PIMA COUNTY PROCUREMENT DEPARTMENT
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Mary Jo Furphy
Procurement Director

December 6, 2019

AMENDMENT NO. TWO (2)

IFB-PO-2000052; INA ROAD CONSTRUCTION DEBRIS LANDFILL PHASE 1 – CLOSURE (2INARD)

Be advised of the following changes, clarifications and/or additions to the above-referenced Solicitation as stated in the following Amendment.

SOLICITATION DUE DATE:
The Bid Due Date has been changed to **Tuesday, December 17, 2019 at 3:00, Local Tucson Time.**

CLARIFICATIONS, CHANGES, AND/OR ADDITIONS:

1. Coordination with an external archaeological monitor during construction is only required at the following two areas: The west drainage basin and the southeast drainage basin excavation. Contractor shall provide one week notice prior to starting work in these areas. A footprint of the area is included as Attachment 1 to Amendment 2.

QUESTIONS/ANSWERS:

Q. 1) Specification Section A01500 Temporary Facilities and Controls Item 1.01(E) states that the Contractor will be liable to pay a $5,000 penalty for any violation or citation of any rule, regulation, ordinance, etc. Please confirm if it is the intent that the County will penalize the Contractor in addition to the fines, penalties, etc. assessed.

A. 1) Specification Section A01500 Item 1.01(E) will remain unchanged. Compliance with Pima County Code Title 17, Chapter 16, Article II and III must be met.

Q. 2) Specification Section A01500 Temporary Facilities and Controls Item 1.02(B) states that a 20% opacity limit applies, but then in underlined text states that "any emission…" Which statement will take precedent, 20% opacity or the visible dust emissions? Additionally, this states that is a violation of this specification, and if so, does the $5,000 penalty mentioned above apply?

A. 2) Compliance with Pima County Code Title 17, Chapter 16, Article II and III must be met at all times

Q. 3) Specification Section A01500 Temporary Facilities and Controls Item 1.02(C) states that continuous control measure to control the dust shall be used. Is it the intent that dust control operations will continue even when no work is being done onsite (i.e. weekends, etc.)?

A. 3) Compliance with Pima County Code Title 17, Chapter 16, Article II and III must be met at all times

Q. 4) During the pre-bid meeting it was discussed that the contours shown on the grading plan will not necessarily be what the site is graded to, and that the primary goal is to achieve the drainage pattern desired. Please clarify if that is indeed how the contractor should base their bid.

A. 4) See Amendment #1, Clarification 3.

Q. 5) Specification Section A01500 Temporary Facilities and Controls Item 1.08(B) states control measures will be maintained until the area is permanently stabilized. No provisions have been made in the bid documents for final stabilization. As discussed at the pre-bid meeting, ADEQ will require that the site reaches 70% of the native vegetative cover. Based on the site visit, the existing conditions have a decent amount of vegetative cover. Please clarify how this should be handled in the bid.

A. 5) Attachment 2 to Amendment 2 includes pages from the ADEQ SWPPP Template. One (1) non-vegetative practice is the installation of "temporary" stormwater basins which result in a non-discharging site. Final Stabilization also refers to Construction General Permit Parts 3.1.1.1, which discusses the use of sediment basins. The County requests that as an additional Best Management Practice (BMP) the Contractor water the final surface in order to create a crust over the bare soil.

Q. 6) In Amendment 1, the County provided calculations on the material available in two stockpiles. Are these the only two stockpiles that have not been accounted for in the plan set issued for bid or is there additional material needing to be excavated that is not accounted for? Since this project is not based on a unit price of excavation, the contractors need to have an accurate method of determining the amount of material needed to be excavated to account for the costs in their bid. Is it safe to assume that the County will pay for any additional cut, not discernible on the plans or addenda via change order or force account?

A. 6) The majority of the material in these two (2) stockpiles is accounted for in the plan set contours. However, the initial investigation that the stockpile drawing was based on was not exhaustive and therefore the Contractor must assume that the cubic yardage values stated are rough estimates of the actual cubic yardage. No additional payments will be made for site conditions that differ from those portrayed in the plan set or stockpile drawing. Per Article 43 of the General Conditions, before the conditions are disturbed, Contractor shall give immediate (within 8 hours) verbal notice to the County followed by written notice within 24 hours for conditions identified in Article 43 (a) and (b)

Q. 7) Is the furnishing, survey, and / or installation of the staking roads shown on Detail 3 part this contract?

A. 7) The fabrication and installation of staking rods is not required for the Phase 1 work. The staking rods are intended to assist with the installation of the final cover section which will be part of Phase 2.

Q. 8) In the description of the project, it was noted that this landfill received Municipal Solid Waste (MSW) for approximately 20 years. Is it anticipated that the contractor will encounter any MSW as part of the trash/debris relocation or should the contractor base their bid on only relocation of Construction & Debris (C&D) material?

A. 8) The County cannot make any assurances regarding the type of material that the Contractor may encounter.

Q. 9) Typically, in stormwater application the geotextile underlayment for rip-rap is not seamed (either sewn or thermally seamed). Will the County permit the standard overlap as an acceptable alternative?

A. 9) Geotextile underlayment for rip-rap may be overlapped two (2) feet if the material is not sewn or thermally seamed.

Q. 10) Does the County have an approximate flow rate for the water source onsite?

A. 10) The standard flow rate is 1,500 gallons per minute. The only current risk is that new regulations by ADEQ state that if the turbidity hits 2, the water cannot be used for dust control. Because of that regulation the County has automated the system to shut down on a turbidity of 2, which is rare but can happen. Therefore a kline tank may be used to mitigate that risk.

Q. 11) Specification Section B02110 Site Clearing & Grubbing Item 3.04, will the stripping and stockpiling of 6" of topsoil be required, and if so, has that quantity been accounted for in the cut-fill quantities provided?

A. 11) See Amendment #1 Clarification 1.

Q. 12) Specification Section B02110 Site Clearing & Grubbing Item 3.06 requires replacement of protected trees or plants. Is there any located on-site?

A. 12) The County is not aware of any protected trees or plants associated with this project. Any protected trees or plans will be handled in accordance with Specification Section B02110.

Q. 13) Will the County require the Contractor to remediate invasive and noxious plants, and if so, how is it to be paid for?
A. 13) The County is not aware of any invasive or noxious plants associated with this project. Additional work will be handled in accordance with Article 20 – Changes in work of the General Conditions.

Q. 14) Can the County release the information regarding the test pits as shown on the plans?
A. 14) Yes, please see Attachment 3 to Amendment 2.

Q. 15) It was stated at the pre-bid that if borrow was necessary it would be handled as additional work, please confirm via Amendment.
A. 15) No additional payments will be made for site conditions that differ from those portrayed in the plan set or stockpile drawing. Per Article 43 of the General Conditions, before the conditions are disturbed, Contractor shall give immediate (within 8 hours) verbal notice to the County followed by written notice within 24 hours for conditions identified in Article 43 (a) and (b). . Further, the County will not provide the Contractor with an incentive to be wasteful with the on-site soil.

Q. 15) What should we figure for the temporary fence? The plans show a permanent fence detail. Would a standard 6' chain link fence with 3 strands of barbed wire suffice? Should the costs to remove this fence be included in this bid, or will the final closure bid be required to remove the fence?
A. 15) Yes, a standard 6' chain link fence with 3 strands of barbed wire will suffice and should be included. Yes, the costs to remove this fence should be included with the bid.

All other requirements and terms of the Solicitation remain unchanged. Failure to include acknowledgment of all amendments may be cause for rejection.

This Amendment is a total of twenty-one (21) pages.

If any questions, please contact me via e-mail at Matthew.Sage@pima.gov.

/s/ Matthew Sage
Matthew Sage, CPPB; Procurement Officer

ATTACHMENT 1 TO AMENDMENT 2

☐ *Permanent* ☐ *Temporary* ☐ *Vegetative* ☐ *Non-Vegetative*	
Design Specifications Included: ☐ **Yes** ☐ **No** **Figure No.**	
Installation Schedule:	
Approximate Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

Repeat as needed

Only fill out the following section use if uncontrollable circumstances have delayed the initiation or completion of stabilization

Note: You will not be able to include this information in your initial SWPPP. If you are affected by such circumstances, you will need to modify your SWPPP to include this information.

Justification

- INSERT DESCRIPTION OF CIRCUMSTANCES THAT PREVENT YOU FROM MEETING THE DEADLINES AND THE SCHEDULE YOU WILL FOLLOW FOR INITIATING AND COMPLETING STABILIZATION

▪ ***BMP Description:***	
☐ *Permanent* ☐ *Temporary* ☐ *Vegetative* ☐ *Non-Vegetative*	
Design Specifications Included: ☐ **Yes** ☐ **No** **Figure No.**	
Installation Schedule:	
Approximate Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

Repeat as needed

3.16 Final Stabilization

Instructions (see CGP Parts 3.1.1.1)

Describe procedures for final stabilization. If you complete major construction activities on part of your site, you can document your final stabilization efforts for that portion of the site (specific vegetative and/or non-vegetative practices). The UCGP allows you to then discontinue inspection activities in these areas.

You can amend or add to this section as areas of your project are finally stabilized.

Update your site plans to indicate areas that have achieved final stabilization.

BMP Description:	
☐ *Permanent* ☐ *Temporary* ☐ *Vegetative* ☐ *Non-Vegetative*	
Design Specifications Included: ☐ **Yes** ☐ **No** **Figure No.**	
Installation Schedule:	

Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:			
☐ ***Permanent*** ☐ ***Temporary*** ☐ ***Vegetative*** ☐ ***Non-Vegetative***			
Design Specifications Included:		☐ **Yes** ☐ **No**	**Figure No.**
Installation Schedule:			
Completion Date:			
Maintenance and Inspection:			
Responsible Staff:			

Repeat as needed

3.17 Post-Construction BMPs

Instructions (see CGP Parts 3.1.1.)

Describe procedures for final stabilization. List all post-construction stormwater management measures that will be installed during the construction project to control pollutant discharges after construction has been completed.

Also see post-construction section of EPAs Menu of BMPs at:
https://www.epa.gov/npdes/stormwater-discharges-construction-activities#resources

Post-Construction Stormwater Management (see CGP Part 6.4)

- The SWPPP shall include a description of post-construction stormwater management control measures that will be installed during the construction process to control pollutants in stormwater discharges after construction have been completed.
- If 'temporary' sediment basins are to be used as/converted to retention or detention basins in the post-construction phase, the operator shall remove and properly dispose of all sediments accumulated in the basin during construction activities prior to filing an NOT.
- New discharge connections or permanent stormwater outfalls directly to OAWs are prohibited under this permit.
  Note: The installation of these devices may also require a separate permit under section 404 of the Clean Water Act.
  Note: This permit only authorizes and requires the operator to install and maintain stormwater management measures up to and including final stabilization of the site, and does not require continued maintenance after stormwater discharges associated with the construction activity have been eliminated from the site and an NOT has been submitted to ADEQ. However, post-construction control measures that discharge pollutants from point sources once construction is complete may require authorization under a separate AZPDES permit.

BMP Description:	
☐ ***Permanent*** ☐ ***Temporary*** ☐ ***Vegetative*** ☐ ***Non-Vegetative***	
Design Specifications Included:	☐ **Yes** ☐ **No** **Figure No.**
Installation Schedule:	
Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
☐ ***Permanent*** ☐ ***Temporary*** ☐ ***Vegetative*** ☐ ***Non-Vegetative***	
Design Specifications Included:	☐ **Yes** ☐ **No** **Figure No.**
Installation Schedule:	
Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
☐ ***Permanent*** ☐ ***Temporary*** ☐ ***Vegetative*** ☐ ***Non-Vegetative***	
Design Specifications Included:	☐ **Yes** ☐ **No** **Figure No.**
Installation Schedule:	
Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
☐ ***Permanent*** ☐ ***Temporary*** ☐ ***Vegetative*** ☐ ***Non-Vegetative***	
Design Specifications Included:	☐ **Yes** ☐ **No** **Figure No.**
Installation Schedule:	
Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

BMP Description:	
☐ ***Permanent*** ☐ ***Temporary*** ☐ ***Vegetative*** ☐ ***Non-Vegetative***	
Design Specifications Included:	☐ **Yes** ☐ **No** **Figure No.**
Installation Schedule:	
Completion Date:	
Maintenance and Inspection:	
Responsible Staff:	

to install stormwater controls prior to the initial earth-disturbance does not apply to construction activities associated with the actual installation of these controls.

There may be some situations where the installation of controls prior to the first earth disturbance is not feasible *(e.g., due to restricted space, etc.)*, in which case such circumstances must be documented and kept with the records.

The requirement in (2) above is included because stormwater controls will not be effective unless properly designed and installed. Design specifications may be found in manufacturer specifications and/or in applicable erosion and sediment control manuals or ordinances. Additionally, where it is appropriate to depart from such specifications, this must reflect good engineering practice and must be explained in the SWPPP.

III.1.1 Part 3.1.1.1 – Control stormwater volume and velocity.

Control stormwater volume and velocity within the site to minimize soil erosion. (Part 3.1.1.1)

Run-on Management. (Part 3.1.1.1(1)). Operators must divert run-on, or manage it on-site, if off-site areas direct stormwater flow onto the construction site. If stormwater conveyance channels are used, the channels must be designed to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. Operators must minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of velocity dissipation devices *(e.g., check dams, sediment traps, riprap, or grouted riprap at outlets)* within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

Sediment Basins and Traps. (Part 3.1.1.1(2)) If an operator installs a sediment basin, the following requirements apply:

1. **Design requirements.** (Part 3.1.1.1(2)(a)).

   - Provide sizing and calculation requirements for sediment basin(s) and indicate whether the basin(s) will be temporary or permanent;

     When discharging from the sediment basin, utilize outlet structures that will minimize the discharge of pollutants. This is typically accomplished by withdrawing water from the surface of the pond to minimize discharge of sediment.

   - Prevent erosion of (1) the sediment basin using stabilization controls *(e.g., erosion control blankets)*, and (2) the inlet and outlet using erosion controls and velocity dissipation devices; and

   - Sediment basins must be situated outside of surface waters and any natural buffer areas established under Part 3.1.1.5.

   Operators of linear projects and drainage locations serving less than 10 acres may use smaller sediment basins or sediment traps and, at a minimum, must use silt fences or equivalent sediment controls for all down slope and appropriate mid-slope boundaries of the construction area.

Note: The 2008 CGP had a sizing requirement for a 2 year/ 24 hour storm event. That requirement was removed from the 2013 CGP to give operators flexibility for basins located in smaller areas that cannot accommodate the previous standard. Contrast this with the sizing requirement for stabilization, which specifically requires sizing for a 100 year/ 24 hour event. When designing storage capacity

for their site, operators can adapt sediment basin dimensions to the limitations of the locality (i.e., physical limitations or zoning).

2. **Maintenance requirements.** (Part 3.1.1.1(2)(b)) Keep sediment basins and traps in effective operating condition and remove accumulated sediment to maintain at least 50% of the design capacity at all times.

   Sediment basins are often used on construction sites to minimize sediment discharges. They are typically placed at or near low points of drainageways in order to temporarily detain stormwater discharges, allowing sediment particulates to settle. Sediment basins are also often designed to reduce peak flowrates, reducing downstream flooding and channel erosion. At the point of discharge, which is typically a pipe or channel, installation of riprap or other stabilization measures is often necessary because the concentrated discharge can cause erosion. Sediment basins are also often designed to reduce flow duration impacts by reducing the total volume of stormwater being discharged or by providing extended detention to reduce discharge rates.

3. **Use of Cationic Treatment Chemicals.** (Part 3.1.1.1(2)(c)). Operators who plan to use cationic treatment chemicals (as defined in Appendix A) must comply with Parts 3.1.1.1(2)(c) and 6.3(10) of the permit. The use of polymers, flocculants, or other treatment chemicals to control turbidity in sediment basins at the construction site must be used in such a manner that it allows adequate settling time and minimizes or eliminates these chemicals in the discharge. Operators must document the use of such chemicals and the supporting rationale for their choice in the SWPPP (Part 6.3(10)).

   The following recommendations are provided as guidance for the handling and use of cationic treatment chemicals. USEPA states in the preamble to the C & D rule that "based on the information in the record USEPA has determined that when polymers are properly applied the risks of toxicity to aquatic life or adverse effects to the receiving water are minimal." Following the recommendations below should result in less chemical being used for treatment, thereby significantly lowering the chances for accidental releases, over-application and residual chemical being discharged. For further information, consult USEPA's Fact Sheet for their 2012 CGP, which devotes considerable space to the discussion of on the selection, proper use and the toxicity problems with cationic treatment chemicals.

   a. **Use conventional erosion and sediment controls prior to and after application of treatment chemicals.** Use conventional erosion and sediment controls prior to chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control prior to discharge.

   b. **Select appropriate treatment chemicals**. Select chemicals that are appropriately suited to the types of soils likely to be exposed during construction and discharged to locations where chemicals will be applied, and to the expected turbidity, pH, and flow rate of stormwater flowing into the chemical treatment system or area. *Note: Information on soils may be obtained at* http://websoilsurvey.nrcs.usda.gov/app/;

   c. **Minimize discharge risk from stored chemicals.** Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures *(e.g., spill berms, decks, spill containment pallets)*, or provide equivalent measures, designed

and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means *(e.g., storing chemicals in covered area or having a spill kit available on site)*.

d. **Comply with state/local requirements.** Comply with relevant state and local requirements affecting the use of treatment chemicals.

e. **Use chemicals in accordance with good engineering practices and specifications of the chemical vendor/supplier.** Use treatment chemicals in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document specific departures from these practices or specifications and how they reflect good engineering practice.

f. **Ensure proper training.** Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.

g. **Comply with additional requirements for the approved use of cationic chemicals.** If the operator has been notified by ADEQ that coverage under the 2013 CGP is conditioned on compliance with additional requirements necessary to ensure that the use of cationic chemicals at the site will not cause an exceedance of water quality standards, the operator is required to comply with all such requirements.

h. **Provide proper SWPPP documentation.** The operator must include documentation in the SWPPP in accordance with Part 6.3(10) on the specific chemicals and chemical treatment systems to be used, and how the site will comply with the requirements of the permit.

III.1.2 Part 3.1.1.2 – Control stormwater discharges.

Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion. (Part 3.1.1.2)

This permit requirement implements 40CFR Part 450.21(a)(2) of the C & D rule.

III.1.3 Part 3.1.1.3 – Minimize exposed soil and steep slopes.

Minimize the amount of soil exposed and the disturbance of steep slopes during construction activity. (Part 3.1.1.3)

This permit requirement actually combines the C & D requirements of 40CFR Part 450.21(a)(3) and (4). The purpose of this requirement is to discourage the disturbance of naturally occurring steep slopes unless or until necessary.

Steep slopes may be defined by a state, Tribe, local government, or industry technical manual (e.g., stormwater BMP manual). Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

The purpose of the requirement to minimize the disturbance of steep slopes is to minimize the amount of soil eroded on construction sites, and the amount of sediment and other pollutants discharged from the site. Minimizing the disturbance of steep slopes during construction activity can be accomplished through a number of practices. These include practices related to how much soil is exposed on steep slopes, such as phasing land disturbing activities, and providing timely soil stabilization on slopes, such as through the use of mulches, rolled erosion control products, and vegetation. Operators

Pima County
Ina Road Landfill
Test Pit Investigation
June 7, 2018

PIMA COUNTY
ENVIRONMENTAL QUALITY

Backhoe Company – Vaquero Excavating

West Cell, Test Pits #1 - #10

Test Pit #1 – 4'- 5" of brown silty sand, then broken concrete

Test Pit #2 – 8' of brown silty sand, then concrete, brick and wood with some metal and wire

Test Pit #3 - 4'-2" of brown silty sand, then discolored soil mixed with broken asphalt and concrete

Test Pit #4 – 2' of brown silty sand, then wood and pieces of dimension lumber, with some rock

Test Pit #5 - 4'-10" of brown silty sand, then red brick, wire and mixed plastic

Test Pit #6 – 6'- 1" of brown silty sand, then soil mixed with yard waste trimmings and wood

Test Pit #7 – 0'- 10" of brown silty sand, then discolored soil mixed with broken asphalt, plastic and cloth

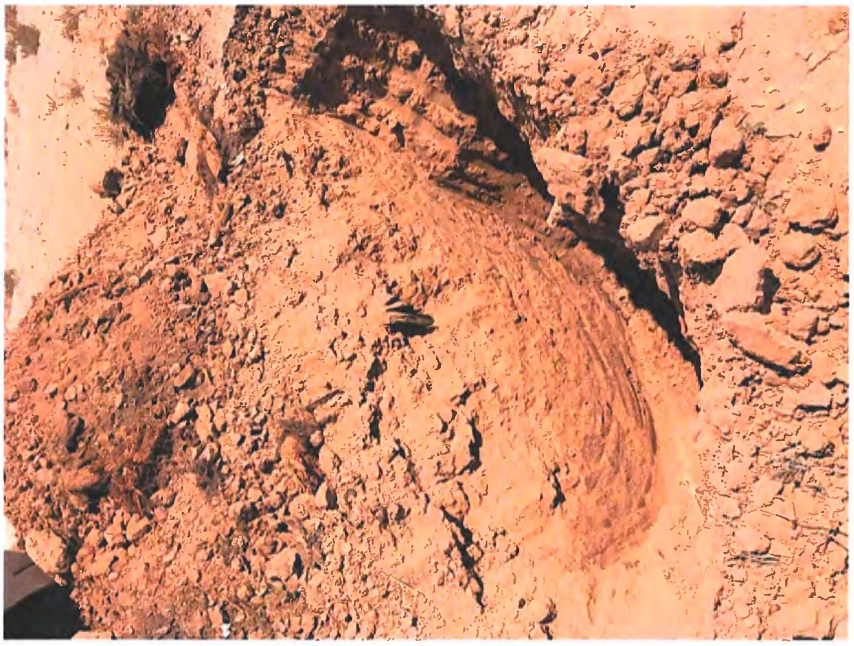
Test Pit #8 – 1'- 0" of brown silty sand, then wood and broken concrete, and concrete test cylinders

Test Pit #9 – 1'- 6" of brown silty sand, then wood, brick and broken concrete

Test Pit #10 – 1'- 4" of brown silty sand, then broken concrete and asphalt, metal and some wood waste

East Cell, Test Pits #11 - #20

Test Pit #11 – 3'- 6" of brown silty sand, then wood waste, tree trimmings mixed with some soil



Test Pit #12 – 4'- 6" of brown silty sand, then palm tree waste

Test Pit #13 – 2'- 0" of brown silty sand, then green waste with some broken concrete and dimension lumber

Test Pit #14 – 4'- 0" of brown silty sand, then green waste and tree stumps

Test Pit #15 – 7'- 10" of brown silty sand, then broken concrete and asphalt and some minor wood waste

Test Pit #16 – 10'- 0" of brown silty sand (maximum depth of backhoe), then discolored soil with some broken asphalt and plastic waste

Test Pit #17 – 9'- 10" of brown silty sand, then wood waste and tree trimmings

Test Pit #18 – 6'- 3" of brown silty sand, then asphalt millings and discolored soil

Test Pit #19 – 2'- 6" of brown silty sand, then green waste, stumps and some carpet

Test Pit #20 - 10'- 0" of brown silty sand (maximum depth of backhoe). This is the soil stockpile adjacent to the bike path. No discolored soil or organics encountered.