POND SOIL REPORT

1) Soil tests were performed by Terracon for the soil in the area of the proposed pond on the site. An accompanying report was prepared on 26 April 2019. The full report, along with all attachments, is available as a pdf. The following excerpts were taken and adapted from the full report.

2) Groundwater was not observed in any of the borings.

3) Construct an earthen liner with a total thickness of at least 12 inches along the bottom and sides of the proposed pond up to the proposed static pool elevation of 1361.0.

4) The on-site cohesive soils are suitable for constructing the embankments and earthen liner for the proposed pond, provided the soils used to construct the liner have a minimum plasticity index of 35. Field moisture and density testing and Atterberg limits testing shall be conducted to evaluate the suitability of the proposed liner materials. Testing is subsidiary to the bid item 'Pond Liner, C.Y.'

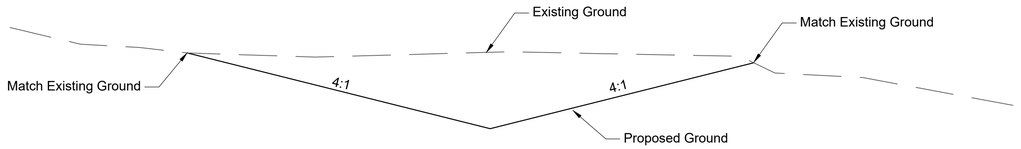
5) The 12-inch thick clay liner within the pond shall be constructed of native soils that are free of organics and deleterious materials, placed in loose lifts not to exceed 9 inches in thickness. The soil used to construct the clay liner in pond should be wetted to moisture content at least 4 percentage points over the optimum moisture and compacted to at least 97% of the standard Proctor maximum dry density (ASTM D698). Each lift of fill shall be tested for density, moisture content, and plasticity index in the pond area.

6) Horizontal joints between overlying and underlying fill lifts shall be staggered at least 2 feet laterally.

7) The contractor shall overexcavate the pond area to allow the installation of the clay liner. The upper 9 inches of resulting exposed subgrade shall be compacted to at least 95% of its maximum dry density by ASTM D698 at moisture contents above its optimum moisture content.

8) Slopes shall be no steeper than 3:1.

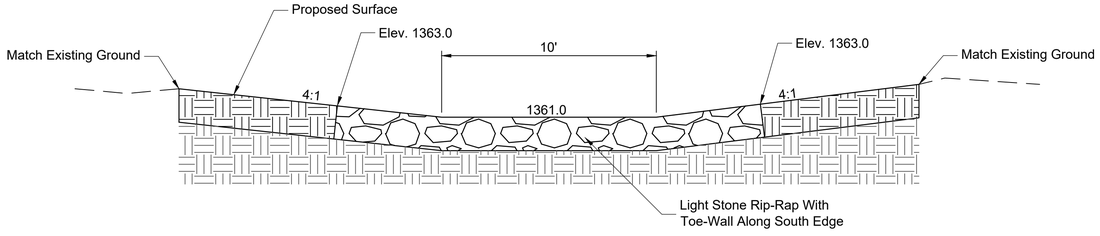
9) Pond slopes above the static pool shall be scarified and recompacted to a depth of 9" to at least 97% of standard proctor density.




Typical Outflow Section (J-J)

Not to Scale

Note:
Light Stone Rip-Rap is to be 18" thick and placed on a 6" stone filter course backing. The Toe-Wall shall extend to a depth of 2 feet below the bottom of the stone filter course backing.



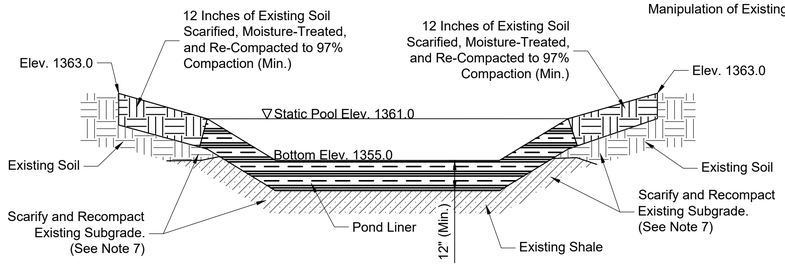

Typical Weir Section

Not to Scale

Note:
Over-excavation for the Pond Liner is incidental to the bid item 'Pond Liner, C.Y.' Earthwork for the Pond Liner and associated over-excavation is not included in the Earthwork Estimate found on Sheet 1 of these Plans. Existing Soil to be Scarified, Moisture-Treated, and Re-Compacted is to be bid as 'Manipulation of Existing Soil, C.Y.', and is not included in the Earthwork Estimate found on Sheet 1 of these Plans.

Bid Item Quantities:

| | |
|---|---|
| Pond Liner: | 1457 C.Y. |
| Manipulation of Existing Soil: | 750 C.Y. |




Typical Pond Section

Not to Scale



CHRISTOPHER MICHAEL BOHM
LICENSED
11631
5.20.19
KANSAS
PROFESSIONAL ENGINEER

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

CITY OF WICHITA
WICHITA, KANSAS

CEDAR CREEK ADD,
PHASE 1

Pond Details

JOB NO.: 18266039
DATE: March 2019
DESIGNED BY: CMB
DRAWN BY: CDJ

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER
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SHEET NUMBER 29 OF 39

File: L:\2018\18266039 - Cedar Creek Phase 1\Drawings\C3D\Drainage\Easement Grading.dwg Last Save: 5/20/2019 3:54 PM Last saved by: CDJurey
Last plotted by: Jurey, Caleb D Plot Style: ---- Plot Scale: 1:2.5849 Plot Date: 5/20/2019 4:52 PM Plotter used: None