



HODGES, HARBIN,
NEWBERRY & TRIBBLE, INC.

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KEVIN G. BERRY, P.E.

April 20, 2012

Received 6/22/2012

JM DIN 16824 8401-MSWLF-1999

Mr. John E. Murray P.E.
Professional Engineer - Solid Waste Section
North Carolina Dept. of Env. & Natural Resources
Mooresville Regional Office
610 East Center Avenue, Suite 301
Mooresville, NC 28115

**Re: City of Albemarle Landfill
Leachate System Improvements
HHNT Project No. 1011-010-01**

Dear Mr. Murray:

We have enclosed the plan sheet showing proposed leachate system improvements for the Phase 1 and Phase 2 areas of the lined MSW landfill area. The proposed improvements will eliminate any leachate flow on the portion of the Phase 2 leachate collection line thought to have a leak in the primary containment pipe or valves leaving Phase 2. Upon your approval of the attached plan, the City of Albemarle will proceed with construction of the improvements.

During your latest site visit, you requested an updated leachate plan for the facility to show the leachate lines installed in the C&D area and the proposed Phase 2 leachate improvements. To honor this request, we have also included a revised sheet 5 of 10 from the Facility Plans for your review.

Should you have any questions, please call.

Sincerely,

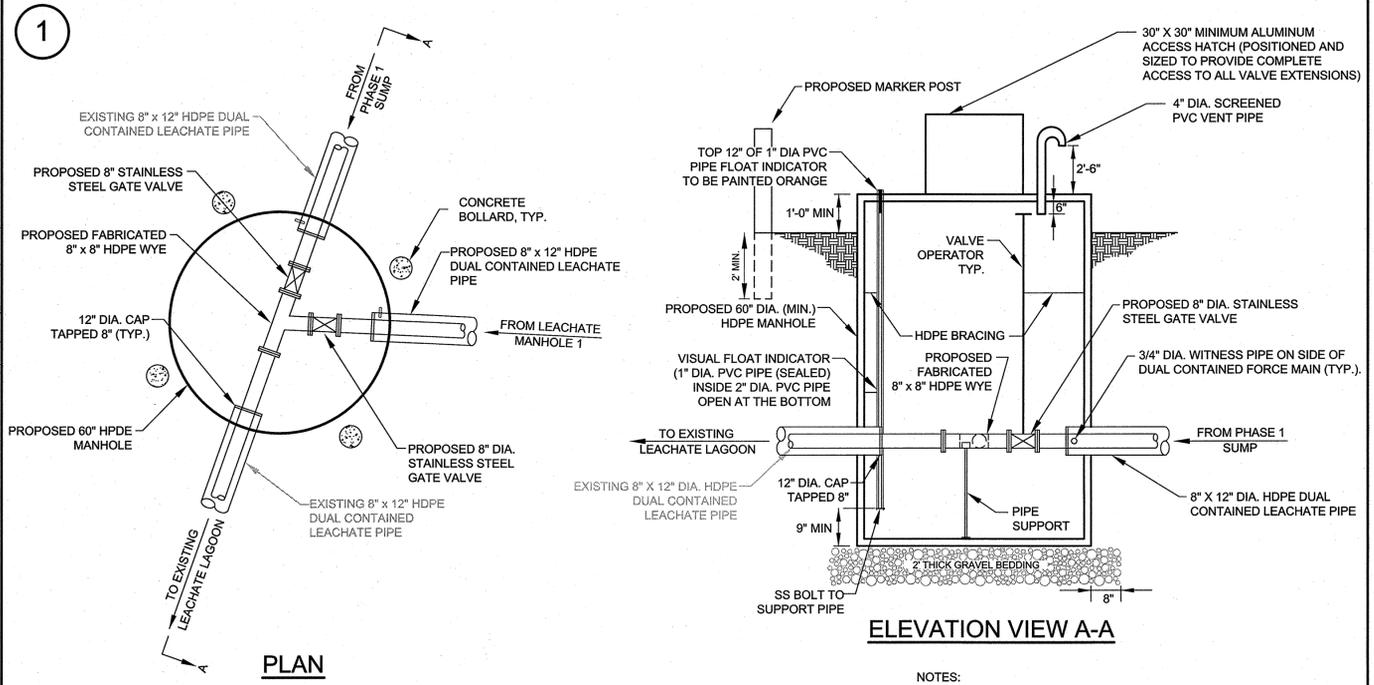
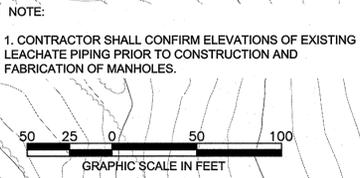
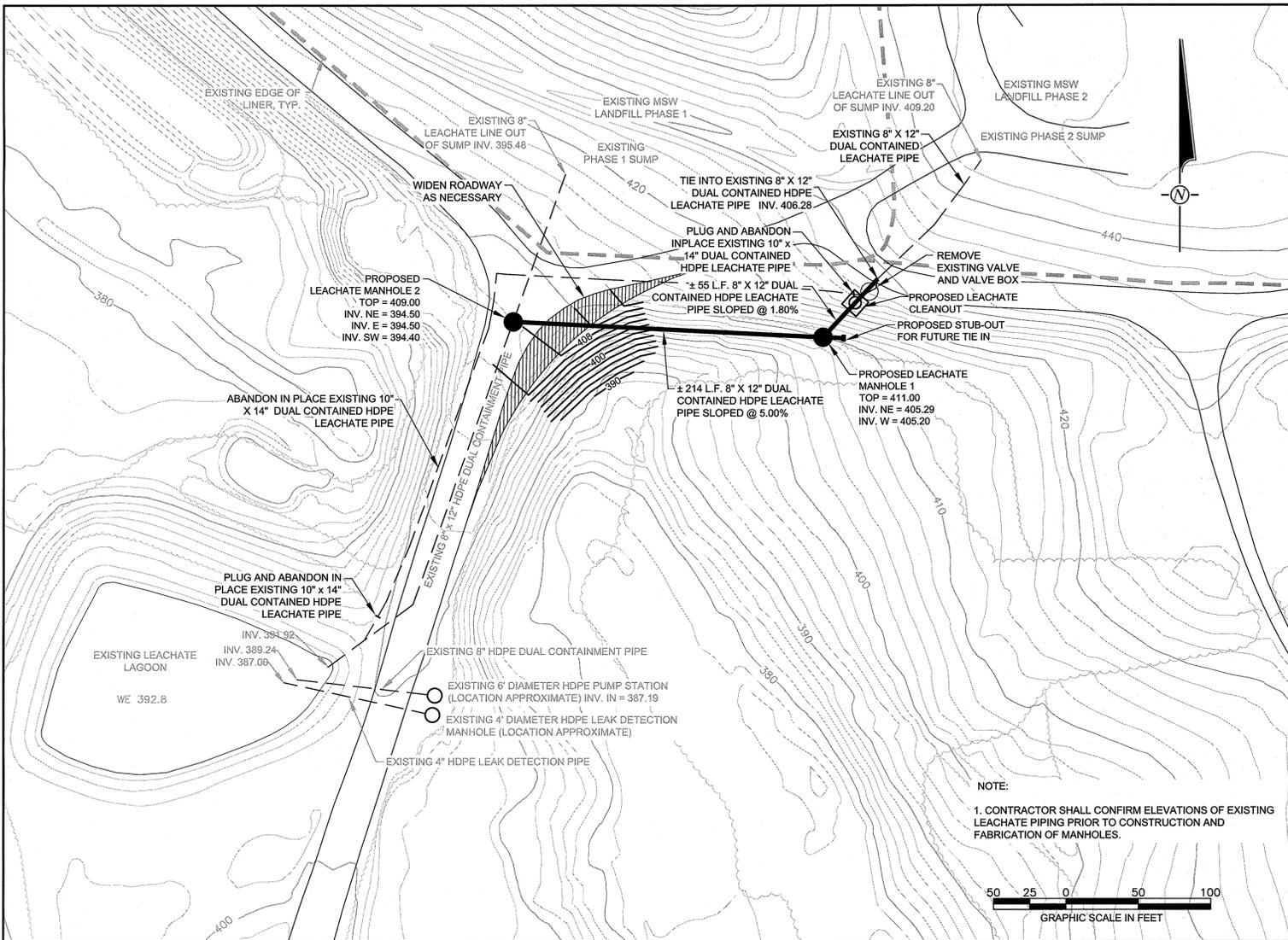
HODGES, HARBIN, NEWBERRY & TRIBBLE, INC.

R. Brant Lane, P.E.
Principal

RBL/cw

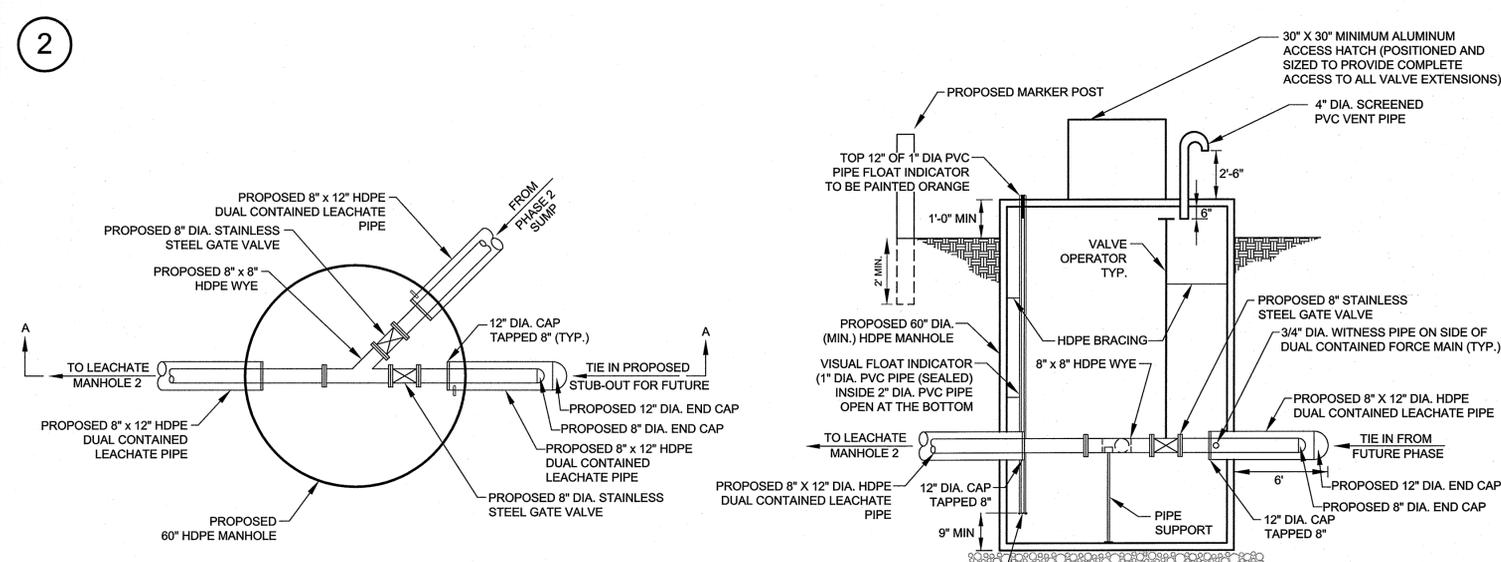
Enclosure

cc: Mike Lambert (w/ enclosure)
Darren Preslar (w/ enclosure)
Nina Underwood (w/ enclosure)



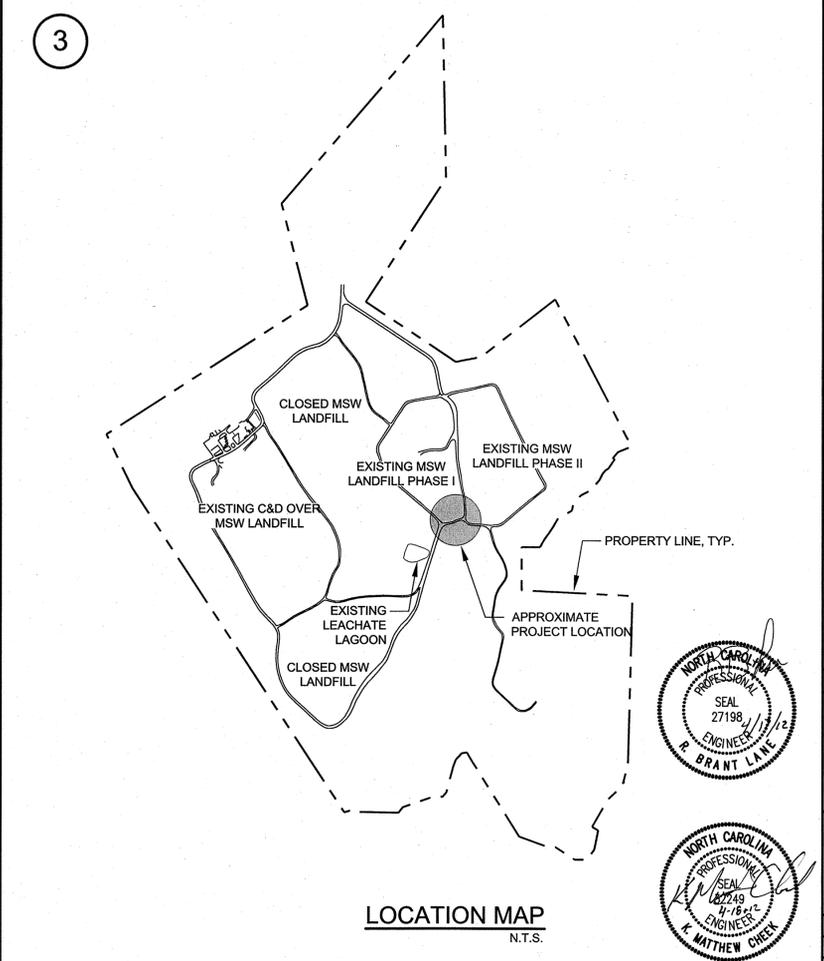
PROPOSED HDPE LEACHATE MANHOLE 2
N.T.S.

- NOTES:
1. ALL VALVES AND FITTINGS SHALL BE FLANGED.
 2. MANHOLE STEPS TO BE FABRICATED BY MANHOLE MANUFACTURER.
 3. ALL FILL MATERIAL SHALL BE COMPACTED TO MIN. 95% STD. PROCTOR DENSITY.
 4. SHOP DRAWINGS OF ALL MANHOLES, VALVES AND FITTINGS ARE TO BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO FABRICATION.

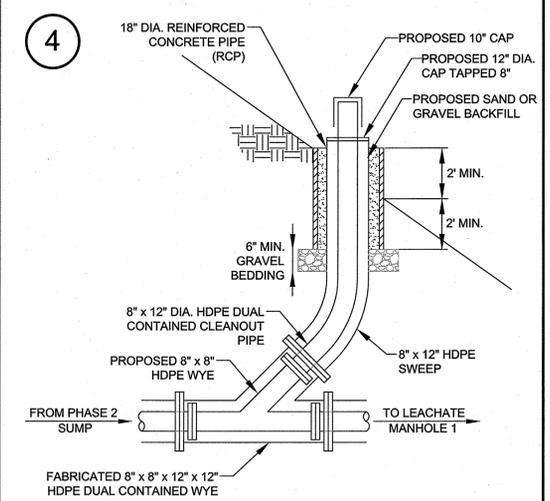


PROPOSED HDPE LEACHATE MANHOLE 1
N.T.S.

- NOTES:
1. ALL VALVES AND FITTINGS SHALL BE FLANGED.
 2. MANHOLE STEPS TO BE FABRICATED BY MANHOLE MANUFACTURER.
 3. ALL FILL MATERIAL SHALL BE COMPACTED TO MIN. 95% STD. PROCTOR DENSITY.
 4. SHOP DRAWINGS OF ALL MANHOLES, VALVES AND FITTINGS ARE TO BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER PRIOR TO FABRICATION.



LOCATION MAP
N.T.S.



PROPOSED LEACHATE CLEANOUT WITH PROTECTION
N.T.S.

LEACHATE MANHOLE DETAILS

LEACHATE COLLECTION IMPROVEMENT PLAN
CITY OF ALBEMARLE MSW LANDFILL

FOR
CITY OF ALBEMARLE
STANLY COUNTY, NORTH CAROLINA

HHNT
HODGES, HARBIN,
NEWBERRY & TRIBBLE, INC.

3920 ARKWRIGHT RD.
SUITE 101
MACON, GEORGIA 31210

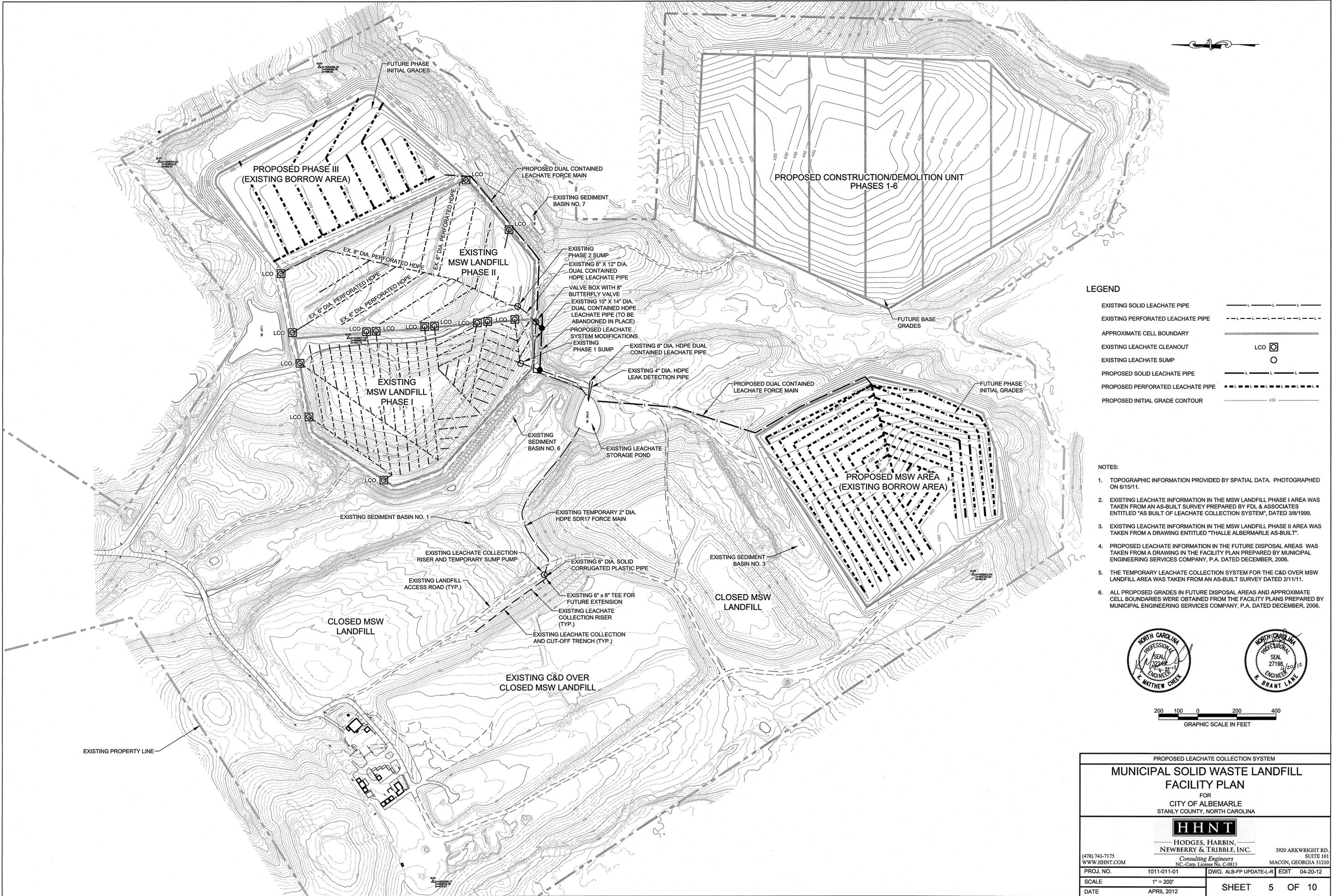
(478) 743-7175
WWW.HHNT.COM

Consulting Engineers
NC-Corp. License No. C-0813

PROJ. NO. 1011-011-01 DWG. Leach Pipe Mod-Shallow EDIT 04-17-12
SCALE 1" = 50'
DATE APRIL, 2012

SHEET 1 OF 1

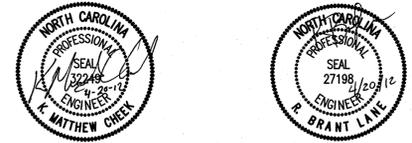




LEGEND

EXISTING SOLID LEACHATE PIPE	— L — L — L —
EXISTING PERFORATED LEACHATE PIPE	- - - L - - - L - - - L - - -
APPROXIMATE CELL BOUNDARY	— — — — —
EXISTING LEACHATE CLEANOUT	LCO □
EXISTING LEACHATE SUMP	○
PROPOSED SOLID LEACHATE PIPE	— L — L — L —
PROPOSED PERFORATED LEACHATE PIPE	- - - L - - - L - - - L - - -
PROPOSED INITIAL GRADE CONTOUR	— 430 —

- NOTES:**
1. TOPOGRAPHIC INFORMATION PROVIDED BY SPATIAL DATA. PHOTOGRAPHED ON 6/15/11.
 2. EXISTING LEACHATE INFORMATION IN THE MSW LANDFILL PHASE I AREA WAS TAKEN FROM AN AS-BUILT SURVEY PREPARED BY FDL & ASSOCIATES ENTITLED "AS BUILT OF LEACHATE COLLECTION SYSTEM", DATED 3/8/1999.
 3. EXISTING LEACHATE INFORMATION IN THE MSW LANDFILL PHASE II AREA WAS TAKEN FROM A DRAWING ENTITLED "THALLE ALBERMARLE AS-BUILT".
 4. PROPOSED LEACHATE INFORMATION IN THE FUTURE DISPOSAL AREAS WAS TAKEN FROM A DRAWING IN THE FACILITY PLAN PREPARED BY MUNICIPAL ENGINEERING SERVICES COMPANY, P.A. DATED DECEMBER, 2006.
 5. THE TEMPORARY LEACHATE COLLECTION SYSTEM FOR THE C&D OVER MSW LANDFILL AREA WAS TAKEN FROM AN AS-BUILT SURVEY DATED 2/11/11.
 6. ALL PROPOSED GRADES IN FUTURE DISPOSAL AREAS AND APPROXIMATE CELL BOUNDARIES WERE OBTAINED FROM THE FACILITY PLANS PREPARED BY MUNICIPAL ENGINEERING SERVICES COMPANY, P.A. DATED DECEMBER, 2006.



PROPOSED LEACHATE COLLECTION SYSTEM MUNICIPAL SOLID WASTE LANDFILL FACILITY PLAN FOR CITY OF ALBEMARLE STANLY COUNTY, NORTH CAROLINA			
HODGES, HARBIN, NEWBERRY & TRIBBLE, INC.		3920 ARKWRIGHT RD. SUITE 101 MACON, GEORGIA 31210	
Consulting Engineers NC-Corp. License No. C-0813			
PROJ. NO.	1011-011-01	DWG. ALB-FP UPDATE-L-R	EDIT 04-20-12
SCALE	1" = 200'		
DATE	APRIL 2012		
			SHEET 5 OF 10