

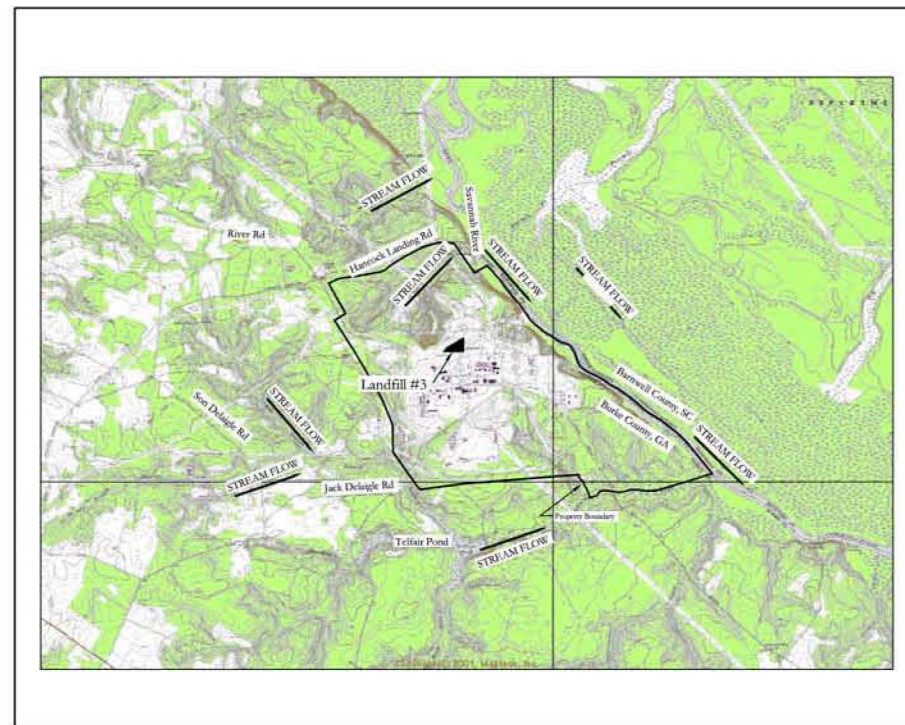
Burke County Location  
N.T.S.

Responsible Official:  
W. F. Kitchens  
Plant Vogtle General Manager  
Southern Nuclear Operating Co., Inc.  
7821 River Road  
Waynesboro, GA 30830  
706-826-4278

Corporate Contact:  
Rachel G. Bauman  
Southern Nuclear Operating Co., Inc.  
40 Inverness Center Parkway  
P. O. Box 1295  
Birmingham, AL 35201  
205-992-7025

Property Owner:  
Georgia Power Company  
P. O. Box 4545  
Atlanta, GA 30302  
404-526-6526

Consultant:  
Kurt R. Batsel, PE  
GA PE #16594  
The Dextra Group, LLC  
4665 Lower Roswell Road, #154  
Marietta, GA 30068  
770-578-9696

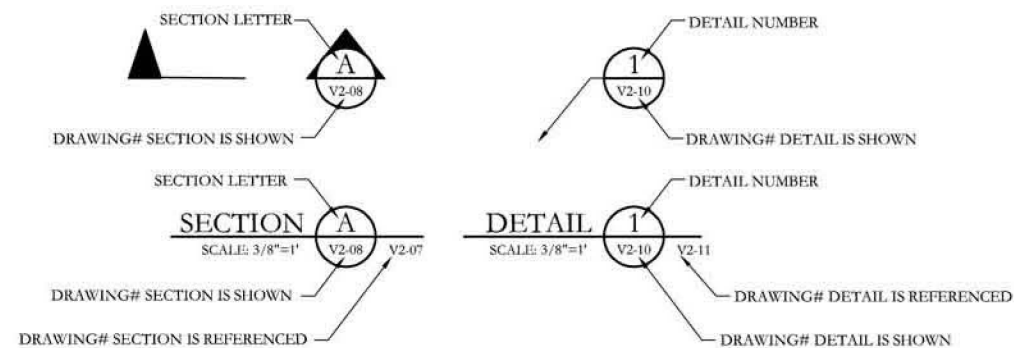


DRIVING DIRECTIONS TO SITE:  
FROM ATLANTA/AUGUSTA: Take I-20 east to Augusta. In Augusta, take I-520 (Bobby Jones Expressway - Exit 196A) south to SR 56. Take SR 56 south approximately 13 miles to SR 23. Take SR 23 south approximately 6 miles to Ebenezer Church Road. Turn left on Ebenezer Church Road and go approximately 6 miles to site entrance.

Site Location  
1" = 1 Mile

| INDEX OF DRAWINGS |                                       |
|-------------------|---------------------------------------|
| V3-00             | TITLE PAGE                            |
| V3-01             | EXISTING SITE TOPOGRAPHY              |
| V3-02             | TRENCHING SEQUENCE                    |
| V3-03             | EXISTING AND FINAL SITE TOPOGRAPHY    |
| V3-04             | TRENCH CROSS SECTIONS                 |
| V3-05             | TRENCH CROSS SECTIONS AND DETAILS     |
| V3-06             | DESIGN & OPERATIONAL INFORMATION      |
| V3-07             | METHANE MONITORING PROGRAM            |
| V3-08             | CLOSURE & POST-CLOSURE CARE PLAN      |
| V3-09             | GROUNDWATER/SURFACE WATER MONITORING  |
| V3-10             | GROUNDWATER/SURFACE WATER MONITORING  |
| V3-11             | EROSION & SEDIMENT CONTROL PLAN       |
| V3-12             | EROSION & SEDIMENT CONTROL DETAILS I  |
| V3-13             | EROSION & SEDIMENT CONTROL DETAILS II |
| V3-14             | MISCELLANEOUS DETAILS                 |


# Plant Vogtle Landfill #3: Design and Operational Plan



| REF. | DWG. NUMBER | TITLE             |
|------|-------------|-------------------|
|      |             | REFERENCE DRAWING |

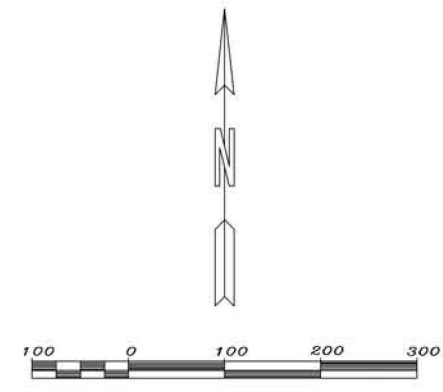
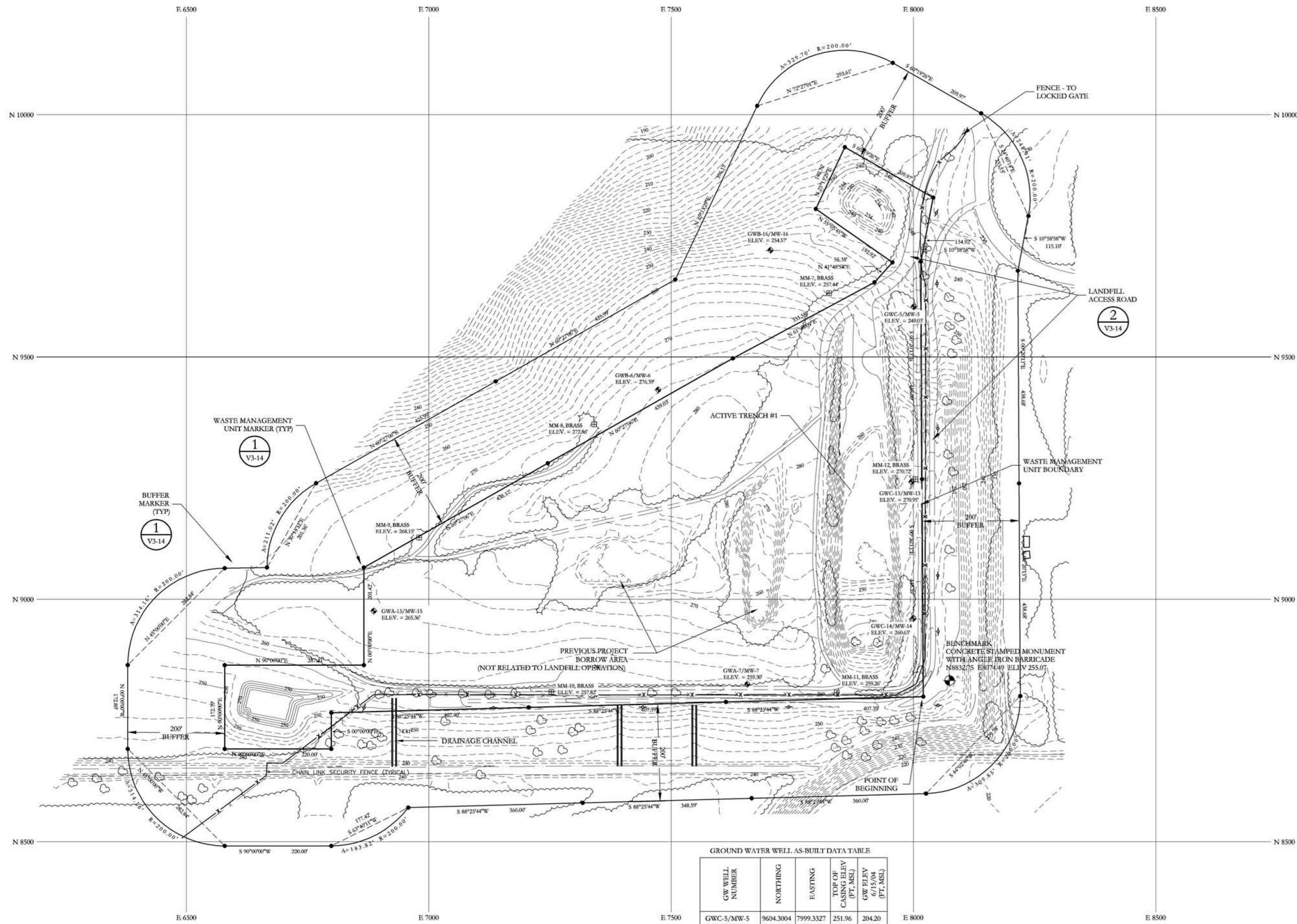
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| JF          | 10/19/01 | V3-00           |
| CHECKED BY: | SCALE:   |                 |
|             | None     |                 |

| REV.                      | DATE     | DESCRIPTION            | BY  | ENGR. | APPR. |
|---------------------------|----------|------------------------|-----|-------|-------|
| 3                         | 12/31/04 | Updated Procedures     | GHA |       |       |
| SUPERSEDES:               |          | REVISIONS:             |     |       |       |
| PROJECT NO. SNOC01-DOV-02 |          | FILENAME: V3-Cover.dwg |     |       |       |


**THE DEXTRA GROUP, INC.**  
 4665 LOWER ROSWELL ROAD, #154  
 MARIETTA, GEORGIA 30068

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Southern Nuclear Operating Co., Inc.  
Title Page  
Plant Vogtle Landfill #3



Map produced by BEI Aerial Mapping, Peachtree City, GA  
 BEI PROJECT #1010805  
 DATE OF PHOTOGRAPHY: 8/22/2001

**LEGEND**

- ⚡ POWER POLE
- ~~~~ TREELINE
- - - - EXISTING CONTOUR
- x - - - - FENCE
- MM-7 METHANE WELL
- GWC-5/MW-5 GROUNDWATER MONITORING WELL
- WASTE MANAGEMENT UNIT/BUFFER BOUNDARY MARKER

**LANDFILL WASTE MANAGEMENT UNIT PROPERTY DESCRIPTION**

Beginning at a benchmark for this site which is a concrete stamped monument with an angle iron barricade, located at local grid N8832.75, E8074.49, and set at Elevation 255.07, then going S58°19'47"W a distance of 63.48' to a point, this being the POINT OF BEGINNING, then going S88°25'44"W a distance of 1222.17' to a point; then going Due South a distance of 74.41' to a point; then going Due West a distance of 220.00' to a point; then going Due North a distance of 172.79' to a point; then going Due East a distance of 287.41' to a point; then going Due North a distance of 200.00' to a point; then going N60°27'6"E a distance of 878.07' to a point; then going N61°48'9"E a distance of 331.58' to a point; then going N41°48'54"E a distance of 55.38' to a point; then going N55°54'5"W a distance of 192.92' to a point; then going N25°13'29"E a distance of 140.76' to a point; then going S60°19'26"E a distance of 209.97' to a point, then going S10°58'58"W a distance of 134.92' to a point; then going S0°20'13"E a distance of 897.19' to a point; such point being the POINT OF BEGINNING; said property encompassing 17.77 acres.

**GROUND WATER WELL AS-BUILT DATA TABLE**

| GW WELL NUMBER | NORTHING  | EASTING   | TOP OF CASING ELEV (FT. MSL) | GW ELEV 6/15/04 (FT. MSL) |
|----------------|-----------|-----------|------------------------------|---------------------------|
| GWC-5/MW-5     | 9604.3004 | 7999.3327 | 251.96                       | 204.20                    |
| GWB-6/MW-6     | 9432.4753 | 7473.2531 | 278.87                       | 232.38                    |
| GWA-7/MW-7     | 8826.2243 | 7657.8853 | 261.33                       | 230.46                    |
| GWC-13/MW-13   | 9242.6820 | 7996.2997 | 273.08                       | 233.49                    |
| GWC-14/MW-14   | 8960.6518 | 7999.6737 | 262.88                       | 210.77                    |
| GWA-15/MW-15   | 8976.1153 | 6886.5411 | 268.15                       | 224.91                    |
| GWB-16/MW-16   | 9720.2971 | 7705.1490 | 256.95                       | DRY                       |

| REV. | DATE     | DESCRIPTION        | BY  | ENGR. APPR. |
|------|----------|--------------------|-----|-------------|
| 3    | 12/31/04 | Updated Procedures | GHA |             |

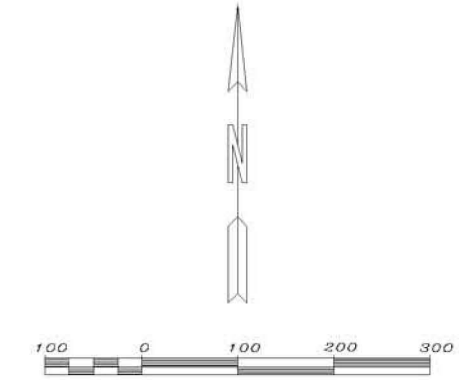
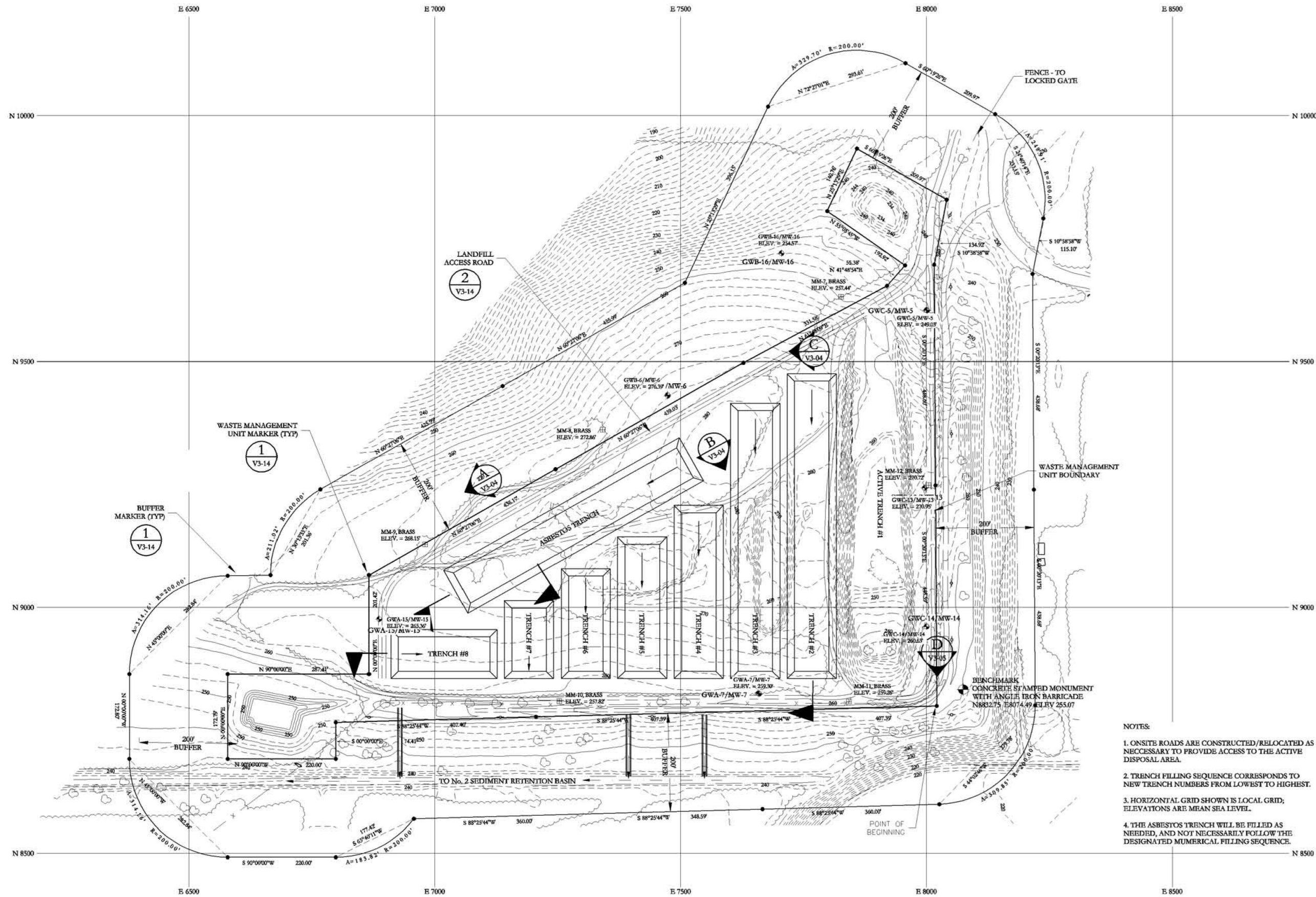
PROJECT NO. SNOC-01-DOV-02 FILENAME: V3-01 Initial topog.dwg  
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 MARIETTA, GEORGIA 30068

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**Southern Nuclear Operating Co., Inc.**  
**Existing Site Topography**  
**Plant Vogtle Landfill #3**

| REF. | DWG. NUMBER | TITLE             |
|------|-------------|-------------------|
|      |             | REFERENCE DRAWING |

| DRAWN BY:   | DATE:    | DRAWING NUMBER: |
|-------------|----------|-----------------|
| JF          | 10/19/01 | V3-01           |
| CHECKED BY: | SCALE:   |                 |
|             | None     |                 |



Map produced by BEI Aerial Mapping, Peachtree City, GA  
 BEI PROJECT #1010805  
 DATE OF PHOTOGRAPHY: 8/22/2001

**LEGEND**

- ⚡ POWER POLE
- ~~~~ TREELINE
- 150--- EXISTING CONTOUR
- x--- FENCE
- MM-9, BRASS ELEV. = 268.15' METHANE WELL
- GWC-5/MW-5 GROUNDWATER MONITORING WELL
- WASTE MANAGEMENT UNIT/BUFFER BOUNDARY MARKER

**LANDFILL WASTE MANAGEMENT UNIT PROPERTY DESCRIPTION**

Beginning at a benchmark for this site which is a concrete stamped monument with an angle iron barricade, located at local grid N8832.75, E8074.49, and set at Elevation 255.07, then going S58°19'47"W a distance of 63.48' to a point, this being the POINT OF BEGINNING, then going S88°25'44"W a distance of 1222.17' to a point; then going Due South a distance of 74.41' to a point; then going Due West a distance of 220.00' to a point; then going Due North a distance of 172.79' to a point; then going Due East a distance of 287.41' to a point; then going Due North a distance of 200.00' to a point; then going N60°27'6"E a distance of 878.07' to a point; then going N61°48'9"E a distance of 331.58' to a point; then going N41°48'54"E a distance of 55.38' to a point; then going N55°5'45"W a distance of 192.92' to a point; then going N25°13'29"E a distance of 140.76' to a point; then going S60°19'26"E a distance of 209.97' to a point; then going S10°58'58"W a distance of 134.92' to a point; then going S0°20'13"E a distance of 897.19' to a point; such point being the POINT OF BEGINNING; said property encompassing 17.77 acres.

**NOTES:**

1. ONSITE ROADS ARE CONSTRUCTED/RELOCATED AS NECESSARY TO PROVIDE ACCESS TO THE ACTIVE DISPOSAL AREA.
2. TRENCH FILLING SEQUENCE CORRESPONDS TO NEW TRENCH NUMBERS FROM LOWEST TO HIGHEST.
3. HORIZONTAL GRID SHOWN IS LOCAL GRID; ELEVATIONS ARE MEAN SEA LEVEL.
4. THE ASBESTOS TRENCH WILL BE FILLED AS NEEDED, AND NOT NECESSARILY FOLLOW THE DESIGNATED NUMERICAL FILLING SEQUENCE.

| REV. | DATE     | DESCRIPTION        | BY | INSG. | APPR. |
|------|----------|--------------------|----|-------|-------|
| 3    | 12/31/04 | Updated Procedures |    | GHA   |       |

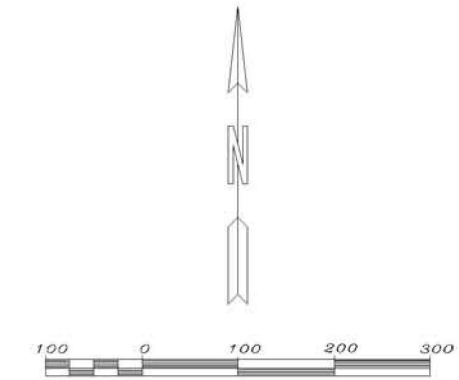
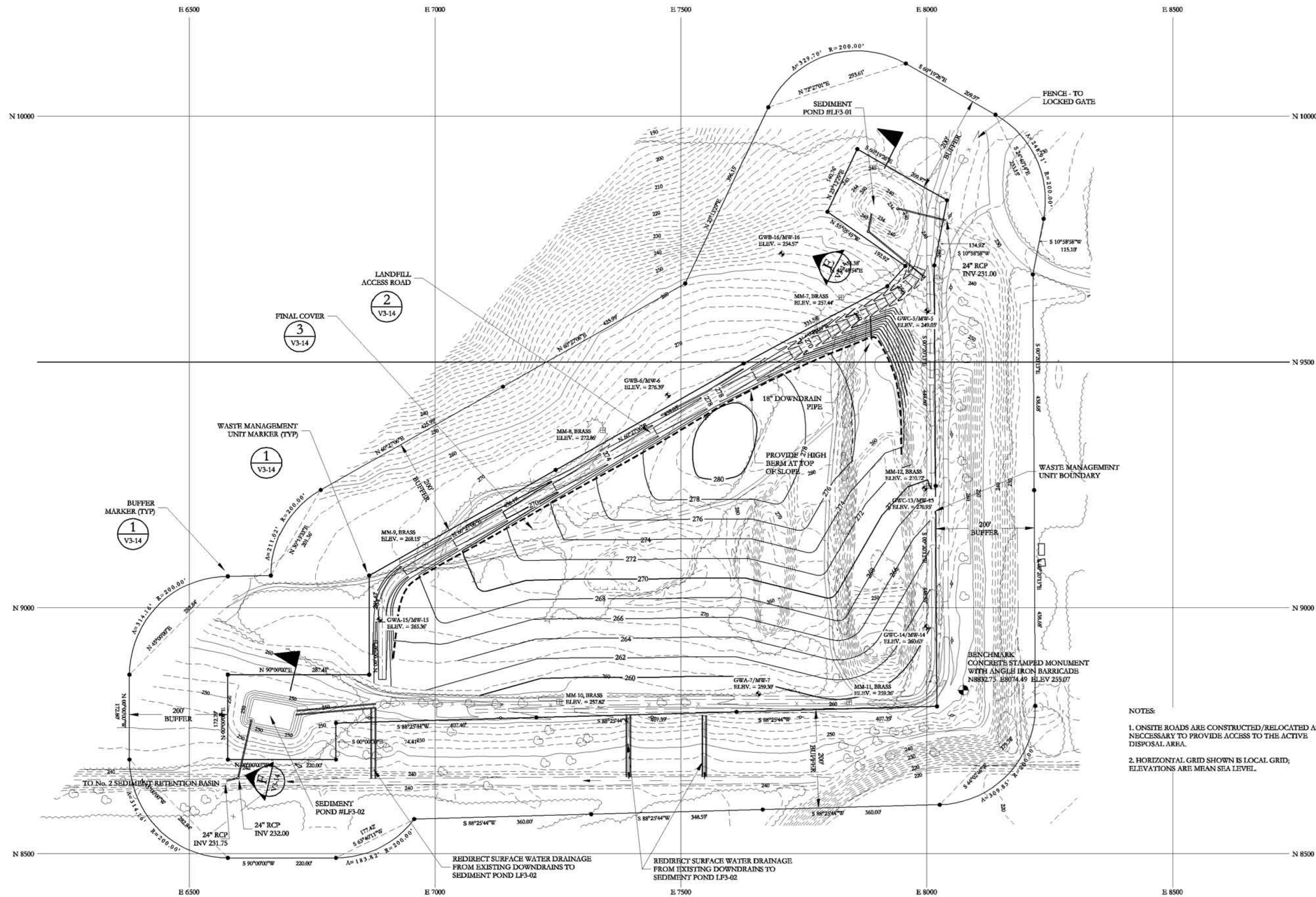
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**Southern Nuclear Operating Co., Inc.**  
**Trenching Sequence**  
**Plant Vogtle Landfill #3**

|             |          |                 |
|-------------|----------|-----------------|
| DRAWN BY:   | DATE:    | DRAWING NUMBER: |
| JF          | 10/19/01 | V3-02           |
| CHECKED BY: | SCALE:   |                 |
|             | None     |                 |

| REF. | DWG. NUMBER | TITLE             |
|------|-------------|-------------------|
|      |             | REFERENCE DRAWING |



Map produced by BEI Aerial Mapping, Peachtree City, GA  
 BEI PROJECT #1010805  
 DATE OF PHOTOGRAPHY: 8/22/2001

**LEGEND**

- ⚡ POWER POLE
- ~~~~ TREELINE
- - - - EXISTING CONTOUR
- — — — FENCE
- MM-4, BRASS  
ELEV. = 272.89' ⊕ METHANE WELL
- GWC-5/MW-5 ⊕ GROUNDWATER MONITORING WELL
- WASTE MANAGEMENT UNIT/BUFFER BOUNDARY MARKER
- 250 — PROPOSED CONTOUR

**LANDFILL WASTE MANAGEMENT UNIT PROPERTY DESCRIPTION**

Beginning at a benchmark for this site which is a concrete stamped monument with an angle iron barricade, located at local grid N8832.75, E8074.49, and set at Elevation 255.07, then going S58°19'47"W a distance of 63.48' to a point, this being the POINT OF BEGINNING, then going S88°25'44"W a distance of 1222.17' to a point; then going Due South a distance of 74.41' to a point; then going Due West a distance of 220.00' to a point; then going Due North a distance of 172.79' to a point; then going Due East a distance of 287.41' to a point; then going Due North a distance of 200.00' to a point; then going N60°27'6"E a distance of 878.07' to a point; then going N61°48'9"E a distance of 331.58' to a point; then going N41°48'54"E a distance of 55.38' to a point; then going N55°54'5"W a distance of 192.92' to a point; then going N25°13'29"E a distance of 140.76' to a point; then going S60°19'26"E a distance of 209.97' to a point; then going S10°58'58"W a distance of 134.92' to a point; then going S0°20'13"E a distance of 897.19' to a point; such point being the POINT OF BEGINNING; said property encompassing 17.77 acres.

- NOTES:**
1. ONSITE ROADS ARE CONSTRUCTED/RELOCATED AS NECESSARY TO PROVIDE ACCESS TO THE ACTIVE DISPOSAL AREA.
  2. HORIZONTAL GRID SHOWN IS LOCAL GRID; ELEVATIONS ARE MEAN SEA LEVEL.

| REV. | DATE     | DESCRIPTION        | BY  | ENG. | APPR. |
|------|----------|--------------------|-----|------|-------|
| 3    | 12/31/04 | Updated Procedures | GHA |      |       |

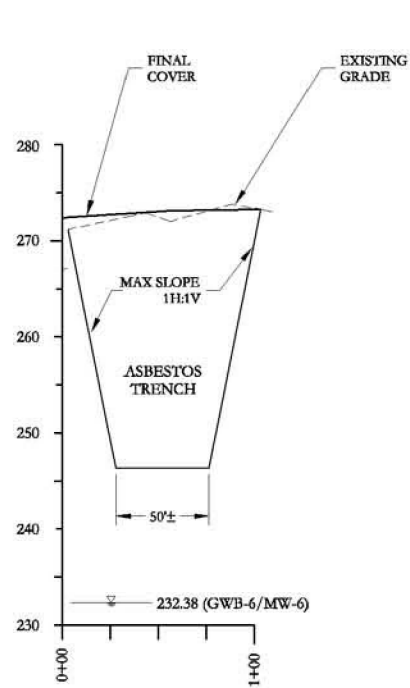
PROJECT NO. SNOC-01-DOV-02  
 FILLNAME: V3-03 Final Topog.dwg

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 MARIETTA, GEORGIA 30068

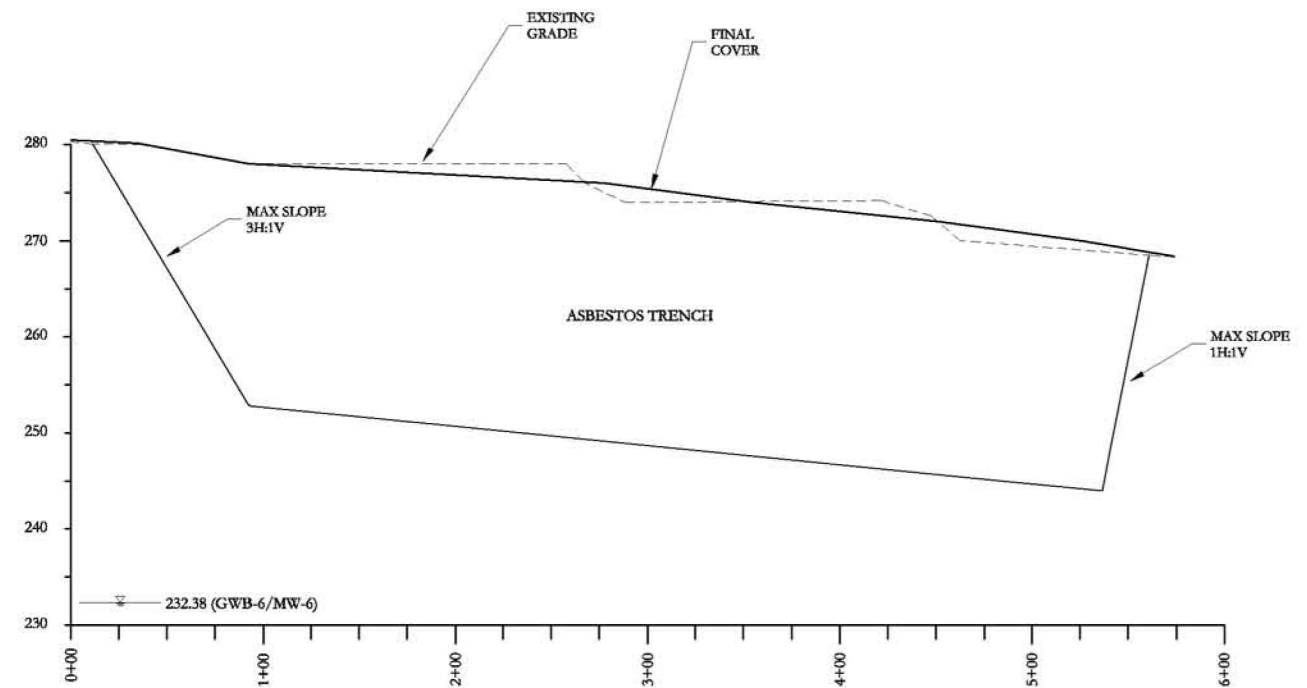
**Southern Nuclear Operating Co., Inc.**  
 Existing and Final Site Topography  
 Plant Vogtle Landfill #3

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|-------------|----------|-----------------|
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| CHECKED BY: | SCALE:   |                 |
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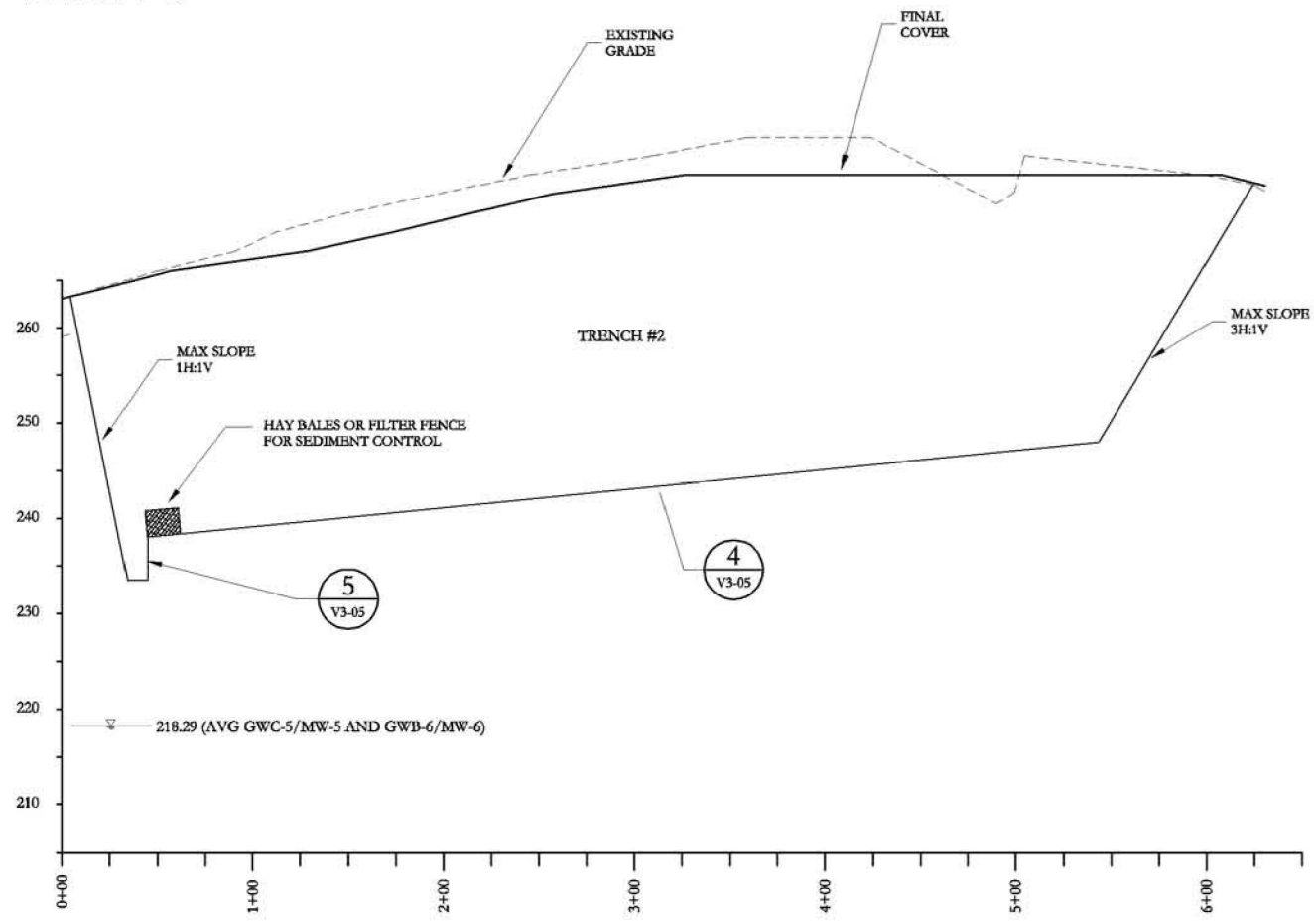
| REF. | DWG. NUMBER | TITLE             |
|------|-------------|-------------------|
|      |             | REFERENCE DRAWING |



**SECTION A**  
 HORZ. SCALE: 1" = 50'  
 VERT. SCALE: 1" = 10'




**SECTION B**  
 HORZ. SCALE: 1" = 50'  
 VERT. SCALE: 1" = 10'



**SECTION C**  
 HORZ. SCALE: 1" = 50'  
 VERT. SCALE: 1" = 10'

**LEGEND**

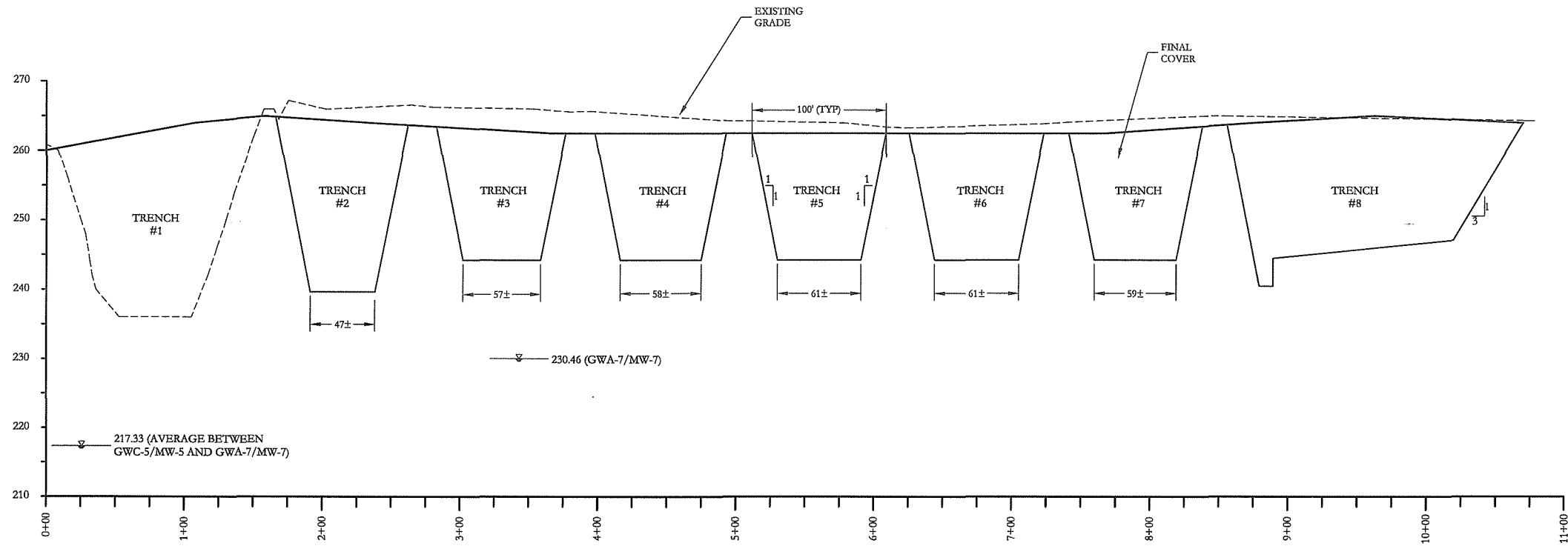
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| ——   | FINAL GRADE                |
| ---- | EXISTING GRADE             |
| ---  | LIMIT OF TRENCH EXCAVATION |
| ▽    | WATER TABLE (6/15/04)      |

| 3   | 12/31/04 | Updated Procedures                   | GHA |             |
|---|----------|--------------------------------------|-----|-------------|
| REV.  | DATE     | DESCRIPTION                          | BY  | INSG. APPR. |
| SUPERSEDES:   |          | REVISIONS:                           |     |             |
| PROJECT NO. SNOC-01-DOV-02  |          | FILENAME: V3-04 Trench Cross-sec.dwg |     |             |
| <br><b>THE DEXTRA GROUP, INC.</b><br>4665 LOWER ROSWELL ROAD, #154<br>MARIETTA, GEORGIA 30068  |          |                                      |     |             |
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**Southern Nuclear Operating Co., Inc.**  
**Trench Cross Sections**  
**Plant Vogtle Landfill #3**

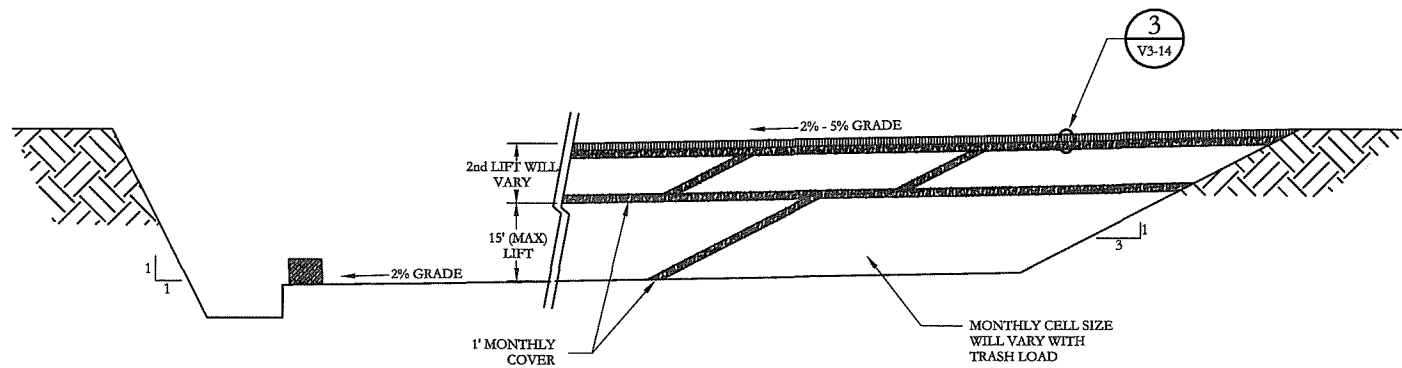
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|      |             |       | <b>V3-04</b>   |

|      |             |                   |
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| REF. | DWG. NUMBER | TITLE             |
|      |             | REFERENCE DRAWING |



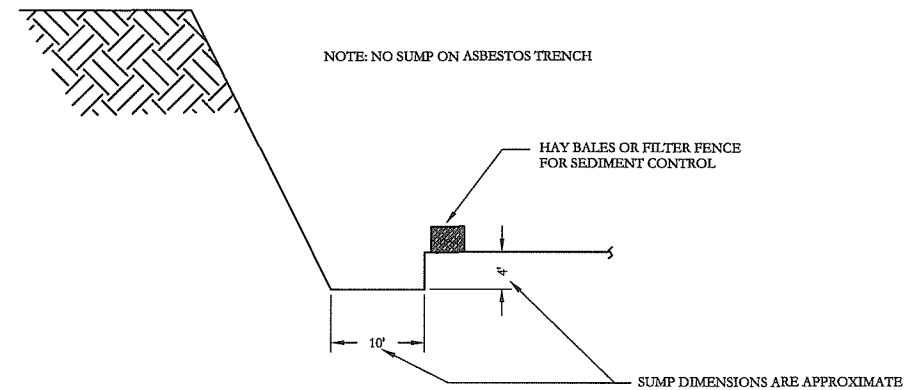
**SECTION D**  
 HORZ. SCALE: 1" = 50'  
 VERT. SCALE: 1" = 10'

- LEGEND**
- FINAL GRADE
  - - - EXISTING GRADE
  - LIMIT OF TRENCH EXCAVATION
  - ∇ WATER TABLE (6/15/04)



**TYPICAL OPERATION FOR TRENCHES 1-8**

**DETAIL 4**  
 N.T.S. V3-05 V3-04



**TYPICAL SUMP FOR DRAINAGE COLLECTION**

**DETAIL 5**  
 N.T.S. V3-05 V3-04

| 3                          | 12/31/04 | Updated Procedures                      | GHA |       |
|----------------------------|----------|---|-----|-------|
| REV.                       | DATE     | DESCRIPTION                             | BY  | APPR. |
| SUPERSEDES:                |          | REVISIONS:                              |     |       |
| PROJECT NO. SNOC-01-DOV-02 |          | FILENAME: V3-05 Cross-sec & Details.dwg |     |       |

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 MARIETTA, GEORGIA 30068

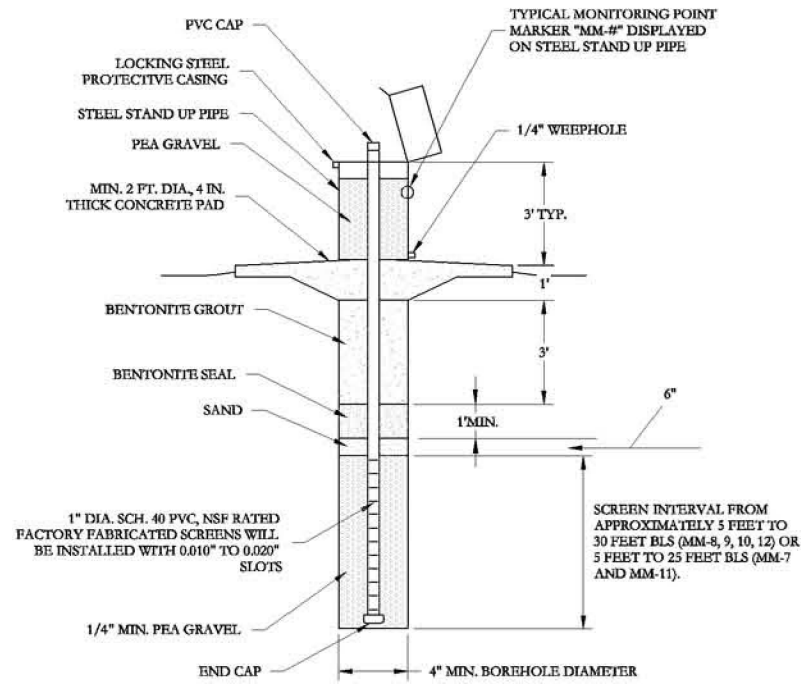
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**Southern Nuclear Operating Co., Inc.**  
**Trench Cross Sections & Details**  
**Plant Vogtle Landfill #3**

|      |             |                   |             |          |                 |
|------|-------------|-------------------|-------------|----------|-----------------|
| REF. | DWG. NUMBER | TITLE             | DRAWN BY:   | DATE:    | DRAWING NUMBER: |
|      |             |                   | JF          | 10/19/01 | V3-05           |
|      |             | REFERENCE DRAWING | CHECKED BY: | SCALE:   |                 |
|      |             |                   |             | None     |                 |



# Methane Gas Monitoring Program:



**TYPICAL METHANE MONITOR WELL**

DETAIL 6  
N.T.S. V3-07 V3-07

## 1. Objectives

This Methane Gas Monitoring Program has been developed for the private solid waste landfill #3 operated by Southern Nuclear Operating Company at Plant Vogtle in Waynesboro, Georgia (Burke County). The objective of this monitoring program, as required by the Georgia Environmental Protection Division (EPD), is to detect the lateral movement of potentially explosive gases in the subsoil and along man-made migration pathways toward nearby on-site structures. The information gathered from the gas monitoring stations will be used to evaluate the potential explosive hazard associated with the accumulation of methane gas in concentrations between the methane gas flammability limits (5 to 15 percent by volume).

## 2. Monitoring System Design and Construction

### Site Environmental Setting

Given the relatively high ability of the shallow soil units to readily transmit any accumulated landfill gas, perimeter monitor wells are screened from approximately 5 feet to 30 feet bsl (MM-8, 9, 10, 12) or 5 feet to 25 feet bsl (MM-7 and MM-11) and are considered adequate for identifying any lateral gas migration. No man-made gas migration pathways are known to exist at the landfill.

### Monitoring System Description

The monitoring system consists of 6 new monitor wells (designations MM-7 through MM-12) at locations around the perimeter of the landfill. The wells were installed with a screened interval at approximately 5 feet to 30 feet bsl (MM-8, 9, 10, 12) or 5 feet to 25 feet bsl (MM-7 and MM-11). The locations of the wells that will comprise the monitor well network for landfill #3 are shown in Dwg. No. V3-02.

### Monitoring System Design and Construction

Prior to installing the new monitor wells, on-site methane screening using bar punch holes was conducted to assist in selecting final locations for the new wells. The objective of the screening was to prevent installation of the monitor wells into waste cells and ensure that suitable locations adjacent to the waste cells were selected. All new monitor wells are constructed of commercially available, 1-inch inside diameter, flush-threaded Schedule 40 PVC casing and Number 10-20 slot screen. The screen length is 25 or 30 feet and set to monitor an elevation of approximately 5 feet to 25 or 30 feet bsl. Material used to construct the filter pack consisted of commercially available, chemically inert, well rounded, dimensionally stable, pea gravel. The gravel pack extends to the top of the well screen, followed by six inches of coarse sand. One foot of chemically inert bentonite pellets were used to seal the annular space above the filter pack. Three to five feet of cement and bentonite mixture were placed above the bentonite seal. A mounded concrete pad with a minimum radius of two feet was placed at the surface. Each well has a protective steel stand-up cover with a protective cap and lock to prevent tampering. Detail 6 (Dwg. No. V3-07) shows a typical methane monitoring well and monitoring point marker. A table that summarizes methane well as-built construction information is provided below.

METHANE MONITOR WELL AS-BUILT DATA TABLE

| METHANE MONITOR WELL | N         | E         | BOLT EL ft mal | TOTAL DEPTH EL ft mal |
|----------------------|-----------|-----------|----------------|-----------------------|
| MM-7                 | 9631.6193 | 7826.0659 | 257.56         | 232.56                |
| MM-8                 | 9361.2699 | 7341.2712 | 272.99         | 242.99                |
| MM-9                 | 9127.9166 | 6980.2829 | 268.32         | 238.32                |
| MM-10                | 8809.0679 | 7253.0077 | 257.95         | 227.95                |
| MM-11                | 8808.1725 | 7841.8269 | 259.39         | 234.39                |
| MM-12                | 9248.4436 | 8003.8302 | 270.86         | 240.86                |

### Monitoring in Onsite Structures

For all structures within 300 feet of the landfill boundary, methane screening of indoor air will be conducted. Monitoring in onsite structures will be conducted at times when dilution of indoor air is minimized and the concentration of soil gas is expected to be at its highest concentration, such as after a building has been closed for the weekend or overnight and when the soil surface has been wet or frozen for several days. Currently, there are no onsite structures in the vicinity of landfill #3.

## 3. Gas Monitoring Procedures

The wells will be monitored in accordance with the following schedule:

- \* Wells will be monitored quarterly until a demonstration can be made to EPD that methane migration from the Plant Vogtle landfill presents no threat.
- \* Each monitoring event will include observations for stressed vegetation due to methane gas movement.
- \* Monitoring in, beneath, and around site structures will be a part of each screening event. The are no applicable structures at the Plant Vogtle landfill #3.

## 4. Quality Assurance and Control Procedures

The following quality assurance and quality control procedures will be implemented:

- \* Sampling will not be performed if conditions conducive to decreasing gas concentrations are present (e.g. subsurface gas pressure less than atmospheric pressure). In this case, sampling will be delayed until such conditions pass.
- \* Sampling must be conducted when gas pressures are at a maximum. Subsurface gas pressures have a diurnal cycle and generally are at a maximum during the afternoon. Therefore, sampling will be conducted after 12:00 noon.
- \* Gas production will vary with changes in seasons and climatic conditions. Each sampling event must be conducted under the same conditions, as near as possible, as the preceding event. Therefore, the operator will review the log of the time and conditions which existed during the preceding sampling event and attempt to emulate those conditions as exactly as possible during subsequent events.

## 5. Evaluation and Reporting of Monitoring Results

### Interpretation of Quarterly Sampling for Methane Gas

- \* Methane gas concentrations shall not exceed 25 percent of the lower explosive limit (LEL) value (1.25 %) for gases in facility structures.
- \* Methane gas concentrations shall not exceed the lower explosive limit for methane at facility boundaries (5 %).

### Reporting of Quarterly Monitoring Events

Methane monitoring results will be reported on EPD Form SWM-19/Report and signed by a Professional Engineer registered in the State of Georgia. The report will be submitted to EPD within fifteen (15) days of testing and completed in accordance with the instructions contained in EPD Guidance document, dated May 23, 1995 and titled: METHANE MONITORING AT MUNICIPAL SOLID WASTE FACILITIES. The facility permit number (017-007D(1)(1)) will be included in the headings of all monitoring reports. If reports are returned from EPD that are incomplete or improperly prepared, a corrected report will be resubmitted within thirty (30) days.

### Response to Validated Finding of Methane Gas Migration

If a validated finding of methane gas migration occurs, a contingency plan will be implemented consisting of the following steps:

1. Verification of explosive gas concentrations by immediate retesting.
2. Upon verification of readings above 25 percent of the LEL in facility structures or the LEL at facility boundaries, immediate notification of EPD and local public safety authorities such as the local health district, fire department, and law enforcement shall be given, as appropriate.
3. The monitoring frequency of the subject monitoring stations will be increased from quarterly monitoring to monthly monitoring until such time that the problem is corrected or determined not to pose a significant threat to the environment, public health and safety.
4. The need for methane gas control systems will be assessed upon validated findings of methane gas migration and appropriate recommendations implemented. This assessment and recommended remedy will be submitted to EPD in the form of a remediation plan within 60 days of a validated finding of methane gas migration.

## 6. Methane Gas Safety Guidelines

The following guidelines will be followed by personnel when sampling at the landfill in areas with confirmed levels of potentially dangerous gases:

- \* No person will enter a vault or a trench on a landfill without first checking for the presence of methane gas. The person will also wear a safety harness with a second person standing by to pull him or her to safety. Anyone installing wells in a landfill will wear a safety rope to prevent falling in the bore hole. Open holes will be covered when they are left unattended.
- \* Smoking will be prohibited on the landfill where drilling, excavating, or installation of equipment is taking place or where gas is venting from the landfill.
- \* Collected gas from a mechanically evacuated system should always be cleared to minimize air pollution and any potential explosive or fire hazard.
- \* Methane gas in a concentration of 5 to 15 percent is an explosive mixture. Gas accumulations should be monitored in enclosed structures to insure that explosive conditions are avoided and, if detected, appropriate action is taken to avoid a source of ignition and to vent the structure.

All personnel working on a landfill will be provided training regarding the danger posed by landfill gases. Personnel operating safety equipment around the landfill will be thoroughly trained in its use and have a clear understanding of the meaning of observations made with the monitoring equipment. Monitoring equipment must be periodically calibrated to ensure continued accuracy in the results.

| REV. | DATE     | DESCRIPTION        | BY  | INSG. APPR. |
|------|----------|--------------------|-----|-------------|
| 3    | 12/31/04 | Updated Procedures | GHA |             |

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**Southern Nuclear Operating Co., Inc.**  
**Methane Monitoring Program**  
**Plant Vogtle Landfill #3**

| REF. | DWG. NUMBER | TITLE | DRAWN BY:   | DATE:    | DRAWING NUMBER |
|------|-------------|-------|-------------|----------|----------------|
|      |             |       | JF          | 10/19/01 | V3-07          |
|      |             |       | CHECKED BY: | SCALE:   |                |
|      |             |       |             | None     |                |







TABLE 1  
Appendix I to Part 40 CFR Part 258: Constituents for  
Detection Monitoring (1)  
Plant Vogtle, Burke County, Georgia

| INORGANIC CONSTITUENTS   | EPA METHOD |
|--|------------|
| Antimony   | 7040/7041  |
| Arsenic  | 7060/7061A |
| Barium   | 7080/7081  |
| Beryllium  | 7090/7091  |
| Cadmium  | 7130/7131  |
| Chromium   | 7190/7191  |
| Cobalt   | 7200/7201  |
| Copper   | 7210/7211  |
| Lead   | 7420/7421  |
| Nickel   | 7520       |
| Selenium   | 7740/7741  |
| Silver   | 7760A/7761 |
| Thallium   | 7840/7841  |
| Vanadium   | 7910/7911  |
| Zinc   | 7950/7951  |
| ORGANIC CONSTITUENTS   | EPA METHOD |
| Acetone  | 8260       |
| Acrylonitrile  | 8260       |
| Benzene  | 8260       |
| Bromochloromethane   | 8260       |
| Bromodichloromethane   | 8260       |
| Bromoform; Tribromomethane                                     | 8260       |
| Carbon disulfide   | 8260       |
| Carbon Tetrachloride   | 8260       |
| Chlorobenzene  | 8260       |
| Chloroethane; Ethyl Chloride                                   | 8260       |
| Chloroform; Trichloromethane                                   | 8260       |
| Dibromochloromethane; Chlorodibromomethane                     | 8260       |
| 1,2-Dibromo-3-chloropropane; DBCP                              | 8260       |
| 1,2-Dibromoethane; Ethylene dibromide; EDB                     | 8260       |
| o-Dichlorobenzene; 1,2-Dichlorobenzene                         | 8260       |
| p-Dichlorobenzene; 1,4-Dichlorobenzene                         | 8260       |
| trans-1,4-Dichloro-2-butene                                    | 8260       |
| 1,1-dichloroethane; Ethylidene chloride                        | 8260       |
| 1,2-dichloroethane; Ethylene dichloride                        | 8260       |
| 1,1-dichloroethene; 1,1-Dichloroethene;<br>Vinylidene chloride | 8260       |
| cis-1,2-Dichloroethene; cis-1,2-Dichloroethene                 | 8260       |
| trans-1,2-Dichloroethene;<br>trans-1,2-Dichloroethene          | 8260       |
| 1,2-dichloropropane; Propylene dichloride                      | 8260       |
| cis-1,3-dichloropropene  | 8260       |
| trans-1,3-Dichloropropene                                      | 8260       |

TABLE 1  
Appendix I to Part 40 CFR Part 258: Constituents for  
Detection Monitoring (1)  
Plant Vogtle, Burke County, Georgia

| ORGANIC CONSTITUENTS   | EPA METHOD |
|--|------------|
| Ethylbenzene   | 8260       |
| 2-Hexanone; Methyl butyl ketone                              | 8260       |
| Methyl Bromide; Bromomethane                                 | 8260       |
| Methyl Chloride; Chloromethane                               | 8260       |
| Methylene bromide; Dibromomethane                            | 8260       |
| Methylene Chloride; Dichloromethane                          | 8260       |
| Methyl ethyl ketone; MEK; 2-Butanone                         | 8260       |
| Methyl iodide; Iodomethane                                   | 8260       |
| 4-Methyl-2-pentanone; Methyl isobutyl ketone                 | 8260       |
| Styrene  | 8260       |
| 1,1,1,2-Tetrachloroethane                                    | 8260       |
| 1,1,2,2-tetrachloroethane                                    | 8260       |
| Tetrachloroethylene; Tetrachloroethene;<br>Perchloroethylene | 8260       |
| Toluene  | 8260       |
| 1,1,1-trichloroethane; Methylchloroform                      | 8260       |
| 1,1,2-trichloroethane  | 8260       |
| Trichloroethylene; Trichloroethene                           | 8260       |
| Trichlorofluoromethane; CFC-11                               | 8260       |
| 1,2,3-Trichloropropane                                       | 8260       |
| Vinyl acetate  | 8260       |
| Vinyl Chloride   | 8260       |
| Xylenes  | 8260       |

(1) This list contains 47 volatile organics for which possible analytical procedures provided in EPA Report SW-846 "Test Methods for Evaluating Solid Waste", third edition, November 1986, as revised December 1987, include Method 8260; and 15 metals for which SW-846 provides either Method 6010 or a method from the 7000 series of methods.

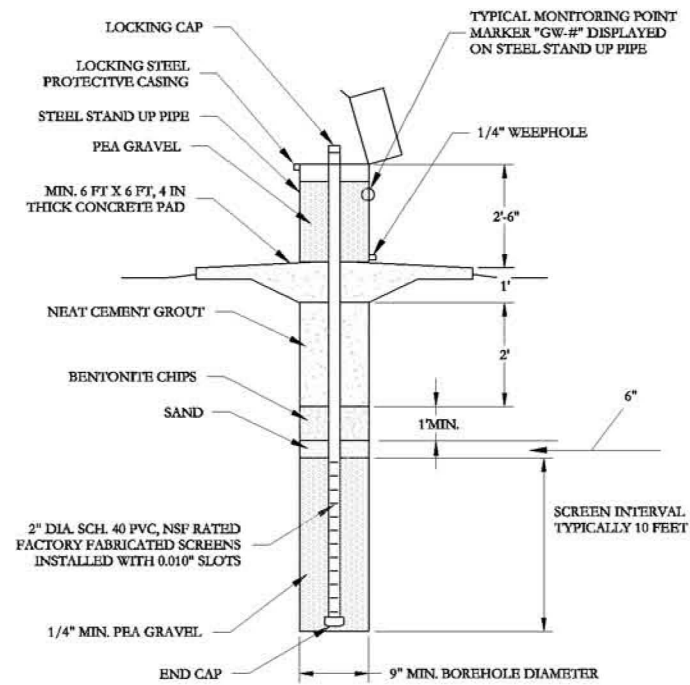
(2) Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

GROUND WATER WELL AS-BUILT DATA TABLE

| GW WELL NUMBER | NORTHING  | EASTING   | TOP OF CASING ELEV (FT, MSL) | GW ELEV 6/15/04 (FT, MSL) | DRY |
|----------------|-----------|-----------|------------------------------|---------------------------|-----|
| GWC-5/MW-5     | 9604.3004 | 7999.3327 | 251.96                       | 204.20                    |     |
| GWB-6/MW-6     | 9432.4753 | 7473.2531 | 278.87                       | 232.38                    |     |
| GWA-7/MW-7     | 8826.2243 | 7657.8853 | 261.33                       | 230.46                    |     |
| GWC-13/MW-13   | 9242.6820 | 7996.2997 | 273.08                       | 233.49                    |     |
| GWC-14/MW-14   | 8960.6518 | 7999.6737 | 262.88                       | 210.77                    |     |
| GWA-15/MW-15   | 8976.1153 | 6886.5411 | 268.15                       | 224.91                    |     |
| GWB-16/MW-16   | 9720.2971 | 7705.1490 | 256.95                       |                           |     |

TABLE 2  
Ground Water Preservation and Handling  
Plant Vogtle, Burke County, Georgia

| Parameter                | EPA Method          | Digestion Vol. Req. (mL)                                    | Collection Volume (mL) | Preservative/Holding Time                 |
|--------------------------|---------------------|---|------------------------|---|
| Total Recoverable Metals | 6010 or 7000 Series | 100   | 600                    | HNO3 to pH <2; 6 months                   |
| Dissolved Metals         | 6010 or 7000 Series | 100   | 600                    | Filter on site; 6 months<br>HNO3 to pH <2 |
| Suspended                | 6010 or 7000 Series | 100   | 600                    | Filter on site; 6 months                  |
| Total                    | 6010 or 7000 Series | 100   | 600                    | HNO3 to pH <2; 6 months                   |
| Volatile Organics        | 8260                | Not Applicable<br>Glass, Teflon-lined septa or caps recomm. | 69 mL for one analysis | Cool 4°C; 7-14 days (extract in 5 days)   |



TYPICAL GROUNDWATER MONITOR WELL

DETAIL 7  
N.T.S. V3-10 V3-09

| 3   | 12/31/04 | Updated Procedures                   | GHA |            |
|---|----------|--------------------------------------|-----|------------|
| REV.  | DATE     | DESCRIPTION                          | BY  | ENG. APPR. |
| SUPERSEDES:   |          | REVISIONS:                           |     |            |
| PROJECT NO. SNOC-01-DOV-02  |          | FILENAME: V3-10 Water Monitoring.dwg |     |            |
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| DRAWN BY:   | DATE:    | DRAWING NUMBER                       |     |            |
| JF  | 10/19/01 | V3-10                                |     |            |
| CHECKED BY:   | SCALE:   |                                      |     |            |
|   | None     |                                      |     |            |

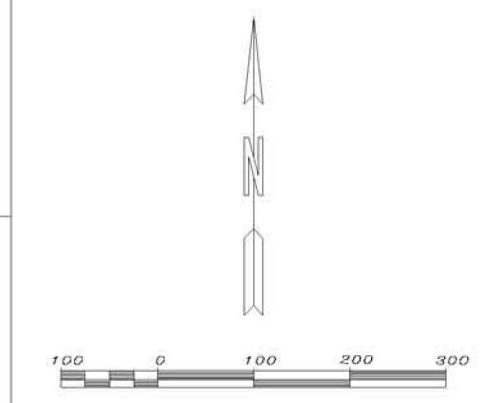
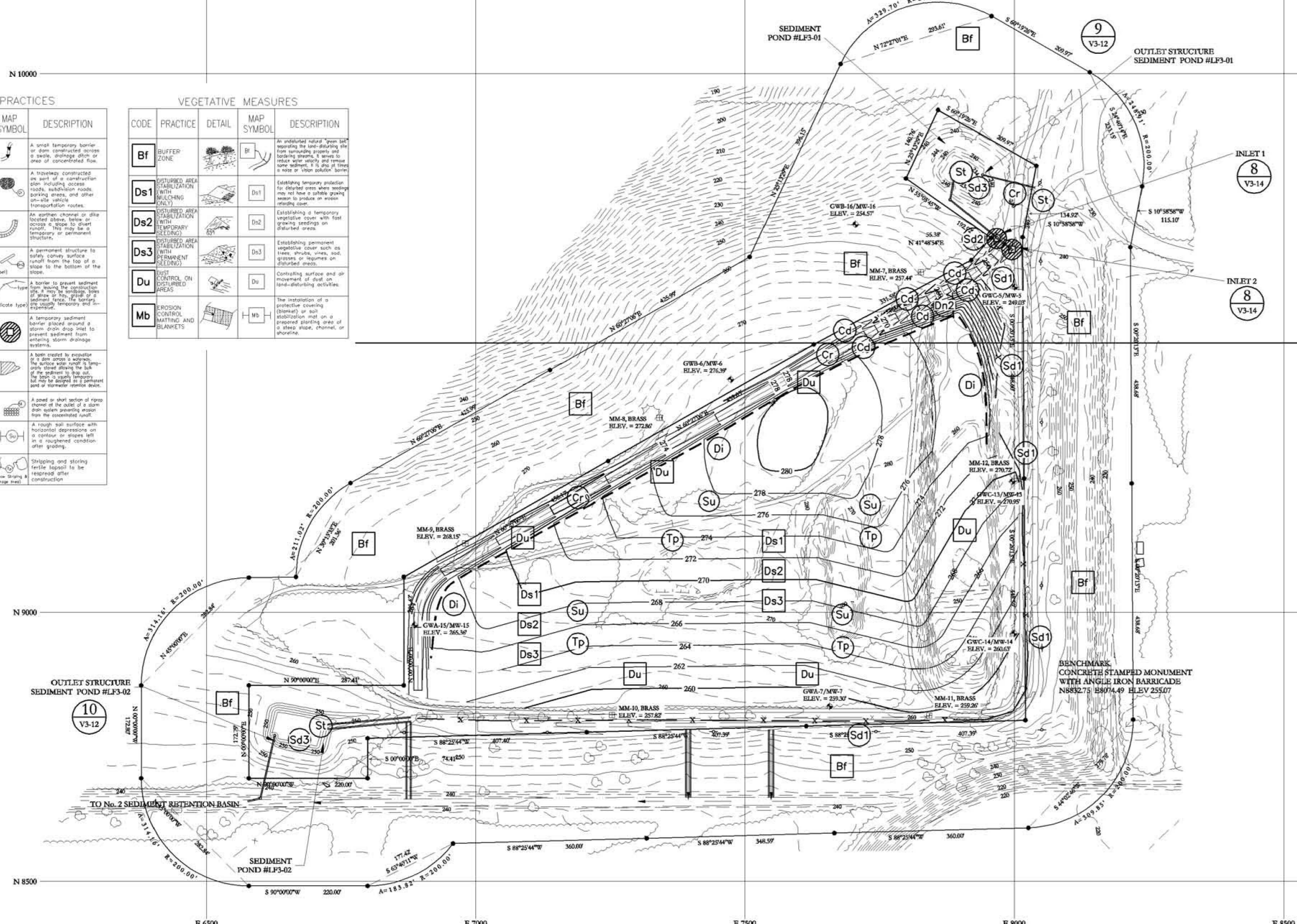
| REF. | DWG. NUMBER | TITLE             |
|------|-------------|-------------------|
|      |             | REFERENCE DRAWING |

E 6500 E 7000 E 7500 E 8000 E 8500

N 10000

| STRUCTURAL PRACTICES |                                 |        |            |  |
|----------------------|---------------------------------|--------|------------|--|
| CODE                 | PRACTICE                        | DETAIL | MAP SYMBOL | DESCRIPTION  |
| Cd                   | CHECKDAM                        |        |            | A small temporary barrier or dam constructed across a swale, drainage ditch or drop of concentrated flow.  |
| Cr                   | CONSTRUCTION ROAD STABILIZATION |        |            | A driveway constructed on soil of a construction site including access roads, subdivision roads, parking areas, and other on-site vehicle transportation routes.   |
| Di                   | DIVERSION                       |        |            | An earthen channel or dike located above, below or across a slope to divert runoff. This may be a temporary or permanent structure.  |
| Dn2                  | PERMANENT DOWNDRAIN STRUCTURE   |        |            | A permanent structure to safely convey surface runoff from the top of a slope to the bottom of the slope.  |
| Sd1                  | SEDIMENT BARRIER                |        |            | A barrier to prevent sediment from leaving the construction site. A mat of straw, hay, or a sediment fence. The barrier is usually temporary and inexpensive.  |
| Sd2                  | INLET SEDIMENT TRAP             |        |            | A temporary sediment barrier placed around a storm drain inlet to prevent sediment from entering storm drainage systems.   |
| Sd3                  | TEMPORARY SEDIMENT BASIN        |        |            | A basin created by excavation or a dam across a roadway. The surface water runoff is temporarily stored during the bulk of the sediment to trap out. The slope is usually 1% permanent pond or stormwater retention basin. |
| St                   | STORMDRAIN OUTLET PROTECTION    |        |            | A panel or short section of riprap channel of the outlet of a storm drain system preventing erosion from the concentrated runoff.  |
| Su                   | SURFACE ROUGHENING              |        |            | A rough soil surface with horizontal depressions on a concrete or pavers left in a roughened condition after grading.  |
| Tp                   | TOPSOILING                      |        |            | Stripping and storing fertile topsoil to be respread after construction.   |

| VEGETATIVE MEASURES |   |        |            |  |
|---------------------|---|--------|------------|--|
| CODE                | PRACTICE  | DETAIL | MAP SYMBOL | DESCRIPTION  |
| Bf                  | BUFFER ZONE   |        |            | An undisturbed natural "green belt" separating the site-disturbing site from surrounding property and existing streams. It serves to reduce water velocity and remove some sediment. It is also, if trees, a noise or vision solution barrier. |
| Ds1                 | DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)     |        |            | Establishing temporary protection for disturbed areas where seedings are not to be applied. Seeding is not to be applied to produce an erosion-retarding cover.  |
| Ds2                 | DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING) |        |            | Establishing a temporary vegetative cover with fast growing seedlings on disturbed areas.  |
| Ds3                 | DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING) |        |            | Establishing permanent vegetative cover with slow growing seedlings on disturbed areas.  |
| Du                  | DUST CONTROL ON DISTURBED AREAS                       |        |            | Controlling surface and air movement of dust on road-disturbing activities.  |
| Mb                  | EROSION CONTROL MATTING AND BLANKETS                  |        |            | The installation of a protective covering (blanket) or soil stabilization mat on a prepared graded area of a steep slope, channel, or structure.   |



Map produced by BEI Aerial Mapping, Peachtree City, GA  
 BEI PROJECT #1010805  
 DATE OF PHOTOGRAPHY: 8/22/2001

**LEGEND**

- POWER POLE
- TREELINE
- 150 EXISTING CONTOUR
- FENCE
- METHANE WELL
- GROUNDWATER MONITORING WELL
- WASTE MANAGEMENT UNIT/BUFFER BOUNDARY MARKER
- 250 PROPOSED CONTOUR

| REV. | DATE     | DESCRIPTION        | BY  | ENGR. APPR. |
|------|----------|--------------------|-----|-------------|
| 3    | 12/31/04 | Updated Procedures | GHA |             |

SUPERSEDES: \_\_\_\_\_ REVISIONS: \_\_\_\_\_  
 PROJECT NO. SNOC-01-DOV-02 FILENAME: V3-11 E&S Plan.dwg

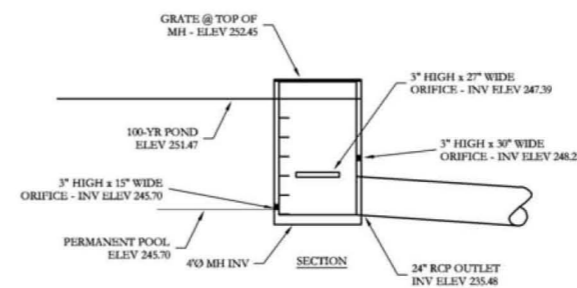
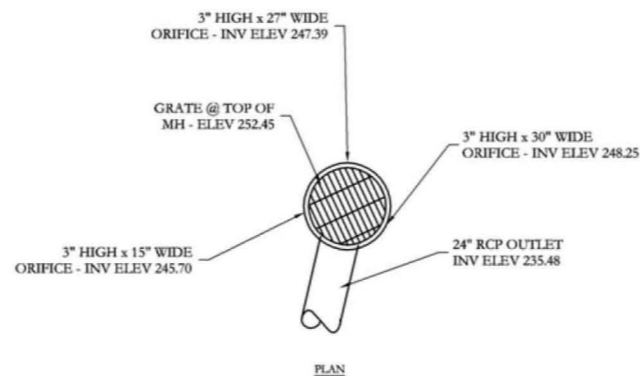
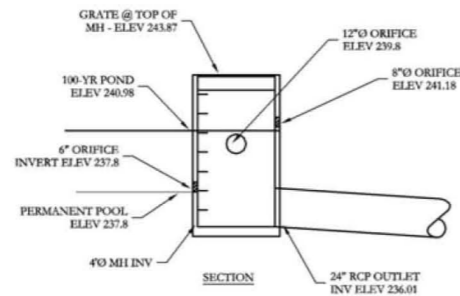
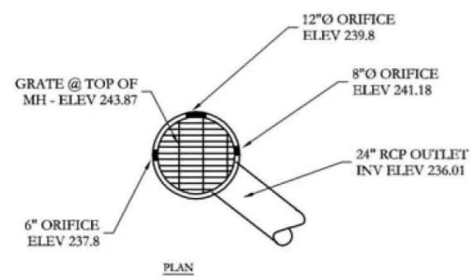
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**Southern Nuclear Operating Co., Inc.**  
**Erosion & Sediment Control Plan**  
**Plant Vogtle Landfill #3**

| REF. | DWG. NUMBER | TITLE             |
|------|-------------|-------------------|
|      |             | REFERENCE DRAWING |

|             |          |                 |
|-------------|----------|-----------------|
| DRAWN BY:   | DATE:    | DRAWING NUMBER: |
| JF          | 10/19/01 | V3-11           |
| CHECKED BY: | SCALE:   |                 |
|             | None     |                 |

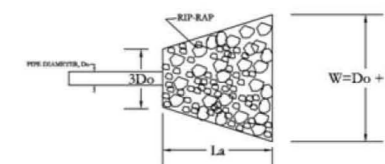


OUTLET STRUCTURE - POND #LF3-01

AS-BUILT DETAIL 9  
1" = 5'-0" V3-12 V3-11

OUTLET STRUCTURE - POND #LF3-02

AS-BUILT DETAIL 10  
1" = 5'-0" V3-12 V3-11



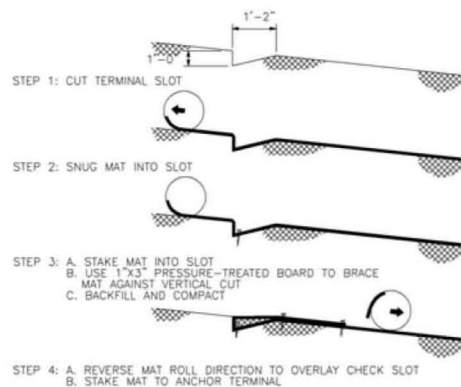
| CMP SIZE | La  | W   | THICKNESS OF APRON | D.O.T. | RIP-RAP NO. |
|----------|-----|-----|--------------------|--------|-------------|
| 12"      | 8'  | 10' | 2'                 | 3      |             |
| 15"      | 10' | 12' | 2'                 | 3      |             |
| 18"      | 12' | 14' | 2'                 | 3      |             |
| 24"      | 16' | 20' | 2'                 | 3      |             |
| 30"      | 20' | 26' | 2'                 | 3      |             |
| 36"      | 24' | 32' | 2'                 | 3      |             |
| 42"      | 28' | 38' | 2'                 | 3      |             |
| 48"      | 32' | 44' | 2'                 | 3      |             |
| 54"      | 36' | 50' | 2'                 | 3      |             |
| 60"      | 40' | 56' | 2'                 | 3      |             |
| 66"      | 44' | 62' | 2'                 | 3      |             |
| 72"      | 48' | 68' | 2'                 | 3      |             |

\*RIP-RAP SHALL BE UNDERLAIN WITH TYPICAL 1114 OR APPROVED EQUAL.

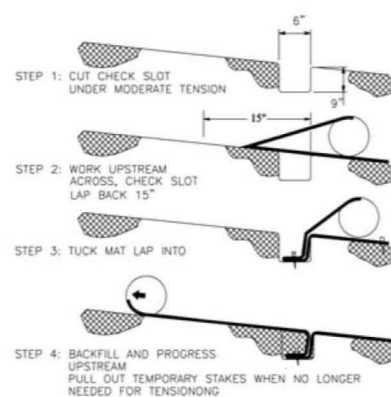
MAINTENANCE: INSPECT RIPRAP OUTLET STRUCTURES AFTER HEAVY RAINS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

St STORMWATER OUTLET PROTECTION

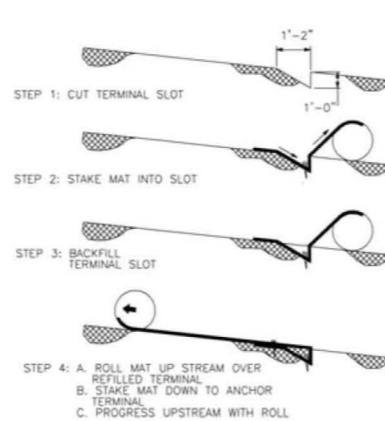
UPSTREAM TERMINAL



TRANSVERSE CHECK SLOT

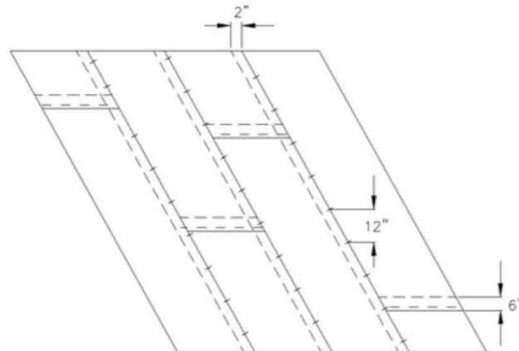


DOWNSTREAM TERMINAL



NOTES:

- CONCENTRATED FLOW AREAS, ALL SLOPES STEEPER THAN 2.5H:1V AND WITH A HEIGHT OF TEN FEET OR GREATER AND CUTS AND FILLS WITHIN STREAM BUFFERS SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER & SEED.
- BEGIN AT TOP OF SLOPE BY ANCHORING BLANKET IN A 6" x 6" TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
- MINIMUM 2" OVERLAP ON PARALLEL BLANKETS. MINIMUM 6" OVERLAP WHEN SPLICING DOWNSLOPES. STAPLES TO BE PLACED AT 12" INTERVALS.
- MAINTENANCE: ALL EROSION CONTROL BLANKETS AND MATTING SHOULD BE INSPECTED PERIODICALLY FOLLOWING INSTALLATION, PARTICULARLY AFTER RAINSTORMS TO CHECK FOR EROSION AND UNDERMINING. ANY DISLOCATION OR FAILURE SHOULD BE REPAIRED IMMEDIATELY. IF WASHOUTS OR BREAKAGE OCCURS, REINSTALL THE MATERIAL AFTER REPAIRING DAMAGE TO THE SLOPS OR DITCH. CONTINUE TO MONITOR THESE AREAS UNTIL THEY BECOME PERMANENTLY STABILIZED.



Mb EROSION CONTROL MATTING AND BLANKETS

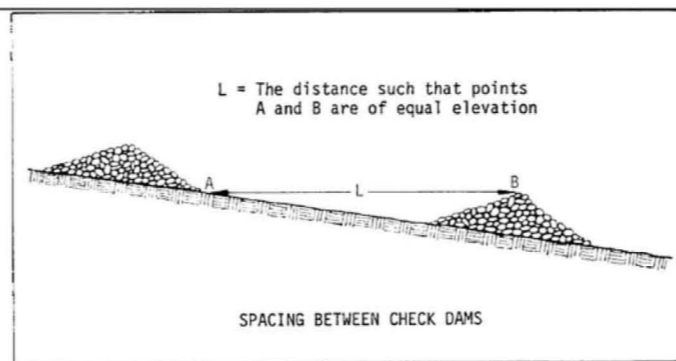
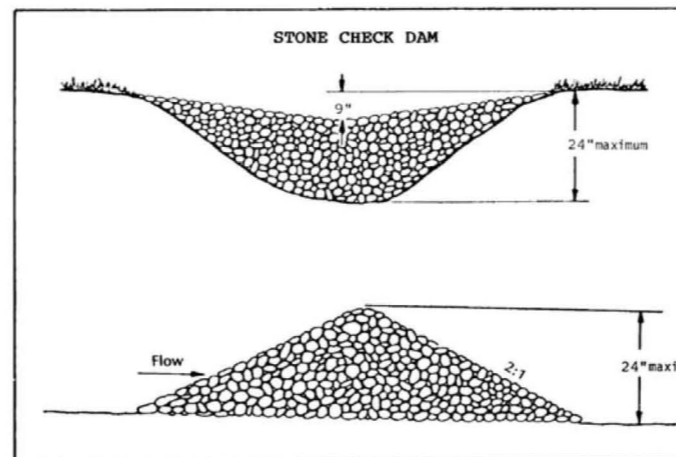


Figure 6-1.1

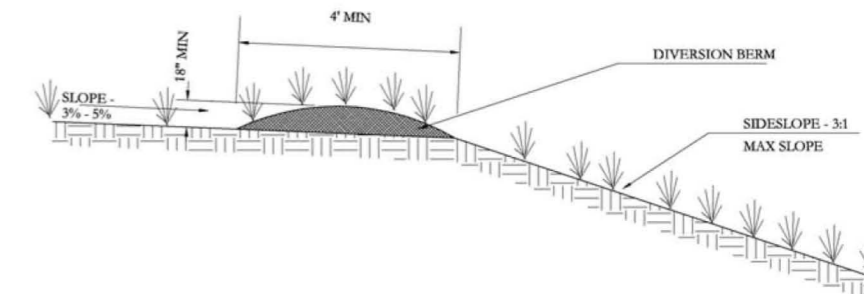


MAINTENANCE: PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 1/2 THE ORIGINAL DAM HEIGHT OR BEFORE. IF THE AREA IS TO BE MOWED, CHECK DAMS SHALL BE REMOVED ONCE FINAL STABILIZATION HAS OCCURRED. OTHERWISE, CHECK DAMS MAY REMAIN IN PLACE PERMANENTLY. AFTER REMOVAL, THE AREA BENEATH THE DAM SHALL BE SEEDED AND MULCHED IMMEDIATELY.

Cd-S CHECK DAM - STONE

GaSWCC (Amended - 1995)

6-14



NOTE: BERM TO BE USED OVER INTERMEDIATE COVER AND OVER FINAL COVER TO DIRECT SURFACE WATER DRAINAGE AWAY FROM SIDESLOPES.

Di DIVERSION BERM

| REV. | DATE     | DESCRIPTION        | BY | ENG. | APPR. |
|------|----------|--------------------|----|------|-------|
| 3    | 12/31/04 | Updated Procedures |    | GHA  |       |

PROJECT NO. SNOC-01-DOV-02  
FILENAME: V3-12 E&SDetail.dwg

THE DEXTRA GROUP, INC.  
4665 LOWER ROSWELL ROAD, #154  
MARIETTA, GEORGIA 30068

Southern Nuclear Operating Co., Inc.  
Erosion & Sediment Control Details I  
Plant Vogtle Landfill #3

| DRAWN BY:   | DATE:    | DRAWING NUMBER: |
|-------------|----------|-----------------|
| JF          | 10/19/01 | V3-12           |
| CHECKED BY: | SCALE:   |                 |
|             | None     |                 |

REF: DWG. NUMBER TITLE

REFERENCE DRAWING

**Dn2** Downdrain (Permanent)

Downdrains are structures used to safely convey surface runoff from a higher to a lower position on the slope. Temporary downdrains are usually placed on the surface of natural soils or well-compacted soils, rather than entrenching them into the soil on the slope. A variety of materials can be used; the most common is non-perforated corrugated plastic or flexible tubing. Other materials such as Triangle Silt Dikes or other open channel materials can also be configured to serve as downdrains.

Construction design:  
Pipe diameter is determined by the acreage drained as provided in Table 1.

Table 1. Downdrain Pipe Sizing Criteria

| Maximum Drainage Area per Pipe (acre) | Pipe Diameter (inches) |
|---------------------------------------|------------------------|
| 0.3                                   | 10                     |
| 0.5                                   | 12                     |
| 1.0                                   | 18                     |

**Inlet:**  
The inlet is usually a depression point in a berm or at ends of sediment barriers (Sd1). The outlet apron must be sloped to minimize erosion and not to form scour pockets at the discharge end of the pipe. The inlet is often constructed of sheet metal. A "Tee" or an "L" is often used. The berm over the inlet must have dimensions as: 18 inches depth over the top of the pipe, 4 feet top width and 3:1 side slopes. If necessary, add a trash rack to prevent the inlet from choking with debris.

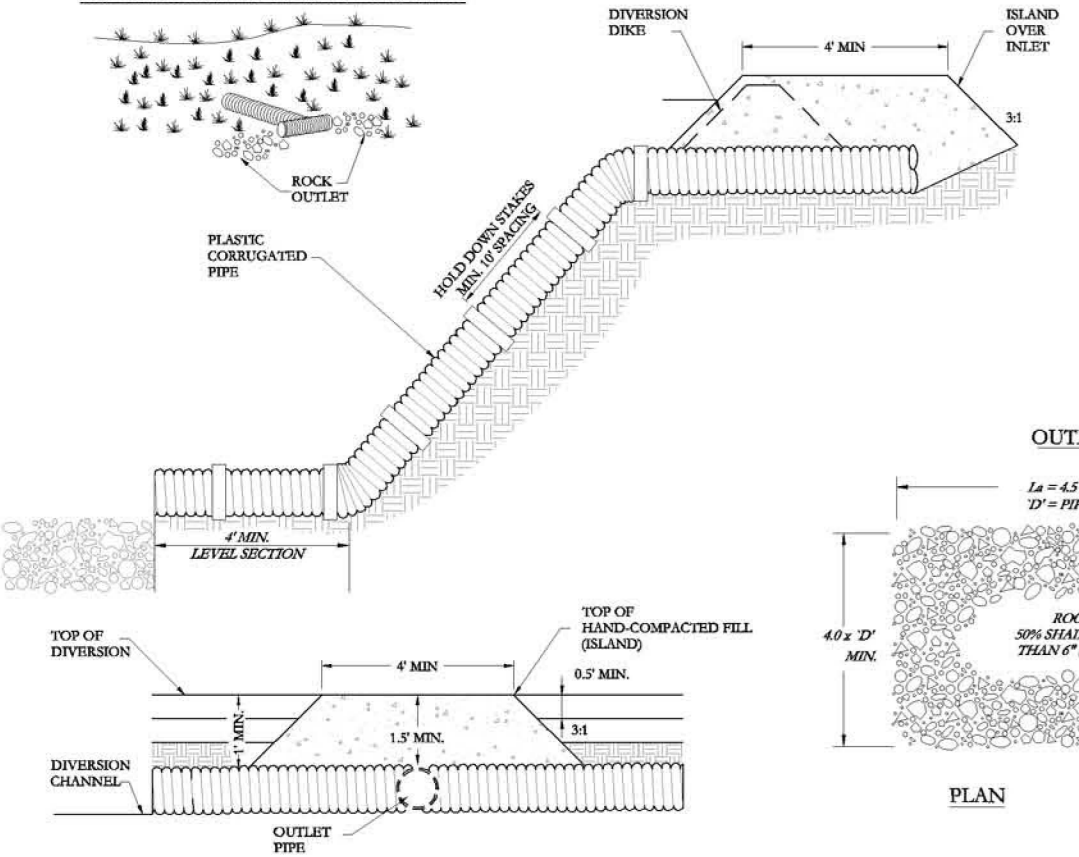
**Barrel:**  
The barrel of the downdrain can be oriented directly downslope, but more beneficial is to slant the downdrain. If the barrel empties directly into a receiving stream, adjust the angle so as not to intercept at a 90-degree angle. All pipe section connections must be watertight. The barrel must be securely anchored to the earth at an interval not to exceed 10-feet.

**Outlet and Energy Dissipater:**  
The outlet must extend a distance of 4 feet, in a level plane beyond the slope. If the discharge outlet is not into a stream, an energy dissipater (St) is required to prevent scour hole formation.

**Maintenance:**  
Inspect inlet structure after every rain to insure that the inlet is not clogged with trash. Inspect the outlet structure to insure that erosion around or below the riprap is not taking place. Make repairs as needed.

Remove the temporary downdrain after construction is completed and the site is stabilized.

**T-FITTING ON PLASTIC PIPE OUTLET**



**Dn2 PERMANENT DOWNDRAIN**

**St** Energy Dissipater

Energy Dissipaters are installed at the outlets of downdrains, road culverts, and paved channel sections that convey water that has erosive velocity. The energy dissipater absorbs the energy and releases the water with a lower erosive potential.

Construction Specifications:  
Energy Dissipaters are often constructed in the form of rip rap barriers over filter fabric. A 6-inch gravel subbase is desirable to prevent the rip rap from puncturing the filter fabric. The thickness of the rip rap should be no less than 1.5 times the diameter of the stone. The apron should extend out beyond the end of the outlet for a distance of 4.5 (feet) times the diameter of the pipe (inches). If the velocity is great, a geogrid can be installed as an apron cover to reduce rip rap scour and dislocation.

Other energy dissipaters include flaps hinged over the top of the downdrain, a "Tee" or gulsion baskets.

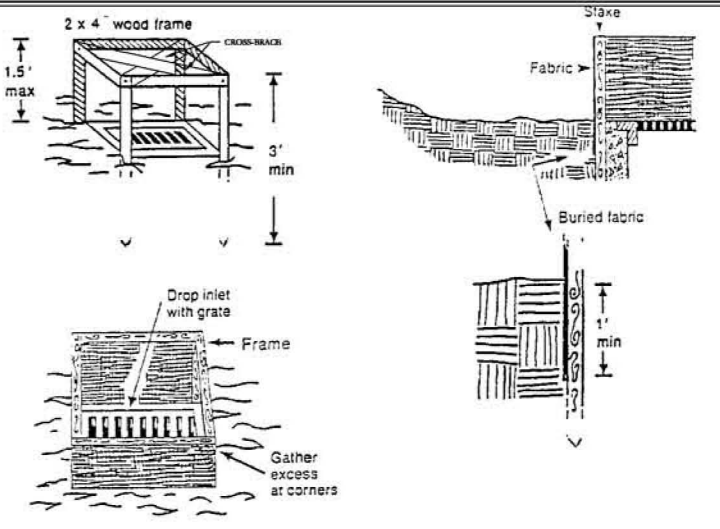


Figure 6-14.1 - Fabric and supporting frame for inlet protection

- For stakes, use 2 x 4 inch wood (preferred) or equivalent metal with a minimum length of 3 feet.
- Space stakes evenly around the perimeter of the inlet a maximum of 3 feet apart, and securely drive them into the ground, approximately 18 inches deep.
- To provide needed stability to the installation, frame with 2 x 4 inch wood strips around the crest of the overflow area at a maximum of 1.5 feet above the drop inlet crest.
- Place the bottom 12 inches of the fabric in a trench and backfill the trench with at least 4 inches of crushed stone or 12 inches of compacted soil.
- Fasten fabric securely to the stakes and frame. Joints must be overlapped to the next stake.
- The top of the frame and fabric must be well below the ground elevation downslope from the drop inlet to keep runoff from bypassing the inlet. It may be necessary to build a temporary dike on the down slope side of the structure to prevent bypass flow.

**MAINTENANCE REQUIREMENTS:**  
THE TRAP SHALL BE INSPECTED PERIODICALLY AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT HAS ACCUMULATED TO HALF THE HEIGHT OF THE TRAP. SEDIMENT SHALL BE REMOVED FROM CURB INLET PROTECTION IMMEDIATELY. FOR EXCAVATED INLET SEDIMENT TRAPS, SEDIMENT SHALL BE REMOVED WHEN HALF OF THE SEDIMENT STORAGE CAPACITY HAS BEEN LOST TO SEDIMENT ACCUMULATION.

SEDIMENT SHALL NOT BE WASHED INTO THE INLET. IT SHALL BE REMOVED FROM THE SEDIMENT TRAP AND DISPOSED OF AND STABILIZED SO THAT IT WILL NOT ENTER THE INLET AGAIN. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED, ALL MATERIALS AND ANY SEDIMENT SHALL BE REMOVED AND SALVAGED OR DISPOSED OF PROPERLY. THE DISTURBED AREA SHALL BE BROUGHT TO PROPER GRADE, THEN SMOOTHED AND COMPACTED. APPROPRIATELY STABILIZE ALL DISTURBED AREAS AROUND THE INLET.

GaSWCC (Amended - 1995) 6-70

**Sd2-F INLET SEDIMENT TRAP-FILTER FABRIC WITH SUPPORTING FRAME**

**MATERIALS** - TOPSOIL SHOULD BE FRIABLE AND LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES AND CONTAIN NO TOXIC SUBSTANCES THAT MAY BE HARMFUL TO PLANT GROWTH. A pH RANGE OF 5.0 - 7.5 IS ACCEPTABLE. SOLUBLE SALTS SHOULD NOT EXCEED 500 ppm.

**TESTING** - FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER THE QUANTITY AND QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.

**STRIPPING** - STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.

**TOPSOIL pH** - IF pH IS <6.0, LIME SHALL BE APPLIED AND INCORPORATED WITH THE TOPSOIL TO ADJUST THE pH TO 6.5 OR HIGHER. TOPSOILS CONTAINING SOLUBLE SALTS GREATER THAN 500 ppm SHALL NOT BE USED.

**STOCKPILES** - LOCATION OF STOCKPILES SHOULD NOT OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE. STOCKPILES SHALL BE CONTAINED BY SEDIMENT BARRIERS TO PREVENT SEDIMENTATION ON ADJACENT AREAS AND SHALL BE STABILIZED IN ACCORDANCE WITH SPECIFICATIONS Dn1 AND Dn2.

**SITE PREPARATION**

**Topsoiling** - WHEN TOPSOILING, MAINTAIN ALL NEEDED EROSION CONTROL PRACTICES.

**Grading** - GRADES ON THE AREAS TO BE TOPSOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED SHALL BE MAINTAINED.

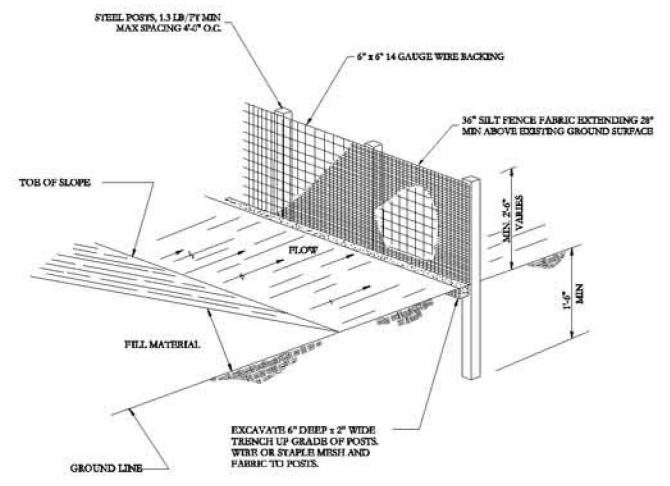
**Liming** - SOIL TESTS SHOULD BE USED TO DETERMINE THE pH OF THE SOIL. WHERE THE pH OF THE SOIL IS 5.0 OR LESS OR COMPOSED OF HEAVY CLAYS, AGRICULTURAL LIMESTONE SHALL BE SPREAD AT THE RATE OF 100 POUNDS PER 100 SF. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED BELOW.

**Bonding** - USE ONE OF THE FOLLOWING METHODS TO INSURE BONDING OF TOPSOIL AND SUBSOIL.

1. TILLAGE - AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE AND IMMEDIATELY PRIOR TO DUMPING AND SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOCKED BY DISCING OR SCALPING TO A DEPTH OF AT LEAST 3 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL.

2. TRACKING - PASSING A BULLDOZER OVER THE ENTIRE SURFACE AREA OF THE SLOPE TO LEAVE HORIZONTAL DEPRESSIONS.

**APPLYING TOPSOIL** - TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE. A UNIFORM APPLICATION OF 3 INCHES (UNSETTLED) IS RECOMMENDED, BUT MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER OR LANDSCAPE ARCHITECT.



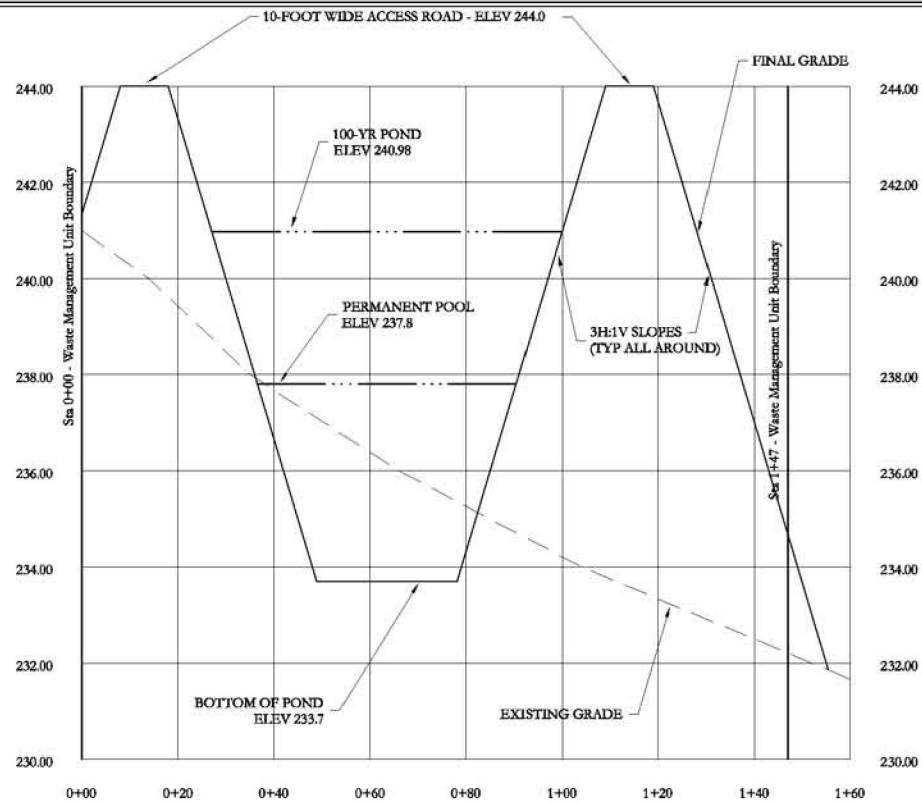
**NOTE:**  
FENCE SHALL BE PLACED AT ALL LOCATIONS WHERE NATURAL GROUND SLOPES AWAY FROM CONSTRUCTION.

- FABRIC REQUIREMENTS:**
- TENSILE STRENGTH (LBS MINIMUM PER ASTM D4632) WARP = 260, FILL = 180
  - ELONGATION (% MAXIMUM PER ASTM D4632) 40%
  - APPARENT OPENING SIZE (MAX SIZE PER ASTM D4753) #50
  - FLOW RATE (GAL/MIN/SF PER GDOT-87) 70
  - ULTRAVIOLET STABILITY (% REDUCTION OF INITIAL MINIMUM TENSILE STRENGTH, AFTER 300 HOUR WEATHERING IN ACCORDANCE WITH ASTM D4355) 80%
  - BURSTING STRENGTH (MINIMUM PSI PER ASTM D3786) 175
  - MINIMUM FABRIC WIDTH: 36 INCHES

**Sd1-C TYPICAL SILT FENCE**

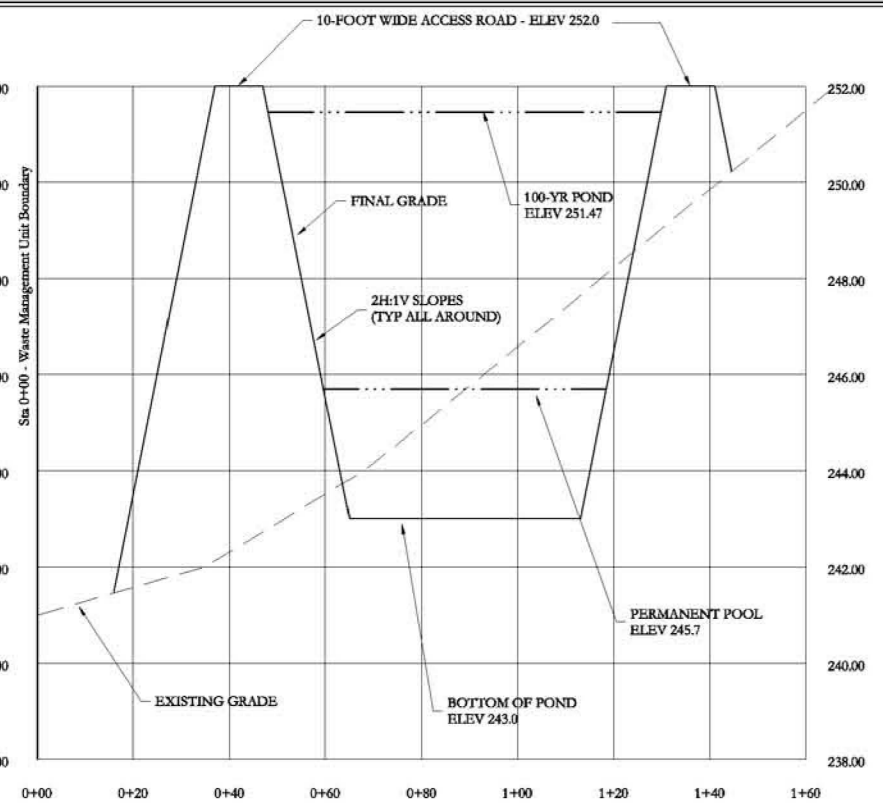
**Tp** TOPSOILING

| REV.  | DATE        | DESCRIPTION        | BY | ENG. | APPR. |
|---|-------------|--------------------|----|------|-------|
| 3   | 12/31/04    | Updated Procedures |    | GHA  |       |
| SUPERSEDES: REVISIONS:  |             |                    |    |      |       |
| PROJECT NO. SNOC-01-DOV-02 FILENAME: V3-13 E&S Details.dwg  |             |                    |    |      |       |
| <p>THE DEXTRA GROUP, INC.<br/>4665 LOWER ROSWELL ROAD, #154<br/>MARIETTA, GEORGIA 30068</p>   |             |                    |    |      |       |
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| DRAWN BY:   | DATE:       | DRAWING NUMBER     |    |      |       |
| JF  | 10/19/01    | V3-13              |    |      |       |
| CHECKED BY:   | SCALE:      |                    |    |      |       |
|   | None        |                    |    |      |       |
| REF.  | DWG. NUMBER | TITLE              |    |      |       |
|   |             | REFERENCE DRAWING  |    |      |       |



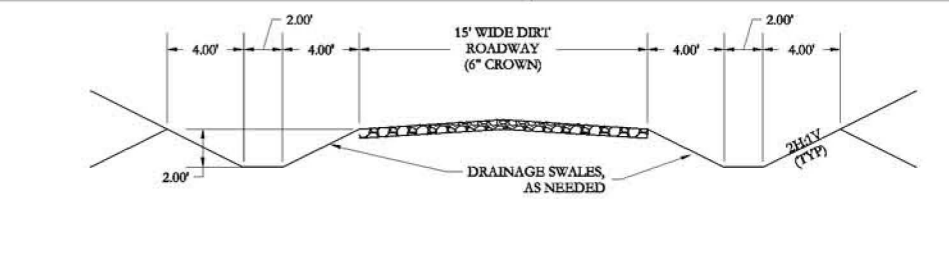
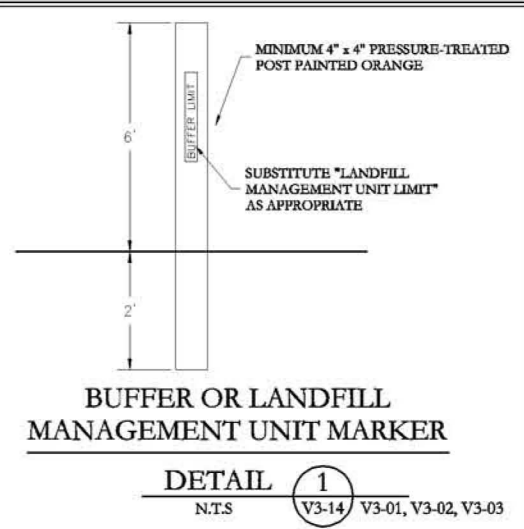
SECTION THROUGH POND LF3-01

SECTION **E**  
 HORZ. SCALE: 1" = 20'  
 VERT. SCALE: 1" = 2'  
 V3-14 V3-03



SECTION THROUGH POND LF3-02

SECTION **F**  
 HORZ. SCALE: 1" = 20'  
 VERT. SCALE: 1" = 2'  
 V3-14 V3-03



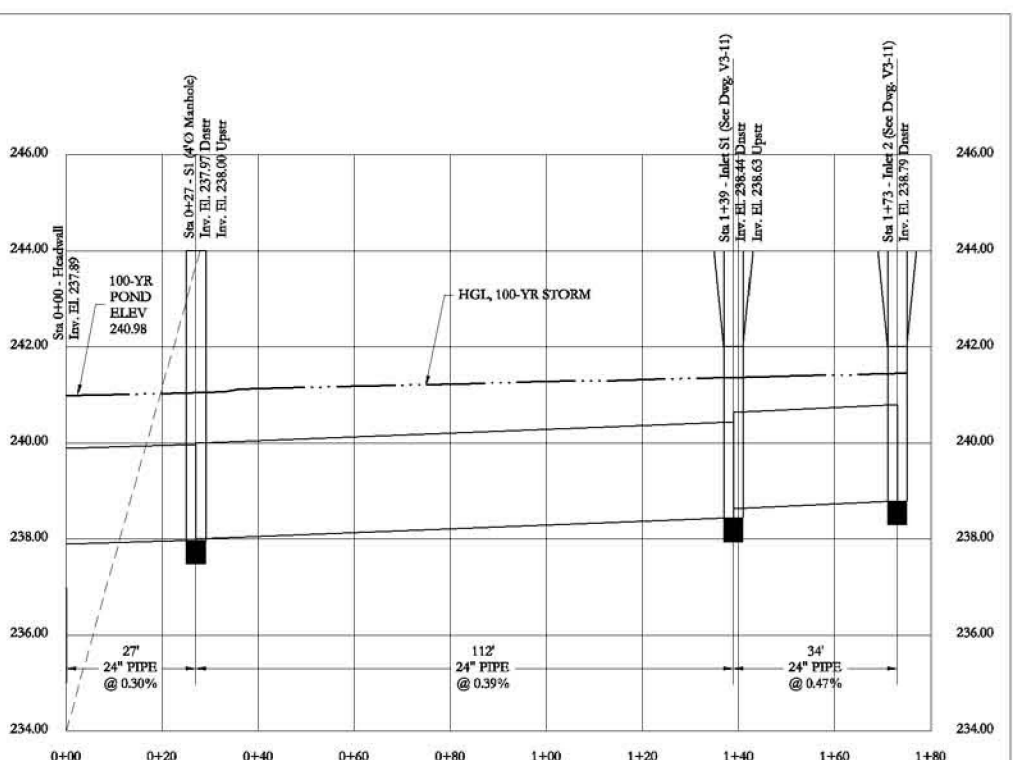
LANDFILL ACCESS ROAD

DETAIL **2**  
 1" = 5'-0"  
 V3-14 V3-01, V3-02, V3-03



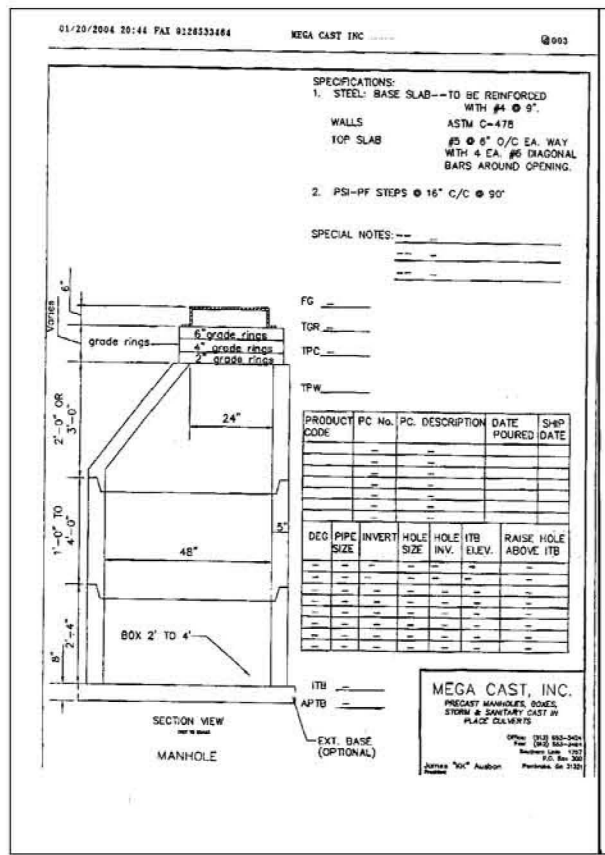
FINAL COVER

DETAIL **3**  
 N.T.S.  
 V3-14 V3-05

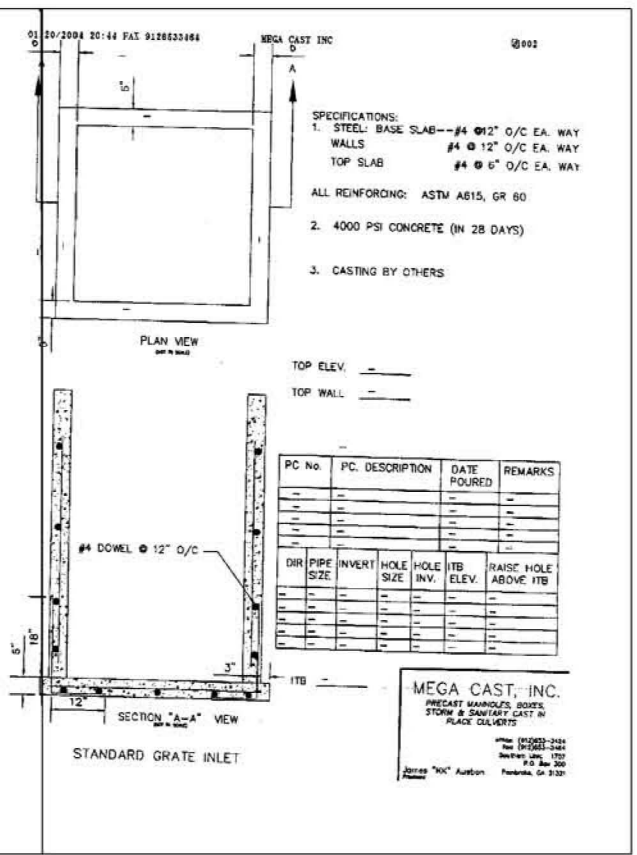


PROFILE, STORMDRAIN PIPE - POND LF3-01

HORZ. SCALE: 1" = 20'  
 VERT. SCALE: 1" = 2'



DROP INLET  
 DETAIL **8**  
 N.T.S.  
 V3-14 V3-11



| REF. | DWG. NUMBER | TITLE             |
|------|-------------|-------------------|
|      |             | REFERENCE DRAWING |

| REV. | DATE     | DESCRIPTION        | BY  | ENG. APPR. |
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| 3    | 12/31/04 | Updated Procedures | GHA |            |

THE DEXTRA GROUP, INC.  
 4665 LOWER ROSWELL ROAD, #154  
 MARIETTA, GEORGIA 30068

Southern Nuclear Operating Co., Inc.  
 Miscellaneous Details  
 Plant Vogtle Landfill #3  
 DRAWN BY: JF  
 DATE: 10/19/01  
 CHECKED BY: None  
 DRAWING NUMBER: V3-14