PIE INLET DETAILS
SCALE: 1" = 10'

WASTE STORAGE POND 1
BOTTOM EL. 900.8

PIVOT FOR TRANSITION TO WASTE POND

5% OVERFILL

NOTE: UTILIZE BEST MATERIAL FOR CONSTRUCTION IN ZONE 1.

TYPICAL HOLDING POND MAXIMUM BERM DETAIL
NOT TO SCALE
### Waste Storage Pond 1 Stage Storage Table

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<td>(ft²)</td>
<td>(ft³)</td>
<td>(ft³)</td>
<td>(acre-ft)</td>
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**General Notes**

- **In-Situ Material**
- **Clay Liner**

**Scale, Feet**

0 2 4 6 8 8

**DeHaan, Grabs & Associates, LLC**

C & H Hog Farms
Gestation-Parrowing Farm
Section 26, T.18 N, R.20 W
Newton County, AR

**Waste Storage Pond 1 Stage Storage Table**

**Date:** May 30, 2012

**Scale:** 1" = 4'

**Drawn By:** CAS

**Checked By:** DLD
### Waste Storage Pond 2 Stage Storage Table

<table>
<thead>
<tr>
<th>Elevation (ft)</th>
<th>Stage</th>
<th>Area (ft²)</th>
<th>Volume (ft³)</th>
<th>Cum. Volume (ft³)</th>
<th>Cum. Volume (acre-feet)</th>
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**25 Year-24 Hour Stage/Must Pumpdown**

- **Stage 10.6**
  - Elevation: 903.7
  - Area: 30,631 ft²
  - Volume: 15,945 ft³
  - Cumulative Volume: 216,649 ft³
  - Cumulative Volume (acre-feet): 5.0

- **Stage 10.1**
  - Elevation: 902.7
  - Area: 28,549 ft²
  - Volume: 14,521 ft³
  - Cumulative Volume: 204,904 ft³
  - Cumulative Volume (acre-feet): 4.7

- **Stage 9.6**
  - Elevation: 902.2
  - Area: 28,535 ft²
  - Volume: 14,056 ft³
  - Cumulative Volume: 160,883 ft³
  - Cumulative Volume (acre-feet): 4.4

- **Stage 9.1**
  - Elevation: 901.7
  - Area: 27,465 ft²
  - Volume: 13,499 ft³
  - Cumulative Volume: 176,078 ft³
  - Cumulative Volume (acre-feet): 4.0

- **Stage 8.6**
  - Elevation: 901.2
  - Area: 26,511 ft²
  - Volume: 13,003 ft³
  - Cumulative Volume: 162,579 ft³
  - Cumulative Volume (acre-feet): 3.7

- **Stage 8.1**
  - Elevation: 900.7
  - Area: 25,501 ft²
  - Volume: 12,516 ft³
  - Cumulative Volume: 149,576 ft³
  - Cumulative Volume (acre-feet): 3.4

- **Stage 7.6**
  - Elevation: 900.2
  - Area: 24,563 ft²
  - Volume: 12,039 ft³
  - Cumulative Volume: 137,060 ft³
  - Cumulative Volume (acre-feet): 3.1

- **Stage 7.1**
  - Elevation: 899.7
  - Area: 23,503 ft²
  - Volume: 11,571 ft³
  - Cumulative Volume: 125,021 ft³
  - Cumulative Volume (acre-feet): 2.9

- **Stage 6.6**
  - Elevation: 899.2
  - Area: 22,691 ft²
  - Volume: 11,114 ft³
  - Cumulative Volume: 113,450 ft³
  - Cumulative Volume (acre-feet): 2.6

- **Stage 6.1**
  - Elevation: 898.7
  - Area: 21,765 ft²
  - Volume: 10,664 ft³
  - Cumulative Volume: 102,336 ft³
  - Cumulative Volume (acre-feet): 2.3

- **Stage 5.6**
  - Elevation: 898.2
  - Area: 20,691 ft²
  - Volume: 10,225 ft³
  - Cumulative Volume: 91,072 ft³
  - Cumulative Volume (acre-feet): 2.1

- **Stage 5.1**
  - Elevation: 897.7
  - Area: 20,013 ft²
  - Volume: 9,786 ft³
  - Cumulative Volume: 81,446 ft³
  - Cumulative Volume (acre-feet): 1.9

- **Stage 4.6**
  - Elevation: 897.2
  - Area: 19,171 ft²
  - Volume: 9,370 ft³
  - Cumulative Volume: 71,860 ft³
  - Cumulative Volume (acre-feet): 1.6

- **Stage 4.1**
  - Elevation: 896.7
  - Area: 18,333 ft²
  - Volume: 8,966 ft³
  - Cumulative Volume: 62,274 ft³
  - Cumulative Volume (acre-feet): 1.4

- **Stage 3.6**
  - Elevation: 896.2
  - Area: 17,531 ft²
  - Volume: 8,566 ft³
  - Cumulative Volume: 53,308 ft³
  - Cumulative Volume (acre-feet): 1.2

- **Stage 3.1**
  - Elevation: 895.7
  - Area: 16,733 ft²
  - Volume: 8,174 ft³
  - Cumulative Volume: 44,472 ft³
  - Cumulative Volume (acre-feet): 1.0

- **Stage 2.6**
  - Elevation: 895.2
  - Area: 15,983 ft²
  - Volume: 7,792 ft³
  - Cumulative Volume: 36,660 ft³
  - Cumulative Volume (acre-feet): 0.8

- **Stage 2.1**
  - Elevation: 894.7
  - Area: 15,205 ft²
  - Volume: 7,420 ft³
  - Cumulative Volume: 28,776 ft³
  - Cumulative Volume (acre-feet): 0.7

- **Stage 1.6**
  - Elevation: 894.2
  - Area: 14,476 ft²
  - Volume: 6,278 ft³
  - Cumulative Volume: 21,356 ft³
  - Cumulative Volume (acre-feet): 0.5

- **Stage 1.1**
  - Elevation: 893.7
  - Area: 13,759 ft²
  - Volume: 5,484 ft³
  - Cumulative Volume: 17,079 ft³
  - Cumulative Volume (acre-feet): 0.4

- **Stage 0.6**
  - Elevation: 893.2
  - Area: 13,063 ft²
  - Volume: 4,794 ft³
  - Cumulative Volume: 12,294 ft³
  - Cumulative Volume (acre-feet): 0.2

- **Stage 0.1**
  - Elevation: 893.1
  - Area: 12,202 ft²
  - Volume: 0 ft³
  - Cumulative Volume: 7,594 ft³
  - Cumulative Volume (acre-feet): 0.0

**Notes:**
- **4" x 4" CCA Treated Post 12.7' in length**
- **LARGE STAINLESS STEEL CLAMP AROUND POST**
- **One foot increments painted with a mark and number with blue marine paint**
- **Pipe concreted in 1 tire**
- **LINER MATERIAL**
- **INSITU MATERIAL**
- **CLAY LINER**

**Scale:**
- **Feet**

**Date:**
- **May 30, 2012**

**Sheet:**
- **15**
ADS DUAL WALL TRENCHING & PIPELINE CONSTRUCTION NOTES

1. Select backfill shall consist of granular soil which meets the USCS sub type GM, OG, 2M, or SC. Material shall have a maximum particle size of 0.5 inch diameter and shall be compacted in 6 inch layers (max) to a density not less than 85% of the Standard Proctor Density.

2. Unclassified backfill shall consist of excavated material, provided it is free from lumps of clay, stone, boulders and other debris. Material shall be wetted and compacted with available rubber tired construction equipment until approved by the Engineer.

3. In locations where the trench bottom contains rocks or is unsuitable for pipe to rest on, as determined by the engineer, the pipe shall be bedded as shown.

4. In locations where the proposed pipelines cross existing utilities, the utility crossing details shall be determined in the field by the Engineer. Prior to trench excavation, existing utilities shall be located and exposed by the Contractor.

5. Select backfill shall be placed under the haunches of all pipe using the shovel slicing method or other method, approved by the Engineer.

6. All trenching excavation shall be braced and/or shored in accordance with OSHA Trench Safety Regulations.

NOTE: PRESSURE LINE
CLEANOUTS TO BE
SCREW CAPPED W/1
AIR PRESSURE
CONNECTION

BUILDING PAD SURFACE

PVC PIPE, SAME SIZE
AS SEWER LINE

FLOW

TYPICAL CLEANOUT DETAIL
NOT TO SCALE
SECTION A-A
SCALE 1" = 10'

SECTION B-B
SCALE 1" = 10'

NOTE: SPLASH PAD FROM BARN WILL BE 5' WIDE WITH 6" X 6" CURB
1. **Concrete (unless otherwise noted)**
   - A. Concrete walls, floors: 4000 psi minimum 28 day strength
   - B. Concrete footings: 4000 psi minimum 28 day strength
   - C. Concrete to be air entrained
   - D. 3'-0" concrete slump on horizontal pours
   - E. 3" maximum concrete slump on vertical pours
   - F. Pit wall, concrete design based off of a 3'-0" backfill
   - G. Refer to engineer specifications for additional concrete construction requirements

2. **Reinforcing Steel (unless otherwise noted)**
   - A. All rebar grade 60
   - B. Lap all reinforcing bar splices a min. of 40 diameters
   - C. Provide bent bars at all corners and wall intersections to match the horizontal reinforcing steel.
   - D. Exterior wall footing: two runs of continuous #3 horizontal rebar.
   - E. Foundation walls: #3 horizontal rebar @ 24" O.C.
   - F. Foundation walls: #3 vertical rebar @ 24" O.C.
   - G. Pit walls: #3 horizontal rebar @ 24" O.C.
   - H. field verify location of fresh water pipe

3. **Cold Joints (unless otherwise noted)**
   - A. Walls (see detail)
   - B. Pit slab (see detail)

4. **Control Joints (unless otherwise noted)**
   - A. Walls (see detail)
   - B. Pit slab (see detail)

5. **Miscellaneous (unless otherwise noted)**
   - A. Waterproof to be used on all exterior pit slab/anchor wall joints (see details)
   - B. Field verify location of fresh water pipe

---

**C & H Hog Farms**

**Gestation-Farrowing Farm**

**Skeaton 20, T. 1D N, R. 20 W**

**Newton County, AR**

**Gestation Building Plan View**

**Date:**
MAY 23, 2012

**Scale:**
1" = 35'

**Drawn By:**

**Checked By:**
OLD

---

**DeHaan, Grabs & Associates, LLC**
Consulting Engineers
P.O. Box 112, Monroe, AR 71859
Phone: (501) 667-8116, Fax: (501) 667-1356
www.dgengineering.com
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<tr>
<th>Item</th>
<th>Quantity</th>
<th>Unit</th>
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</thead>
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