

## Chao, Ming-tai

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**From:** Branch Smith <bsmith@paramounte-eng.com>  
**Sent:** Monday, September 26, 2016 10:24 AM  
**To:** Chao, Ming-tai  
**Subject:** RE: Everett's LCIDLF, P1303, DIN 26720  
**Attachments:** 160926 LCID-2.pdf

**Follow Up Flag:** Flag for follow up  
**Flag Status:** Flagged

Mr. Chao:

Please review the map and see if this approach will meet the concerns of leachate draining into potentially damaged pipe. I propose concrete pipe sealed watertight. The other option is digging a ditch but any leachate will get in this ditch as well. This pipe is not directly under the landfill as it is in clean fill. Runoff and leachate will always be of concern, but this should minimize your concerns as stated below.

Kind Regards;  
Branch

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**From:** Chao, Ming-tai [mailto:ming.chao@ncdenr.gov]  
**Sent:** Friday, September 09, 2016 2:07 PM  
**To:** Branch Smith <bsmith@paramounte-eng.com>  
**Cc:** Hare, Wes <wes.hare@ncdenr.gov>; lynn@ecandg.com  
**Subject:** Everett's LCIDLF, P1303, DIN 26720

Dear Mr. Smith:

The Solid Waste Section (SWS) completed a review of the revised Permit Application (DIN 26704) and has two comments stated below:

1. (Operations Plan, Waste Disposal Plan, on Page 2 of 6) Pursuant to the Solid Waste Management Rules (Rule) 15A NCAC 13B .0566(5) & (7), the soil cap, at minimum of one foot thickness, shall be installed over the disposal area at the landfill no later than 120 calendar days [not one year, proposed in Item (t)] after completion of any phase of disposal operations. The soil cap must be revegetated at the specified time frame as well. The Item (t) must be revised accordingly.  
**Response: O&M text changed.**
2. (Drawing Nos. LCID-2 & LCID-3) A 24-inch-diameter aluminum pipe is added to the revised plan drawings to drain the surface runoff in the ditch along the east side of the landfill into the stormwater holding area, which is located on the west side of the landfill. And this transverse aluminum pipe is to be installed underneath the landfill. The SWS has strong concerns of this design because the buried pipe, if it is damaged or leaks for any reason, will potentially provide a least-resistant path for leachate migration to the on-site surface-water body (stormwater holding area) and consequently to the groundwater underneath the landfill. (Don't forget what causes the coal ash spill into the Dan River.) Leachate is defined as any liquid, including any suspended components in liquid, that has percolated through or drained from solid waste according to Rule 15A NCAC 13B .0101(24). Please noted that the landfill will be perpetually located at the property, but the pipe has a limited service

life. Mr. Everett who owns and operates this landfill will be legally and financially responsible for any environment damages to surface water and groundwater resulting from leachate migration via the damaged pipe. Consequently, this design has a potential violation of the Rule 15A NCAC 13B.0566(14) - leachate shall be properly managed on site through the use of current best management practices.

**Response: Pipes have been removed – see revised maps.**

Additionally, the Permit Application must properly address the following concerns, if Mr. Everett insists to use this approach to manage the on-site stormwater/drainage system:

- i. According to the “LCID Full-Build Out Cross-Section” on Drawing No. LCID-3, the pipe intake (daylight) is placed on the grade without any backfill cover, and approximately 50% of the pipe is covered by less than 1-foot thick cover.
  - a. Will this pipe be able to resist waste loads (static) and live loads, generated from the movements of dump truck and earth-moving equipment with an acceptable factor of safety? Please provide the detailed calculation to demonstrate the selected pipe has adequate strength to support the maximum static and live loads in construction and operation of the landfill.

**Response: Pipes have been removed – see revised maps.**

- b. Provide a typical detail and cross section of the pipe trench which must meet the assumptions/concepts of pipe-soil system used in the calculations mentioned in the above-mentioned item (a) including, but not limit to, trench width & depth, specifications for backfill materials and compaction efforts, thickness of cover and bedding, etc.

**Response: Pipes have been removed – see revised maps.**

- ii. If the pipe trench and installation will be constructed after the minimum 4-feet-thick landfill base is completely constructed, the trench safety requirements must be clearly specified on the drawing.

**Response: Pipes have been removed – see revised maps.**

- iii. Will the aluminum pipe have chemical compatibility and corrosion resistance to the potentially exposed environmental media such as leachate, waste, standing water, or backfill material? Shall the pipe be protected by a suitable coating or applying cathodic protection? Please clarify.

- iv. What is the service life of the pipe? Please provide detailed references and calculations.

**v. Response: Pipes have been removed – see revised maps.**

- vi. Is there an inspection and maintenance plan for the drainage pipe to be conducted during the landfill operation period? Should the pipe be damaged for any reason, how you plan to repair the pipe? Please clarify.

**vii. Response: Pipes have been removed – see revised maps.**

Please contact myself if you have any questions to the above-mentioned comments. Thanks and have a wonderful weekend.

*Ming Chao*  
Ming-Tai Chao, P.E.  
Environmental Engineer  
Permitting Branch, Solid Waste Section

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<http://portal.ncdenr.org/web/wm/sw>



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**From:** Chao, Ming-tai  
**Sent:** Tuesday, September 06, 2016 11:33 AM  
**To:** 'BSmith@paramounte-eng.com' <[BSmith@paramounte-eng.com](mailto:BSmith@paramounte-eng.com)>  
**Cc:** Rice, Sarah M <[sarah.rice@ncdenr.gov](mailto:sarah.rice@ncdenr.gov)>; Hare, Wes <[wes.hare@ncdenr.gov](mailto:wes.hare@ncdenr.gov)>; Hammonds, Andrew <[andrew.hammonds@ncdenr.gov](mailto:andrew.hammonds@ncdenr.gov)>  
**Subject:** Everett's LCIDLF, P1303

Dear Mr. Smith: Good morning. On August 29, 2016 the Solid Waste Section (the SWS) received the hard copy of the responses to the July 11, 2016 comments (DIN 26446) and the revised Operations Plan and supporting documents associated to the proposed new landfill. The above-mentioned documents are scanned, logged and uploaded to the document tracking system with a DIN 26704. The SWS will review the revised operations plan and responses shortly.

*Ming Chao*  
Ming-Tai Chao, P.E.  
Environmental Engineer  
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PROPERTY DATA: NC PIN #: 3577-99-4506; LENOIR CO. RECORD 4596  
 ZONING: RURAL  
 TOTAL ACREAGE: 17.94 ± BY TITLE SEARCH BY MATRIX EAST.  
 DEED REFERENCE: DB 987, PG 1; MP 19-15  
 PROPERTY OWNER & OPERATOR:  
 MR. HENRY LEON EVERETT, JR. (LYNN EVERETT)  
 EVERETT'S LOT CLEARING AND GRADING, INC.  
 2402 FRED EVERETT RD., PO BOX 6025, KINSTON, NC 28504  
 (252) 522-5260

LANDFILL AREA	WASTE FOOTPRINT (AC)	EST. QUARTERLY CAPACITY (CY)	GROSS CAPACITY (CY)
SINGLE FILL	XXX	1,000	XXXX

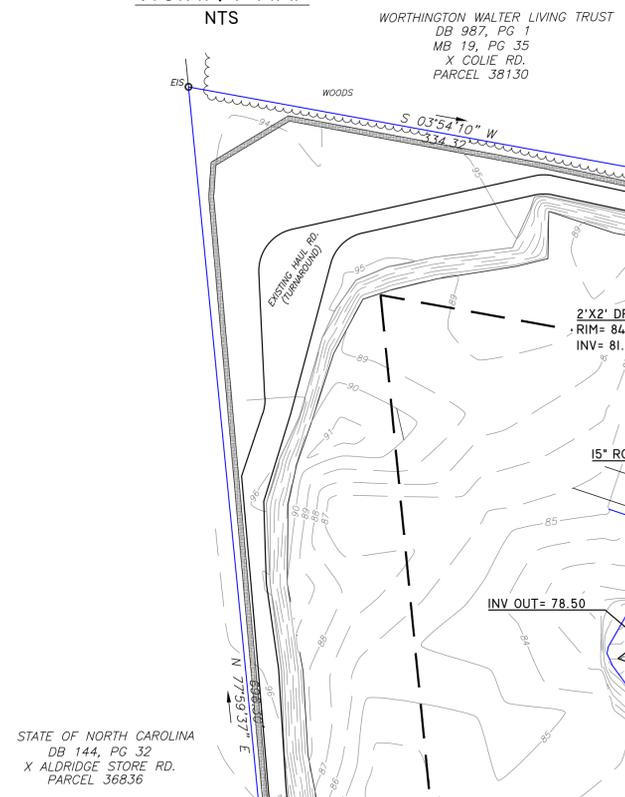
**SEQUENCE OF LCID CONSTRUCTION & OPERATIONS**

1. SEE PHASE I CONSTRUCTION SEQUENCE.
2. CONTINUE BACKFILLING TO ELEVATION 85.0-FT (NAVD 88) WITH CLEAN SOILS WITH ORGANICS LESS THAN 2%, 40-60% PASSING THE No. 200 SIEVE WITH PLASTICITY INDEX LESS THAN 20%; AND LIQUID LIMIT OF LESS THAN 50%; FREE OF ROCK OR GRAVEL LARGER THAN 2-INCHES IN ANY DIMENSION, ROOTS, DEBRIS, WASTE, FROZEN MATERIALS, VEGETATION, AND OTHER DELETERIOUS MATTER UNLESS OTHERWISE APPROVED BY A GEOTECHNICAL ENGINEER. THESE SOILS WILL BE PLACED IN 8-INCH LIFTS FOR HEAVY COMPACTION EQUIPMENT AND IN 4-INCH LIFTS FOR HAND COMPACTION. MAXIMUM DRY DENSITY SHALL BE NOT LESS THAN 95% IN ACCORDANCE WITH ASTM D 698.
3. AFTER THE BASE ELEVATION OF 85.0-FT (NAVD 88) HAS BEEN ESTABLISHED, THE WASTE MATERIALS CAN BE HAULED IN TO CREATE THE LCID FILL SLOPE. SEE MAPS AND CROSS-SECTIONS.
4. VEGETATE PER THE TEMPORARY AND PERMANENT SEEDING SPECIFICATIONS TO CREATE CLEAN SLOPES AND PREVENT SEDIMENTATION RUNOFF. SEE NOTES ABOUT CAPPING THE LCID WHEN NECESSARY.

1. BOUNDARY INFORMATION WAS TAKEN FROM MATRIX EAST, PLLC SURVEYING AND MAPPING.
2. TOPOGRAPHIC INFORMATION TAKEN FROM MATRIX EAST FIELD SURVEY.
3. THIS TRACT IS NOT SUBJECT SPECIAL FLOOD HAZARD AREAS AS SHOWN ON NFIP MAP PANEL 3720357800J AND 3720357700J EFFECTIVE DATE 4/16/13 720357800J. FALLING CREEK FLOODPLAIN IS APPROXIMATELY 460-FT SOUTH OF THE TRACT AT APPROX. BFE=74.
4. OPEN PIT SCREENING PROVIDED FROM EXISTING CROP FIELDS, LIVESTOCK FIELDS, AND ACCESS ROAD GATE.
5. ALL RUNOFF FROM LCID AREA DRAINS OR WILL DRAIN INTO STORMWATER AREAS AS INDICATED.
6. LANDFILL FILLING, OPERATION, AND RESTORATION ACTIVITIES WILL NOT INTRODUCE ANY FILL, STOCKPILES, WASTEPILES, OR NON-MOBILE EXCAVATING OR PROCESSING EQUIPMENT ABOVE THE PRE-DISTURBANCE GRADES.
7. LCID MATERIALS WILL BE COVERED AT ALL TIMES WITH A MIN. 1-FT OF SOIL AND MATERIALS WILL BE MIN. 4-FT ABOVE GROUNDWATER.
8. REFERENCE THE LCID SEQUENCE OF CONSTRUCTION ON SHEET LCID-3.

SITE  
FALLING CREEK

**VICINITY MAP**  
NTS



STATE OF NORTH CAROLINA  
DB 144, PG 32  
X ALDRIDGE STORE RD.  
PARCEL 36836

WORTHINGTON WALTER LIVING TRUST  
DB 987, PG 1  
MB 19, PG 35  
X COLIE RD.  
PARCEL 38130

N/F  
SARAH VAUGHN HEIRS  
DB 128, PG 156  
3918 ALDRIDGE STORE RD.  
PARCEL 4551

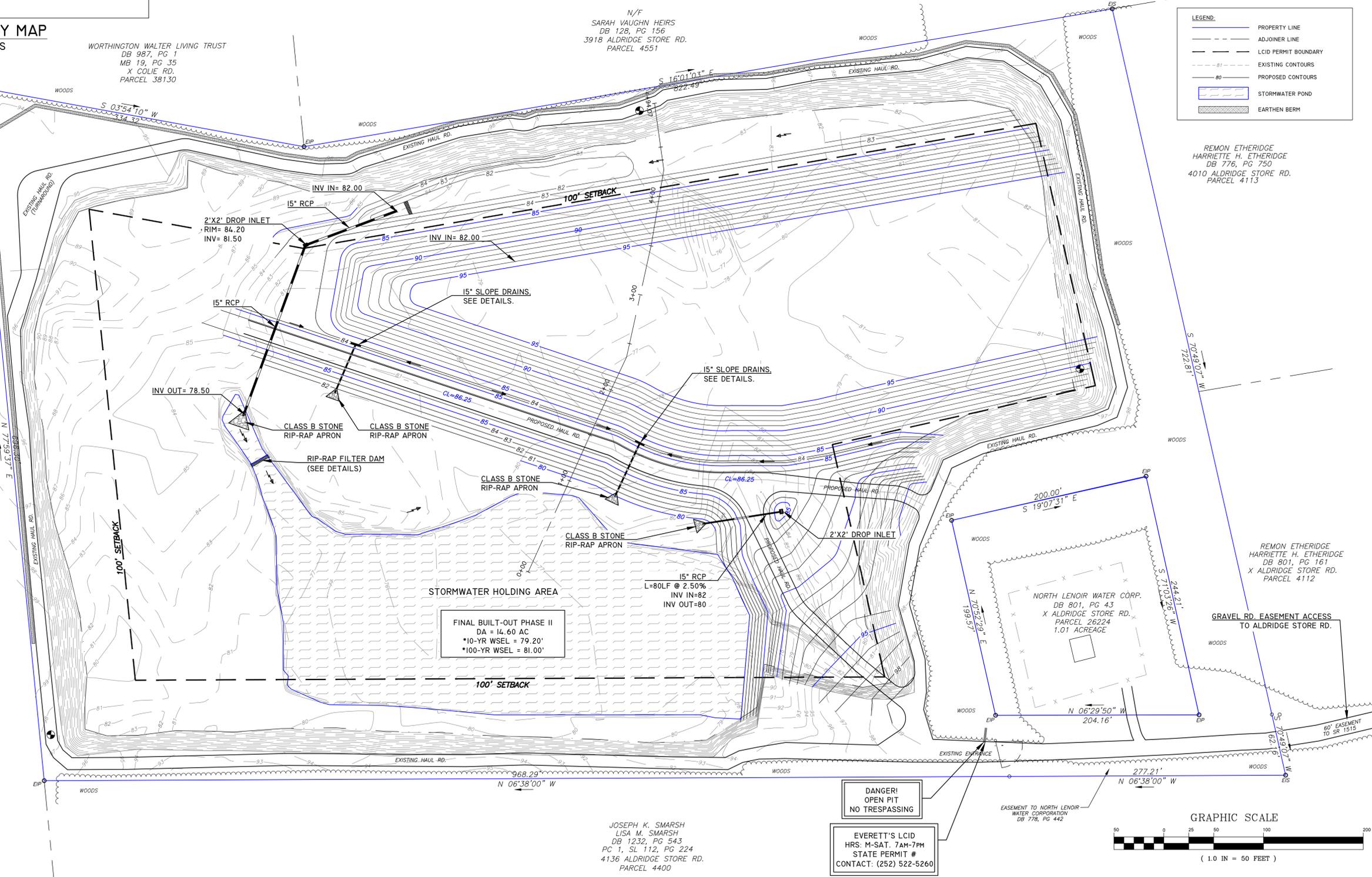
**LEGEND:**

- PROPERTY LINE
- ADJOINER LINE
- LCID PERMIT BOUNDARY
- EXISTING CONTOURS
- PROPOSED CONTOURS
- STORMWATER POND
- EARTHEN BERM

REMON ETHERIDGE  
HARRIETTE H. ETHERIDGE  
DB 776, PG 750  
4010 ALDRIDGE STORE RD.  
PARCEL 4113

REMON ETHERIDGE  
HARRIETTE H. ETHERIDGE  
DB 801, PG 161  
X ALDRIDGE STORE RD.  
PARCEL 4112

NORTH LENOIR WATER CORP.  
DB 801, PG 43  
X ALDRIDGE STORE RD.  
PARCEL 26224  
1.01 ACREAGE

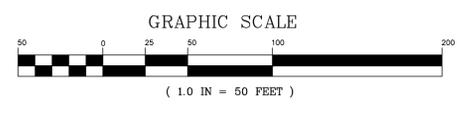


FINAL BUILT-OUT PHASE II  
DA = 14.60 AC  
\*10-YR WSEL = 79.20'  
\*100-YR WSEL = 81.00'

DANGER!  
OPEN PIT  
NO TRESPASSING

EVERETT'S LCID  
HRS: M-SAT. 7AM-7PM  
STATE PERMIT #  
CONTACT: (252) 522-5260

JOSEPH K. SMARSH  
LISA M. SMARSH  
DB 1232, PG 543  
PC 1, SL 112, PG 224  
4136 ALDRIDGE STORE RD.  
PARCEL 4400



**FINAL PROPOSED LANDFILL  
PHASE II LANDFILL OPERATIONS**

REV. NO.	DATE	REVISIONS	BY
8.22.16		REVISIONS PER DSW REVIEW	JBS
6.24.16		REVISIONS PER DSW REVIEW	JBS

SCALE: 1" = 50'  
 DEPARTMENT: \_\_\_\_\_  
 DRAWN BY: JBS DATE STARTED: MAR. 2016 SHEET No. 2 OF 3  
 CHECKED: JBS DRAWING NO. \_\_\_\_\_  
 APPROVED: JBS/LHE  
 PROJECT NO. \_\_\_\_\_  
 EVERETT'S LCID

**EVERETT'S LOT CLEARING AND GRADING, INC.**  
 2402 FRED EVERETT ROAD  
 KINSTON, NC 28504  
 (252) 522-5260

**EVERETT'S LAND CLEARING  
AND INERT DEBRIS PIT**

**INSTITUTE TOWNSHIP  
LENOIR COUNTY, NC**

**LCID-2**