# CHATHAM COUNTY PURCHASING DEPARTMENT ADDENDUM NO. 1 TO BID 20-0029-7

FOR: Sharon Park Landfill Access Road Improvements

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# PLEASE SEE THE FOLLOWING ADDITIONS, CLARIFICATIONS AND/OR CHANGES:

- **QUESTION:** There is no line item for the Concrete Valley Gutter. How many linear feet will be necessary?
  - **<u>RESPONSE:</u>** The concrete valley gutter shall be 50 linear feet. See line item 13 on the enclosed revised Bid Schedule.
- **QUESTION:** Is the quantity correct for the concrete pavement, line item 7? **RESPONSE:** The line item quantity has been revised to show 550 SY on the enclosed revised Bid Schedule. The County has requested concrete for the entire 30 feet x 160 feet area. The concrete has also been revised to a 5,000 psi concrete with rebar reinforcing. See the enclosed detail.
- 3. QUESTION: What shall the length for the matted drainage swale be?

  RESPONSE: The matted drainage swale shall be 60 linear feet. See line item 12 on the attached revised Bid Schedule.
- **QUESTION:** Will the pile of concrete/brick debris remain on site? Who is responsible for the removal?
  - **RESPONSE:** Chatham County will remove or relocate the pile of concrete/brick debris prior to construction of the project.
- **OUESTION:** Will the excess cut material from grading to be stockpiled adjacent to the project?
  - **RESPONSE:** Excess cut material may be temporarily stored onsite with the appropriate erosion control BMPs. The contractor must remove and properly dispose or reuse any excess cut material prior to the completion of the project and the submission of the Notice of Termination.
- **QUESTION:** The striping line item states 4" white striping and 18" stop bars. Is this correct or will GDOT standards be needed?
  - **RESPONSE:** GDOT standards should be followed. The revised items will be 5-inch white centerline striping and 24-inch white stop bars. See the enclosed revised Bid Schedule.
- **QUESTION:** There is no line item for centerline striping. Will centerline striping be needed?
  - **RESPONSE:** Yes, centerline striping is required. Line item 14a is intended for the centerline striping.
- **8. QUESTION:** Will any clearing be necessary to provide a 30' width of roadway and shoulder?
  - **RESPONSE:** No clearing is anticipated for this project.
- **QUESTION:** Will boring logs be provided?
  - **RESPONSE:** Yes, boring logs and a location map are enclosed.
- 10. **QUESTION:** There is no line item for sampling or inspections. Where should the fee

for sampling and inspections be included?

**RESPONSE:** The sampling and inspections fee should be included in the NPDES monitoring line item 18j.

11. **QUESTION:** Could you define the limits of the Curlex 1 matting and add a bid item for it?

**RESPONSE:** Matting will extend from top bank to top bank across the width of the 4-feet-wide, 6-inches deep drainage swale conducting the curb and gutter storm water runoff to the existing drainage ditch.

- 12. QUESTION: Could a detail be provided for the container pad?

  RESPONSE: The concrete container pad will now be 30 feet wide by 160 feet long. Refer to the revised concrete paving detail enclosed.
- 13. QUESTION: Could a detail be provided for the hog wire fence?

  RESPONSE: Hog wire fence installed will match the existing fence. We estimate the existing hog wire fence is 4/5 gauge steel wire with four (4) or five (5) inch square openings.
- QUESTION: Typical sections D&E are called out on sheet 3.0. Where are the corresponding typical sections located?
   RESPONSE: Typical Sections D&E are called out on sheet 3.0 and provided on sheet 9.0 under detail 3.
- **QUESTION:** What are the limits of the 18" curb and gutter? **RESPONSE:** Refer to the roadway section details and stations for the limits of the 18inch curb and gutter. The curb and gutter will continue on section E to the corner of the concrete pad (PT 3).
- **QUESTION:** What are the limits of the 18" CPP culvert? **RESPONSE:** The 18-inch CPP culvert will begin at the proposed grate inlet to replace the flared end section and end by connecting to the existing 18-inch CPP culvert. Approximately 40 linear feet is to be installed. See the profile on sheet 6.0.
- QUESTION: Will both the Geotextile Fabric Mirafi 140N and the Geogrid Tensar TriAx TX 140 be used on this project?
   RESPONSE: Tensar TX 140 only (or approved equal or alternate, see alternate items on the Bid Schedule) should be installed in accordance with the cross sections and stationing and manufacturer's recommendations.
- **QUESTION:** Are the existing grades to be used as the new top of pavement grade? **RESPONSE:** The existing grades should be used to build the new top of pavement grades with minor adjustments to improve storm water drainage. The base bid should include the installation of a minimum of 8-inches of Graded Aggregate Base over the existing or improved subgrade.
- **19. QUESTION:** Will proposed grades be provided to determine where the cut areas are: Will a line item be added for removal of waste?
  - **RESPONSE:** The only anticipated cut areas are the expanded edges of the road, drainage swale and sediment trap. See Revised Bid Schedule items 18j and 24.
- **QUESTION:** Note #2 on Sheet 3.0 is calling for excavating 24: below design grade, but the cross section shows going on top of "existing gravel road". Which should be used for estimating?
  - **RESPONSE:** The purpose of this note is to ensure that 24-inches of cover (soil, rock or asphalt) remains over the waste disposed. See the response to item 19 above.
- 21. QUESTION: What type of turf reinforcement matting is required?

  RESPONSE: Tensar North American Green SC 250 TRM or approved equal (see Detail 1 and 5 on Sheet 9.0) unless otherwise noted (such as the drainage swale note indicating

Curlex I or approved equal).

**QUESTION:** Is #57 stone bedding required for the CPP and RCP pipe installation? Detail 12 Sheet #9 for Ductile Iron Pipe.

**RESPONSE:** Yes, #57 stone is required for both.

23. QUESTION: Is there an average width of the existing roadway and drop off areas? Response: Refer to the existing conditions.

QUESTION: Is the 24-inch cover over waste note a pre-bid requirement or a post-bid

requirement? **RESPONSE:** The 24-inch cover requirement is a post construction requirement.

25. <u>CHANGE:</u> Replace Bid Schedule with Revised Bid Schedule. Bidders must use Revised Bid Schedule.

# THE BID OPENING <u>REMAINS</u> APRIL 30, 2020 AT 2:00 P.M.

#### BIDDER IS RESPONSIBLE FOR MAKING THE NECESSARY CHANGES.

April 23, 2020

DATE

24.

MARGARET H. JOYNER PURCHASING DIRECTOR CHATHAM COUNTY

#### BID SCHEDULE-REVISED

#### CHATHAM COUNTY, GEORGIA

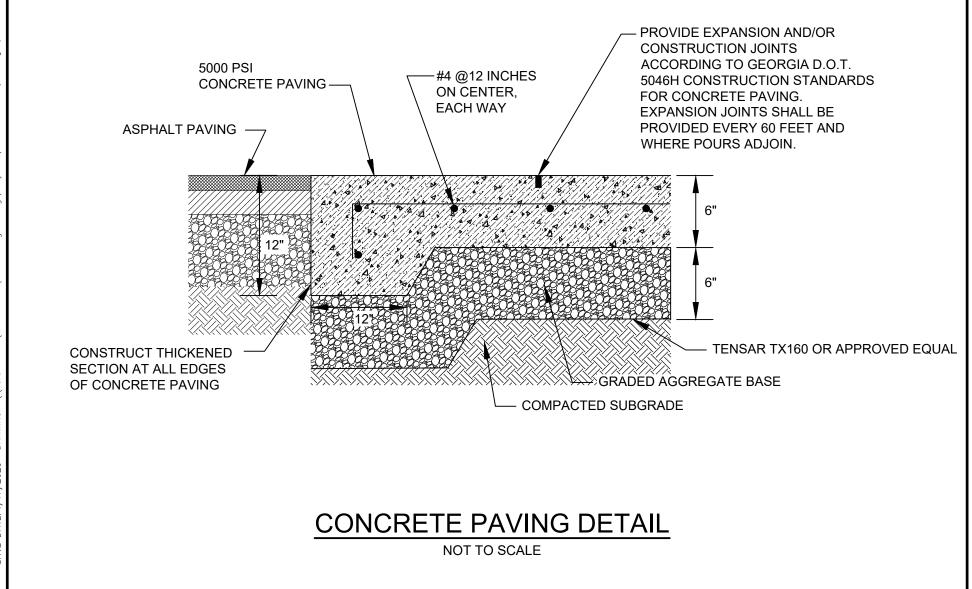
#### BID NO. 20-0029-7

#### SHARON PARK LANDFILL ACCESS ROAD IMPROVEMENTS PROJECT

# ALL WORK SHALL BE IN ACCORDANCE WITH THE BIDDING AND CONTRACT DOCUMENTS FOR THE FOLLOWING PRICE:

1.   Mobilization and Bonds   Lump Sum	ITEM NO.	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL COST
2.         Construction Staking         Lump Sum           3.         Grading         Lump Sum           4.         Tensar Triaxial TX140 Geogrid         4250 SY           5.         Graded Aggregate Base         1275 CY           6.         Asphalt Pavement         2           a.         19 mm Superpave 2-inch Thick         625 TON           b.         9.5 mm Superpave 1 1/2 inch Thick         465 TON           7.         Concrete Pavement (5,000 psi,6 inch Thick)         550 SY           8.         18 inch Concrete Curb & Gutter         920 LF           9.         15 inch RCP Culvert         48 LF           10.         18 inch CPP Culvert         40 LF           11.         Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)         2 EA           12.         Matted Drainage Swale         60 LF           13.         DOT D-33 Concrete Valley Gutter         50 LF           14.         Pavement Striping         1,000 LF           a.         5 inch White Thermoplastic Striping         1,000 LF           b.         24 inch White Thermoplastic Striping         24 LF           15.         Relocation of Signs         Lump Sum           16.         Well Prote			-	TRICE	COST
3.         Grading         Lump Sum           4.         Tensar Triaxial TX140 Geogrid         4250 SY           5.         Graded Aggregate Base         1275 CY           6.         Asphalt Pavement         25 TON           a.         19 mm Superpave 2-inch Thick         625 TON           b.         9.5 mm Superpave 1 1/2 inch Thick         465 TON           7.         Concrete Pavement (5,000 psi,6 inch Thick)         550 SY           8.         18 inch Concrete Curb & Gutter         920 LF           9.         15 inch RCP Culvert         48 LF           10.         18 inch CPP Culvert         40 LF           11.         Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)         2 EA           12.         Matted Drainage Swale         60 LF           13.         DOT D-33 Concrete Valley Gutter         50 LF           14.         Pavement Striping         1,000 LF           a.         5 inch White Thermoplastic Striping         1,000 LF           b.         24 inch White Thermoplastic Striping         1,000 LF           b.         24 inch White Thermoplastic Striping         1,000 LF           15.         Relocation of Signs         Lump Sum           16. <td></td> <td></td> <td>-</td> <td></td> <td></td>			-		
4.       Tensar Triaxial TX140 Geogrid       4250 SY         5.       Graded Aggregate Base       1275 CY         6.       Asphalt Pavement		<u> </u>	_		
5.         Graded Aggregate Base         1275 CY           6.         Asphalt Pavement         2           a.         19 mm Superpave 2-inch Thick         625 TON           b.         9.5 mm Superpave 1 1/2 inch Thick         465 TON           7.         Concrete Pavement (5,000 psi,6 inch Thick)         550 SY           8.         18 inch Concrete Curb & Gutter         920 LF           9.         15 inch RCP Culvert         88 LF           10.         18 inch CPP Culvert         40 LF           11.         Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)         2 EA           12.         Matted Drainage Swale         60 LF           13.         DOT D-33 Concrete Valley Gutter         50 LF           14.         Pavement Striping         1,000 LF           a.         5 inch White Thermoplastic Striping         1,000 LF           b.         24 inch White Thermoplastic Striping         24 LF           15.         Relocation of Signs         Lump Sum           16.         Well Protection Fences         3 EA           17.         Remove and Relocate Hogwire Fence         165 LF           18.         Erosion and Sediment Control           a.         Non-Sensitiv			_		
6. Asphalt Pavement       a. 19 mm Superpave 2-inch Thick       625 TON         b. 9.5 mm Superpave 1 1/2 inch Thick       465 TON         7. Concrete Pavement (5,000 psi,6 inch Thick)       550 SY         8. 18 inch Concrete Curb & Gutter       920 LF         9. 15 inch RCP Culvert       88 LF         10. 18 inch CPP Culvert       40 LF         11. Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)       2 EA         12. Matted Drainage Swale       60 LF         13. DOT D-33 Concrete Valley Gutter       50 LF         14. Pavement Striping       1,000 LF         a. 5 inch White Thermoplastic Striping       1,000 LF         b. 24 inch White Thermoplastic Striping       24 LF         15. Relocation of Signs       Lump Sum         16. Well Protection Fences       3 EA         17. Remove and Relocate Hogwire Fence       165 LF         18. Erosion and Sediment Control       a. Non-Sensitive Area Silt Fence       2000 LF         b. Sensitive Area Silt Fence       1000 LF         b. Sensitive Area Silt Fence       1000 LF         c. Hay Bale Check Dam       4 EA         Diversion Berm, including Channel       4 EA         d. Protection       4 SA         g. Inlet Protection (9-inch Rip-Rap)			<del>-</del>		
a. 19 mm Superpave 2-inch Thick b. 9.5 mm Superpave 1 1/2 inch Thick 7. Concrete Pavement (5,000 psi,6 inch Thick) 550 SY 8. 18 inch Concrete Curb & Gutter 920 LF 9. 15 inch RCP Culvert 10. 18 inch CPP Culvert 11. Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010) 12. Matted Drainage Swale 13. DOT D-33 Concrete Valley Gutter 14. Pavement Striping 1a. 5 inch White Thermoplastic Striping 1b. 24 inch White Thermoplastic Striping 1c. Well Protection Fences 15. Relocation of Signs 16. Well Protection Fences 17. Remove and Relocate Hogwire Fence 18. Erosion and Sediment Control 18. Erosion and Sediment Control 20. Hay Bale Check Dam 21. Diversion Berm, including Channel 22. Lump Sum 23. Signal 24. Construction Exit 25. Lump Sum 26. Lump Sum 27. Lump Sum 28. Construction Exit 29. Lump Sum 29. Lump Sum 29. Lump Sum 20. Lump Sum					
b. 9.5 mm Superpave 1 1/2 inch Thick 465 TON 7. Concrete Pavement (5,000 psi,6 inch Thick) 550 SY 8. 18 inch Concrete Curb & Gutter 920 LF 9. 15 inch RCP Culvert 40 LF 10. 18 inch CPP Culvert 40 LF 11. Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010) 2 EA 12. Matted Drainage Swale 60 LF 13. DOT D-33 Concrete Valley Gutter 50 LF 14. Pavement Striping a. 5 inch White Thermoplastic Striping 1,000 LF b. 24 inch White Thermoplastic Striping 24 LF 15. Relocation of Signs Lump Sum 16. Well Protection Fences 3 EA 17. Remove and Relocate Hogwire Fence 165 LF 18. Erosion and Sediment Control a. Non-Sensitive Area Silt Fence 2000 LF b. Sensitive Area Silt Fence 2000 LF c. Hay Bale Check Dam 4 EA Diversion Berm, including Channel d. Protection d. Protection e. Construction Exit Lump Sum f. Outlet Protection (9-inch Rip-Rap) 13 SY g. Inlet Protection 3 EA h. Rip Rap 30 SY i. Grassing Lump Sum		•	625 TON		
7.         Concrete Pavement (5,000 psi,6 inch Thick)         550 SY           8.         18 inch Concrete Curb & Gutter         920 LF           9.         15 inch RCP Culvert         40 LF           10.         18 inch CPP Culvert         40 LF           11.         Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)         2 EA           12.         Matted Drainage Swale         60 LF           13.         DOT D-33 Concrete Valley Gutter         50 LF           14.         Pavement Striping         1,000 LF           a.         5 inch White Thermoplastic Striping         1,000 LF           b.         24 inch White Thermoplastic Striping         24 LF           15.         Relocation of Signs         Lump Sum           16.         Well Protection Fences         3 EA           17.         Remove and Relocate Hogwire Fence         165 LF           18.         Erosion and Sediment Control           a.         Non-Sensitive Area Silt Fence         2000 LF           b.         Sensitive Area Silt Fence         2000 LF           c.         Hay Bale Check Dam         4 EA           Diversion Berm, including Channel         d.         Protection         430 LF		1 1	<del>-</del>		
8.       18 inch Concrete Curb & Gutter       920 LF         9.       15 inch RCP Culvert       88 LF         10.       18 inch CPP Culvert       40 LF         11.       Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)       2 EA         12.       Matted Drainage Swale       60 LF         13.       DOT D-33 Concrete Valley Gutter       50 LF         14.       Pavement Striping       1,000 LF         a.       5 inch White Thermoplastic Striping       1,000 LF         b.       24 inch White Thermoplastic Striping       24 LF         15.       Relocation of Signs       Lump Sum         16.       Well Protection Fences       3 EA         17.       Remove and Relocate Hogwire Fence       165 LF         18.       Erosion and Sediment Control         a.       Non-Sensitive Area Silt Fence       2000 LF         b.       Sensitive Area Silt Fence       2000 LF         c.       Hay Bale Check Dam       4 EA         Diversion Berm, including Channel       430 LF         e.       Construction Exit       Lump Sum         f.       Outlet Protection       3 EA         h.       Rip Rap       30 SY		1 1	<del>-</del>		
9.       15 inch RCP Culvert       40 LF         10.       18 inch CPP Culvert       40 LF         11.       Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)       2 EA         12.       Matted Drainage Swale       60 LF         13.       DOT D-33 Concrete Valley Gutter       50 LF         14.       Pavement Striping       1,000 LF         a.       5 inch White Thermoplastic Striping       24 LF         15.       Relocation of Signs       Lump Sum         16.       Well Protection Fences       3 EA         17.       Remove and Relocate Hogwire Fence       165 LF         18.       Erosion and Sediment Control         a.       Non-Sensitive Area Silt Fence       2000 LF         b.       Sensitive Area Silt Fence       2000 LF         c.       Hay Bale Check Dam       4 EA         Diversion Berm, including Channel       430 LF         e.       Construction Exit       Lump Sum         f.       Outlet Protection (9-inch Rip-Rap)       13 SY         g.       Inlet Protection       3 EA         h.       Rip Rap       30 SY         i.       Grassing		* * * * * * * * * * * * * * * * * * * *	<del>-</del>		
10.       18 inch CPP Culvert       40 LF         11.       Grate Inlet with Hood, Precast Structure, and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)       2 EA         12.       Matted Drainage Swale       60 LF         13.       DOT D-33 Concrete Valley Gutter       50 LF         14.       Pavement Striping       1,000 LF         a.       5 inch White Thermoplastic Striping       24 LF         b.       24 inch White Thermoplastic Striping       24 LF         15.       Relocation of Signs       Lump Sum         16.       Well Protection Fences       3 EA         17.       Remove and Relocate Hogwire Fence       165 LF         18.       Erosion and Sediment Control         a.       Non-Sensitive Area Silt Fence       1000 LF         b.       Sensitive Area Silt Fence       2000 LF         c.       Hay Bale Check Dam       4 EA         Diversion Berm, including Channel       430 LF         e.       Construction Exit       Lump Sum         f.       Outlet Protection (9-inch Rip-Rap)       13 SY         g.       Inlet Protection       3 EA         h.       Rip Rap       30 SY         i.       Grassing			<del>-</del>		
And 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)  12. Matted Drainage Swale  13. DOT D-33 Concrete Valley Gutter  14. Pavement Striping  a. 5 inch White Thermoplastic Striping  b. 24 inch White Thermoplastic Striping  15. Relocation of Signs  16. Well Protection Fences  17. Remove and Relocate Hogwire Fence  18. Erosion and Sediment Control  a. Non-Sensitive Area Silt Fence  b. Sensitive Area Silt Fence  1000 LF  c. Hay Bale Check Dam  Diversion Berm, including Channel  d. Protection  e. Construction Exit  f. Outlet Protection (9-inch Rip-Rap)  g. Inlet Protection  h. Rip Rap  i. Grassing  1.000 LF	10.		40 LF		
and 6 inch minimum #57 Stone Base (Georgia DOT Standard 1010)  12. Matted Drainage Swale 13. DOT D-33 Concrete Valley Gutter 14. Pavement Striping 15. Relocation of Signs 16. Well Protection Fences 17. Remove and Relocate Hogwire Fence 18. Erosion and Sediment Control 18. Erosion and Sediment Control 20. Hay Bale Check Dam 21. Diversion Berm, including Channel 22. EA 23. EA 24. Inch White Thermoplastic Striping 24 LF 25. Relocation of Signs 26. Lump Sum 27. Remove and Relocate Hogwire Fence 28. Erosion and Sediment Control 29. Erosion and Sediment Control 20. Anon-Sensitive Area Silt Fence 20. Hay Bale Check Dam 20. Erosion Berm, including Channel 20. Protection 20. Construction Exit 20. Lump Sum 20. Inlet Protection (9-inch Rip-Rap) 20. Inlet Protection 20. Sensitive Area 20. Sens	11.	Grate Inlet with Hood, Precast Structure.	_		
12. Matted Drainage Swale 13. DOT D-33 Concrete Valley Gutter 14. Pavement Striping a. 5 inch White Thermoplastic Striping b. 24 inch White Thermoplastic Striping 15. Relocation of Signs 16. Well Protection Fences 17. Remove and Relocate Hogwire Fence 18. Erosion and Sediment Control a. Non-Sensitive Area Silt Fence b. Sensitive Area Silt Fence 1000 LF c. Hay Bale Check Dam Diversion Berm, including Channel d. Protection e. Construction Exit f. Outlet Protection (9-inch Rip-Rap) g. Inlet Protection 1000 LF 13 SY 13 SY 13 SY 15 Grassing 16 Lump Sum 17 SENSITY STRIP STRIP SUM 18 SOLF 19 SOLF 1		· · · · · · · · · · · · · · · · · · ·			
13. DOT D-33 Concrete Valley Gutter  14. Pavement Striping  a. 5 inch White Thermoplastic Striping  b. 24 inch White Thermoplastic Striping  15. Relocation of Signs  16. Well Protection Fences  17. Remove and Relocate Hogwire Fence  18. Erosion and Sediment Control  a. Non-Sensitive Area Silt Fence  b. Sensitive Area Silt Fence  1000 LF  c. Hay Bale Check Dam  Diversion Berm, including Channel  d. Protection  4 EA  Diversion Exit  Construction Exit  Duel Protection (9-inch Rip-Rap)  g. Inlet Protection  3 EA  h. Rip Rap  i. Grassing  1,000 LF  1000 LF  10		(Georgia DOT Standard 1010)	2 EA		
14. Pavement Striping a. 5 inch White Thermoplastic Striping b. 24 inch White Thermoplastic Striping 15. Relocation of Signs 16. Well Protection Fences 17. Remove and Relocate Hogwire Fence 18. Erosion and Sediment Control a. Non-Sensitive Area Silt Fence 1000 LF b. Sensitive Area Silt Fence c. Hay Bale Check Dam Diversion Berm, including Channel d. Protection 430 LF e. Construction Exit f. Outlet Protection (9-inch Rip-Rap) 13 SY g. Inlet Protection 3 EA h. Rip Rap 30 SY i. Grassing 1,000 LF			60 LF		
a. 5 inch White Thermoplastic Striping b. 24 inch White Thermoplastic Striping 15. Relocation of Signs 16. Well Protection Fences 17. Remove and Relocate Hogwire Fence 18. Erosion and Sediment Control a. Non-Sensitive Area Silt Fence b. Sensitive Area Silt Fence 1000 LF c. Hay Bale Check Dam Diversion Berm, including Channel d. Protection e. Construction Exit f. Outlet Protection (9-inch Rip-Rap) g. Inlet Protection h. Rip Rap i. Grassing 1,000 LF 1	13.	DOT D-33 Concrete Valley Gutter	50 LF		
b. 24 inch White Thermoplastic Striping 15. Relocation of Signs 16. Well Protection Fences 17. Remove and Relocate Hogwire Fence 18. Erosion and Sediment Control 18. Erosion and Sediment Control 20. A Non-Sensitive Area Silt Fence 2000 LF	14.	Pavement Striping	_		
15. Relocation of Signs  16. Well Protection Fences  17. Remove and Relocate Hogwire Fence  18. Erosion and Sediment Control  a. Non-Sensitive Area Silt Fence  b. Sensitive Area Silt Fence  c. Hay Bale Check Dam  Diversion Berm, including Channel  d. Protection  e. Construction Exit  f. Outlet Protection (9-inch Rip-Rap)  g. Inlet Protection  h. Rip Rap  i. Grassing  Lump Sum  1000 LF  2000 LF  4 EA  Lump Sum  13 SY  3 EA  13 SY  Lump Sum  14 SY  30 SY  Lump Sum  15 Osymptotic Sum  16 Lump Sum  17 Sy  18 Lump Sum  18 Lump Sum  19 Lump Sum  10 Sy  10 Lump Sum  10 Lump Sum  11 Lump Sum  12 Lump Sum  13 Lump Sum  14 Lump Sum  15 Lump Sum  16 Lump Sum  17 Lump Sum  18 Lump Sum	a.	1 0	1,000 LF		
16. Well Protection Fences 3 EA  17. Remove and Relocate Hogwire Fence 165 LF  18. Erosion and Sediment Control  a. Non-Sensitive Area Silt Fence 1000 LF  b. Sensitive Area Silt Fence 2000 LF  c. Hay Bale Check Dam 4 EA  Diversion Berm, including Channel  d. Protection 430 LF  e. Construction Exit Lump Sum  f. Outlet Protection (9-inch Rip-Rap) 13 SY  g. Inlet Protection 3 EA  h. Rip Rap 30 SY  i. Grassing Lump Sum	b.	1 1 5	24 LF		
17. Remove and Relocate Hogwire Fence  18. Erosion and Sediment Control  a. Non-Sensitive Area Silt Fence  b. Sensitive Area Silt Fence  c. Hay Bale Check Dam  Diversion Berm, including Channel  d. Protection  e. Construction Exit  f. Outlet Protection (9-inch Rip-Rap)  g. Inlet Protection  h. Rip Rap  i. Grassing  1000 LF  2000 LF  4 EA  Lump Sum  4 EA  Lump Sum  13 SY  30 SY  Lump Sum  Lump Sum  Lump Sum	15.	Relocation of Signs	Lump Sum		
18. Erosion and Sediment Control  a. Non-Sensitive Area Silt Fence 1000 LF  b. Sensitive Area Silt Fence 2000 LF  c. Hay Bale Check Dam 4 EA Diversion Berm, including Channel  d. Protection 430 LF  e. Construction Exit Lump Sum  f. Outlet Protection (9-inch Rip-Rap) 13 SY  g. Inlet Protection 3 EA  h. Rip Rap 30 SY  i. Grassing Lump Sum	16.	Well Protection Fences	3 EA		
a. Non-Sensitive Area Silt Fence 1000 LF b. Sensitive Area Silt Fence 2000 LF c. Hay Bale Check Dam 4 EA Diversion Berm, including Channel d. Protection 430 LF e. Construction Exit Lump Sum f. Outlet Protection (9-inch Rip-Rap) 13 SY g. Inlet Protection 3 EA h. Rip Rap 30 SY i. Grassing Lump Sum	17.	Remove and Relocate Hogwire Fence	165 LF		
b. Sensitive Area Silt Fence 2000 LF c. Hay Bale Check Dam 4 EA Diversion Berm, including Channel d. Protection 430 LF e. Construction Exit Lump Sum f. Outlet Protection (9-inch Rip-Rap) 13 SY g. Inlet Protection 3 EA h. Rip Rap 30 SY i. Grassing Lump Sum	18.	Erosion and Sediment Control	_		
c. Hay Bale Check Dam Diversion Berm, including Channel  d. Protection 430 LF e. Construction Exit Lump Sum f. Outlet Protection (9-inch Rip-Rap) g. Inlet Protection h. Rip Rap i. Grassing  4 EA  430 LF  Lump Sum  3 SY  4 EA  430 LF  Lump Sum	a.	Non-Sensitive Area Silt Fence	1000 LF		
Diversion Berm, including Channel d. Protection 430 LF e. Construction Exit Lump Sum f. Outlet Protection (9-inch Rip-Rap) 13 SY g. Inlet Protection 3 EA h. Rip Rap 30 SY i. Grassing Lump Sum	b.		2000 LF		
d. Protection 430 LF e. Construction Exit Lump Sum f. Outlet Protection (9-inch Rip-Rap) 13 SY g. Inlet Protection 3 EA h. Rip Rap 30 SY i. Grassing Lump Sum	c.	•	4 EA		
e. Construction Exit  f. Outlet Protection (9-inch Rip-Rap)  g. Inlet Protection  h. Rip Rap  i. Grassing  Lump Sum  13 SY  30 SY  Lump Sum	1		420 I E		
f. Outlet Protection (9-inch Rip-Rap)  g. Inlet Protection  h. Rip Rap  i. Grassing  13 SY  3 EA  Lump Sum			<del>-</del>		
g. Inlet Protection 3 EA h. Rip Rap 30 SY i. Grassing Lump Sum			-		
h. Rip Rap 30 SY i. Grassing Lump Sum		• • • • • • • • • • • • • • • • • • • •	<del>-</del>		
i. Grassing Lump Sum	_		<del>-</del>		
· <u> </u>			<del>-</del>		
J. Sediment Trap Lump Sum		_	-		
	J.	Seaiment Trap	Lump Sum _		

k.	NPDES Monitoring	3 Months				
			TOTAL	BID:		
ALTER	NATE, IF REQUESTED BY THE COUNTY					
19.	DEDUCT: Nyloplast Structure with 2ft x3ft H20 Rated with Low Hood and 8-inch Thick Concrete Collar (Extending 18 inches in all directions)	2 EA	(	)	(	)
20. 21.	DEDUCT: Remove and Reuse Existing Gravel for Graded Aggregate Base DEDUCT: GDOT Standard Crushed Concrete	Lump Sum	(	)		)
21.	GAB (Section 815) in lieu of crushed stone GAB	1275 CY	(	)_	_(	)
22.	Mirafi RS580i Woven Geosynthetics or Approved Equal in lieu of Triaxial Geogrid	4250 SY				
23.	Tensar Triaxial TX5 Geogrid	4250 SY				
24.	Removal and Disposal of Waste	40 CY				
	MS REQUESTING TO DO BUSINESS WITH CH R ON-LINE AT HTTP://PURCHASING.CHATH			ST		
NAME/TI	ГLЕ					
COMPAN	Y NAME					
ADDRESS	<u> </u>					
CITY/STA	TE/ZIP					
PHONE/FA	AX NUMBER					
EMAIL						
WEBSITE						



FIGURE

1.0

1 OF 1

ACCESS ROAD IMPROVEMENTS

REVISED CONCRETE PAVING DETAIL

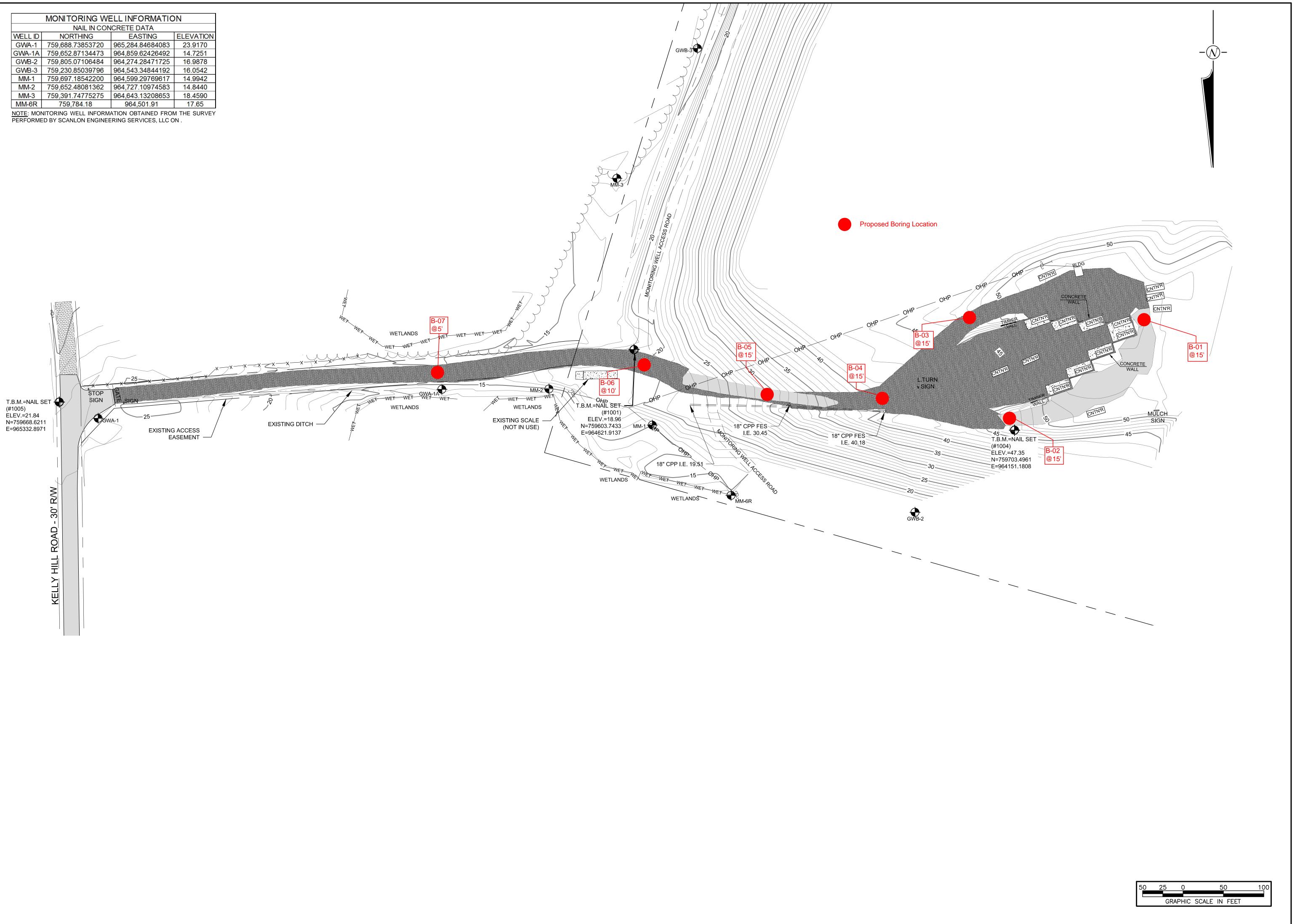
CHATHAM COUNTY BOARD OF COMMISSIONERS

SHARON PARK LANDFILL



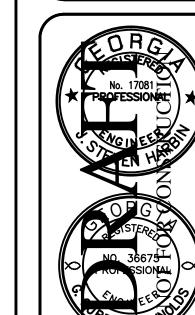


41 West Johnston Street Forsyth, Georgia 31029 Phone (478) 992-9122



NEERING,





CHATHAM COUNTY BOARD OF COMMISSIONERS SHARON PARK LANDFILL PERMIT NO. 025-057D(L)

CLOSURE PLAN MODIFICATION: ACCESS ROAD

0-460-2.0 2 OF 9



Project Name:

# **Sharon Park Landfill Improvements**

Client:

**Chatham County** 

Project No:

1705-041-01

Driller: Whitiker Laboratory, Inc.

Date: 3/31/2014

Ground Surface Elevation: **N/A** GW Elev: **No W.T.** 

# **BORING B-1**

Depth	Soil Description	SS ID	0" - 6"	6"-12"	12"-18"	N
0.0 - 0.5	9 inches of <b>GRAVEL</b>		10			
0.5 - 1.0	Stiff tan-brown fine sandy CLAY (CL)	SS-1		8		14
1.0 - 1.5					6	14
1.5 - 2.0	Stiff dark brown fine sandy <b>CLAY (CL)</b>		8			
2.0 - 2.5		SS-2		10		20
2.5 - 3.0					10	20
3.0 - 3.5						
3.5 - 4.0	Medium stiff brown silty CLAY (CL)					
4.0 - 4.5			4			
4.5 - 5.0		SS-3		4		9
5.0 - 5.5					5	9
5.5 - 6.0						
6.0 - 6.5	Stiff tan-gray fine sandy <b>CLAY (CL)</b>					
6.5 - 7.0			2		•	
7.0 -7.5		SS-4		4		11
7.5 - 8.0					7	11
8.0 - 8.5						
8.5 - 9.0	Medium stiff tan silty CLAY (CL)			•		
9.0 - 9.5			2			
9.5 - 10.0		SS-5		2		5
10.0 - 10.5					3	
10.5 - 11.0						
11.0 - 11.5						
11.5 - 12.0						
12.0 - 12.5						
12.5 - 13.0						
13.0 - 13.5	Dense dark brown fine to medium silty SAND (SM) with					
13.5 - 14.0	waste					
14.0 - 14.5			14			
14.5 - 15.0		SS-6		15		43
15.0 - 15.5					28	43



Project Name:

# **Sharon Park Landfill Improvements**

Date: **3/31/2014** 

Client:

**Chatham County** 

Project No:

1705-041-01

Driller: Whitiker Laboratory, Inc.

Ground Surface Elevation: **N/A** GW Elev: **No W.T.** 

# **BORING B-2**

Depth	Soil Description	SS ID	0" - 6"	6"-12"	12"-18"	N
0.0 - 0.5	8 inches of <b>GRAVEL</b>		7			
0.5 - 1.0	Stiff tan-brown fine sandy <b>CLAY (CL)</b>	SS-1		7		14
1.0 - 1.5					7	14
1.5 - 2.0	Stiff dark brown fine sandy <b>SILT (ML)</b>		5			
2.0 - 2.5		SS-2		6		12
2.5 - 3.0					6	12
3.0 - 3.5						
3.5 - 4.0			T			
4.0 - 4.5			5			
4.5 - 5.0		SS-3		6		11
5.0 - 5.5					5	
5.5 - 6.0						
-	Stiff dark brown fine sandy <b>CLAY (CL)</b>		T	1		
6.5 - 7.0			5		I i	
7.0 -7.5		SS-4		7		14
7.5 - 8.0					7	
8.0 - 8.5						
	Medium stiff tan-gray fine sandy <b>CLAY (CL)</b>		T _	ı		
9.0 - 9.5			3		1	
9.5 - 10.0		SS-5		3		9
10.0 - 10.5					6	
10.5 - 11.0						
11.0 - 11.5						
11.5 - 12.0						
12.0 - 12.5						
12.5 - 13.0						
	Medium dark brown fine to medium silty SAND (SM)					
	with waste		l 7			
14.0 - 14.5		SS 6	7	10		
14.5 - 15.0		SS-6		10	15	25
15.0 - 15.5					15	



Project Name:

# **Sharon Park Landfill Improvements**

Client:

**Chatham County** 

Project No:

1705-041-01

Driller: Whitiker Laboratory, Inc.

Ground Surface Elevation: N/A

Date: 3/31/2014

GW Elev: No W.T.

# **BORING B-3**

Depth	Soil Description	SS ID	0" - 6"	6"-12"	12"-18"	N
0.0 - 0.5	4 inches of <b>GRAVEL</b>		5			
0.5 - 1.0	Stiff brown-orange fine sandy CLAY (CL)	SS-1		5		12
1.0 - 1.5					7	12
1.5 - 2.0	Stiff brown-gray fine sandy <b>CLAY (CL)</b>		6		•	
2.0 - 2.5		SS-2		8		20
2.5 - 3.0					12	20
3.0 - 3.5						
3.5 - 4.0	Medium-stiff tan-brown silty CLAY (CL)					
4.0 - 4.5			3			
4.5 - 5.0		SS-3		3		9
5.0 - 5.5					6	
5.5 - 6.0						
6.0 - 6.5	Stiff orange-red fine sandy CLAY (CL)					
6.5 - 7.0			6		i	
7.0 -7.5		SS-4		8		20
7.5 - 8.0					12	
8.0 - 8.5						
8.5 - 9.0	Medium tan fine to coarse silty SAND (SM)		T	1		
9.0 - 9.5			7			
9.5 - 10.0		SS-5		8		15
10.0 - 10.5	1				7	
10.5 - 11.0	4					
11.0 - 11.5	4					
11.5 - 12.0	4					
12.0 - 12.5	4					
12.5 - 13.0						
	Dense dark-brown fine to medium silty SAND (SM) with					
13.5 - 14.0						
14.0 - 14.5			7		ı	
14.5 - 15.0		SS-6		9		30
15.0 - 15.5					21	



Project Name:

# **Sharon Park Landfill Improvements**

Client:

**Chatham County** 

Project No:

1705-041-01

Driller: Whitiker Laboratory, Inc.

Date: **3/31/2014** 

Ground Surface Elevation: **N/A** 

GW Elev: No W.T.

# **BORING B-4**

Depth	Soil Description	SS ID	0" - 6"	6"-12"	12"-18"	N
0.0 - 0.5	4.5 inches of <b>GRAVEL</b>		10			
0.5 - 1.0	Hard brown fine sandy SILT (ML)	SS-1		15		35
1.0 - 1.5					20	33
1.5 - 2.0			15			
2.0 - 2.5		SS-2		20		35
2.5 - 3.0					15	33
3.0 - 3.5						
3.5 - 4.0	Medium dark brown fine to medium silty SAND (SM)					
4.0 - 4.5	with waste		15			
4.5 - 5.0		SS-3		17		27
5.0 - 5.5					10	21
5.5 - 6.0						
6.0 - 6.5	Dense tan-gray fine to medium silty <b>SAND (SM) with</b>					
6.5 - 7.0	waste		10		•	
7.0 -7.5		SS-4		18		41
7.5 - 8.0					23	7.
8.0 - 8.5						
8.5 - 9.0			1	1		
9.0 - 9.5			9		İ	
9.5 - 10.0		SS-5		20		40
10.0 - 10.5					20	10
10.5 - 11.0						
11.0 - 11.5						
11.5 - 12.0						
12.0 - 12.5						
12.5 - 13.0						
	Medium dark brown fine to medium silty <b>SAND (SM)</b>					
	with waste					
14.0 - 14.5			8			
14.5 - 15.0		SS-6		11		27
15.0 - 15.5					16	



Project Name:

# **Sharon Park Landfill Improvements**

Client:

**Chatham County** 

Project No:

1705-041-01

Driller: Whitiker Laboratory, Inc.

Ground Surface Elevation: N/A

Date: 3/31/2014

GW Elev: No W.T.

#### **BORING B-5**

Depth	Soil Description	SS ID	0" - 6"	6"-12"	12"-18"	N
0.0 - 0.5	2 inches of <b>ASPHALT PAVEMENT</b> , 5 inches of <b>GRAVEL</b>		15			
0.5 - 1.0	Very dense dark brown fine to medium silty SAND (SM)	SS-1		25		57
1.0 - 1.5	with trace waste				32	37
1.5 - 2.0	Dense to very dense dark brown fine to medium silty		10			
2.0 - 2.5	SAND (SM) with waste	SS-2		20		44
2.5 - 3.0					24	44
3.0 - 3.5						
3.5 - 4.0						
4.0 - 4.5			8			
4.5 - 5.0		SS-3		15		40
5.0 - 5.5					25	40
5.5 - 6.0						
6.0 - 6.5						
6.5 - 7.0			15			
7.0 -7.5		SS-4		23		56
7.5 - 8.0					33	30
8.0 - 8.5						
8.5 - 9.0						
9.0 - 9.5			50			
9.5 - 10.0		SS-5		50		100
10.0 - 10.5					50	100
10.5 - 11.0						
11.0 - 11.5						
11.5 - 12.0						
	Medium stiff tan-gray fine sandy CLAY (CL)					
12.5 - 13.0						
13.0 - 13.5						
13.5 - 14.0						
14.0 - 14.5			4			
14.5 - 15.0		SS-6		4		8
15.0 - 15.5					4	0



Project Name:

# **Sharon Park Landfill Improvements**

Client:

**Chatham County** 

Project No:

1705-041-01

Driller: Whitiker Laboratory, Inc.

GW Elev: No W.T.

Date: **3/31/2014** 

# **BORING B-6**

Ground Surface Elevation: N/A

Depth	Soil Description	SS ID	0" - 6"	6"-12"	12"-18"	N
0.0 - 0.5	2 inches of <b>ASPHALT PAVEMENT</b> , 7 inches of <b>GRAVEL</b>		15			
0.5 - 1.0	Dense dark brown fine to medium silty SAND (SM) with	SS-1		15		38
1.0 - 1.5	trace waste				23	38
1.5 - 2.0	Medium dark brown fine to medium silty SAND (SM)		10			
2.0 - 2.5	with waste	SS-2		13		28
2.5 - 3.0					15	20
3.0 - 3.5						
3.5 - 4.0	Very loose dark brown fine to medium silty <b>SAND (SM)</b>					
4.0 - 4.5	with waste		1			
4.5 - 5.0		SS-3		2		3
5.0 - 5.5					1	3
5.5 - 6.0						
6.0 - 6.5	Medium gray fine to medium clayey SAND (SC)					
6.5 - 7.0			5			
7.0 -7.5		SS-4		5		13
7.5 - 8.0					8	13
8.0 - 8.5						
8.5 - 9.0	Stiff tan-gray fine to medium sandy CLAY (CL)					
9.0 - 9.5			5			
9.5 - 10.0		SS-5		7		15
10.0 - 10.5					8	13



HARBIN ENGINEERING, P.C. 1660 Old Atlanta Highway Forsyth, Georgia 31029 Project Name:

# **Sharon Park Landfill Improvements**

Client:

#### **Chatham County**

Project No:

1705-041-01

Driller: Whitiker Laboratory, Inc.

Date: 3/31/2014

Ground Surface Elevation: **N/A** GW Elev: **No W.T.** 

# **BORING B-7**

Depth	Soil Description	SS ID	0" - 6"	6"-12"	12"-18"	N
0.0 - 0.5	8.0 inches of <b>GRAVEL</b>					
0.5 - 1.0	fine to medium red-brown silty SAND (SM)	SS-1				0
1.0 - 1.5						U
1.5 - 2.0	fine to medium brown silty SAND (SM)				-	
2.0 - 2.5		SS-2				0
2.5 - 3.0						U
3.0 - 3.5						
3.5 - 4.0	fine to medium tan-brown silty SAND (SM)					
4.0 - 4.5						
4.5 - 5.0		SS-3				0
5.0 - 5.5						כ

# WHITAKER LABORATORY INC.

#### P.O. BOX 7078 SAVANNAH, GEORGIA 31418

PROJECT	NAM	IE K	ofin	Yolk	Sharan Pork land Fill DATE }	31-14
PROJECT						
			N 41 15 15 11 11 11 11 11 11 11 11 11 11 11		2 FIELD ENGINEER Ron WILLIE	
GROUND				100	GROUND WATER ELEV. AND	i a 75
SAMPLE NO.	SAN FROM	MPLE TO		ATUM TO	VISUAL FIELD CLASSIFICATION	BLOWS/ FOOT
B.1			0	91	9n Rocks	
1	0 -	15	9n	3.5	BRown Sand Clay	108-6
7	15	3			1' 7'	Q 10 10
7	15	5	3.5	6	BRown Clay X	445
Ý	65	8	6	13	gray Cay	247
Ś	9	145			1. 11	223
6	14	15.5	13	1535	BROWN Clay orange	141558
n 2						
/>					8in Rocks	(L)
1	0-	15	(0)	100	BROWN Good de Vy Rubbish	777
7	15	2	16	6	Rhawn cly	566
3	45	5			/	5.65
1	65	S	6	85	Blown Sand Clas & Rubbish	E and was
5	9	) Y	8	13	gray clay	334
6	141	55	13	155	Flac brown Sand y wood	7/6/5
					·	
						1

#### WHITAKER LABORATORY INC.

#### P.O. BOX 7078 SAVANNAH, GEORGIA 31418

					R Showon Park land Fill DATEZ-	31.14
PROJECT	LOC	ATIO	N	6000	len aty	
BORING N	IMU	BER	R3	10	SY FIELD ENGINEER ROMANICA	
GROUND	SURI	FACE	ELEV		GROUND WATER ELEV.	wT
SAMPLE NO.	SAN FROM	MPLE I TO		ATUM TO	VISUAL FIELD CLASSIFICATION	BLOWS/ FOOT
R3					4in Rocks	
)	0	7	4,1	1.5	Boloun orane Gard Clay	5.57
7	1.5	3	1.5	3.5	KRown Sand Clay	6.8/2
3	14	14	3.5	6	Gran day	336
ý	65	Y	6	85	Atante May	6812
3	91	20	8-5	13	Fini Tan Sand	7.87
6	141	15	13	15.5	Free bour SIMY sondy Trash	7.921
						and
BY					4/2 in Rocks	WT
1	7	11	(19)	15	Marin Sand Clay	141520
7	15	3	15	25	Free brown Sonil	152015
5	dr	Y	2 5	05	Firehour Sand Sound & Tragh	151770
G	65	17	_ X X.	38 2	11 11	181833
6	0	1.0	85	13	and declarated	97020
À	141	KT		15.05	Fine bour Sayl & Josh	1 20
	1	3/3	-7 X	1 8000	TIME SINGLE SONE TRANS	

#### WHITAKER LABORATORY INC.

#### P.O. BOX 7078 SAVANNAH, GEORGIA 31418

PROJECT	NAM	IE_/	BoRin	· Fol	2 Sharan Park lander   DATE	3-87 14
PROJECT	LOC	ATIO	N /	Ford -	- GAY GO	**
BORING N	NUM	BER	KK	- 1R	6 FIELD ENGINEER ROMANIKUS	1
GROUND					GROUND WATER ELEV.	
SAMPLE NO.	SA! FROM	MPLE I TO		ATUM TO	VISUAL FIELD CLASSIFICATION	BLOWS/ FOOT
13.5					2 in ASDA SUM POCKS	
1	0	35	7.	12	Fine hour Sandy 70056	14.518
2	1.5	3		1	1.5 17	1020 24
3	93	Y			1 1/	81525
Ý	6	5 8			7 17	152333
V	9	14			4 × 4 /	501
6	141	17	12	155	Sters Carry Sand	4.4.4
	8 8					
136					2 in ASDL Fin Rocks	W8.5)
-	0	15	9,	ber	Fine boun Soud sulf Trash	101523
2	15	3			1' 1	1013 15
3	¥	5			1: 11	17.1
	65	Y	GFT	55	Fine Ton Soul	8.2-2
7	C/	lox	85	65	gay day	678
137					Bin Rocks	10 m
			8.6	200	Fine Grove Sand & Bricks	2
			2	3.5	Fine beaux Sond	
			7.5	5	Frac Tan Sand	