates 30 days prior to expiration or termination of any required insurance occurring prior to expiration or termination of this Contract. If such insurance terminates without CONTRACTOR's prior knowledge, immediately upon becoming aware of such termination CONTRACTOR will provide notice to the City's Risk Manager at P.O. Box 2451, Daytona Beach, Florida 32115-2451.

The CITY reserves the right to suspend any or all of the Work until such insurance has been replaced, or to obtain replacement insurance at CONTRACTOR's sole cost.

**E.** Termination of Insurance. CONTRACTOR will not cancel any required insurance coverage until the work is completed, accepted by the CITY and CONTRACTOR has received written notification from the Risk Manager that CONTRACTOR is authorized to cancel the insurance and the effective date of such authorization. The Risk Manager will provide such written notification at the request of CONTRACTOR if the request is made no earlier than two weeks before the work is to be completed.

The liabilities of CONTRACTOR under this Contract will survive and not be terminated, reduced, or otherwise limited by any expiration or termination of insurance coverage. Neither approval nor failure to disapprove insurance furnished by the contractor will relieve the CONTRACTOR or its sub-contractors from responsibility to provide insurance as required by the contract.

## ARTICLE VIII. NOTICES

A. Where the Contract Documents authorize or require the CITY to provide notice to CONTRACTOR, notice may be provided by delivery by hand to CONTRACTOR's designated Superintendent at the Project Site, or in the absence or unavailability of the Superintendent to any other person on the Project Site who holds himself of herself out as managing the Work on behalf of CONTRACTOR, or in lieu of either of these, by written notice to the address provided below.

B. Where the Contract Documents authorize or require CONTRACTOR to provide notice to the CITY, notice may be provided only by written notice to the address provided below.

C. Written notice is valid only if sent by certified United States mail, return receipt requested, facsimile with confirmation receipt required, or by recognized courier such as Federal Express with confirmation receipt requested. All such notices will be deemed to have been duly given and provided on (i) the date of receipt, (ii) upon receipt or refusal of delivery if transmitted by registered or certified mail, return receipt requested, or (iii) the first business day after the date of deposit, if transmitted by reputable overnight courier service, whichever occurs first. Written notices will be sent to the following persons:

If to the CITY:

If to the CONTRACTOR:

Attn: Frank VanPelt, Technical Services Director The City of Daytona Beach 950 Bellevue Ave Daytona Beach, FL 32114 Fax: 386-671-8620 Michael Knapp, President AJS Building Moving & Leveling, Inc. 20907 Bowman Rd. Spring Hill, FL 34610 Fax: 813-501-1022

provided, however, that either Party may by written notice change the address designated for receipt of written and faxed notices.

## ARTICLE IX. DISPUTE RESOLUTION

If a dispute exists concerning this Contract, the Parties agree to use the following procedure prior to pursuing any judicial remedies.

A. **Negotiations Required**. A Party will request in writing that a meeting be held between representatives of each Party within 14 days of the request or such later date that the Parties may agree to. Each Party will attend and will include, at a minimum, a senior level decision maker (an owner, officer, or employee of each organization) empowered to negotiate on behalf of their organization. The purpose of this meeting is to negotiate the matters constituting the dispute in good faith. The Parties may mutually agree in writing to waive this step and proceed directly to mediation as described below.

Non-Binding Mediation. Mediation is a forum in which an impartial person, the mediator, Β. facilitates communication between parties to promote reconciliation, settlement, or understanding among them. Within 30 days after the procedure described above proves unsuccessful or the Parties mutually waive the procedure, the Parties will submit to a non-binding mediation. The mediation, at a minimum, will provide for (i) conducting an on-site investigation, if appropriate, by the mediator for fact gathering purposes, (ii) a meeting of all Parties for the exchange of points of view and (iii) separate meetings between the mediator and each Party to the dispute for the formulation of resolution alternatives. The Parties will select a mediator trained in mediation skills and certified to mediate by the Florida Bar, to assist with resolution of the dispute. The Parties will act in good faith in the selection of the mediator and give consideration to qualified individuals nominated to act as mediator. Nothing in this Contract prevents the Parties from relying on the skills of a person who also is trained in the subject matter of the dispute or a contract interpretation expert. Each Party will attend and will include, at a minimum, a senior level decision maker (an owner, officer, or employee of each organization) empowered to negotiate on behalf of their organization.

If the Parties fail to reach a resolution of the dispute through mediation, then the Parties are released to pursue any judicial remedies available to them.

## ARTICLE X. GENERAL PROVISIONS

A. This Contract will be governed by the laws of the state of Florida without regard to any choice of law principles that could result in application of the laws of any other jurisdiction. Venue for any legal action or proceeding arising out of this Contract is exclusively in the federal or state courts in and for Volusia County, Florida. The Parties hereby waive any right to stay or dismiss any action or proceeding brought under or in connection with this Contract that is brought before the above-referenced courts on the basis of *forum non-conveniens*.

B. In case of litigation arising out of this Contract where the meaning of one or more provisions is at issue, the CITY will not be penalized by virtue of its having drafted this Contract. CONTRACTOR has carefully reviewed and had the opportunity to seek advice of legal counsel prior to executing this Contract.

C. The CITY and CONTRACTOR agree that they have knowingly waived the right to trial by jury and have instead agreed that, in the event of any litigation arising out of or connected to this Contract, to proceed with a trial before the court, unless both parties subsequently agree otherwise in writing.

D. In performing the services provided for herein, CONTRACTOR is an independent contractor and not an employee of the CITY.

E. The waiver of any provision of this Contract will not be deemed to be a waiver of any other provision of this Contract. No waiver of any provision of this Contract will be deemed to constitute a continuing waiver unless expressly provided in writing, nor will a waiver of any default be deemed a waiver of any subsequent defaults of the same type. The failure at any time to enforce this Contract, whether the default is known or not, does not constitute a waiver or estoppel of the right to do so.

F. All terms and conditions of this Contract which contemplate a period of time beyond completion or termination, will survive such completion or termination and not be merged therein or otherwise terminated.

G. If any word, phrase, clause, sentence or provision of the Contract, or the application of same to any person or set of circumstances is for any reason held to be unconstitutional, invalid or unenforceable, that finding will only effect such word, phrase, clause, sentence or provision, and such finding will not affect the remaining portions of this Contract; this being the intent of the Parties in entering into the Contract; and all provisions of the Contract are declared to be severable for this purpose.

H. The undersigned representative of CONTRACTOR affirms that in executing this Contract on behalf of CONTRACTOR, he or she is fully authorized to bind CONTRACTOR to the terms and conditions herein set forth.

I. No CITY officer, employee, or independent consultant who is involved in the development, evaluation, or decision-making process or the performance of any solicitation will have a financial interest, direct or indirect, in the Contract resulting from that solicitation. Any violation of this provision, with the knowledge, expressed or implied, of CONTRACTOR will render the Contract voidable by the CITY.

## Balance of this page intentionally left blank

This Contract represents the entire and integrated agreement between the CITY and J. CONTRACTOR with respect to the subject matter hereof and supersedes all prior negotiations, representations or agreements, either written or oral.

IN WITNESS WHEREOF, the Parties have executed this Contract on the dates written below.

THE CITY OF DAYTONA BEACH

AJS BUILDING MOVING & LEVELING, INC.

By:

Derrick L. Henry, Mayor

By: 12 Printed Name: Michael Knapp

Title: President

Attest:

Letitia LaMagna, City Clerk

Date: \_\_\_\_\_

Date: 1ム - ノフ - 19

Approved as to legal form:

By: \_\_\_\_\_ Robert Jagger, City Attorney

## GENERAL CONDITIONS

## SECTION 1. Execution, Correlation and Intent of Documents.

The Contract shall be signed, in duplicate, by the Owner and Contractor.

The Contract Documents are complimentary, and what is called for by one shall be as binding as if called for by all. In case of conflict between plans and specifications, the specifications shall govern.

All references to the Contract, the Contract, or to the Contract Documents, shall be deemed to be to the Contract including all referenced Exhibits, including this Exhibit.

## SECTION 2. Compliance with Law.

Contractor shall comply with all other applicable requirements of federal, state, and local law associated with the prosecution of the Work, including the following if applicable:

The Occupational Safety and Health Administration's (OSHA) Excavation Safety Standard, 29 C.F.R.s 1926.650 Sub Part P, and Chapter 90-96 Florida Statutes.

The current stormwater permit issued to the City of Daytona Beach pursuant to the National Pollutant Discharge Elimination System (NPDES) program, a copy of which will be made available upon request.

Contractor shall also be responsible for obtaining, at Contractor's costs, all permits associated with the Work.

## SECTION 3. Arrangement and Coordination.

CONTRACTOR will confine operations at the Project Site to those areas permitted by all Legal Requirements, and will not unreasonably encumber the Project Site with materials and equipment. CONTRACTOR will assume full responsibility for any damage to any portion of the Project Site, or to the owner or occupant thereof or of any adjacent land or areas, resulting from the performance of the Work. If an adjacent property owner or occupant files a claim because of or in connection with the performance of the Work, CONTRACTOR will promptly settle the claim by negotiation or as otherwise provided by law. CONTRACTOR will indemnify, defend and hold harmless the OWNER and anyone directly or indirectly employed by the OWNER, from and against all claims, costs, losses, and damages (including court costs and reasonable attorney's fees) arising out of or resulting from any claim or action, legal or equitable, brought by any such the owner or occupant against the OWNER, E/A or any other party indemnified hereunder to the extent caused by or based upon performance of the Work or failure to perform the Work.

## SECTION 4. Materials, Appliances, Employees.

Unless otherwise stipulated, Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation, and other facilities necessary for the execution and completion of the Work. Unless otherwise specified, all materials incorporated in the Work shall be new and both workmanship and materials shall be of

good quality. If requested by the Owner, Contractor furnish satisfactory evidence as to the kind and quality of materials.

Contractor shall at all times enforce strict discipline and good order among Contractor's employees and personnel, and shall seek to avoid employing on the Work, any unfit person or anyone not skilled in the work assigned.

## SECTION 5. Public Safety.

Contractor shall provide and maintain all necessary watchmen, barricades, red lights, or warning signs, as commonly used in the industry, to protect endangering life and property during prosecution of the Work, and shall otherwise take all necessary precautions to avoid undue risk towards endangering life and property. Contractor shall make good any damage or loss to the Work, to Owner's property, and to other property, or due to bodily injury or death, resulting from lack of reasonable protective precautions, except to the extent that such damage, injury, or loss is caused by employees or other agents of the Owner.

In an emergency affecting public safety, or endangering life or property, Contractor is, without special instructions or authorization from the Owner, hereby permitted to act at Contractor's discretion to prevent such threatening loss or injury. Contractor shall also act, without appeal, if so authorized or instructed by the Contract Administrator.

Any compensation claimed by the Contractor on account of emergency work shall be determined by Contract.

## SECTION 6. Inspection of Work.

The Owner shall provide sufficient competent personnel for the inspection of Work. The Owner shall at all times have access to the Work whenever it is in preparation or progress, and Contractor shall provide proper facilities for such access and for inspection.

If pursuant to applicable regulations any aspect of the Work must be specially tested or approved, Contractor shall give the Owner timely notice of its readiness for inspection and, if the inspection is by an authority than the Owner, of the date fixed for such inspection. Inspections by the Owner shall be promptly made, and where practicable at the source of supply. If any Work should be covered up without the Owner's approval or consent, the Owner may require Contractor to, be uncover the same for examination. In such instance, the uncovering and restoration of the Work shall be at Contractor's expense.

The Owner may order reinspection of any Work; and if so ordered, Contractor must uncover it. If such Work is found to be in accordance with the Contract, the Owner shall pay the cost of re-inspection and replacement. If such work is not in accordance with the Contract, Contractor shall pay such cost.

## SECTION 7. Superintendence.

Contractor shall keep at the project site during progress of the Work, a competent superintendent and any necessary assistants, all satisfactory to the Owner. The superintendent shall represent Contractor in Contractor's absence, and all directions given to the superintendent shall be binding as if given to the Contractor. Important directions

shall immediately be confirmed in writing to Contractor. Other directions shall be confirmed on written request in each case. Contractor shall give sufficient superintendence to the work, using Contractor's best skill and attention.

## SECTION 8. Changes in the Work.

In giving instructions, the Owner shall have authority to make minor changes in the work not involving extra cost and not inconsistent with the purpose of the work. No extra work or change shall be made unless in pursuance of a written order issued by the Owner, and no claim for an addition to the Contract Sum shall be valid unless the additional work was so ordered.

The City Manager for the City may order such changes in the Work that are (i) required in response to an emergency, or (ii) in accumulation with all other changes, would not cause the Contract Sum to be increased by more than \$25,000. Any other changes in the Work involving cost increases must be approved by the Daytona Beach City Commission to be valid.

Contractor shall proceed with the Work as changed and the value of any such extra work or change shall be determined as provided below.

## SECTION 9. Extension of Time.

a. The period of time for completion set forth in the Contract shall be extended in amount equal to time lost due to causes which could not have been foreseen or are beyond the control of Contractor, but not due to causes which are not the result of the Contractor's fault, negligence, or deliberate act. Extension of time for completion shall also be allowed for delays in the progress of the Work caused by any act or omission on the part of the Owner, or the Owner's officers, employees, agents, or by other contractors employed by the Owner; or delays due to the Government. Strikes and labor disputes shall be cause for an extension of time. However, if Contractor may avoid a delay otherwise justifying an extension of time by rearranging the Work without undue costs, the Contractor will not be given an extension of time to complete the Work.

b. Contractor shall notify the Owner within ten days of any occurrence which in the Contractor's opinion entitles Contractor to an extension of time for completion. Such notice shall be in writing shall state in detail the facts supporting Contractor's assertion that additional time is required, and shall include an estimate of the additional time needed. Owner shall acknowledge in writing receipt of any such claim by Contractor within ten days of its receipt.

## SECTION 10. Claims for Extra Cost.

a. Contractor must notify Owner in writing of a claim for extra cost within 10 days after (i) discovery of site-related conditions that are unanticipated and could not reasonably be anticipated, (ii) receipt of revised instructions or requirements of regulatory government agencies issued after the Effective Date, or (iii) receipt of change orders issued by the Owner pursuant to the Contract. The notice must include sufficient detail to justify Contractor's claim for extra cost. If Contractor fails to provide notice of such claim within the timeframe required, or commences with Work directly in response to any of the foregoing conditions before receiving Owner's written response to such claim, which Owner

will provide within 10 days after receipt, then Contractor shall be deemed to have waived Contractor's claim for extra cost.

b. Payment for extra work will calculated based on extension of unit prices set forth in the Contract if applicable; or on the basis of the Schedule of Values; or if such payment cannot be reasonably determined on the basis of unit price extension or the Schedule of Values, at mutually agreed upon unit prices or on a lump sum basis as provided for "Force Account Work."

## SECTION 11. Force Account Work.

a. If the Owner orders, in writing, the performance of any work not otherwise covered by the Contract, then such extra work shall be done except for federally funded projects which shall comply with Federal Procurement Standard, based only on one of the following methods:

1. Unit Prices as stated in the Bid Schedule.

2. A fixed not-to-exceed or lump sum agreed to by the OWNER and CONTRACTOR and stated in the Change Order, properly itemized and supported by sufficient substantiating data to permit evaluation which will be limited to estimated costs of labor, materials, supplies and equipment, rental cost of machinery and equipment, additional bond cost, plus a fixed fee for profit and overhead (which includes office overhead and site-specific overhead and general conditions) of 10% if the Work is performed by CONTRACTOR, or 5% if the Work is performed by a subcontractor or sub-subcontractor. The subcontractors' or sub-subcontractors' overhead and profit in turn will not exceed 10%. The total percentage of overhead and profit payable by the OWNER (to both CONTRACTOR and all sub tier subcontractors), regardless of the sub-tier which performs the work, will not exceed 15%.

3. Actual costs, properly itemized, plus a profit factor, using the Force Account method set forth in this Section.

b. The term "Cost" shall cover all payroll charges for workers employed and supervision required under the specific order, together with all Workers' Compensation, Social Security, pension and retirement allowances, and social insurance, or other regular payroll charges on same; the cost of all materials and supplies required of either temporary or permanent character; rental of all power-driven equipment at agreed-upon rates, together with cost of fuel and supply charges on same; and any other costs incurred by Contractor as a direct result of executing the order, if approved by the Owner.

c. Equipment rental rates shall be the applicable daily, weekly or monthly rate as given in the latest edition of the "Rental Rate Blue Book" as published by EquipmentWatch (1-800-669-3282) for each hour that said equipment is in use on such work, which rate includes the cost of fuel, lubricants and repairs. The established equipment rates will be paid for each hour that the equipment is utilized in the Work. If the equipment is used intermittently during the Work, full payment for an eight-hour day will be made if the equipment is not idle more than four hours of the day. If the equipment is idle more than four hours in a day, then payment will be made only for the actual hours worked. No additional compensation will be allowed on the equipment for CONTRACTOR's or any affected subcontractor's overhead and profit. The OWNER may accept an actual rental invoice in lieu of the method of calculation set forth in this Paragraph for equipment rented exclusively for Force Account Work or for equipment not included in the Rental Rate Blue Book.

d. The cost of the work done each day shall be documented and submitted to the Owner in a satisfactory form on the succeeding day, and shall be approved by him or adjusted at once.

## SECTION 12. Deductions for Uncorrected Work.

If the Owner deems it inexpedient to correct Work that has been damaged or that was not done in accordance with the Contract, an equitable deduction from the Contract Sum shall be made therefore.

## SECTION 13. Correction of Work before Final Payment.

During the prosecution of the Work, Contractor shall promptly remove from the project site, all defective materials, whether incorporated in the Work or not, and Contractor shall promptly replace and re-execute the Work in accordance with the Contract and without expense to the Owner, and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

If Contractor does not remove such defective materials as promptly as possible, after written notice, the Owner may remove them and store the material at the expense of Contractor.

## SECTION 14. Suspension of Work.

The Owner may at any time suspend the Work, or any part thereof, by giving ten days' notice to Contractor in writing. The Work shall be resumed by Contractor within ten days after the date fixed in the written notice from the Owner to Contractor to do so. The Owner shall reimburse Contractor for expense incurred by Contractor in connection with the work under this Contract as a result of such suspension.

## SECTION 15. Owner's Right to Terminate Contract.

If Contractor is adjudged as bankrupt or makes a general assignment for the benefit of creditors, or if a receiver is appointed on account of Contractor's insolvency, or if Contractor persistently fails or refuses, except in cases for which extensions of time are provided, to supply enough properly skilled workmen or proper materials, or if Contractor fails to make prompt payment to subcontractors or for material or labor, or persistently disregard applicable laws and regulations, including permit conditions, or is otherwise be guilty of a substantial violation of any provision of the Contract, then the Owner may, without prejudice to any other right or remedy and after giving the Contractor seven days' written notice, terminate the employment of Contractor and take possession of the project site and of all materials, tools, and appliances thereon, and finish the Work by whatever method the Owner may deem expedient. In such case, Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Sum shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to Contractor. If such expense shall exceed such unpaid balance, Contractor shall pay the difference to the Owner.

The Owner's termination of the Contract shall not affect or terminate any of the rights of the Owner as against Contractor or Contractor's surety, then existing or which may thereafter accrue because of such default. Any retention or payment of monies by the Owner due Contractor under the terms of the Contract shall not release Contractor or his surety from liability for such default.

The Owner may terminate performance of Work in accordance with this clause in whole, or from the time in part, whenever the Owner determines that such termination is in the best interest of the Owner. Any such termination shall be effected by the delivery to the Contractor of a Notice of Termination specifying the extent to which performance of Work is terminated, and the date upon which such termination becomes effective. Upon such termination for convenience, Contractor shall be entitled to payment, in accordance with the payment provisions, for services rendered up to the termination date, and the Owner shall have no other obligations to Contractor. Contractor shall be obligated to continue performance of contract services, in accordance with this Contract, until the termination date and shall have no further obligation to perform services after the termination date.

## SECTION 16. Contractor's Right to Stop Work or Terminate Contract.

If the Work is stopped under an order of any court or other public authority, for a period of three months or more, through no act or fault of the Contractor or of anyone employed by him, or if the Owner fails to pay the Contractor an amount due under this Contract within 30 days of the due date, Contractor may, upon seven days' written notice to the Owner, stop work or terminate this Contract, and recover from the Owner payment for all work executed, plus any loss sustained upon any plant or materials, plus reasonable profit and damages.

## SECTION 17. Removal of Equipment.

In the case of termination of this Contract before completion for any cause whatever, Contractor, if notified to do so by the Owner, shall promptly remove any part or all of Contractor's equipment or supplies from the project site; failing to, the Owner shall have the right to remove such equipment and supplies at Contractor's expense.

## SECTION 18. Use of Completed Portions.

The Owner may, at any time during progress of the work, after written notice to the Contractor, take over and place in service any completed portions of the work which are ready for service, although the entire work of the Contract is not fully completed, and notwithstanding the time for completion of the entire work or such portions which may not be expired. In such case, the Owner shall issue certificates of acceptance for such portions of the Work, but such taking possession thereof shall not be deemed an acceptance of any other portions of the work, nor of any uncompleted portions, nor of any Work not completed in accordance with the Contract Documents.

## SECTION 19. Payments Withheld Prior to Final Acceptance of Work.

The Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any certificate of payment to such extent as may be necessary to protect the Owner from loss on account of:

a. Defective Work not remedied.

b. Claims filed or reasonable evidence indicating public filing of claims by other parties against the Contractor.

c. Failure of Contractor to make payments properly to subcontractors or for materials or labor.

d. Damage to another contractor.

When the above grounds are removed or the Contractor provides a Surety Bond satisfactory to the Owner, which will protect the Owner in the amount withheld, payment shall be made for amounts withheld because of them.

## SECTION 20. Reserved.

**SECTION 21. Final Application for Payment**. As soon as practical after the OWNER's issuance of the Certificate of Final Completion, CONTRACTOR will submit to the OWNER a properly completed application for Final Payment in the form approved or provided by the OWNER. The application will include or attach the following:

a. Three complete manuals containing all maintenance and operating instructions, warranties, and other associated documents for equipment or other materials that have been installed or otherwise included in the Work;

b. Record documents (i.e., all Drawings, Specifications, Addenda, Change Instruments and written interpretations and clarifications issued pursuant to this Contract);

c Unless CONTRACTOR has provided payment and performance bonds and procedurally complied with Florida Statutes, Section 255.05:

1. Legally effective final releases or waivers of liens from CONTRACTOR, and from all subcontractors and sub-subcontractors which performed services for CONTRACTOR and all suppliers of material or equipment to CONTRACTOR;

2. An affidavit that all of CONTRACTOR's debts, and claims, including from all subcontractors, subcontractors, and suppliers in connection with the Work, have been paid or otherwise satisfied;

3. Complete and legally effective releases or waivers satisfactory to the OWNER of all claims other than claims of subcontractors, Sub-subcontractors, and suppliers, filed in association with the Work;

d. The consent of the surety, if any, to final payment;

e. Non-Use of Asbestos Affidavit (After Construction);

f, Certificate evidencing that required insurance will remain in force after final payment and through the warranty period; and

g. Any other documentation required pursuant to this Contract.

## SECTION 22. Assignments and Subcontracting.

Contractor shall not assign the Contract or subcontract the Work as a whole or in part without Owner's written consent. Contractor shall not assign any monies due or to become due to Contractor hereunder without the Owner's written consent. Assigning the Contract and subcontracting the Work shall not relieve the Contractor or Contractor's surety from any Contract obligations.

## SECTION 23. Rights of Various Interests.

Wherever work being done by the Owner's forces or by other contractors is contiguous to Work covered by this Contract, the respective rights of the various interests involved shall be established by the Owner to secure the completion of the various portions of the work in general harmony.

## SECTION 24. Separate Contracts.

The Owner reserves the right to let other contracts in connection with this work. Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with theirs.

## SECTION 25. Cleaning Up.

Contractor shall remove at Contractor's own expense from the Owner's property and from all public and private property, all temporary structures, rubbish and waste materials resulting from Contractor's prosecution of the Work.. This requirement shall not apply to property used for permanent disposal of rubbish or waste materials in accordance with Owner's permission.

## EXHIBIT B

## **Table of Contents**

Scope of Works

**Technical Special Provisions** 

Appendix A – House Relocation Map

Appendix B – Foundation Plans

Appendix C – Geotechnical Evaluation Dates 8/21/2019

Appendix D – Survey Monument (RMR-19)

## SCOPE OF WORK

## I. BACKGROUND

A. Introduction: The project consist of relocating the historic wood framed two-story house currently located at 355 N. Beach Street approximately 800-LF to the north of its current location to facilitate upcoming Riverfront Park improvements.

B. USER: Cultural Service Division

## C. CURRENT STATUS:

1. Riverfront Park is scheduled to go through a large scale make over, starting on the north end of the park just south of Fairview Avenue. Consequently, the house needs to be relocated prior to the upcoming park improvements.

2. The current budgeted amount is \$100,000

II. SCOPE OF WORK

Contractor and applicable Subcontractors to mobilize and demobilize all necessary equipment needed to complete the project. Contractor to have a Professional Land Surveyor and Mapper lay the site out. Contractor or Subcontractor is responsible for clearing and grubbing the area where the house is to be placed, including any needed site leveling, site compaction per the Geotechnical Report and Foundation Plans, finish grading, erosion and sedimentation control measures (silt fencing to be placed along the river at current and proposed house locations) and construction fencing to secure work areas. Contractor or Subcontractor to construct the new foundation as shown on the Foundation Plans, including the piles and connectors, being sure to level the house accordingly, finished floor elevation is 7.0-FT. Contractor or Subcontractor to transport the house and porches, excluding outside stairs and ramp, from its current location to the new location shown on the plans (location and orientation) and place the house level on the new foundation. Contractor to stock pile any Construction and Demolition debris and any organic debris in nicely kept separate piles on site for transport by others. Contractors to take preconstruction photos and submit then to the City prior to commencement of construction.

City forces to clear the existing trees within the transport path and remove the check valve assemblies, and duct work from underneath the house prior to transport through the park. City forces to remove outside air conditioning condensing units. Public Works to acquire the necessary City Building Permit. City forces to perform electrical disconnect and reconnect. City to remove decorative rod iron fence from the northern boundary and the decorative white picket fence just off the back porch prior to transport. City to provide AutoCAD drawing containing the coordinates of the new location to Contractor's Professional Land Surveyor and Mapper to facilitate site layout.

## III. Schedule

Preconstruction meeting will be within one week of City Commission approval of the Relocation Contract. The Notice to Proceed will be issued for the following Monday after the preconstruction meeting or as discussed in the preconstruction meeting. 1. Foundation Plans: Rebar dowels can be drilled and epoxied after structure is moved over new piers by utilizing HILTI HY 200 or equal with minimum 8" embedment.

2. Concrete Block: Regular Concrete Masonry Unit (CMU) is acceptable for the Base Bid. In the bid alternate, split face block will be used only along the perimeter of the building, and the rest of the all unseen piers can be constructed of regular CMU.

3. The Contractor or its Subcontractor constructing the foundation and house connections must be a Certified Building Contractor or a General Contractor.

4. Survey Monument: The closest survey monument description and location information is provided in Appendix D.

# Appendix A – House Relocation Map



Recy contract - be Josel Rocens wouse relicced score twat s or tw



# Appendix B – Foundation Plans





Appendix C – Geotechnical Evaluation Dates 8/21/2019



911 Beville Road, Suite 3 South Daytona, Florida 32119

## CONSULTANTS:

Geotechnical Engineering • Environmental Engineering • Construction Materials Testing Threshold Inspection • Private Provider Inspection • Geophysical Studies

OFFICES: Daytona Beach, FL • Fort Myers, FL • Fort Pierce, FL • Gainesville, FL • Jacksonville, FL • Leesburg, FL • Miami, FL • Norcross, GA • Ocala, FL • Orange City, Orlando, FL Palm Coast, FL • Panama City, FL • Pensacola, FL • Rockledge, FL • Sarasota, FL • St. Augustine, FL • Tampa, FL • West Palm Beach, FL

EMERGENCY CONTRACT - DR JOSIE ROGERS HOUSE RELOCATION

SCOPE PAGE 12 OF 34



Attachments

CW/BCP/cme

Cody Wilson, E.I. **Project Engineer** 

UNIVERSAL ENGINEERING SCIENCES

Respectfully submitted,

preparation.

association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

"In PROM

\*Branch Manager

STATE

"in mint

P.E. Number 60216 \*

01

Dear Mr. Nelson:

We appreciate the opportunity to have worked with you on this project and look forward to a continued

Universal Engineering Sciences, Inc. has completed the geotechnical evaluation for the subject project. This report contains the results of our evaluation, an engineering interpretation of these with respect to the project characteristics described to us, and recommendations for shallow foundation support and site

**GEOTECHNICAL EVALUATION** Reference: Dr. Josie Rogers House Relocation Daytona Beach, Volusia County, FL UES Project No. 0430.1900146.0000 and UES Report No. 135022

City of Daytona Beach 950 Bellevue Avenue Daytona Beach, Florida 32115

Mr. Jim Nelson Jr., P.E.

UNIVERSA ENGINEERING SCIENCES Consultants In: Geotechnical Engineering • Environmental Sciences Geophysical Services • Construction Materials Testing • Threshold Inspection Building Inspection • Plan Review • Building Code Administration

August 21, 2019

LOCATIONS:

- Atlanta Daytona Beach
- Fort Myers
- Fort Pierce
- Gainesville Jacksonville
- . Kissimmee
- Leesburg
- Miami
- Ocala Orlando (Headquarters)
- Palm Coast Panama City
- Pensacola
- Rockledge Sarasota
- Tampa
- West Palm Beach

#### 1.0 INTRODUCTION

#### 1.1 GENERAL

In this report we present the results of the subsurface evaluation for the proposed construction in Daytona Beach, Florida. We have divided this report into the following sections:

- SECTION 2.0 SCOPE OF SERVICES
- SECTION 3.0 FINDINGS
- SECTION 4.0 FOUNDATION RECOMMENDATIONS
- SECTION 5.0 CONSTRUCTION RELATED SERVICE
- SECTION 6.0 LIMITATIONS

#### 2.0 SCOPE OF SERVICES

#### 2.1 PROJECT DESCRIPTION

Project information has been provided to us in correspondence with you. We understand the proposed project will consist of relocating the existing two-story wood framed residential structure approximately 900 feet north of its current location. We also understand the structure will be supported by a monolithic slab on grade with concrete column/pedestals and that minimal fill is anticipated to be placed within the structure area. We estimate column/pedestal loads will not exceed 25 kips. Also, we have assumed the total load displaced on the slab will be on the order of 500 pounds per square foot (psf), or less.

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

#### 2.2 PURPOSE

The purposes of this investigation were:

- to investigate the general subsurface conditions at the site;
- to interpret and review the subsurface conditions with respect to the proposed construction; and,
- to provide geotechnical engineering recommendations for shallow foundation support and site preparation.

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

Our investigation was confined to the zone of soil likely to be influenced by the proposed construction. Our work did not address the potential for surface expression of deep geological conditions, such as sinkhole development related to karst activity. A deep geological evaluation requires a more extensive range of field services than performed in this study.

#### 2.3 FIELD INVESTIGATION

#### 2.3.1 Borings

The subsurface conditions within the proposed building area were investigated with two (2) Standard Penetration Test (SPT) borings (Designated B-1 and B-2) advanced to a depth of approximately 20 feet each below existing grade and three (3) auger borings (Designated B-3 through B-5) advanced to a depth of approximately 6 feet each below existing grade. We performed the SPT and auger borings according to the procedures of ASTM D-1586 and ASTM D-1452, respectively.

The borings were located by our field personnel using tape measurements from established landmarks, and should be considered accurate only to the degree implied by the method used. The location of the borings is presented on the attached Boring Location Plan in Appendix A.

Samples obtained from the borings were transported to our laboratory for further evaluation. Samples of the soils encountered will be held in our laboratory for your inspection for 60 days unless we are notified otherwise.

#### 2.4 LABORATORY INVESTIGATION

#### 2.4.1 Index Testing

The soil samples recovered from the soil borings were returned to our laboratory and a UES Engineer visually examined and reviewed the field descriptions. The soils were classified in accordance with the Unified Soil Classification System (USCS). Tests consisting of percent passing a No. 200 sieve determination were performed to aide in classification of the soils.

#### 3.0 FINDINGS

#### 3.1 SUBSURFACE CONDITIONS

The boring locations and detailed subsurface conditions are illustrated in Appendix A: Boring Location Plan and Subsurface Profiles. The classifications and descriptions shown on the profiles are based upon visual characterizations of the recovered soil samples. Also, see Appendix A: Key to Boring Log, for further explanation of the symbols and placement of data on the Subsurface Profiles. The following discussion summarizes the soil conditions encountered.

The results of the SPT borings generally indicated the presence of topsoil in the upper approximate 0.5 feet underlain by intermittent layers of very loose to medium dense fine sand (SP) and fine sand with silt (SP-SM) to approximately 7 feet below existing grade. This layer was underlain by intermittent layers of very loose to loose fine sand with silt (SP-SM) and silty fine sand (SM) to approximately 10 feet below existing grade which was further underlain by intermittent layers of loose to medium dense fine sand (SP) to the boring termination depth of approximately 20 feet each below existing grade.

The results of the auger borings generally indicated the presence of top soil in the upper approximate 0.5 feet underlain by intermittent layers of fine sand (SP) and fine sand with silt (SP-SM) to the boring termination depth of approximately 6 feet below existing grade.

UES Project No. 0430.1900146.0000 UES Report No. 135022 August 21, 2019

#### 3.2 GROUNDWATER

The groundwater level was encountered at a depths varying between approximately 2.0 and 2.5 feet below grade at the boring locations. The depth of the measured groundwater level is noted on the Subsurface Profiles. It should be anticipated the groundwater level will fluctuate due to seasonal climatic variations, surface water runoff patterns, construction operations, and other interrelated factors

We recommend positive drainage be established and maintained on the site during construction. We further recommend permanent measures be constructed to maintain positive drainage from the site throughout the life of the project.

#### 4.0 FOUNDATION RECOMMENDATIONS

#### 4.1 GENERAL

The following recommendations are made based upon a review of the attached soil test data, our understanding of the proposed construction, and experience with similar projects and subsurface conditions. If the structural loadings, construction locations, or grading information change from those discussed previously, we request the opportunity to review and possibly amend our recommendations with respect to those changes.

Additionally, if subsurface conditions are encountered during construction which was not encountered in the borings, report those conditions immediately to us for observation and recommendations.

#### 4.2 STRUCTURE FOUNDATIONS

#### 4.2.1 Bearing Pressure

The maximum allowable net soil bearing pressure for shallow foundations design should not exceed 2,000 pounds per square foot (psf). Net bearing pressure is defined as the soil bearing pressure at the base of the foundation in excess of the natural overburden pressure. The foundations should be designed based upon the maximum load that could be imposed by all loading conditions. As previously discussed, we anticipate the slab on grade will have a load of 500 pounds per square foot (psf) or less displaced on it.

#### 4.2.2 Foundation Size

The minimum widths recommended for any isolated column footing and continuous wall footings are 24 inches and 18 inches, respectively. Even though the maximum allowable soil bearing pressure may not be achieved, these width recommendations should control the size of the foundations.

#### 4.2.3 Bearing Depth

Any exterior foundations should bear at a depth of at least 18 inches below the exterior final grades and the interior footings should bear at a depth of at least 18 inches below the finish floor elevation to provide confinement to the bearing level soils. We recommend stormwater and surface water be diverted away from the building exterior, both during and after construction, to reduce the possibility of erosion beneath the exterior footings.

#### 4.2.4 Bearing Material

The foundations may bear on either the compacted suitable natural soils or compacted structural fill. The bearing level soils, after compaction, should exhibit densities of at least 95 percent of the maximum dry density of the bearing soils as determined by ASTM D-1557 (Modified Proctor), to the depth described subsequently in the Site Preparation section of the report. In addition to compaction, the bearing soils must exhibit stability and be free of "pumping" conditions.

#### 4.2.5 Settlement Estimates

Post-construction settlement of the structure will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundations; (3) site preparation and earthwork construction techniques used by the contractor, and (4) external factors, including but not limited to vibration from offsite sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present.

Our settlement estimates for the structure are based upon the use of successful adherence to the site preparation recommendations presented later in this report. Any deviation from these recommendations could result in an increase in the estimated post-construction settlement of the structure.

Due to the nature of the surficial soils, following the compaction operations, we expect a significant portion of settlement to be elastic in nature. This settlement is expected to occur relatively quickly, upon application of the loads, during and immediately following construction. Using the recommended maximum bearing pressure, the assumed maximum structural loads, and the field test data which we have correlated to the strength and compressibility characteristics of the subsurface soils, we estimate the total settlements of the structure to be less than one inch.

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. Based on the subsurface conditions as determined by our borings and required improvement, it is anticipated that differential settlements will be within tolerable limits.

#### 4.3 SITE PREPARATION FOR SHALLOW FOUNDATIONS

We recommend the following site preparation procedures for the structure areas:

- Prior to construction, the location of existing underground utility lines within the construction area should be established. Provisions should then be made to relocate interfering utilities to appropriate locations. It should be noted that if underground pipes are not properly removed or plugged, they may serve as conduits for subsurface erosion which may subsequently lead to excessive settlement of the overlying structures.
- Strip the proposed construction limits of all debris, grass, roots, topsoil, asphalt and other deleterious materials within and 5 feet beyond the perimeter of the proposed structure. Expect initial clearing and grubbing to depths of approximately 6 to 12 inches.
- 3. Compact the exposed surface using tractor/ dozer or vibratory equipment. We recommend that vibratory equipment be operated in static mode within 100 feet of any existing structures. The upper two foot of soils below the exposed surface within the building areas should be improved to achieve a minimum compaction requirement of 95% of the Modified Proctor Test (ASTM D-1557). We recommend the compacted soils exhibit moisture content within 2 percent of the soils optimum moisture content as



determined by the Modified Proctor Test (ASTM D-1557). Should the soils experience pumping and soil strength loss during the compaction operations, compaction work should be immediately terminated and (1) the disturbed soils removed and backfilled with dry structural fill soils which are then compacted, or (2) the excess moisture content within the disturbed soils allowed to dissipate before recompacting.

- 4. Test the compacted surface for compliance at a minimum of one location per 2,500 square feet within the building area, or at a minimum of four locations.
- 5. Place fill material, as required. The fill should consist of "clean," fine sand with less than 5 percent soil fines. You may use fill materials with soil fines between 5 percent and 10 percent, but strict moisture control may be required. Place fill in uniform 8 to 12-inch loose lifts and compact each lift to a minimum density of 95 percent of the Modified Proctor maximum dry density. We recommend the compacted soils exhibit moisture content within 2 percent of the soils optimum moisture content as determined by the Modified Proctor Test (ASTM D-1557). If light compaction equipment is used, we recommend the lift thickness be reduced to 8 inch thick lifts.
- 6. Perform compliance tests within the backfill and fill soils at a minimum of one location per 2,500 square feet per lift (minimum four locations).
- 7. Compact and test footing cuts for compaction to a depth of two feet below bearing levels. We recommend that you test one out of every four (25 percent) column footings and perform one test per every 50 linear feet of wall footing. Compaction operations in confined areas, such as footing excavations, can best be performed with a lightweight vibratory sled or other hand-held compaction equipment.

#### 5.0 CONSTRUCTION RELATED SERVICES

We recommend the owner retain Universal Engineering Sciences to perform construction materials tests and observations on this project. Field tests and observations include verification of foundation subgrades by monitoring filling operations and performing quality assurance tests on the placement of compacted natural soils and structural fill. We can also perform concrete testing, pavement section testing, structural steel testing and other construction materials testing services.

The geotechnical engineering design does not end with the advertisement of the construction documents. The design is an on-going process throughout construction. Because of our familiarity with the site conditions and the intent of the engineering design, we are most qualified to address problems that might arise during construction in a timely and cost-effective manner.

#### 6.0 LIMITATIONS

During the early stages of most construction projects, geotechnical issues not addressed in this report may arise. Because of the natural limitations inherent in working with the subsurface, it is not possible for a geotechnical engineer to predict and address all possible problems. An Association of Engineering Firms Practicing in the Geosciences (ASFE) publication, "Important Information about Your Geotechnical Engineering Report" appears in Appendix C, and will help explain the nature of geotechnical issues. Furriner, we present documents in Appendix C: Constraints and Restrictions, to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

# **APPENDIX A**

## BORING LOCATION PLAN SUBSURFACE PROFILES SOILS CLASSIFICATION CHART

R.	-		7 1
	L	E. FAIRVIEW AVENUE	1 A
学校	10		
		AB-2 B-1	
-		AB-1 AB-2	
N. BEAGH ST		AB-3	
	*		
			GRAPHIC SCALE
	APPRO	XIMATE LOCATION OF AUGER BORING	(IN FEET)
		TITLE: BORING LOCATION PLAN	1 INCH ≈ 60 ft.
		PROJECT: GEOTECHNICAL EVALUATION DR. JOSIE ROGERS HOUSE RELOCATION DAYTONA BEACH, FLORIDA	T <sup>™</sup> ≈ 60 <sup>°</sup> PAGE/FIG. NO A-1
	SCIENCES	DRAWN BY: MKL DATE: 08/12/19 PROJECT NO.: 0430.190	0146.0000

DRAWN BY:	MKL	DATE:	08/12/19	PROJECT NO .:	0430.1900146.0000
CHECKED BY:	BP EMERGENCY CONTRAC	DATE	JUSTE ROGERS HOUSE RELO	REPORT NO .:	135022







# **KEY TO BORING LOGS**

SYMBOLS	
---------	--

SYMBOL	DESCRIPTION			
N	No. of blows of a 140-lb weight falling 30 inches required to drive standard spoon 1 foot.			
WOR	Weight of Drill Rods			
WOH	Weight of Drill Rods and Hammer			
% REC	Percent Core Recovery from Rock Core Drilling			
RQD	Rock Quality Designation			
EOB	End Of Boring			
BŢ	Boring Terminated			
-200	Fines Content or % Passing N0, 200 Sieve			
MC	Moisture Content			
LL	Liquid Limit			
PI	Plasticity Index			
к	Coefficient of Permeability			
O.C.	Organic Content			
$\nabla$	Estimated seasonal high groundwater level			
V	Measured groundwater level at time of drilling			

#### RELATIVE DENSITY (sand-silt) Very Loose - Less Than 4 Blows/Ft.

Loose - 4 to 10 Blows/Ft. Medium - 11 to 30 Blows/Ft. Dense - 31 to 50 Blows/Ft. Very Dense - More Than 50 Blows/Ft.

#### CONSISTENCY (clay)

Very Soft - Less than 2 Blows/Ft. Soft - 2 to 4 Blows/Ft. Medium - 5 to 8 Blows/Ft. Stiff - 9 to 15 Blows/Ft. Very Stiff - 16 to 30 Blows/Ft. Hard - More Than 30 Blows/Ft.

#### RELATIVE HARDNESS (Limestone)

Soft - 100 Blows for more than 2" Hard - 100 Blows for less than 2"

MAJOR DIVISIONS		GROUP SYMBOLS	TYPICAL NAMES	
UNCOLUMBIZAÇI		CLEAN GRAVELS	GW	Well-graded grevels and gravel-sand mixtures, little or no fines
	GRAVELS 50% or more of coarce kacton rdsimed on No. 4 sieve		GP	Well-graded gravels and gravel-sand mixtures, little or no fines
off S		GRAVELS WITH FINES	GM	Silly gravels, gravel-send-sill modures
AINED SI 0% retein 00 siewe*			GC	Clayey gravels, gravel-sand-clay mixtures
RSE-GR re then 5 on No. 20	SANDS More than 50% of coarse fraction passes No. 4 store	CLEAN SANDS	SW**	Well-graded sands and gravely sands, little or no fines
Wo			SP**	Well-graded sands and gravelty sands, tittle or no fines
		SANDS WITH FINES	SM**	Silty sands, sand-sill mixtures
			SC**	Clayey sands, sand-clay motures
			ML	Inorganic silts, very line sands, rock flour, silty or clayey fine sands
	SILTS AND CLAYS Liquid Imit 50% or lass		CL	Inorganic clays of low to medium plasticity, gravelity clays, sandy clays, silty clays, lean clays
sessed			OL	Organic silts and organic silty days of low plasticity
or more	SILTS AND CLAYS Liquid firmt graetor then 50%		мн	Inorganic sitts, micaceous or diatomaceous tine sands or sits, elastic sitts
50% 20%			СН	Organic clays or high plasticity, lat clays
			ОН	Organic clays of medium to high plasticity
			PT	Peat, muck and other highly organic solls

## MODIFIERS

These modifiers provide our estimate of the amount of minor constituents (SILT or CLAY sized particles) in the soil sample. Trace - 5% or less With SILT or with CLAY - 6% to 11% SILTY or CLAYEY - 12% to 30% Very SILTY or Very CLAYEY - 31% to 50%

These modifiers provide our estimate of the amount of organic components in the soil sample. Trace - 1% to 2% Few - 3% to 4% Soine - 5% to 8% Many - Greater than 8%

These modifiers provide our estimate of the amount of other components (Shell, Gravel, Etc.) in the soil sample Trace - 5% or less Few - 6% to 12% Some - 13% to 30% Many - 31% to 50%

# **APPENDIX B**

## LABORATORY TESTING PROCEDURES

## DESCRIPTION OF LABORATORY TESTING PROCEDURES

## LABORATORY PERMEABILITY TEST

The laboratory permeability test is a Falling Head Test that is performed on soil samples recovered from this site. The data recovered from this test are used to calculate Darcy's Coefficient of Permeability (k) of the soil.

### WASH 200 TEST

The Wash 200 test is performed by passing a representative soil sample over a No. 200 sieve and rinsing with water. The percentage of the soil grains passing this sieve is then calculated.

## ORGANIC CONTENT TESTS

The organic content test is performed by weighing a sample before and after placing in a high temperature oven which burns the organic material in the sample. The percent of organic material by weight is then calculated.

## **MOISTURE CONTENT DETERMINATION ASTM D-2216**

Moisture content is the ratio of the weight of water to the dry weight of soil. Moisture content is measured by drying a sample at 105 degrees Celsius. The moisture content is expressed as a percent of the oven dried soil mass.

## ATTERBERG LIMITS

The Atterberg Limits consist of the Liquid Limit (LL) and the Plastic Limit (PL). The LL and PL were determined in general accordance with the latest revision of ASTM D-4318. The LL is the water content of the material denoting the boundary between the liquid and plastic states. The PL is the water content denoting the boundary between the plastic and semisolid states. The Plasticity Index (PI) is the range of water content over which a soil behaves plastically and is denoted numerically by as the difference between the LL and the PL. The water content of the sample tested was determined in general accordance with the latest revision of ASTM D-2216. The water content is defined as the ratio of "pore" or "free" water in a given mass of material to the mass of solid material particles.

#### CONSOLIDATION TESTING

A single selected portion of the undisturbed sample was extruded from the 3-inch diameter sample tube for consolidation testing. The selected sample was trimmed and confined into a stainless steel disc having a diameter of 2.5 inches and a height of 1 inch. The disc was then "sandwiched" between 2 porous stones, saturated and subjected to incrementally increasing loads. The resulting deformation of the sample within the steel disc was measured using a micrometer gauge.

# APPENDIX C

GENERAL CONDITIONS CONSTRAINTS AND RESTRICTIONS AND IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

#### Universal Engineering Sciences, Inc. GENERAL CONDITIONS

#### SECTION 1: RESPONSIBILITIES

- 1.1 Universal Engineering Sciences, Inc., ("UES"), has the responsibility for providing the services described under the Scope of Services section. The work is to be performed according to accepted standards of care and is to be completed in a timely manner. The term "UES" as used herein includes all of Universal Engineering Sciences, Inc's agents, employees, professional staff, and subcontractors.
- 1.2 The Client or a duly authorized representative is responsible for providing UES with a clear understanding of the project nature and scope. The Client shall supply UES with sufficient and adequate information, including, but not limited to, maps, site plans, reports, surveys and designs, to allow UES to properly complete the specified services. The Client shall also communicate changes in the nature and scope of the project as soon as possible during performance of the work so that the changes can be incorporated into the work product.
- 1.3 The Client acknowledges that UES's responsibilities in providing the services described under the Scope of Services section is limited to those services described therein, and the Client hereby assumes any collateral or affiliated duties necessitated by or for those services. Such duties may include, but are not limited to, reporting requirements imposed by any third party such as federal, state, or local entities, the provision of any required notices to any third party, or the securing of necessary permits or permissions from any third parties required for UES's provision of the services so described, unless otherwise agreed upon by both parties.
- 1.4 Universal will not be responsible for scheduling our services and will not be responsible for tests or inspections that are not performed due to a failure to schedule our services on the project or any resulting damages.

## 1.5 PURSUANT TO FLORIDA STATUTES §558.0035, ANY INDIVIDUAL EMPLOYEE OR AGENT OF UES MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.

#### SECTION 2: STANDARD OF CARE

- 2.1 Services performed by UES under this Agreement will be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of UES's profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, express or implied, is made.
- 2.2 The Client recognizes that subsurface conditions may vary from those observed at locations where borings, surveys, or other explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by UES will be based solely on information available to UES at the time of service. UES is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed.
- 2.3 Execution of this document by UES is not a representation that UES has visited the site, become generally familiar with local conditions under which the services are to be performed, or correlated personal observations with the requirements of the Scope of Services. It is the Client's responsibility to provide UES with all information necessary for UES to provide the services described under the Scope of Services, and the Client assumes all liability for information not provided to UES that may affect the quality or sufficiency of the services so described.
- 2.4 Should UES be retained to provide threshold inspection services under Florida Statutes §553.79, Client acknowledges that UES's services thereunder do not constitute a guarantee that the construction in question has been properly designed or constructed, and UES's services do not replace any of the obligations or liabilities associated with any architect, contractor, or structural engineer. Therefore it is explicitly agreed that the Client will not hold UES responsible for the proper performance of service by any architect, contractor, structural engineer or any other entity associated with the project.

#### SECTION 3: SITE ACCESS AND SITE CONDITIONS

- 3.1 Client will grant or obtain free access to the site for all equipment and personnel necessary for UES to perform the work set forth in this Agreement. The Client will notify any and all possessors of the project site that Client has granted UES free access to the site. UES will take reasonable precautions to minimize damage to the site, but it is understood by Client that, in the normal course of work, some damage may occur, and the correction of such damage is not part of this Agreement unless so specified in the Proposal.
- 3.2 The Client is responsible for the accuracy of locations for all subterranean structures and utilities. UES will take reasonable precautions to avoid known subterranean structures, and the Client waives any claim against UES, and agrees to defend, indemnify, and hold UES harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, Client agrees to compensate UES for any time spent or expenses incurred by UES in defense of any such claim with compensation to be based upon UES's prevailing fee schedule and expense reimbursement policy.

#### SECTION 4: SAMPLE OWNERSHIP AND DISPOSAL

- 4.1 Soil or water samples obtained from the project during performance of the work shall remain the property of the Client.
- 4.2 UES will dispose of or return to Client all remaining soils and rock samples 60 days after submission of report covering those samples. Further storage or transfer of samples can be made at Client's expense upon Client's prior written request.
- 4.3 Samples which are contaminated by petroleum products or other chemical waste will be returned to Client for treatment or disposal, consistent with all appropriate federal, state, or local regulations.

#### SECTION 5: BILLING AND PAYMENT

- 5.1 UES will submit invoices to Client monthly or upon completion of services. Invoices will show charges for different personnel and expense classifications.
- 5.2 Payment is due 30 days after presentation of invoice and is past due 31 days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1 ½ %) per month, or the maximum rate allowed by law, on past due accounts.
- 5.3 If UES incurs any expenses to collect overdue billings on invoices, the sums paid by UES for reasonable attorneys' fees, court costs, UES's time, UES's expenses, and interest will be due and owing by the Client.

#### SECTION 6: OWNERSHIP AND USE OF DOCUMENTS

- 6.1 All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by UES, as instruments of service, shall remain the property of UES.
- 6.2 Client agrees that all reports and other work furnished to the Client or his agents, which are not paid for, will be returned upon demand and will not be used by the Client for any purpose.
- 6.3 UES will retain all pertinent records relating to the services performed for a period of five years following submission of the report, during which period the records will be made available to the Client at all reasonable times.
- 6.4 All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by UES, are prepared for the sole and exclusive use of Client, and may not be given to any other party or used or relied upon by any such party without the express written consent of UES.

#### SECTION 7: DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS

- 7.1 Client warrants that a reasonable effort has been made to inform UES of known or suspected hazardous materials on or near the project site.
- 7.2 Under this agreement, the term hazardous materials include hazardous materials (40 CFR 172.01), hazardous wastes (40 CFR 261.2), hazardous substances (40 CFR 300.6), petroleum products, polychlorinated biphenyls, and asbestos.
- 7.3 Hazardous materials may exist at a site where there is no reason to believe they could or should be present. UES and Client agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work. UES and Client also agree that the discovery of unanticipated hazardous materials may make it necessary for UES to take immediate measures to protect health and safety. Client agrees to compensate UES for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous waste.
- 7.4 UES agrees to notify Client when unanticipated hazardous materials or suspected hazardous materials are encountered. Client agrees to make any disclosures required by law to the appropriate governing agencies. Client also agrees to hold UES harmless for any and all consequences of disclosures made by UES which are required by governing law. In the event the project site is not owned by Client, Client recognizes that it is the Client's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.
- 7.5 Notwithstanding any other provision of the Agreement, Client waives any claim against UES, and to the maximum extent permitted by law, agrees to defend, indemnify, and save UES harmless from any claim, liability, and/or defense costs for injury or loss arising from UES's discovery of unanticipated hazardous materials or suspected hazardous materials including any costs created by delay of the project and any cost associated with possible reduction of the property's value. Client will be responsible for ultimate disposal of any samples secured by UES which are found to be contaminated.

#### SECTION 8: RISK ALLOCATION

8.1 Client agrees that UES's liability for any damage on account of any breach of contract, error, omission or other professional negligence will be limited to a sum not to exceed \$50,000 or UES's fee, whichever is greater. If Client prefers to have higher limits on contractual or professional liability, UES agrees to increase the limits up to a maximum of \$1,000,000.00 upon Client's written request at the time of accepting our proposal provided that Client agrees to pay an additional consideration of four percent of the total fee, or \$400.00, whichever is greater. The additional charge for the higher liability limits is because of the greater risk assumed and is not strictly a charge for additional professional liability insurance.

#### SECTION 9: INSURANCE

9.1 UES represents and warrants that it and its agents, staff and consultants employed by it, is and are protected by worker's compensation insurance and that UES has such coverage under public liability and property damage insurance policies which UES deems to be adequate. Certificates for all such policies of insurance shall be provided to Client upon request in writing. Within the limits and conditions of such insurance, UES agrees to indemnify and save Client harmless from and against loss, damage, or liability arising from negligent acts by UES, its agents, staff, and consultants employed by it. UES shall not be responsible for any loss, damage or liability beyond the amounts, limits, and conditions of such insurance or the limits described in Section 8, whichever is less. The Client agrees to defend, indemnify and save UES harmless for loss, damage or liability arising from acts by Client, Client's agent, staff, and other UESs employed by Client.

#### SECTION 10: DISPUTE RESOLUTION

- 10.1 All claims, disputes, and other matters in controversy between UES and Client arising out of or in any way related to this Agreement will be submitted to alternative dispute resolution (ADR) such as mediation or arbitration, before and as a condition precedent to other remedies provided by law, including the commencement of litigation.
  - If a dispute arises related to the services provided under this Agreement and that dispute requires litigation instead of ADR as provided above, then:
  - (a) the claim will be brought and tried in judicial jurisdiction of the court of the county where UES's principal place of business is located and Client waives the right to remove the action to any other county or judicial jurisdiction, and
    - (b) The prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, and other claim related expenses.

#### SECTION 11: TERMINATION

10.2

- 11.1 This agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, UES shall be paid for services performed to the termination notice date plus reasonable termination expenses.
- 11.2 In the event of termination, or suspension for more than three (3) months, prior to completion of all reports contemplated by the Agreement, UES may complete such analyses and records as are necessary to complete its files and may also complete a report on the services performed to the date of notice of termination or suspension. The expense of termination or suspension shall include all direct costs of UES in completing such analyses, records and reports.

#### SECTION 12: ASSIGNS

12.1 Neither the Client nor UES may delegate, assign, sublet or transfer their duties or interest in this Agreement without the written consent of the other party.

#### SECTION 13. GOVERNING LAW AND SURVIVAL

- 13.1 The laws of the State of Florida will govern the validity of these Terms, their interpretation and performance.
- 13.2 If any of the provisions contained in this Agreement are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired. Limitations of liability and indemnities will survive termination of this Agreement for any cause.

#### SECTION 14. INTEGRATION CLAUSE

- 14.1 This Agreement represents and contains the entire and only agreement and understanding among the parties with respect to the subject matter of this Agreement, and supersedes any and all prior and contemporaneous oral and written agreements, understandings, representations, inducements, promises, warranties, and conditions among the parties. No agreement, understanding, representation, inducement, promise, warranty, or condition of any kind with respect to the subject matter of this Agreement shall be relied upon by the parties unless expressly incorporated herein.
- 14.2 This Agreement may not be amended or modified except by an agreement in writing signed by the party against whom the enforcement of any modification or amendment is sought.

Rev. 06/10/2015

#### CONSTRAINTS AND RESTRICTIONS

#### WARRANTY

Universal Engineering Sciences has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

#### UNANTICIPATED SOIL CONDITIONS

The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on the Boring Location Plan. This report does not reflect any variations which may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

#### CHANGED CONDITIONS

We recommend that the specifications for the project require that the contractor immediately notify Universal Engineering Sciences, as well as the owner, when subsurface conditions are encountered that are different from those present in this report.

No claim by the contractor for any conditions differing from those anticipated in the plans, specifications, and those found in this report, should be allowed unless the contractor notifies the owner and Universal Engineering Sciences of such changed conditions. Further, we recommend that all foundation work and site improvements be observed by a representative of Universal Engineering Sciences to monitor field conditions and changes, to verify design assumptions and to evaluate and recommend any appropriate modifications to this report.

#### MISINTERPRETATION OF SOIL ENGINEERING REPORT

Universal Engineering Sciences is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If the conclusions or recommendations based upon the data presented are made by others, those conclusions or recommendations are not the responsibility of Universal Engineering Sciences.

#### CHANGED STRUCTURE OR LOCATION

This report was prepared in order to aid in the evaluation of this project and to assist the architect or engineer in the design of this project. If any changes in the design or location of the structure as outlined in this report are planned, or if any structures are included or added that are not discussed in the report, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions modified or approved by Universal Engineering Sciences.

#### USE OF REPORT BY BIDDERS

Bidders who are examining the report prior to submission of a bid are cautioned that this report was prepared as an aid to the designers of the project and it may affect actual construction operations.

Bidders are urged to make their own soil borings, test pits, test caissons or other investigations to determine those conditions that may affect construction operations. Universal Engineering Sciences cannot be responsible for any interpretations made from this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which will affect construction operations.

#### STRATA CHANGES

Strata changes are indicated by a definite line on the boring logs which accompany this report. However, the actual change in the ground may be more gradual. Where changes occur between soil samples, the location of the change must necessarily be estimated using all available information and may not be shown at the exact depth.

#### **OBSERVATIONS DURING DRILLING**

Attempts are made to detect and/or identify occurrences during drilling and sampling, such as: water level, boulders, zones of lost circulation, relative ease or resistance to drilling progress, unusual sample recovery, variation of driving resistance, obstructions, etc.; however, lack of mention does not preclude their presence.

#### WATER LEVELS

Water level readings have been made in the drill holes during drilling and they indicate normally occurring conditions. Water levels may not have been stabilized at the last reading. This data has been reviewed and interpretations made in this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, tides, and other factors not evident at the time measurements were made and reported. Since the probability of such variations is anticipated, design drawings and specifications should accommodate such possibilities and construction planning should be based upon such assumptions of variations.

#### LOCATION OF BURIED OBJECTS

All users of this report are cautioned that there was no requirement for Universal Engineering Sciences to attempt to locate any man-made buried objects during the course of this exploration and that no attempt was made by Universal Engineering Sciences to locate any such buried objects. Universal Engineering Sciences cannot be responsible for any buried man-made objects which are subsequently encountered during construction that are not discussed within the text of this report.

#### TIME

This report reflects the soil conditions at the time of investigation. If the report is not used in a reasonable amount of time, significant changes to the site may occur and additional reviews may be required.

# Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

# Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical- engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one* — *not even you* — should apply this report for any purpose or project except the one originally contemplated.

#### **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

#### Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- · not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a lightindustrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- · the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an

assessment of their impact. Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.

## Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by*: the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

#### Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

## A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmationdependent recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.* 

# A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

#### Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk*.

# Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, but preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/ or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. Be sure constructors have sufficient time to perform additional study. Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

#### **Read Responsibility Provisions Closely**

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely*. Ask questions. Your geotechnical engineer should respond fully and frankly.

#### **Environmental Concerns Are Not Covered**

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnicalengineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures*. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else*.

# Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the express purpose of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold- prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical- engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.

#### Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.



8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

Copyright 2015 by Geoprofessional Business Association (GBA). Duplication, reproduction, or copying of this document, or its contents, in whole or in part, by any means whatsoever, is strictly prohibited, except with GBA's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of GBA, and only for purposes of scholarly research or book review. Only members of GBA may use this document as a complement to or as an element of a geotechnical-engineering report. Any other firm, individual, or other entity that so uses this document without being a GBA member could be commiting negligent or intentional (fraudulent) misrepresentation.

# Appendix D – Survey Monument (RMR-19)

DANTON	The Ci	ty of Daytona Beac	h				
	Public Works Department · Engineering Division						
	(386) 671-	8617 · (fax) (386) 671-	5905				
SECTI	ON 38 , TOWNS	HIP 15 SOUTH , R	ANGE 33 EAST				
	Designation:	RMR-19					
MONUMEN	MONUMENTATION DESCRIPTION AND DIRECTIONS TO REACH						
	3" brass disk.		Stamped RMR-19				
TO REACH							
From the interse	ction of US Hwy 1 (N Rid	gewood Av) and Fairview A	Av go East				
0.4 miles ± to the	intersection of Fairview	Av and Bowman Av. proce	ed North				
monument is in th	e sidewalk between the	center two rows of parking	a spaces.				
115' ± East of the	e C/L of Bowman Av.		, -				
HORIZO	NTAL POSITION A	ND HEIGHT INFORM	MATION:				
Latitude	29° 13' 19.35735" N	Longitude81° 01'	16.57900" W				
NORTHING (ft.) 1,7	77,029.171 EASTING (f	t.) 649,381.417 Zon	e FSPC East, U.S. Feet				
Convergence -0° 00' 37.38	552" Scale Factor 0	.999941229 Coordinate	Determination GPS Static				
Horizontal Datum	NAD83 (2007)	Horizontal Accuracy	2nd Order, Class II				
Vertical Datum	NAVD 88	Vertical Accuracy	2nd Order, Class II				
	Adjusted Elevation	- in feet 3.815					
Adjusted Elevation - In Teet 3.815							
CMillen L	and Surveying, I	nc southeastern sl	IRVEYING & MAPPING CORP. FLORIDA SINCE 1972				

EMERGENCY CONTRACT - DR JOSIE ROGERS HOUSE RELOCATION

