



**ADDENDUM NO. 2
INVITATION TO BID #16-022
WINDSOR PARKWAY DETENTION POND PROJECT**

**NEW BID DUE DATE
MAY 13, 2016 2:00 P.M.**

**COMPLETE THIS ADDENDUM, SIGN and SUBMIT with the ITB.
City of Sandy Springs – Purchasing Division
Sandy Springs City Hall
7840 Roswell Road Bldg. 500
Sandy Springs, GA 30350**

THE CITY ANTICIPATES THE ISSUANCE OF A THIRD ADDENDUM.

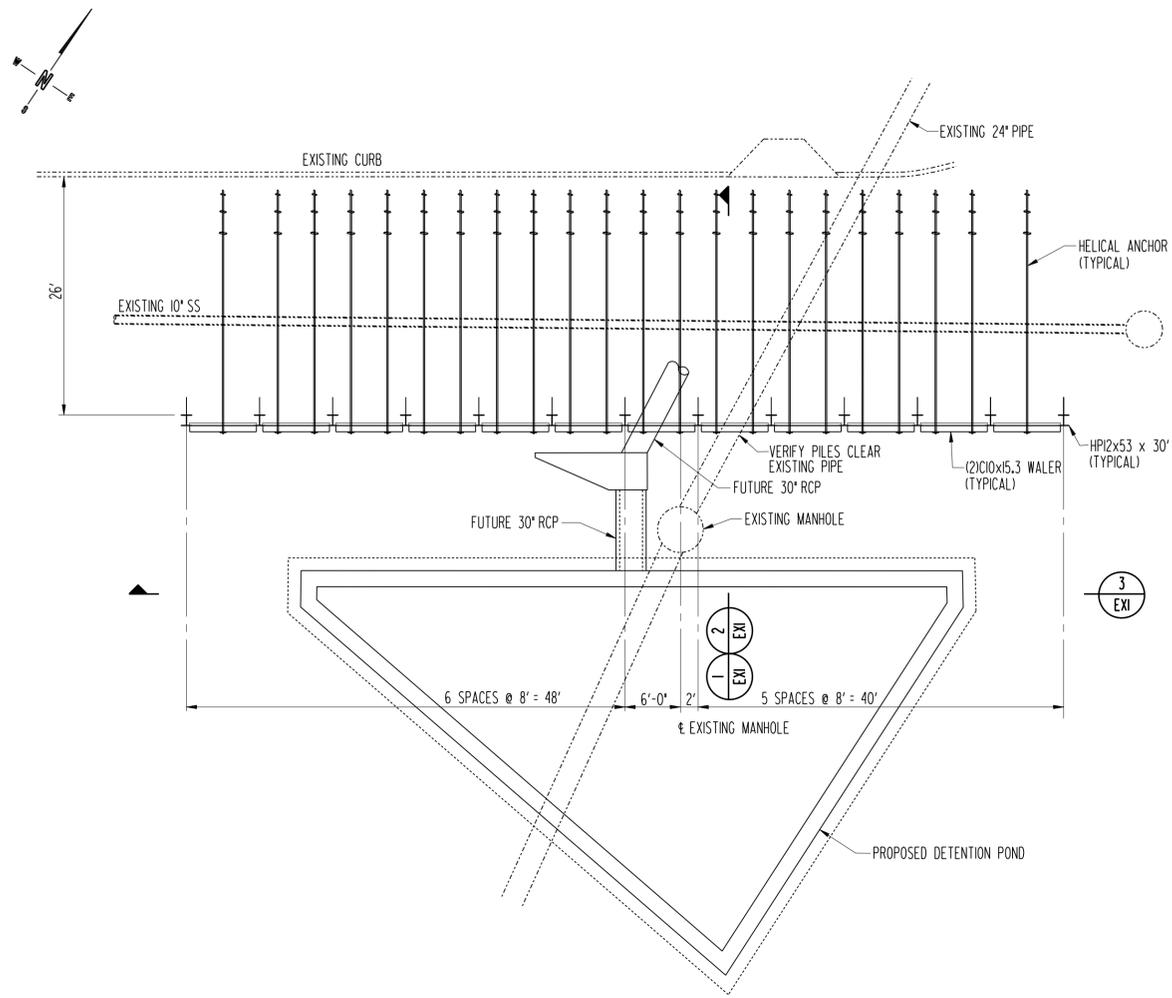
NOTE:

VENDORS MUST USE THE ATTACHED REVISED BID SCHEDULE

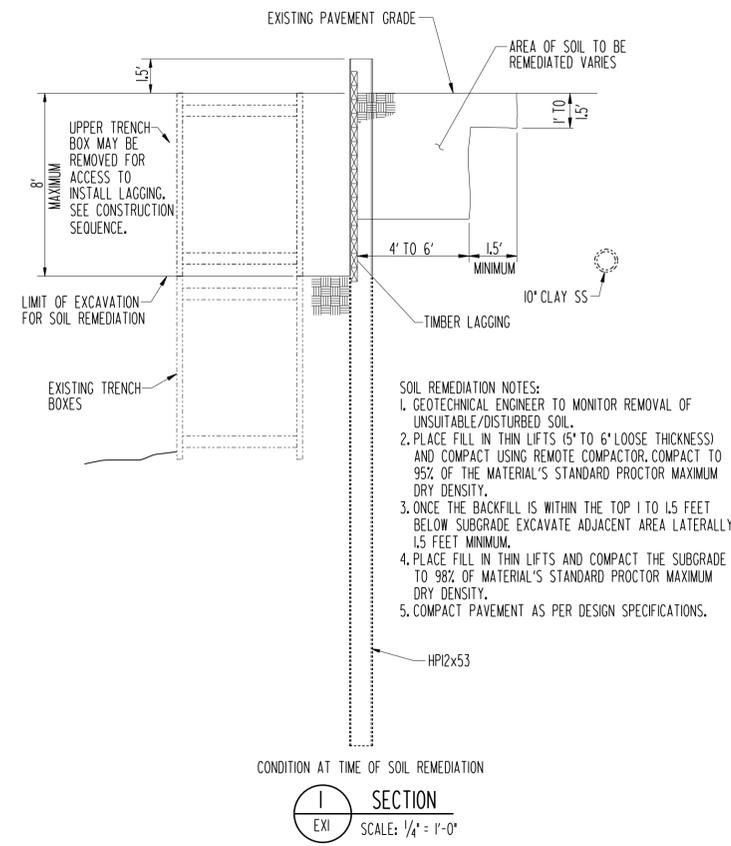
QUESTIONS/RESPONSES

1. Page C.2 General Notes, Line 15- All existing pipe to be removed, is this note referring to Manhole A-1, A-2, A-3 including all existing piping? **Existing pipe between A-1, A-2, A-3, along with storm structures shall be adjusted to the proposed grades shown in the construction plans. Revised construction plan sheets depicting the required adjustments are available at LDI Norcross, 3030 A Business Park Dr., Norcross, GA 30071, 770-263-1010 (P), 770-417-1147 (F), <http://www.ldireproprinting.com/locations.htm>,**
2. If all piping is removed can it be reused for this project? **If it is undamaged, yes.**
3. Is existing pipe from A-1 to A-2 19"X30" ERCRP? **Yes**
4. Is existing pipe from A-2 to A-3 36" RCP? **Yes**
5. Does this project require Laser Profiling? **No**
6. What size Leland Cypress will be required? **5 foot**
7. When will the soil reports be available? **Attached for reference.**
8. Who will be inspecting and signing off on progress of work? **City and third party staff**
9. Is Sandy Springs providing Geo Tech or Contractor? **No**
10. Assuming existing soil having to be removed from existing shoring side of project for compaction purposes, has this been taken in to account for existing shoring design and install or should we assume further means of protection of fear of it failing? **Shoring plan attached for reference.**
11. The material left on site from previous contractor will or will not be removed for this project? If not removed whose responsibility will it be to move out of way, or to use if adequate? **It will be left on the site and the contractor may use them to complete the project.**
12. Does Sandy Springs have any property that unsuitable soils could be taken to? **No**
13. The pre-bid package refers to 120 days completion from notice to proceed, the contract documents states 150 to substantial completion, which one is correct? **120 calendar days**

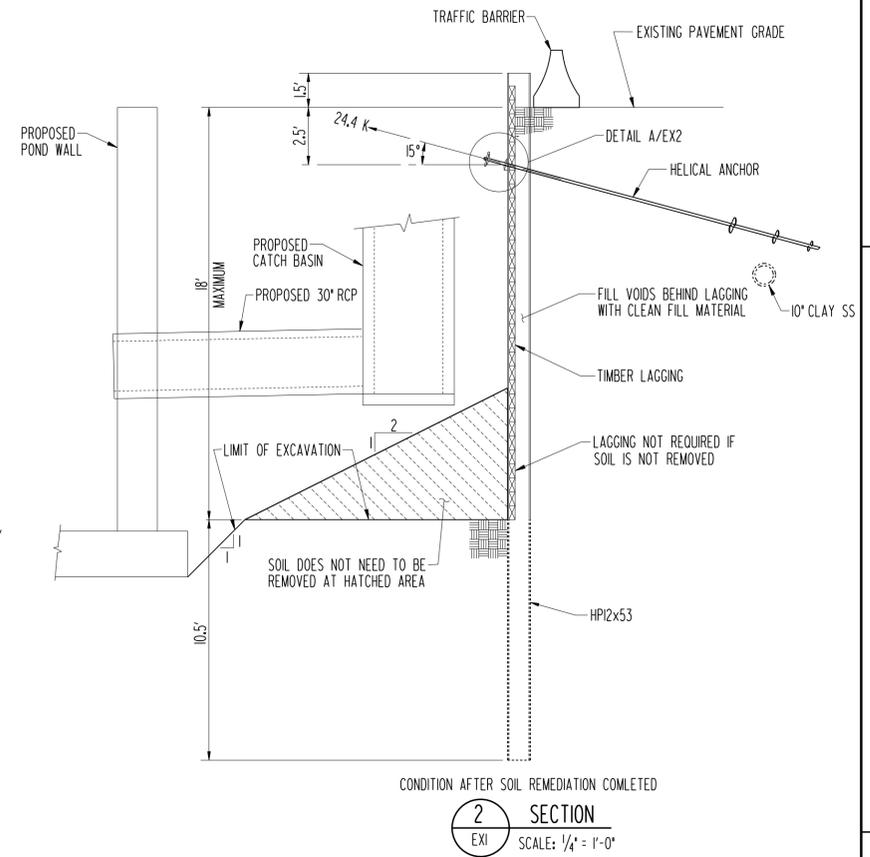
PROJECT BID ITEMS & QUANTITIES				REVISED PER ADDENDUM NUMBER 2	
WINDSOR PARKWAY DETENTION POND ITB #16-022					
GA. DOT	PAY ITEMS				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	COST	TOTAL COST
1-001	Install Leyland Cypress	EA	17		
150-1000	TRAFFIC CONTROL	LS	1		
163-0232	TEMPORARY GRASSING	AC	1		
163-0240	MULCH	TN	1		
163-0300	CONSTRUCTION EXIT, INCL. MAINT	EA	1		
163-0529	CONSTRUCT AND REMOVE BALED STRAW CHECK DAMS, INCL.	EA	2		
163-0541	CONSTRUCT AND REMOVE ROCK FILTER DAMS, INCL. MAINT	EA	1		
163-0550	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP, INCL. MAINT	EA	1		
171-0030	TEMPORARY SILT FENCE, TYPE C, INCL. MAINT	LF	250		
205-0001	UNCLASS EXCAV	CY	1		
207-0203	FOUND BKFILL MATL, TP II	CY	1		
210-0100	GRADING COMPLETE	LS	1		
441-0016	DRIVEWAY CONCRETE, 6 IN TK	SY	20		
441-5002	CONCRETE HEADER CURB, 6 IN, TP 2	LF	30		
500-3200	CLASS B CONCRETE WIDENING	CY	5		
550-1100	STORM DRAIN PIPE, 10 IN, DIP	LF	33		
550-1240	STORM DRAIN PIPE, 19 IN X 30 IN ERCP	LF	60		
550-1300	STORM DRAIN PIPE, 30 IN, RCP	LF	12		
550-1360	STORM DRAIN PIPE, 36 IN, RCP	LF	31		
603-2180	STN DUMPED RIP RAP, TP 3, 12 IN, PLUNGE POOL	SY	30		
607-1000	MORTAR RUBBLE MASONRY	CY	35		
607-1001	MODULAR BLOCK RETAINING WALL	EA	1		
643-8200	BARRIER FENCE (ORANGE), 4 FT	LF	250		
643-8210	WOOD FENCE, INCL. GATE	LF	320		
668-1100	GDOT STD. 1033D, CATCH BASIN	EA	1		
700-9300	BERMUDA SOD	SY	800		
716-2000	EROSION CONTROL MATS, SLOPES	SY	240		
900-0526	BOLLARDS	EA	16		
	#57 STONE WITH GEOTEXTILE FABRIC	SY	180		
	OUTLET CONTROL STRUCTURE, COMPLETE	EA	1		
	REINFORCED CONC. WALL DETENTION POND, COMPLETE	LS	1		
	LANDSCAPING REPAIRS TO CONTI PROEPERTY	LS	LS	\$5,000.00	\$5,000.00
	UTILITY CONTINGENCY ADD TEN PERCENT (10%)				
	TOTAL BID PRICE				\$



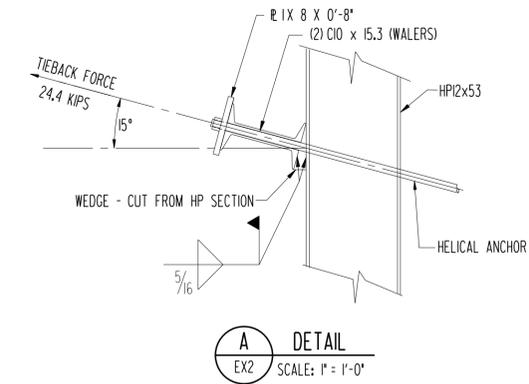
EXCAVATION BRACING PLAN
SCALE: 1" = 10'-0"



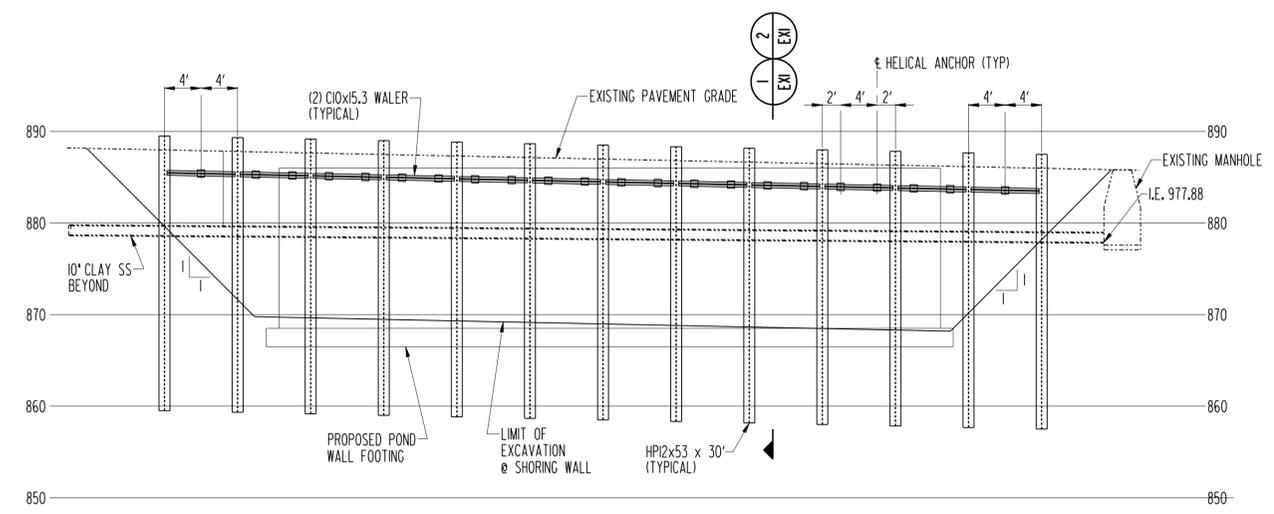
SECTION 1
EXI SCALE: 1/4" = 1'-0"



SECTION 2
EXI SCALE: 1/4" = 1'-0"



DETAIL A
EX2 SCALE: 1" = 1'-0"



SECTION 3
EXI SCALE: 1" = 10'-0"

- GENERAL NOTES:**
- ALL DESIGN, DETAILING, FABRICATION AND CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES AND SPECIFICATIONS:
 - THE INTERNATIONAL BUILDING CODE (2012 EDITION).
 - AMERICAN SOCIETY OF TESTING AND MATERIALS (ASTM) SPECIFICATIONS.
 - SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, ANSI/AISC 360-10, BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
 - CODE FOR WELDING IN BUILDING CONSTRUCTION OF THE AMERICAN WELDING SOCIETY (CURRENT EDITION).
 - MATERIALS**
 - STEEL H-PILES SHALL BE ASTM A-572, GRADE 50. STRUCTURAL STEEL PLATES SHALL BE ASTM A-36. STRUCTURAL STEEL CHANNELS SHALL BE ASTM A-36.
 - WELDING ELECTRODES SHALL COMPLY WITH AWS A5.1 OR A5.5, E70xx.
 - LAGGING SHALL BE 4" NOMINAL ROUGH CUT HARDWOOD.
 - TIEBACKS SHALL BE HELICAL ANCHORS DESIGNED TO RESIST 1.25 TIMES THE NOTED TIEBACK FORCE.
 - RECORDS**
 - MAKE CONTINUOUS DRIVING RECORDS FOR EACH PILE. SUBMIT DRIVING RECORDS TO THE ENGINEER.
 - TIEBACK INSTALLATION**
 - INSTALL HELICAL ANCHOR TIEBACKS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. TIEBACKS SHALL BE INSTALLED TO A DEPTH THAT PROVIDES THE REQUIRED RESISTANCE AS INDICATED BY TORQUE.
 - INSTALL WALERS AND BEARING PLATES, AND THEN USE A HYDRAULIC JACK TO JACK TIEBACKS TO THE INDICATED FORCE.
 - CONSTRUCTION SEQUENCE**
 - VERIFY LOCATION OF EXISTING PIPE. MODIFY PILE LOCATION IF NEEDED TO MISS PIPE.
 - DRIVE PILES.
 - ONLY IF TRENCH BOXES MUST BE MOVED TO INSTALL LAGGING, REMOVE TOP TRENCH BOXES ONE AT A TIME, EXCAVATE IN FRONT OF PILES AND INSTALL LAGGING AS EXCAVATION PROGRESSES BEFORE REMOVING NEXT TRENCH BOX.
 - REMEDiate SOIL BEHIND WALL THAT WAS AFFECTED BY FAILURE OF ORIGINAL SHORING SYSTEM. SEE SOIL REMEDIATION NOTES IN SECTION 1/EX1.
 - INSTALL TIEBACKS. LOCK OFF TIEBACKS AT LISTED TIEBACK FORCE (SEE DETAIL A).
 - REMOVE NEXT ROW OF TRENCH BOXES ONE AT A TIME. EXCAVATE IN FRONT OF PILES AND INSTALL LAGGING AS EXCAVATION PROGRESSES BEFORE REMOVING ADJACENT TRENCH BOX.
 - COMPLETE EXCAVATION AND LAGGING INSTALLATION. H. CONSTRUCT POND WALL AND INSTALL PIPING.
 - DE-TENSION TIEBACKS AFTER WALL IS CONSTRUCTED AND BACKFILLED WITHIN ONE FOOT OF TIEBACKS.
 - REMOVE WALERS, IF DIRECTED BY CITY OF SANDY SPRINGS, REMOVE TIEBACKS.
 - BACKFILL TO GRADE.
 - CUT PILES OFF MINIMUM 2 FEET BELOW GRADE, UNLESS DIRECTED BY CITY OF SANDY SPRINGS TO REMOVE THEM.



REVISIONS

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Norcross, Georgia 30071
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www.unitedconsulting.com

We're here for you

UNITED CONSULTING

WINDSOR PARKWAY DETENTION POND
SANDY SPRINGS, GEORGIA
CITY OF SANDY SPRINGS

PROJECT DESCRIPTION

SHEET TITLE

EXCAVATION BRACING

SCALE: AS NOTED
DRAWN BY: PJC
CHECKED BY: NBY
DATE: FEBRUARY 12, 2016
JOB NO.: 2016.5037.02
DRAWING NUMBER

EX1

May 2, 2016

Mr. Dane M. Hanson, P.E.
City of Sandy Springs
7840 Roswell Road
Building 500
Sandy Springs, GA 30350

Via Email: DHanson@SandySpringsga.gov

RE: **Windsor Parkway Detention Pond Project**
Evaluation of Fill and Stone along Storm Pipe
Project No.: 2016.5037.05

Dear Mr. Hanson:

United Consulting is pleased to submit this letter concerning soil testing services at **Windsor Parkway Detention Pond Project** site. The project site was visited on April 06, 2016 and April 29, 2016 to perform hand auger with dynamic cone penetrometer (DCP) testing to evaluate the consistency of the underlying soils placed by the previous contractor on top and surrounding the installed storm pipes, and to evaluate the soils underneath the proposed concrete detention pond footing. The thickness of the rock bedding underneath the storm pipes was also measured. Lastly, soil samples were collected to determine if the existing soils within the detention pond were suitable as use as Engineered Fill material.

FIELD TESTING

On April 6, 2016, United Consulting representatives evaluated the underlying soils on top and surrounding the installed storm pipes. Most of the areas between MH-A and MH-B were covered by a tarp. Due to the significant amount of sediment on top of the tarp, the tarp was left in place and we drilled through the tarp. A hand auger was used to drill borings in select areas atop the storm water pipes were placed. These borings were drilled until the top of the pipe was encountered. A dynamic cone penetrometer (DCP) was used within each boring drilled at the subgrade elevation and at 1.0 foot intervals to record "N" values. A total of six (6) borings were performed. The DCP testing was performed in general accordance with ASTM Special Publication No. 399. Although there is no direct correlation between DCP N-values and in-place density tests, compaction can be loosely estimated. The DCP N-values to the depths tested ranged from 1 to 9 blows for 1.75 inches of penetration, indicative of loose to moderately compacted materials.

To measure the thickness of the rock bedding underneath the storm pipes, an excavator was used to dig adjacent to the storm pipe to expose the rock bedding. Two areas between MH-A and MH-

B were randomly chosen. Once the rock bedding was exposed, water immediately filled the excavated area. The following rock bedding thicknesses were measured.

Location	Rock Bedding Thickness
5' South of MH-A	Approx 3.0' below the pipe; Approx 8" top of pipe
20' South of MH-A	Approx 20" below the pipe; Approx 8" top of pipe

On April 29, 2016, United Consulting representatives evaluated the soils underlying the proposed concrete detention pond wall foundations. A hand auger and dynamic cone penetrometer (DCP) were used within each boring drilled at the subgrade elevation and at 1.0 foot intervals to record "N" values. United Consulting representatives tried to perform 2 to 3 borings along the proposed detention pond foundation footprint. However, due to borehole sidewalls caving, the borings could not penetrate deeper than 1 to 2 feet below the existing grade. We then used a probe rod to determine depths of the low consistency soils. The probe rod could be pushed to about 3 feet without much effort. As such we believe that at least the top 3 feet of the existing subgrade is of low consistency and not capable so supporting the proposed detention pond wall. Furthermore, soils being excavated at the tested areas showed very high moisture content.

LABORATORY TESTING PROGRAM

Laboratory testing for this project included two (2) natural moisture content tests and two Standard Proctor (ASTM D-698) test. The standard Proctor test curve is provided as attachment to this report. Based on the laboratory test results the maximum dry density of the soil obtained ranged from 109 to 109.2 pcf with optimum moisture content of 14.7% and 17.2%. The natural moisture content of the soils tested was 13.4% and 20.2%. Based on the laboratory test data, these soils are suitable fill material.

CONCLUSION

Based on our evaluation of the subsurface soil conditions and our past experience with similar projects, it is our opinion that the fill material used for backfill above the previously installed 24" and 36" RCP storm pipes is not properly compacted. These soils also have a moisture content much higher than the soil's optimum moisture as determined by a Standard Proctor. Based on the laboratory test data, the soils used for backfill material within the previously installed 24" and 36" RCP storm pipes are suitable fill material if the soil moisture content is adjusted to within +1% to -3% of the materials optimum moisture content. Fill material may be dried to achieve the proper moisture content. We recommend that the contractor remove fill material placed on the 24" and 36" RCP storm pipes and to re-compact the fill material to 95% of the soil's Standard Proctor maximum dry density.

The soils beneath the proposed concrete detention pond wall foundation are of low consistency and if not remediated, the wall will experience significant settlement. We recommend that the foundation soils be undercut a minimum 3 feet below the bottom of the footing elevation. However, please note that the amount of material to be undercut below the concrete detention pond wall foundation might vary in thickness due to the condition of soils once exposed, so we recommend a geotechnical engineer to be present when the excavation of the footing is taking place to help determine the limits of undercutting below the footing. The excavated area should be backfilled with surge stone placed in one foot lifts with each lift rolled in with heavy equipment. The surge stone should then be capped with a minimum of 6" layer of compacted graded aggregate base (GAB). The GAB should be compacted to 98% of the materials Modified Proctor maximum dry density. The material removed from the footing excavation may be used on areas that are "non-structural".

CLOSURE

If we can assist you further, please don't hesitate to contact our office.

Sincerely,

UNITED CONSULTING



Jay Paul Gapuzan
Project Manager, Materials Testing



Mehdi Moazzami, P.E.
Senior Geotechnical Engineer

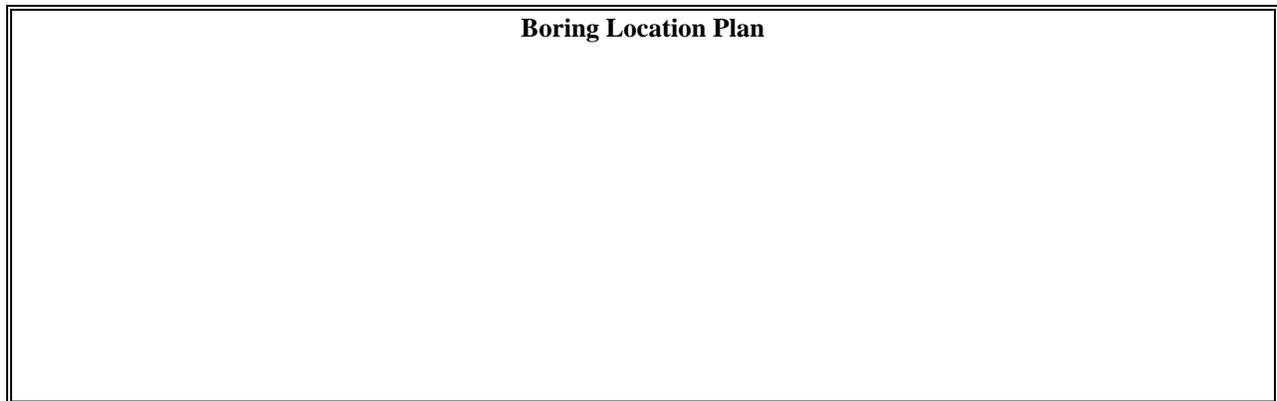
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**UNITED CONSULTING
HAND AUGER PENETROMETER BORING LOG**

Date: 04/06/2016 **Project No:** 2016.5037.05
Project Name: Windsor Parkway Detention Pond Project (HAP Testing) **Tested By:** Freddy Yohannan / Antawyn Griffin
Building No: _____ **Fill Depth:** _____

Boring #5 (From MH-B; 40' towards MH-A)			Boring #6 (From MH-B; 46' towards MH-A)		
Soil Description	Depth	"N" Values	Soil Description	Depth	"N" Values
Gray, sandy silt, muddy (Wet)	subgrade	1/1	Gray, sandy silt, muddy (Wet)	subgrade	2/1
Gray, sandy silt, muddy (Wet)	6.0"	2/2	Gray, sandy silt, muddy (Wet)	6.0"	2/2
#57 stone encountered	1.0'	(#57 stone)	#57 stone encountered	1.0'	(#57 stone)

Soil Description	Depth	"N" Values	Soil Description	Depth	"N" Values



Document Control Number: 2000-2009

I hereby acknowledge receipt of Addendum 2 for ITB #16-022 WINDSOR PARKWAY
DETENTION POND PROJECT and have incorporated the changes into my response for
the abovementioned Invitation to Bid.

COMPANY NAME: _____ CONTACT PERSON: _____

ADDRESS: _____ CITY: _____ STATE: ____ ZIP: _____

PHONE: _____ FAX: _____ EMAIL ADDRESS: _____

SIGNATURE: _____ DATE: _____

END OF ADDENDUM NUMBER 2