Brunswtck-7

Brunswick; Lanier Property;
DuPont; ISG Resources; William D. Lanier;
September 17, 1999; May 17, 2000;

The August 17, 1999 Industrial Services Group (ISG Resources, Inc.) Notification for this project proposed a starting date of September 17, 1999 with completion anticipated by May 17, 2000. CCBPs were to be supplied by the E. I. DuPont Cape Fear Plant located in Wilmington with approximately 30,000 cubic yards needed for the structural fill. Representative TCLP data on an ash sample collected eleven months earlier was included in the Notification, This just met the Permitting Branch's criteria of data being less than a year old. The ash was described as being 92% fly ash and 8% bottom ash.

A "project location map" was submitted with marking to show the site location. Also included in the narrative was the description that the location is on the Lewis Swamp, N.C. USGS 7.5 minute quadrangle map at latitude 34 degrees 9' 31.45" North and longitude 78 degrees 8' 23.38" West. A signed and dated owner consent statement for the use of CCBPs in construction on his property plus agreement to recordation according to Rule .1707 was included. The Notification narrative restated the Rule .1704 siting requirements and noted that the project would be in compliance with these and the .1705 Rule design and construction requirements. Construction drawings were supplied.

In the Notification it was stated that the project would reclaim an existing borrow pit area and would provide the owner with a reconstructed topography allowing him to build an access road through the property at a later date.

An August 25, 1999 letter from the Permitting Branch to ISG cited seven points on which the Division requested clarification or additional information to support compliance. These were: (1) the presence of (or absence of involved) wetlands, (2) confirmation of two feet separation between groundwater and ash, (3) clarification of the proposed beneficial use, (4) confirmation of separation distance between the project and drinking water sources, (5) objection to use of certain disclaimers on the construction drawings, (6) the possible existence of a Division of Land Quality (or another Division) permit for the borrow area and (7) desirability of having more recent TCLP data from the generator.

A response letter from ISG dated September 23, 1999 was received. It was determined that the seven areas of concern communicated to ISG in the August 25, 1999 Division letter were all addressed in their response. The only response that was not fully satisfactory was the "clarification of the proposed beneficial use" because it was not specifically identified. This is not a violation to the current .1700 rules and therefore had to be accepted. However, if the rules are revised in the future, this feature needs to be improved. A Letter of Acknowledgment was issued by the Branch on September 29, 1999.

ISG submitted a Closure Certification Report dated November 22, 2001. The narrative stated that initial placement of CCBP occurred in October of 1999 with final placement September 21, 2001. Final cover was completed on October 31, 2001. Dr. Schmaltz was telephoned on November 29, 2001 to confirm receipt of his Closure Report and to remind him of the need for the owner to Record the fill on the deed. He said that was underway and a statement would be sent to DENR soon. The Recordation document was received on December 10, 2001. It was dated August 24, 2001.

C:\WP6DOCS\Struct-Fill-Rpt-01\Brunswick\Brunswick-7.wpd

RESOURCES, INC.

August 17, 1999 FedEx Delivery

William R. Hocutt
State of North Carolina
Department of Environment and Natural Resources
Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

RE: Notification for Coal Combustion By-Product Structural Fill Facilities
Section .1700 of 15A NCAC 13B Solid Waste Management Rules
Lanier Property Project
USGS Quadrangle: Lewis Swamp, N.C.
Brunswick County, North Carolina

Mr. Hocutt:

This correspondence serves as notification to the Division Waste Management of ISG Resources, Inc.'s (ISG's) intent to beneficially utilize coal combustion by-products (CCBPs) as structural fill on the private property of William D. Lanier in Brunswick County, North Carolina. The following six (6) items are presented to satisfy Rule .1703 (a), "Notification for Structural Fill Facilities".

(1) The subject property is just to the north of Green Hill Road on private property owned by William D Lanier. This area is located on the Lewis Swamp, N.C. USGS 7.5 minute series quadrangle at latitude 34° 9' 31.45" North and longitude 78° 8' 23.38" West. This location is shown on the attached project location map. This structural fill application of CCBPs will be performed to reclaim an existing borrow pit area. Coal combustion by-products for this project will be placed approximately 700 feet beyond the northeast end of Turceau Trail NE at an average width of 200 feet. Details of the placement area can be found in the attached construction drawings (prepared per Rule .1703 (b)).

(2) Placement of the CCBPs is scheduled to begin September 17, 1999. The duration of the project will be approximately 8 months; the anticipated completion date is May 17, 2000.

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(3) The volume of the CCBPs to be used for this project will be approximately 30,000 cubic yards.

(4) A toxicity characteristic leaching procedure (TCLP) analysis of the coal combustion by-products to be used in the project is provided (attached). The DuPont Cape Fear Plant produces coal combustion by-products composed of approximately 92% fly ash and 8% bottom ash.

(5) A signed and dated statement by the owner of the land, William D. Lanier, on which the structural fill is to be placed, acknowledging and consenting to the use of coal combustion by-products as structural fill and agreeing to record the fill in accordance with Rule .1707 is included in the attachments.

(6) This structural fill will be constructed with coal combustion by-products from the DuPont Cape Fear Plant in Leland, North Carolina. The address of the generator, and the telephone number of the generator are presented below:

A) E.I. DuPont Cape Fear Plant

B) North Carolina State Road 1426
Leland, North Carolina 28451

C) P.O. Box 2042
Wilmington, North Carolina 28402

D) Mr. Jim Phillips
Senior Research Engineer-Power

E) 910/371-4507

F) If future circumstances require changes to the above information the Division of Waste Management will be notified.

The siting, design, construction and operation of this facility will comply with requirements of Rules .1704 and .1705. Compliance with these rules is discussed below and in the notes of the project drawings provided. This structural fill project complies with Rule .1704 siting requirements as follows:

(1) CCBPs are not placed within 50 horizontal feet of any jurisdictional wetland.

(2) CCBPs are not placed within 50 horizontal feet of the top of the bank of a perennial stream or other surface water body. CCBPs are placed at a 100 foot setback from the nearest perennial stream, an unnamed tributary to Town Creek.

(3) CCBPs shall not be placed within two feet of the seasonal high groundwater table as determined by direct field investigation. To assure separation, two feet of soil will be added to existing grades over most of the placement area.

(4) The project site is not within 100 horizontal feet of any source of drinking water, such as a well, spring or other groundwater source of drinking water.

(5) The project site is not within an area subject to a one hundred-year flood, as determined by survey and verified by Flood Insurance Rate Map, Brunswick County, North Carolina (Community-Panel Number 370295 0120 C).

(6) Coal combustion by-products will not be placed within 25 feet of any property boundary. This setback distance is marked in the drawings and will be strictly followed.

(7) Coal combustion by-products will not be placed within 25 feet of a bedrock outcrop. No such outcrops exist at the site.

The structural fill for the Lanier Property Project is an engineered fill with a beneficial end use achieved by reclaiming an existing borrow pit area. By reclaiming this area, the owner is provided with a reconstructed topography that will allow him to build an access road through the property at a later date.

ISG appreciates your expedited handling of this matter. If you have any questions or require further information, do not hesitate to contact me directly at (770) 218-6420.

Sincerely,

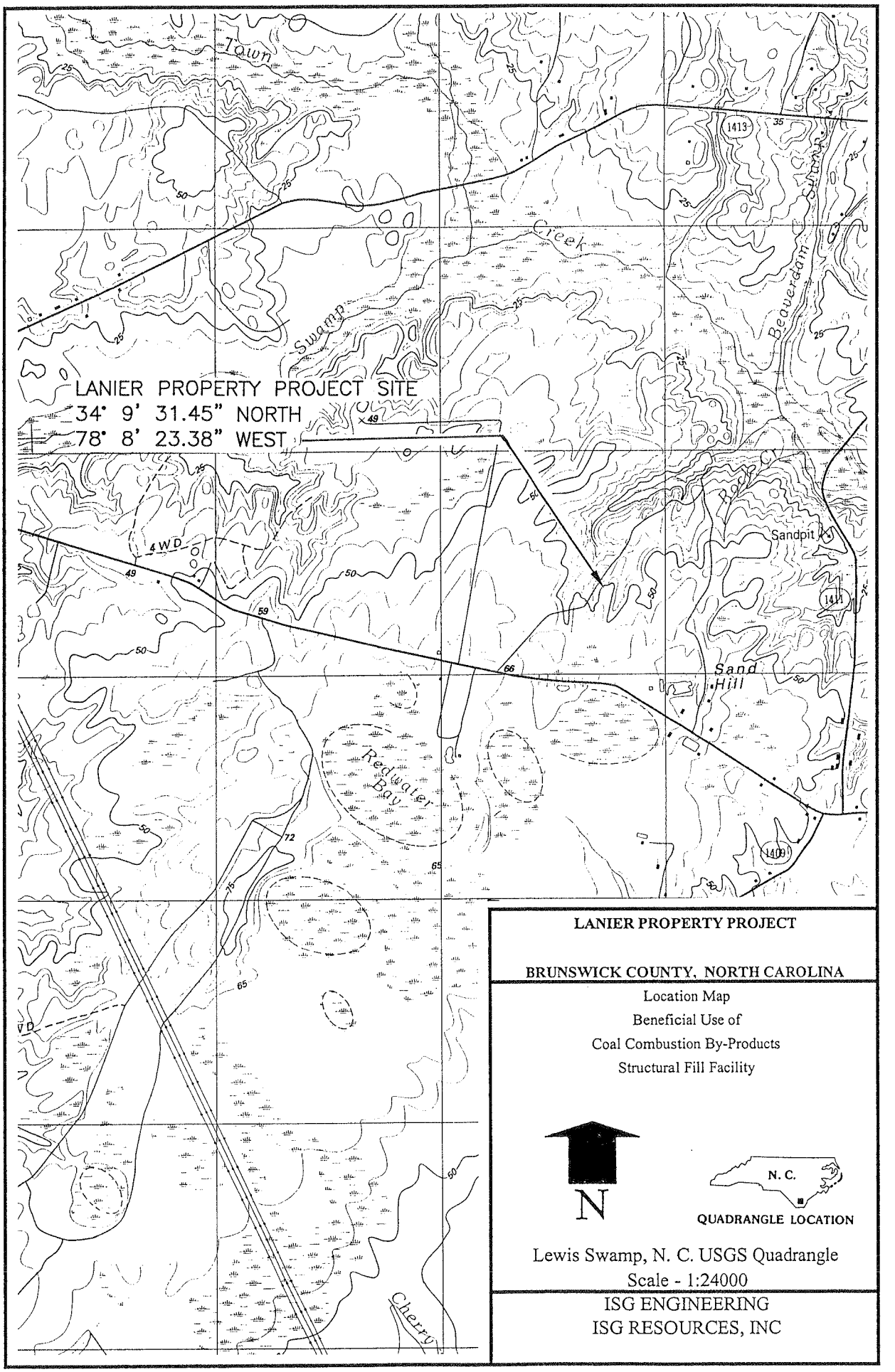
ISG RESOURCES, INC.

Thomas C. Schmaltz

Thomas C. Schmaltz, Ph.D.
Environmental Manager

Attachments: Location Map
TCLP
Owner Statement (original notarized)

Enclosure: Drawings



LANIER PROPERTY PROJECT

BRUNSWICK COUNTY, NORTH CAROLINA

Location Map
Beneficial Use of
Coal Combustion By-Products
Structural Fill Facility

N

N. C.

QUADRANGLE LOCATION

Lewis Swamp, N. C. USGS Quadrangle
Scale - 1:24000

ISG ENGINEERING
ISG RESOURCES, INC

DuPont Cape Fear Plant
P.O. Box 2042
Wilmington, North Carolina 28402

DUPONT

October 6, 1998

DuPont Cape Fear Plant

Mr. John Rives
ISG Resources, Inc.
1000 Cobb Place Boulevard
Kennesaw, Georgia 30144

Subject: Toxicity Characteristic Leaching Procedure (TCLP)
Cape Fear DuPont Plant, 1998

Dear Mr. Rives:

Please find enclosed the TCLP results from the Cape Fear DuPont Coal Fired Power House. The sample was taken on 9/11/98. The sample is representative of normal ash refuse from Coal Fired Boilers #1 and #2.

If you have any questions, please call me at (910) 371-4507.

DuPont Dacron*
Dacron Manufacturing Division

James M. Phillips, P.E.

James M. Phillips, P.E.
Senior Research Engineer - Power

* Registered Trademark of E. I. DuPont de Nemours & Co., Inc.

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for TCLP Metals

Client Sample ID:	Coal Ash	Analyzed By:	JMF
Client Project ID:	El Dupont	Date Collected:	9/11/98
Lab Sample ID:	47833	Date Received:	9/11/98
Lab Project ID:	G235-10	Matrix:	Leachate

Metals	Result (mg/L)	Quantitation Limit (mg/L)	Procedure	Date Analyzed
Arsenic	**0.0253**	0.0200	6010A	9/15/98
Barium	BQL	0.800	6010A	9/15/98
Cadmium	BQL	0.0100	6010A	9/15/98
Chromium	BQL	0.0100	6010A	9/15/98
Lead	BQL	0.0100	6010A	9/15/98
Mercury	BQL	0.0004	7470	9/15/98
Selenium	**0.0673**	0.0100	6010A	9/15/98
Silver	BQL	0.0200	6010A	9/15/98

Note

BQL = Below Quantitation Limit

Reviewed By: ma

ISG RESOURCES, INC.

March 2, 1999

Mr. William D. Lanier
917 Greenhill Road, NE
Leland, N.C. 28451

Dear Mr. Lanier:

This letter is to establish your understanding of Section .1700; Requirements for Beneficial Use of Coal Combustion By-products and to obtain your consent to utilize coal ash in the application of structural fill on your property. Also, within ninety days of the completion of the project, change your deed to comply with Section .1707, Recordation of Structural Fill Activities.

If you are in agreement with these requirements, please sign this letter, have it notarized and return to my attention at 720 Leland, North Carolina 28451.

Sincerely,

James R. Freeman

James R. (Rick) Freeman
Technical Sales Representative
Atlantic District

jep

William D. Lanier
William D. Lanier

3-16-99
Date

NOTARY:

Emogean Mintz
Signature
Expiration 11-16-2000

3-16-99
Date

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Phone (770) 424-1900 Fax (770) 218-6590

C:\My Documents\Rick\Consent to utilize coal ash for struct. fill letter.doc

B. Hoeth

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

NCDENR

JAMES B. HUNT JR.
GOVERNOR

WAYNE MCDEVITT
SECRETARY

WILLIAM L. MEYER
DIRECTOR

August 25,1999

Thomas C. Schmaltz, Ph. D.
Environmental Manager
ISG Resources, Inc.
1000 Cobb Place Blvd., Building 400
Kennesaw, GA 30144

Reference: IGS Notification Dated August 17, 1999 Regarding an E. I. DuPont Coal Combustion By-Products Structural Fill Project Proposed for Lewis Swamp in Brunswick County, NC.

Dear Dr. Schmaltz:

Your reference Notification has been reviewed and we find that some changes in the material supplied will be necessary and that some additional information will also be needed. Please be aware that until these items are satisfactorily corrected the project cannot be started. This may postpone the beginning date past the original desired start-up date of September 17, 1999.

We have been successful in generally locating the project site on a 100 year flood plain map of the area. That map showed a large enough area not subject to flooding to allow concluding that the general location of the project is not exposed to that threat. However, this is not the case when we tried to locate the project on a 1983 U.S. Department of Interior Fish and Wildlife Service Wetland Aerial Photo. That photo showed many areas of wetlands that will require precise location of the project site to determine if any of those jurisdictional wetland areas are within 50 horizontal feet of the site. For this purpose we will require a similar photo or a clearly defined wetlands map with the four corners of the project identified by precise longitudes and latitudes. The site boundaries also need to be identified by being highlighted on the photo or map. In addition (if appropriate), as per rule .1704(a)(1), a permit or waiver for the fill from the U.S. Corps of Engineers will be necessary.

The addition of two feet of soil in the borrow area is not clearly shown as necessary or for that matter adequate to provide the required two feet of separation of the coal ash from the maximum ground water levels in the site. This needs to be determined by installing monitoring wells or otherwise establishing the maximum groundwater elevations along the existing grades shown in Sections A and B of drawing 2006-C-04. It is necessary to establish the amount of compacted fill soil required to furnish the two feet of separation over the entire site footprint.

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The proposed use of this fill at completion of the project is not clear. The fill slopes upward, beginning at the end of an existing 1500 foot long access road into the property from Green Hill Road. The fill extends that access road another 600 to 700 feet with a "useable" width of approximately 200 feet terminating abruptly at an elevation of about 24 feet above existing grade. Your letter does not indicate an **immediate** use for the fill site and the drawings do not show how the fill will be utilized as a future access road. This needs clarification.

The property on either side of the existing access road appears to be subdivided into building lots. If so, the source of water for these potential homes becomes quite important due to Rule .1704(a)(4). This rule states that fills cannot be located nearer than 100 feet from sources of drinking water, such as a well, spring, or other groundwater sources of water. If this is to be a housing development or subdivision, then it will need to have access to off site water.

The disclaimer at the bottom of the drawings which reads "This drawing is the property of IGS----------and is to be returned upon request" is unacceptable since they become public property upon receipt by the state. If IGS desires that the drawings be shipped back to them, the DWM will comply or we will destroy them, whichever option IGS chooses. For the project to proceed, the DWM will need drawings without the disclaimer.

We have a question about the borrow area. Was this site permitted by the Land Quality Division Of the Department of Environment and Natural Resources or some other Division? If so, this proposed change in a permitted site probably will also require approval for the change by that regulatory (permitting) agency.

The TCLP data submitted is from an ash sample taken on September 11, 1998. This is almost a year ago and data that is a year or longer old is not considered current by the Solid Waste Section (SWS). Although the SWS is **not requiring** you to obtain more recent data as being more representative, it would

be appreciated if you would contact DuPont and determine if they have data which is nearer to current. Including such data along with the **required items** (listed elsewhere in this letter) that are to be submitted would be helpful.

Please telephone me at (919)-733-0692, extension 260 if you have any questions about the contents of this letter.

Sincerely,

William R. Hocutt, Chemist
Solid Waste Section

cc: Jim Coffey
Terry Dover
Sherri Coghill
Jim Barber

c:wp6docs/letter/ccbp-08.99

ISG RESOURCES, INC.

September 23, 1999

RECEIVED SEP 1999

William R. Hocutt, Chemist
Solid Waste Section
North Carolina Department of Environmental and Natural Resources
Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, NC 27605

RE: Supplemental Information to Notification
Coal Combustion By-product Structural Fill Facilities
Lanier Property Project – Brunswick County, NC

Dear Mr. Hocutt:

ISG Resources, Inc, (ISG) is providing this letter in response to concerns raised by the Department of Environmental and Natural Resources (NCDENR) in your letter of August 25, 1999 on the referenced project. All concerns will be addressed which include:

Presence of Wetlands ✓
Separation from Groundwater ✓
Beneficial End-Use Have to accept, Really not exactly stated.
Separation from Drinking Water Sources ✓
Use of Disclaimer on Drawings ✓
History of Borrow Area ✓
TCLP Data ✓

✓ = ANSWERED

Wetlands

The project site is clearly an upland site. ISG understands NCDENR's concern about abandoned borrow pits creating wetlands. This particular borrow pit is well drained because of its relatively high elevation without retention of surface flow and its separation from groundwater, which eliminates saturated soil conditions and thus, the presence of wetlands vegetation. To verify, confirm and otherwise validate these observations, ISG secured the services of a private environmental consultant, certified in wetlands delineation (who is also an environmental geologist), to visit the site to conduct a wetlands assessment and evaluate for the presence of wetlands and related hydrologic conditions.

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The consultant's findings (attached) validate earlier investigation and observations that the site is an upland site with no wetlands present. This report also provides observation and professional opinion on separation from groundwater as the soil profile was investigated/observed for evidence of a seasonal high-groundwater level and saturated soil conditions were noted.

Groundwater Separation

Although not submitted with the original notification, groundwater levels were investigated at the site on February 25, 1999. The results of this investigation, conducted by a professional geologist, revealed the highest groundwater level at the site to be 22" below the surface of a highly excavated and eroded portion of the borrow pit (see attached drawing with data).

At the request of NCDENR, State provided groundwater well data from Brunswick County was reviewed by this office for comparison purposes. While no truly analogous conditions were provided, well NC-199 (the closest well) data was reviewed with respect to potential fluctuation in groundwater levels. Information provided by the State verified that late February is typically a time when seasonal high water is observed. . Based on the State data reviewed and groundwater levels observed at the site, current plans for project development will provide more than the required two-foot separation.

Also, during the high flooding incident recently provided immediately after Hurricane Floyd, the site was observed and borings made. During this time the site was dry with no water in the borrow pit area. The distances from surface to groundwater were equal or greater than levels observed in February. Finally, the wetland assessor also observed evidence of seasonal high groundwater and saturated soils at the project site; his observations are consistent with previous findings (see attached).

Beneficial End-Use

Beneficial use is defined in the regulations as, "projects promoting public health and environmental protection, offering equivalent success relative to other alternatives, and preserving natural resources." The immediate gains provided from this project by reduction of erosion at the site provide beneficial use by definition.

In addition, the owner will gain access to his property on a moderately sloping grassed surface of 3%. A slope of 2% to 3% is regarded as a minimum to provide adequate drainage and prevent ponding. As you noted, the top of the structural fill is 24 feet above the existing grade in the northeast portion of the project; this is where erosion has taken place and will be repaired prior to CCBR placement. The top of the structural fill is only 14 feet above the point of initiation from the southwest, over a distance of about 500'.

Access will be gained and significant "edge effect" enhancement of wildlife habitat will be achieved. Edge effect is achieved by having a herbaceous habitat within an otherwise wooded habitat, thus providing enhance wildlife habitat diversity.

Perhaps of equal importance, the owner who has requested, reviewed and approved the project, finds it of benefit to him. To summarize, the project will reclaim a borrow site, reduce erosion, provide some immediate access to the site, provide a base for a future surfaced access road, and enhance wildlife habitat.

Separation from Drinking Water Sources

No drinking water sources are present on the subject property. The nearest adjacent property has a drinking water well centrally located on its parcel (property of James Capps). The closest distance from CCBP placement to James Capps nearest property line is approximately 95' as shown in the drawings; it is several hundred feet from the well on his property to the nearest point of CCBP placement. This separation distance to the current well is in excess of the minimum 100' horizontal separation requirement.

Use of Disclaimer on Drawings

ISG understands that standard disclaimer language on its drawings does not apply to drawings submitted to the State. ISG understands that drawings so submitted become property of the State. If required, this letter is to provide written documentation of ISG's understanding that the submitted drawings are property of the State and the State has full authority to use the drawings for any environmental permitting purposes or other uses as allowed by law. There is no need to destroy or return the drawings.

History of Borrow Area

This borrow area was operated on an intermittent basis by the brother of the current owner. The operator is now deceased. To the best knowledge of the current owner, the site was never permitted and has been inactive for at least 6 years.

TCLP Data

As you noted, the data submitted is aging but adequate. As you are aware, ISG conducts regular structural fill project and periodically tests this fill material. ISG will continue to keep data current.

ISG hopes that these responses adequately address your concerns. ISG appreciates your prompt handling of this matter. If there are any questions or additional information is required, please contact this office immediately at (770) 218-6420.

Sincerely,

ISG RESOURCES, INC.

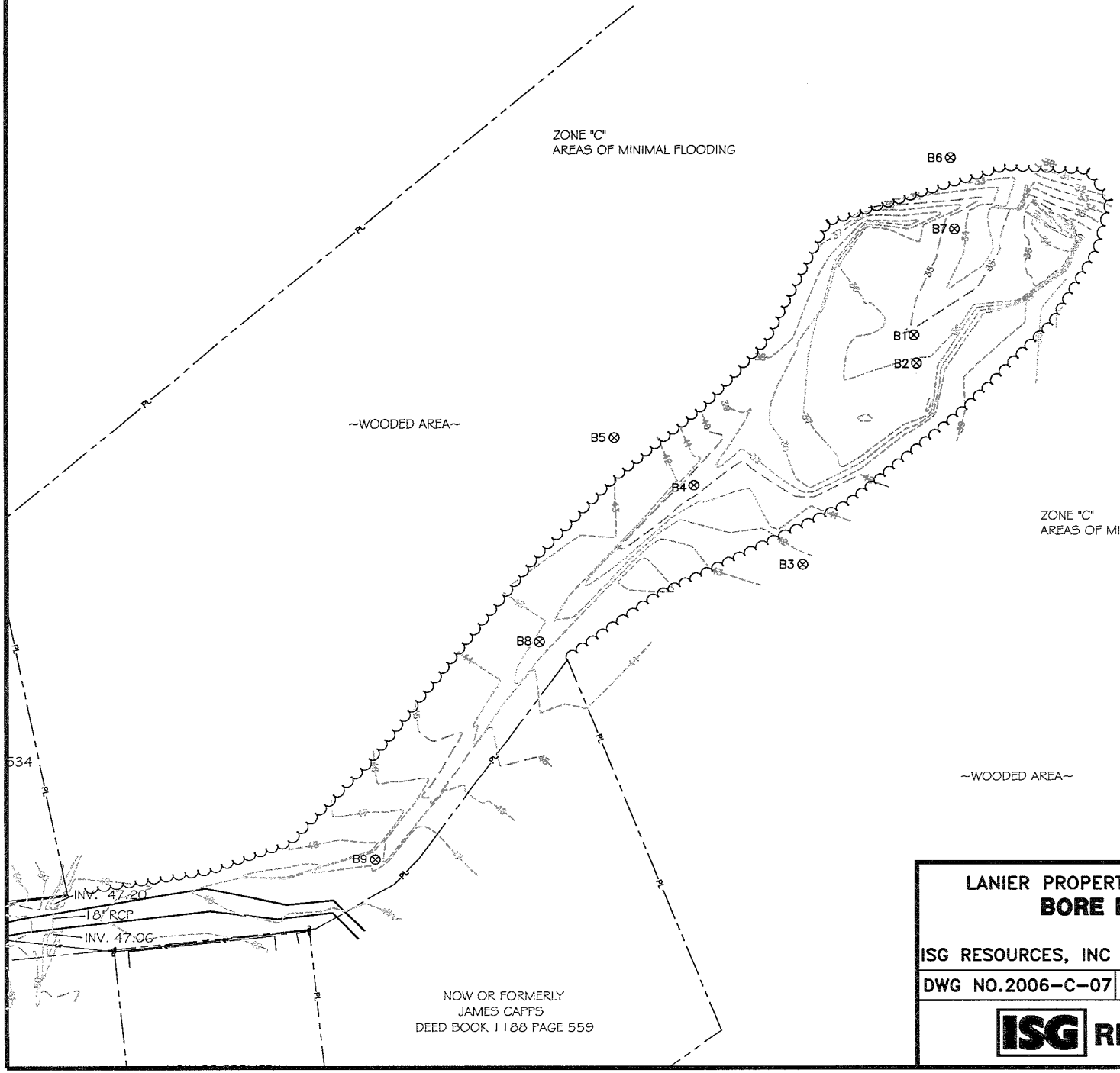
Thomas C. Schmaltz

Thomas C. Schmaltz, Ph.D.
Environmental Manager

Attachments: Drawing of Site Borings
Wetlands Determination Letter

fc: William Hocutt – NCDENR
Jim Barber – NCDENR

cc: William Lanier
Rick Freeman



BORE HOLE #	DEPTH OF WATER DETECTION
B1	2' 0"
B2	2' 0"
B3	4' 3"
B4	1' 10"
B5	6' 6"
B6	7' 0"
B7	2' 4"
B8	5' 3"
B9	4' 3"

NOTES:

1. BORINGS PERFORMED ON FEBURARY 25, 1999.
2. ALL SOILS ENCOUNTERED REPORTED AS SANDY BY JOHN S. RIVES, P.G.
3. BORINGS PERFORMED AND WATER LEVELS REPORTED BY JOHN S. RIVES, P.G.

LEGEND

⊗ BORE HOLE
EXISTING CONTOURS
PL PROPERTY LINE
WOODED AREA

LANIER PROPERTY PROJECT STUCTURAL FILL

BORE HOLE LOCATIONS

ISG RESOURCES, INC BRUNSWICK COUNTY, LELAND N.C.

DWG NO.2006-C-07	DATE: SEPT-1-99	SCALE: 1"=150'

ISG RESOURCES, INC.

TRIGON

ENGINEERING CONSULTANTS, INC.

P.O. Box 18846 • Zip 27419-8846 • 313 Gallimore Dairy Rd. • Greensboro, NC 27409 • (336) 668-0093 • FAX (336) 668-3868

RECEIVED
SEP 21 1999
Ans'd.....

September 17, 1999

ISG Resources, Inc.
1000 Cobb Place Boulevard, Building 400
Kennesaw, Georgia 30144

Attention: Mr. Thomas C. Schmaltz, Ph.D.

Re: Wetlands Determination
Lanier Property Project
Latitude 34° 9' 31.45'' North, Longitude 78° 8' 23.38'' West
Brunswick County, North Carolina
Trigon Project No. 066-99-044

Dear Mr. Schmaltz:

Trigon Engineering Consultants, Inc. (Trigon) has completed the requested determination of the existence of wetlands at the referenced property. The former borrow pit at the property was evaluated based on methods outlined in the 1987 Corps of Engineers Wetland Delineation Manual. After visiting the property and reviewing available information pertaining to vegetation, soils, and hydrology, Trigon concludes that the former borrow pit and the surrounding 50 feet do not meet the environmental characteristics of a wetland. The borrow pit area and surrounding 50 feet correspond to the limit of construction in ISG's project drawings for the subject site.

The National Wetlands Inventory Map designates the site and surrounding property as uplands. The Lewis Swamp, North Carolina USGS 7.5 minute series quadrangle indicates the property historically has not been a low lying area. Evidence of the seasonal high water table within the borrow pit was generally at a depth greater than two feet below ground surface. Saturated soils within the borrow pit observed during this site visit were also generally at a depth greater than two feet below the ground surface.

The prevalent vegetation consists of plant species that are typically adapted for life only in aerobic soils. These plant species cannot persist in predominantly anaerobic soil conditions. Plant species surrounding the borrow pit are indicative of uplands. Soils

within the borrow pit are mapped as Mandarin fine sands according to the Brunswick County, North Carolina Soil Survey. Mandarin fine sand is not included in the list of "Hydric Soils of North Carolina" and possess characteristics associated with aerobic conditions.

Based on information reviewed during this investigation, Trigon believes the subject property has the diagnostic characteristics and fits the definition of a non-wetland.

Very truly yours,
TRIGON ENGINEERING CONSULTANTS, INC.

Chris Hay/PKB

Christopher W. Hay, E. I.
Environmental Geologist

CWH:pkb

Attachment: Wetland Delineation & Management Training Program Certificate

cc: Mr. Tom Bianca, P. E. - Trigon Engineering Consultants, Inc.

TRIGON

Richard Chinn Environmental Training, Inc.

certifies that

Chris Hay

has successfully completed a

38 Hour Army Corps of Engineers Wetland Delineation & Management Training Program

Issued Certificate No. 1013 and 3.8 CEUs on this ninth day of July, 1999 in Charlotte, NC

Richard Chinn, CET

Richard Chinn Environmental Training, Inc.
PO Box 10776, Pompano Beach, FL 33061-6776
800.427.0307 • FAX: 508.629.0783 • info@richardchinn.com • http://www.richardchinn.com

This training has been based in part on the U. S. Army Corps of Engineers Wetlands Delineation Manual Technical Report Y-87-1 (1987 manual), as provided for in the training materials developed in conjunction with Section 307(e) of the Water Resources Development Act of 1990 for the Wetland Delineator Certification Program.

NCDENR

JAMES B. HUNT JR.
GOVERNOR

WAYNE MCDEVITT
SECRETARY

WILLIAM L. MEYER
DIRECTOR

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

September 29, 1999

Mr. Thomas C. Schmaltz, Ph. D.
Environmental Manager
ISG Resources , Inc.
1000 Cobb Place Boulevard, Building 400
Kennesaw, GA 30144

Subject: Coal Ash Structural Fill on the Lanier Property, Lewis Swamp in Brunswick County, NC.

References:
1. August 17, 1999 Notification Letter proposing a E. I. DuPont Coal Ash Structural Fill Project, Lanier Property, Lewis Swamp in Brunswick County, NC.
2. Supplemental Information to Original Notification dated September 23, 1999

Dear Mr. Schmaltz:

This is to acknowledge receipt of the subject Structural Fill Notification letter and supplemental information. The information submitted satisfies the **Notification** requirements of Section .1700 of the 15A NCAC 13B Solid Waste Management Rules. The notification identified the ash generator as the E.I. DuPont Cape Fear Plant and that approximately 30,000 cubic yards of mixed fly and bottom ash are to be utilized.

Please be aware that analysis of groundwater samples collected from monitoring wells located at a North Carolina coal ash structural fill site revealed that levels of sulfate and arsenic were elevated above the background well values and exceeded the 15A NCAC 2L Standards. It was later found that **the ash had been placed in the ground water at this site** and the ash has been subsequently removed. The Division of Waste Management strongly recommends that you retain the services of a qualified hydrogeologic consulting firm to assist you in determining the vulnerability of the groundwater at the site based on site attenuation, waste extractability and end use to inhibit infiltration. You can then consider installation of groundwater monitoring wells depending on vulnerability before commencing fill operations.

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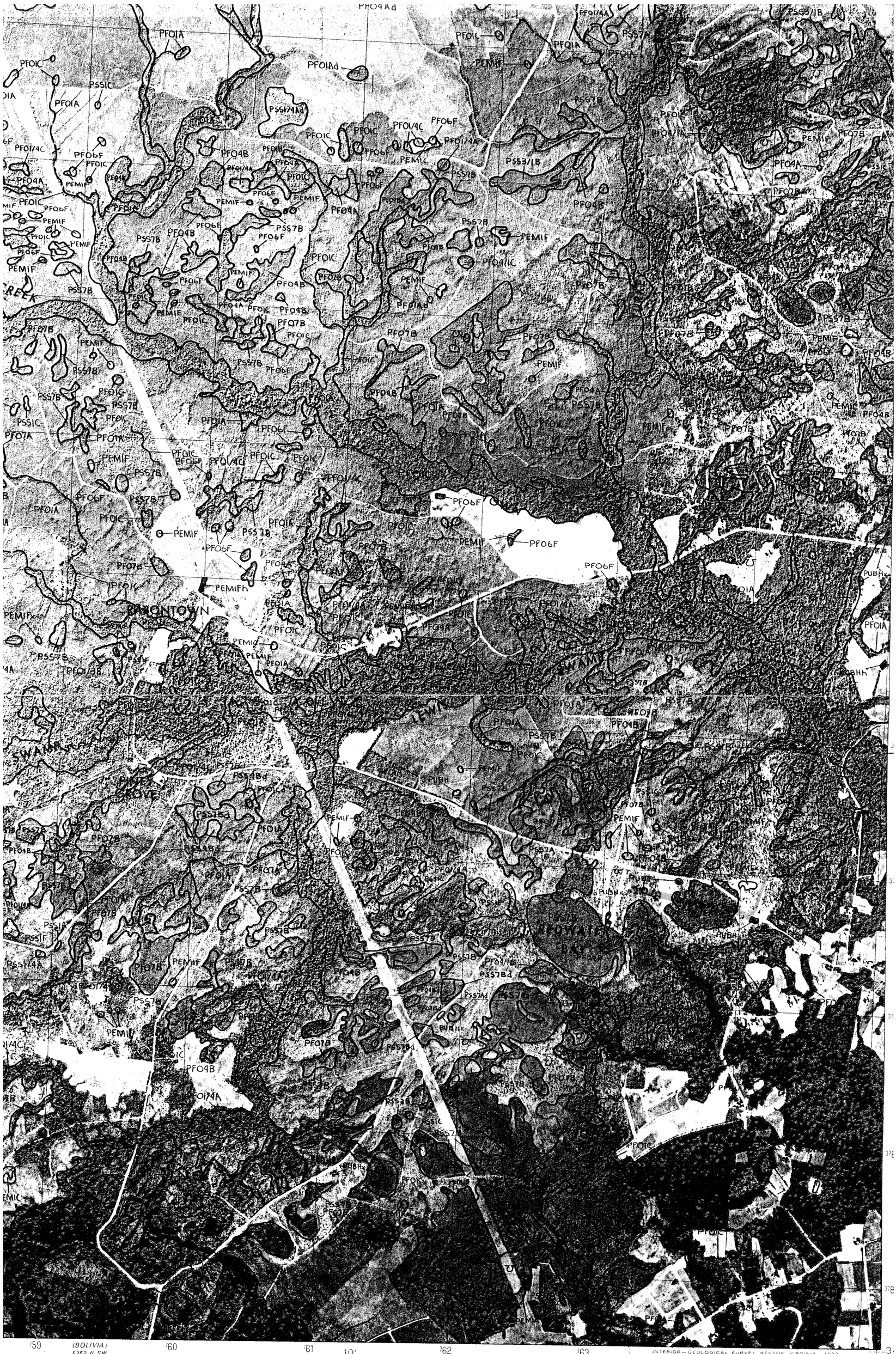
If you have any questions, please contact me at (919) 733-0692, ext. 255, or Bill Hocutt at ext. 260.

Sincerely,

James C Coffey

James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

cc: Terry Dover
John Crowder
Bill Hocutt
Jim Barber


BARNTOWN
SWAMP
LEWIS
REDWAIN
(BOLIVIA)
INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1982
78°07'30"

DRAFT

LEWIS SWAMP, N.C.

U.S. DEPT. OF THE INTERIOR

FISH & WILDLIFE SERVICE.

MARCH 1983 WETLAND

AERIAL PHOTO.

ISG RESOURCES, INC.

NOV 2001
Received
Solid Waste
Section

November 27, 2001

FedEx Delivery

William R. Hocutt
State of North Carolina
Department of Environment and Natural Resources
Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

RE: Lanier Property Project
Coal Combustion By-Product Structural Fill
Professional Engineer's Closure Report and Certification
Section .1706 of 15A NCAC 13B Solid Waste Management Rules
Brunswick County, North Carolina

Mr. Hocutt:

This correspondence serves as notification to the Division of Waste Management by ISG Resources, Inc.'s (ISG's) on behalf of the landowner, William D. Lanier, of ISG's completion of the referenced project. Submittal of the required certification statement and documentation of project completion is provided as an enclosure.

ISG appreciates your assistance in this matter. If you have any questions or require further information, do not hesitate to contact me directly at (770) 218-6420.

Sincerely,

ISG RESOURCES, INC.

Thomas C. Schmaltz

Thomas C. Schmaltz, Ph.D.
Environmental Manager

cc: Rick Freeman ISG

Enclosure: Report with Engineer's Certification

LANIER PROPERTY PROJECT

CLOSURE CERTIFICATION REPORT

WILLIAM D. LANIER- OWNER

ISG RESOURCES INC.

NOVEMBER 22, 2001

PROJECT BACKGROUND

The Lanier Property Project is a project owned by a private property owner, William D. Lanier (Owner). The project was planned with the utilization of Coal Combustion By-products (CCB) to reclaim a borrow area and to re-establish site grades to restore the property use. The Lanier Property Project, as a reclamation project, was designed as a beneficial use CCB project by the Owners, utilizing CCBs produced by the E. I. DuPont – Cape Fear Plant (Plant). The property is located one mile west of the intersection of Green Hill Road (State Route 1410) and State Route 1409 in Brunswick County, North Carolina. The site maps contained in the Project Notification Documents dated August 17, 1999 (Documents) give details on the site location and characteristics.

REGULATORY HISTORY

The Project Notification Documents, dated August 17,1999, were submitted to the North Carolina Department of Environment and Natural Resources-Division of Waste Management (NCDENR) by ISG Resources, Inc. (ISG) on behalf of the Owner. After reviewing the documentation, NCDENR issued a letter dated August 25, 1999 that requested additional information regarding the Project. ISG filed a supplement to the August 17, 1999 Notification and addressed the NCDENR letter with a September 23, 1999 submittal. On September 29, 1999 NCDENR acknowledged receipt the submittals and stated that "...The information submitted satisfies the Notification requirements of Section .1700 of the 15A NCAC 13B Solid Waste Management Rules." A copy of the NCDENR acknowledgment letter dated September 29, 1999 is included in Attachment A.

CLOSURE REQUIREMENT

In accordance with the North Carolina Regulations Governing Beneficial Use of Coal Combustion By-Products, compliance with the requirements for projects with a volume of more than 10,000 cubic yards requires submittal of construction plans that demonstrate sound engineering practices and adherence with the control standards of the NCDENR. As part of the regulatory program for beneficial use of coal combustion by-products in structural fills, Section .1706 establishes requirements for closure of the structural fill. Closure construction measures must address long term integrity of the structural fill and include a final cover, proper drainage grades and re-vegetation. The closure requirements found Section .1706 also state that "...the constructor or operator shall submit a certification to the Division signed and sealed by a registered professional engineer ... certifying that all requirements in the Rules of this Section have been met." This report is prepared to satisfy this requirement.

CLOSURE SITE INSPECTION

On November 1, 2001 a site visit was performed at the Lanier Property Project as part of the Closure Certification. The structural fill was completed using CCB ash generated by the E.I. DuPont - Cape Fear Plant. Initial placement of CCB at the Lanier Property Project began in October 1999. Final placement of coal combustion by-products at the Lanier Property Project occurred on September 21, 2001 and operations began to complete the final stage of grading and cover placement on September 24, 2001. Placement of the last stage of final cover was completed on October 31, 2001.

The final closure measures were inspected and a series of photographs were taken to document the site conditions during the site visit. Photo Nos. 1 through 10 (see Attachment B) show the completed project site with re-vegetation. Locations from which each of the photos were taken and the direction of focus are shown on Drawing No. 2006-C-06 which is included as Attachment C. Photo No. 1 is a sweep view that shows the structural fill as viewed from the northeast end of the fill area facing in a southwest direction. Photo No. 2 is taken from the same general location as Photo No.1 but is facing to the northeast. Photos

No. 3 and No. 4 show the location of Test Hole No. 1 (TH-1) as viewed from both the southwest and northeast directions. Photo No. 5 shows the depth of final cover measurement at TH-1. Photos No. 6 and No. 7 document visually the test hole location and cover depth confirmation process for Test Hole No. 2 (TH-2). Photos No. 8, No. 9 and No. 10 show the location and depth of Test Hole No. 3 (TH-3).

PLACEMENT AND COMPACTION

As part of the construction sequence, the design-operating plan required regular testing of the in-place compaction. Field compaction tests were to be performed on a minimum frequency of one test per 5000 cubic yards of CCBs placed. Field compaction tests were performed by a third party, Law Engineering and Environmental Services Inc. of Wilmington, North Carolina. Test locations were selected by the third party field representative and results documented. The compaction requirement for coal combustion by-products was a minimum of 95% of the maximum dry density achievable at optimum moisture content in accordance with the Standard Proctor method, ASTM D 698.

The placement of the coal combustion by-products was in twelve-inch thick lifts with compaction performed by a CASE VIBRO MAX smooth drum vibratory roller. Based on the lab proctor analyses of the CCBs, moisture levels had to be increased at the project site to reach the desired optimum compaction condition. Moisture levels were adjusted, when needed, by adding water at the site with a water truck equipped with a spreader bar.

The field density testing was performed by using the drive tube method. Compaction efforts exerted at the project site were able to achieve 95% of maximum dry density and adjusted a 'delivered unit weight' between 25 and 30 pounds per cubic foot to the desired 'in-place compacted unit weight' of 50.2 to 52.8 pounds per cubic foot.

During the placement of the CCBs, tests of compaction occurred at intervals correlating to volume estimated at 5000 cubic yards or less. Based on the project drawings and in-place volume estimates, approximately 29,250 cubic yards of compacted CCBs (55,000 loose as received cubic yards) were placed in the Lanier Property Project structural fill. A total of six compaction tests were performed on the in-place fill. A summary of the compaction test results is shown in Attachment D. To summarize the compaction data, a total of six passing tests results are documented representing, on average, one passing test per 4,875 cubic yards of CCB structural fill material placed.

FINAL SLOPE GRADES

Based on final inspection of the completed project, and a review of the project development plan prepared by ISG Resources (see Attachment E), it appears that the closure grades are consistent with the proposed plans. The construction plans provide for minimum slopes of three percent and maximum slopes of thirty three percent, which meet the regulatory requirements. All slopes are stabilized with vegetative covers and the slopes provide adequate drainage of surface runoff. All storm water management features of the active fill site have been stabilized as part of the closure activities.

FINAL COVER LAYER

The project design called for a final cover thickness of eighteen inches including a minimum twelve-inch infiltration minimization layer covered by a six-inch soil layer capable of supporting re-vegetation. As part of the November 1, 2001 site visit, three randomly selected locations were used to check the actual depth of the topsoil and cover soil thickness. At each location, one foot diameter holes were dug using a digging bar and a post hole digger. The thickness of the topsoil and cover soil were measured and recorded. As stated above the hole locations are shown on Drawing No. 2006-C-06 enclosed in Attachment B. Photos related to the test hole locations are shown in Photo Nos. 3, 4, 6, 8, and 9 while Photo Nos. 5, 7, and 10 show the depth confirmation process. The soil thickness for each location is listed in Table 1. All locations had at

least six inches of topsoil and at least twelve inches of cover soil thus providing a total of eighteen inches or more of soil at each test location.

TABLE 1

COVER SOIL THICKNESS

TEST HOLE NO.	INFILTRATION LAYER THICKNESS	TOPSOIL THICKNESS	TOTAL
TH-1	18 inches	6 inches	24 inches
TH 2	15 inches	7 inches	22 inches
TH-3	12 inches	6 inches	18 inches

SUMMARY

The Lanier Property Project is a soil borrow area reclamation project owned by a private party, Mr. William D. Lanier. As part of the reclamation project, Coal Combustion By-Products generated by the DuPont – Cape Fear Plant were utilized as structural fill. Project Documents, including Engineering Plans and Drawings of the proposed site development were prepared for the owner by ISG and filed with the North Carolina Department of Environmental and Natural Resources- Division of Waste Management. As part of the NCDENR regulations, the site must be closed by providing a final cover that complies with the construction plans and meets the requirements of Section .1706. The NCDENR regulations require a certification signed by a registered professional engineer that the construction was completed in accordance with the design documents and that all requirements in the Rules of Section .1706 have been met. A site inspection and review of the project documentation has been completed and this report documents the findings of the project closure.

ENGINEER CERTIFICATION

After reviewing the project documentation and based on a site inspection the following certification statement is submitted:

The construction of the Lanier Property Project has been completed in accordance with the engineering design plans prepared by ISG Resources, Inc., and closure of the structural fill facility has been performed in accordance with the requirements of Section .1706 of 15A NCAC 13B of the North Carolina Solid Waste Management Rules governing the beneficial use of coal combustion by-products.

SIGNED: Danny L. Gray

Danny L. Gray, P.E.

SEAL:

ATTACHMENT A

NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES CORRESPONDENCE

NCDENR

JAMES B. HUNT JR.
GOVERNOR

WAYNE MCDEVITT
SECRETARY

WILLIAM L. MEYER
DIRECTOR

RECEIVED
OCT 0 5 1999
Ans'd.....

NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

September 29, 1999

Mr. Thomas C. Schmaltz, Ph. D.
Environmental Manager
ISG Resources , Inc.
1000 Cobb Place Boulevard, Building 400
Kennesaw, GA 30144

Subject: Coal Ash Structural Fill on the Lanier Property, Lewis Swamp in Brunswick County, NC.

References:
1. August 17, 1999 Notification Letter proposing a E. I. DuPont Coal Ash Structural Fill Project, Lanier Property, Lewis Swamp in Brunswick County, NC.
2. Supplemental Information to Original Notification dated September 23, 1999

Dear Mr. Schmaltz:

This is to acknowledge receipt of the subject Structural Fill Notification letter and supplemental information. The information submitted satisfies the **Notification** requirements of Section .1700 of the 15A NCAC 13B Solid Waste Management Rules. The notification identified the ash generator as the E.I. DuPont Cape Fear Plant and that approximately 30,000 cubic yards of mixed fly and bottom ash are to be utilized.

Please be aware that analysis of groundwater samples collected from monitoring wells located at a North Carolina coal ash structural fill site revealed that levels of sulfate and arsenic were elevated above the background well values and exceeded the 15A NCAC 2L Standards. It was later found that **the ash had been placed in the ground water at this site** and the ash has been subsequently removed. The Division of Waste Management strongly recommends that you retain the services of a qualified hydrogeologic consulting firm to assist you in determining the vulnerability of the groundwater at the site based on site attenuation, waste extractability and end use to inhibit infiltration. You can then consider installation of groundwater monitoring wells depending on vulnerability before commencing fill operations.

401 OBERLIN ROAD, SUITE 150, RALEIGH, NC 27605
PHONE 919-733-4996 FAX 919-715-3605
AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER - 50% RECYCLED/10% POST-CONSUMER PAPER

If you have any questions, please contact me at (919) 733-0692, ext. 255, or Bill Hocutt at ext. 260.

Sincerely,

James C Coffey

James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

cc: Terry Dover
John Crowder
Bill Hocutt
Jim Barber

ATTACHMENT B

SITE PHOTOGRAPHS
PHOTOS TAKEN ON 11-1-2001

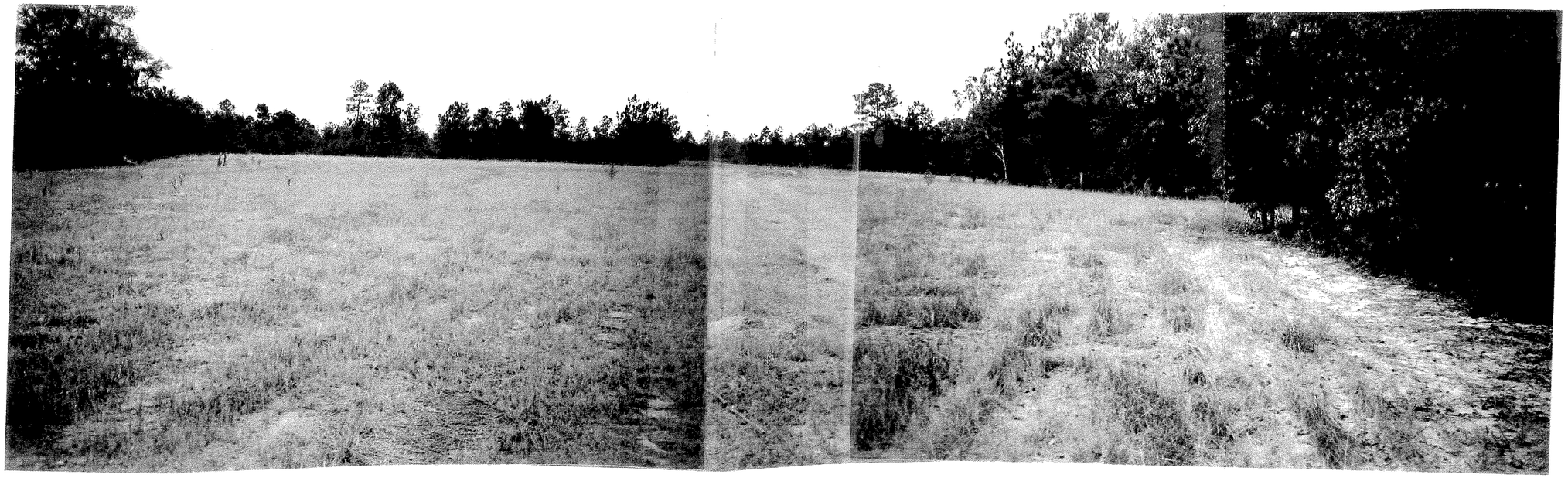
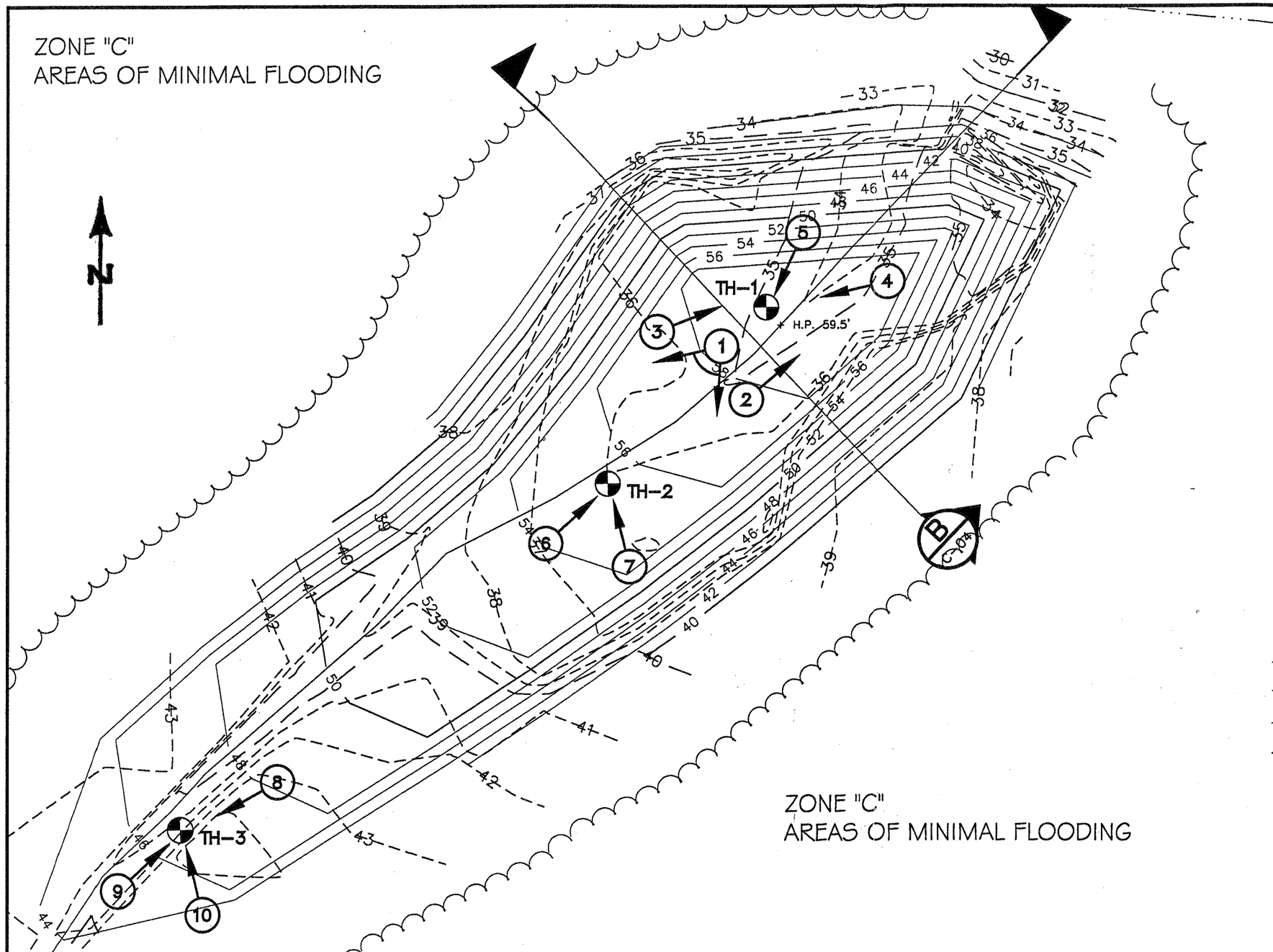


PHOTO NO 1- AREA VIEW TO SW

PHOTO NO 2- AREA VIEW TO NE

ZONE "C"
AREAS OF MINIMAL FLOODING



ZONE "C"
AREAS OF MINIMAL FLOODING

NOTES:

1. PROPOSED CONTOURS REFLECT TOP OF FINAL GRADE.

2. MAXIMUM SIDE SLOPES SHALL BE 3 HORIZONTAL TO 1 VERTICAL.

3. MINIMUM TOP SLOPES WILL BE 3% TO PREVENT PONDING AND ASSURE DRAINAGE.

4. FINAL COVER IS TWELVE (12) INCHES OF COMPACTED EARTHEN MATERIAL PLUS 6 INCHES OF TOPSOIL. FINAL COVER WILL BE PERMANENTLY SEEDED ACCORDING TO SCHEDULE.

LEGEND

PROPOSED CONTOURS
EXISTING CONTOURS
STREAM
PL PROPERTY LINE
WOODED AREA
TH-2 TEST HOLE
8 PHOTO NUMBER & VIEW DIRECTION

DATE	NO.	REVISION DESCRIPTION	APPD.

"THIS DRAWING IS THE PROPERTY OF ISG RESOURCES,INC (ISG) AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT WRITTEN CONSENT OF ISG, OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST."

ISG RESOURCES, INC.

ISG RESOURCES, INC.
1000 COBB PLACE BOULEVARD
KENNESAW, GEORGIA 30144
(770) 426-5944
FAX (770) 218-6519
www.isgresources.com

SCALE: NTS
DATE: NOV-20-01
DESIGN BY:
DRAWN BY:
CHECKED BY:
APPROVED BY:

LANIER PROPERTY PROJECT STUCTURAL FILL
PHOTO & TEST HOLE LOCATION MAP
CCBP PLACEMENT
ISG RESOURCES, INC BRUNSWICK COUNTY, LELAND N.C.

DRAWING NO. 2006-C-06 | REVISION NO. | SHEET NO.

PHOTO NO 3- TH 1- VIEW TO NE

PHOTO NO 4- TH 1-VIEW TO SW

PHOTO NO 5- TH 1- DEPTH

PHOTO NO 6- TH 2-VIEW TO NE

PHOTO NO 7- TH 2- DEPTH

PHOTO NO 8- TH 3-VIEW TO SW

PHOTO NO 9- TH 3- VIEW TO NE

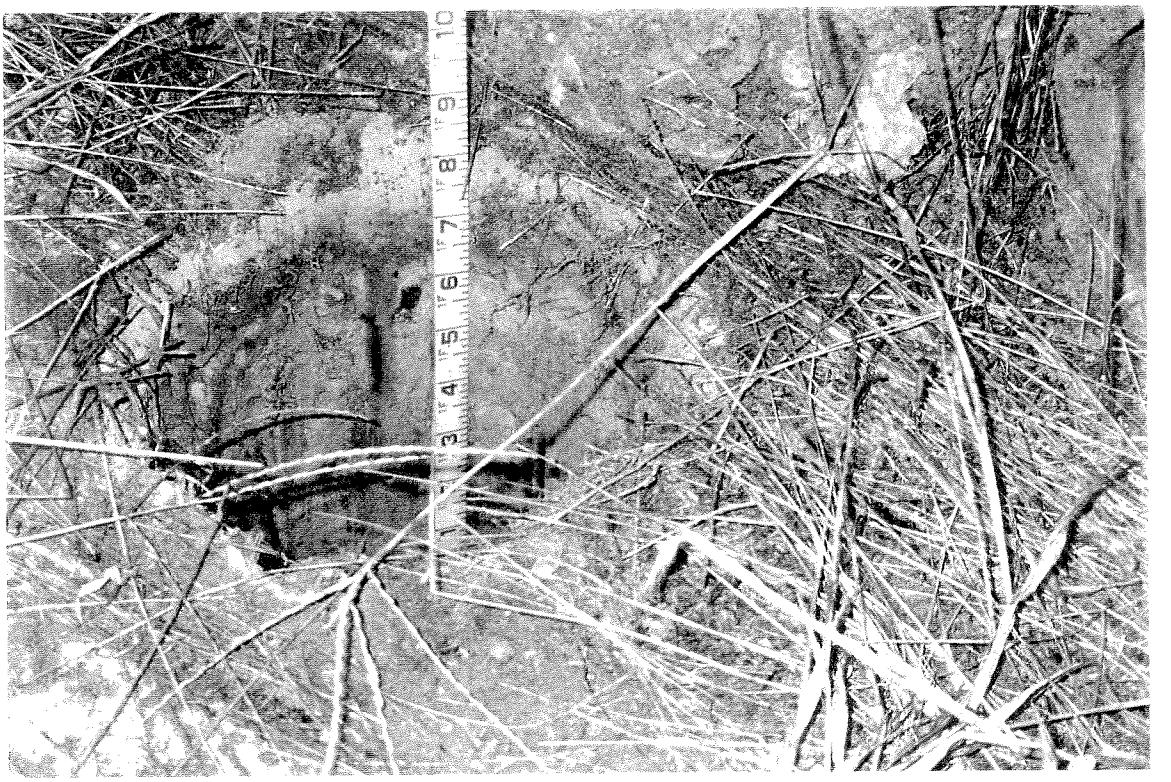


PHOTO NO 10- TH 3- DEPTH

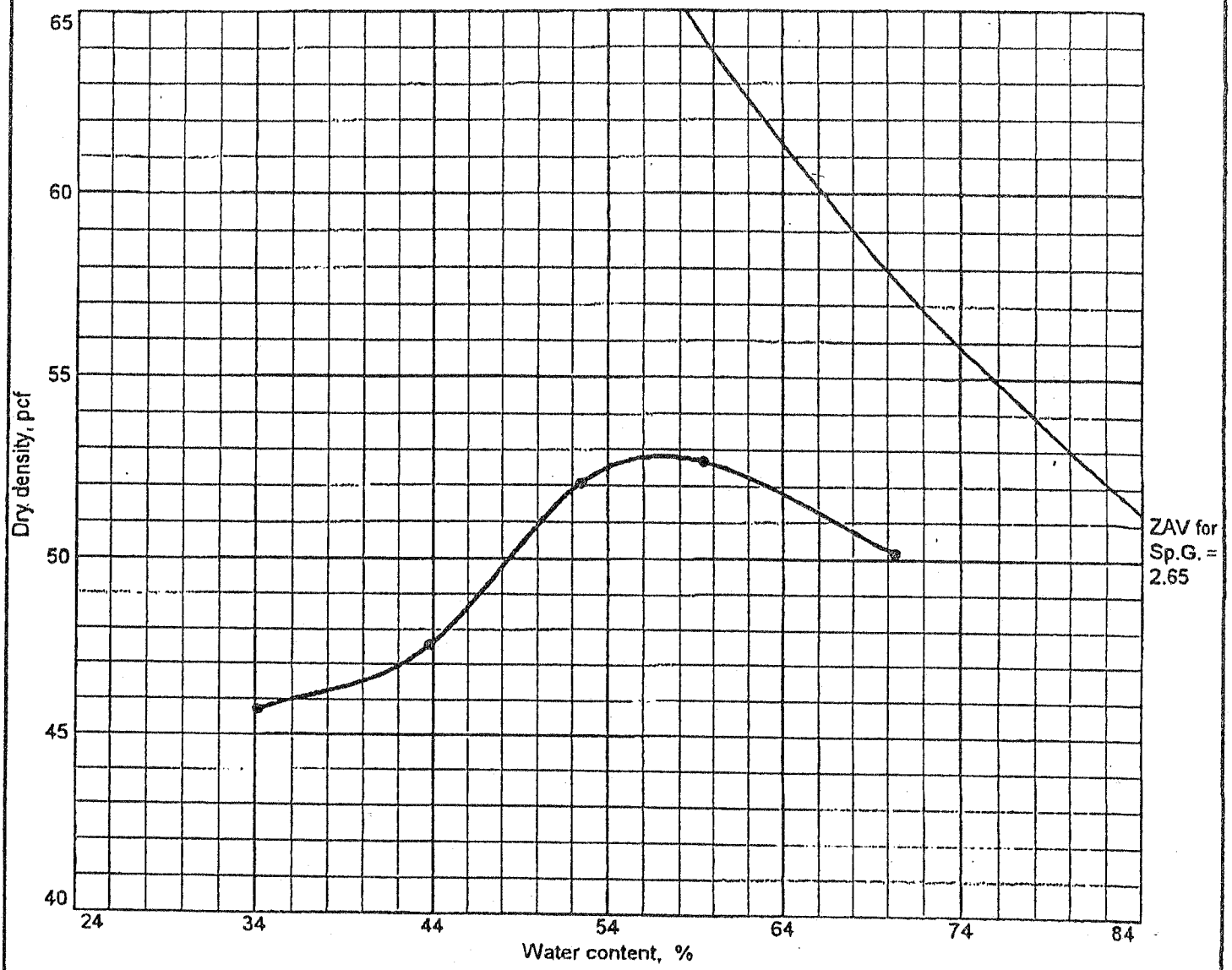
ATTACHMENT C

PHOTO & TEST HOLE LOCATION MAP

ATTACHMENT D

SUMMARY RESULTS OF COMPACTION TESTS

COMPACTION TEST REPORT



Test specification: ASTM D 698-91 Method A Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > No.4	% < No.200
	USCS	AASHTO						
	ND	ND	ND	ND	ND	ND	ND	ND

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 52.8 pcf Optimum moisture = 57.0 %	(VISUAL) FLY ASH

Project No. 91236 **Client:** 31000
Project: ISG

● **Location:** PROCTOR #1 (BAG)

Remarks:
ND=NOT DETERMINED.
6-23-99

COMPACTION TEST REPORT

LAW ENGINEERING & ENVIRONMENTAL SERVICES, INC.

REPORT OF FIELD DENSITY TEST BY DRIVE TUBE METHOD (ASTM D2937)

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.

WILMINGTON, NORTH CAROLINA

LAW
LAWGIBB Group Member

TECHNICIAN: Allen McCauley DATE: 2/3/00

PROJECT NAME: Turceau Trail

PROJECT NUMBER: 31000-9-1236 PH: TK: 820

DRIVE TUBE DATA

HEIGHT(in): 5 DIAMETER(in): 4 VOLUME(cf): 0.0327

CHECKED BY: DATE: 3-Dec-99

		DRIVE TUBE DENSITY DATA					FIELD MOISTURE DATA*			PROCTOR		RESULTS			
Test No.	Depth Below Finished Grade or Elev., (ft)	Tube Weight, (lb)	Tube Volume, (cu. ft)	Weight Wet Soil + Tube, (lb)	Weight Wet Soil, (lb)	Wet Density, (pcf)	Wet Weight, (g)	Dry Weight, (g)	Moisture Content, (%)	Proctor No.	Maximum Dry Density, (pcf)	Dry Density, (pcf)	Percent Compaction, (%)	Required Compaction, (%)	Pass or Fail?
1	0.5	1.35	0.0327	4.06	2.71	82.87	300	182.3	64.56	1	52.8	51	95.37	95	P
2	0.5	1.35	0.0327	4.29	2.94	89.91	300	177.9	68.63	1	52.8	53	100+	95	P
3	0.5	1.35	0.0332	4.05	2.70	82.56	300	181.6	65.20	1	52.8	50	95	95	P

TEST NO.	LOCATION
1	East Turceau Trail
2	West Turceau Trail
3	North Turceau Trail

PROCTOR NO.	MAXIMUM DRY DENSITY, (pcf)	OPTIMUM MOISTURE, (%)
1	52.8	57

REMARKS

cmt/forms/density.xls

REPORT OF FIELD DENSITY TEST BY DRIVE TUBE METHOD (ASTM D2937)

LAW ENGINEERING AND ENVIRONMENTAL SERVICES, INC.
WILMINGTON, NORTH CAROLINA

LAW
LAWGIBB Group Member

TECHNICIAN: A. McCauley DATE: 9/13/00
PROJECT NAME: Turceau Trail ISG
PROJECT NUMBER: 31000-9-1236 PH: TK: 820

DRIVE TUBE DATA
HEIGHT(in): 5 DIAMETER(in): 4 VOLUME(cf): 0.0329
CHECKED BY: ULH DATE: 18-Sep-00
SCALES USED: 3.1.33 3.1.65

		DRIVE TUBE DENSITY DATA					FIELD MOISTURE DATA*			PROCTOR		RESULTS			
Test No.	Depth Below Finished Grade or Elev., (ft)	Tube Weight, (lb)	Tube Volume, (cu. ft)	Weight Wet Soil + Tube, (lb)	Weight Wet Soil, (lb)	Wet Density, (pcf)	Wet Weight, (g)	Dry Weight, (g)	Moisture Content, (%)	Proctor No.	Maximum Dry Density, (pcf)	Dry Density, (pcf)	Percent Compaction, (%)	Required Compaction, (%)	Pass or Fail?
4	0.5	1.32	0.0329	4.32	3.00	91.10	305.2	204.5	49.2	1	52.8	61.04	100+	95	P
5	0.5	1.32	0.0329	4.19	2.87	87.23	303.1	200.9	50.9	1	52.8	57.81	100+	95	P
6	0.5	1.32	0.0329	4.33	3.01	91.48	302.4	197.8	52.9	1	52.8	59.83	100+	95	P

TEST NO.	LOCATION
4	North east end of Turceau Trail
5	North end of Turceau Trail
6	North east end of Turceau Trail

PROCTOR NO.	MAXIMUM DRY DENSITY, (pcf)	OPTIMUM MOISTURE, (%)
1	52.8	57

REMARKS

Fly Ash

* ASTM D 2216

9-13-00D.xls

ATTACHMENT E

PROPOSED SITE PLAN MAP

ISG RESOURCES, INC.

December 6, 2001

FedEx Delivery

William R. Hocutt
State of North Carolina
Department of Environment and Natural Resources
Division of Waste Management
401 Oberlin Road, Suite 150
Raleigh, North Carolina 27605

RE: Lanier Property Project
Coal Combustion By-Product Structural Fill Facility
Record with Register of Deeds
Section .1707 of 15A NCAC 13B Solid Waste Management Rules
Brunswick County, North Carolina

Dear Mr. Hocutt:

This correspondence serves as notification to the Division Waste Management by ISG Resources, Inc.'s (ISG's) on behalf of the landowner, William D. Lanier, of ISG's completion of the referenced project. Submittals of required documents under the referenced regulation are provided as an enclosure.

ISG appreciates your assistance in this matter. If you have any questions or require further information, do not hesitate to contact me directly at (770) 218-6420.

Sincerely,

ISG RESOURCES, INC.

Thomas C. Schmaltz

Thomas C. Schmaltz, Ph.D.
Environmental Manager

DEC 2001
Received
Waste Management
Division

cc: David Marshall

Enclosures: Deed Notice

An INDUSTRIALSERVICESGROUP Company

1000 Cobb Place Boulevard, Building 400, Kennesaw, GA 30144
Phone (770) 424-1900 Fax (770) 218-6590

Brunswick County—Register of Deeds
Robert J. Robinson
Inst #95383 Book 1525Page 447
11/29/2001 08:36:29am Rec# 91358

_____ COUNTY
NORTH CAROLINA

STATEMENT OF USE OF COAL COMBUSTION BY-PRODUCTS

I, William D. Lanier, pursuant to 15A North Carolina Administrative Code 13B.1707 do/does hereby state that 29,250 cubic yards of compacted coal combustion by-products, 55,215 loose cubic yards, have been utilized as fill material on the parcel of land more particularly described below:

LEGAL DESCRIPTION:

RET William Lanier
TOTAL 8- REV ____ TC# 38
REC# ____ CK AMT ____ CK# ____
CASH 10- REF ____ BY EP

NAME: William D. Lanier
William D. Lanier

I, Tanya Lee Sellers, do hereby certify that (Name of Signatory) William D. Lanier personally appeared before me this day and acknowledged the due execution of the foregoing instrument. Witness my hand and official seal this the 24 day of August, 2001.

Tanya Lee Sellers
Notary Public

My Commission Expires:
12-8-2004

TANYA LEE SELLERS
NOTARY PUBLIC
BRUNSWICK COUNTY, NC
MY COMMISSION EXPIRES 12-8-2004

(NOTARY STAMP OR SEAL)

The Register of Deeds in accordance with G.S. 161-14 shall record the notarized statement and index it in the Grantor Index under the name of the owner(s) of the land. The original statement with the Register's seal and the date, book and page number of recording shall be returned to the Division after recording.

Mail completed recorded original notification to the following address: Division of Solid Waste Management
Solid Waste Section (Coal Ash)
401 Oberlin Road, Suite 150
Raleigh, NC 27605
(919) 733-0692, ext. 260

STATE OF NORTH CAROLINA
COUNTY OF BRUNSWICK
The Foregoing (or annexed) Certificate(s) of TANYA LEE SELLERS

Notary(ies) Public is (are) Certified to be Correct.
This Instrument was filed for Registration on this 29th Day of November, 2001
in the Book and Page shown on the First Page hereof.

Robert J. Robinson
ROBERT J. ROBINSON, Register of Deeds