5103Map2001 - Batch No.___

1

Johnston Co.

5103Z001
map

Attachment 2

Map showing wells:
MW-5-1
MW-5-2
MW-5-10

MW-5-10
TOC=202.88
DTW=12.76
GWE=190.12

MW-5-9
TOC=198.31
DTW=11.29
GWE=187.02

MW-5-8
TOC=189.31
DTW=7.68
GWE=181.63

MW-5-7
TOC=182.73
DTW=10.26
GWE=172.47

MW-5-6
TOC=199.11
DTW=30.44
GWE=168.67

MW-5-5
TOC=185.42
DTW=10.90
GWE=174.52

MW-5-4
TOC=186.58
DTW=5.74
GWE=180.84

MW-5-3
TOC=203.8
DTW=10.04
GWE=193.76

MW-5-2
TOC=206.77
DTW=4.75
GWE=202.02

MW-5-1
TOC=232.17
DTW=24.72
GWE=207.45

PHASE 5
LANDFILL

APPROXIMATE LIMITS
OF WASTE

170 175 180 185 190 195 200 205

0 200' 400' 600'

G.N. RICHARDSON & ASSOCIATES, INC.
Engineering and Geological Services
425 N. Boylan Avenue Raleigh, North Carolina
(919)-828-0577 Fax:(919)-828-3899 www.gnra.com

FIGURE NO.	1
FILE NAME	JOHN-B0208
SCALE:	AS SHOWN
CHECKED BY:	J.A.S.
PROJECT NO.	JOHN-4
DRAWN BY:	C.T.J.
DATE:	AUG. 2001

TITLE:
POTENTIOMETRIC MAP
JOHNSTON COUNTY LANDFILL
PHASE 5, APRIL 2001

Attachment 1

WQ 0019631
Johnston County
Reclaimed Water Spray Irrigation
Johnston County Landfill

N

200 100 0 200 400
SCALE 1" = 200'

SPRINKLER COVERAGE AREA (TYP.)
MIDDLE CREEK
BORROW AREA WILL BE STABILIZED PRIOR TO CONSTRUCTION, NOT PART OF THIS CONTRACT
SILT FENCE (APPROX. 400 LF)
FIELD #10
SILT FENCE (APPROX. 250 LF)
BORROW AREA WILL BE STABILIZED PRIOR TO CONSTRUCTION, NOT PART OF THIS CONTRACT
WETTED PERIMETER LINE (TYP.)
LEACHATE POND
FIELD #9
Monitoring Well DWQ-MW-3
EXISTING SILT FENCE (BY OTHERS)
ERODED AREA WILL BE STABILIZED PRIOR TO CONSTRUCTION, NOT PART OF THIS CONTRACT
FIELD #8
RIPARIAN BUFFER (TYP.)
POND
RECLAIMED WATER MAIN NOT PART OF THIS CONTRACT REDUCES FROM 16" TO 10" AT APPROXIMATELY THIS POINT
12" PVC RS FORCE MAIN NOT PART OF THIS CONTRACT
FIELD #7
EXISTING SILT FENCE (BY OTHERS)
WOODSLINE (TYP.)
PHASE 4
PHASE 3
SILT FENCE (APPROX. 700 LF)
SILT FENCE (APPROX. 350 LF)
BORROW AREA
MATCH LINE SEE SHEET C4 OF 8
MATCH LINE SEE SHEET C4 OF 8

REVISION INFORMATION				DRAWING INFORMATION		
Num	Description	Date	Init		Init	Date
				Drawn By:	SRM	06/01
				Checked By:	KCY	06/01
				Approved By:	RES	06/01

NORTH CAROLINA PROFESSIONAL SEAL 022662 ENGINEER DONALD E. SNIPES
February 11, 2002

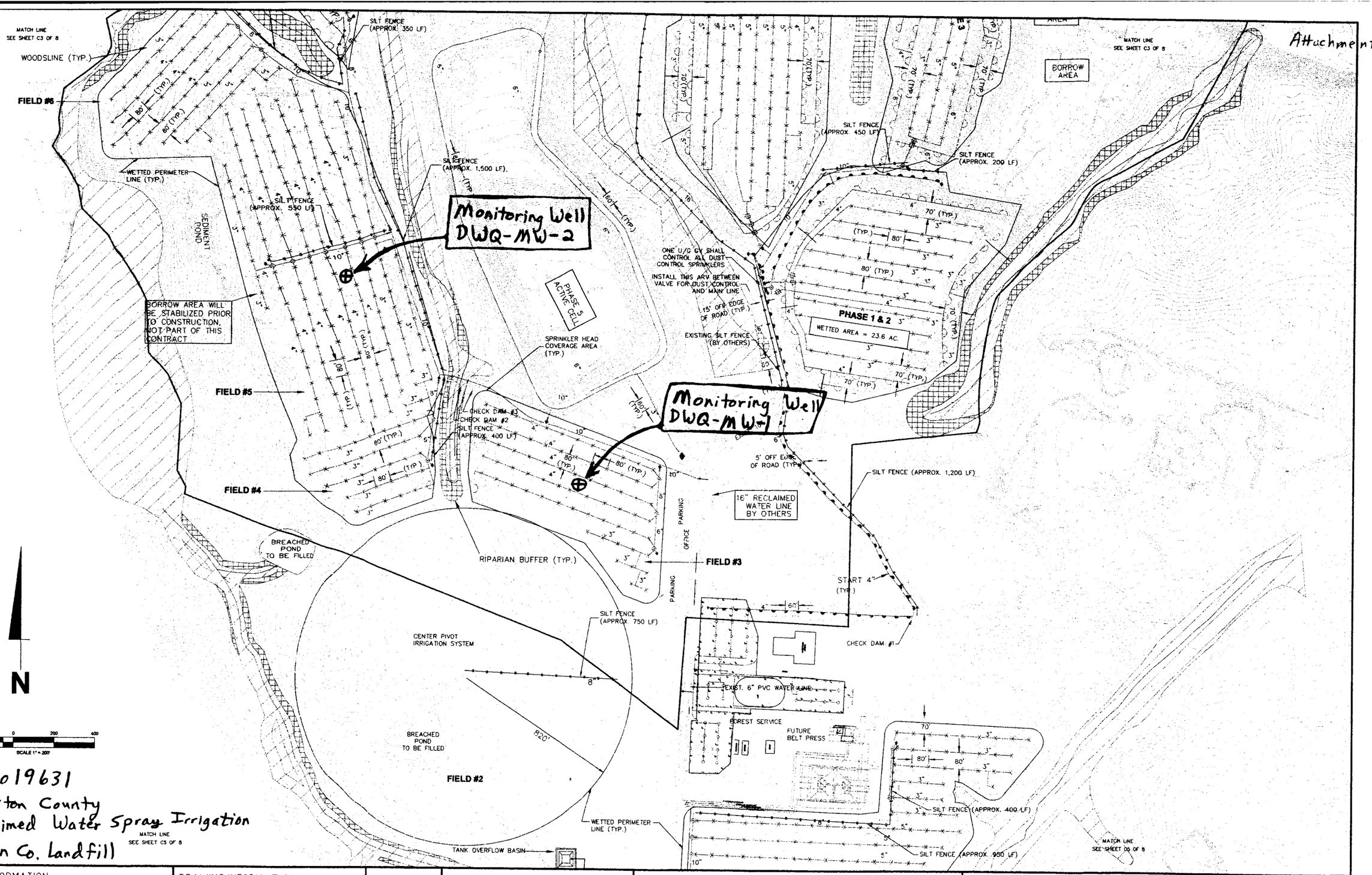
Wetted Areas Plan - Area A

LANDFILL RECLAIMED EFFLUENT IRRIGATION SYSTEM

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SHEET
EXHIBT 1
of 3

Attachment 1



WQ0019631
Johnston County
Reclaimed Water Spray Irrigation
Johnston Co. Landfill

REVISION INFORMATION				DRAWING INFORMATION		
Num	Description	Date	Init		Init	Date
				Drawn By:	SRM	06/01
				Checked By:	KCY	06/01
				Approved By:	RES	06/01

NORTH CAROLINA PROFESSIONAL ENGINEER RONALD E. SNEED
February 11, 2002

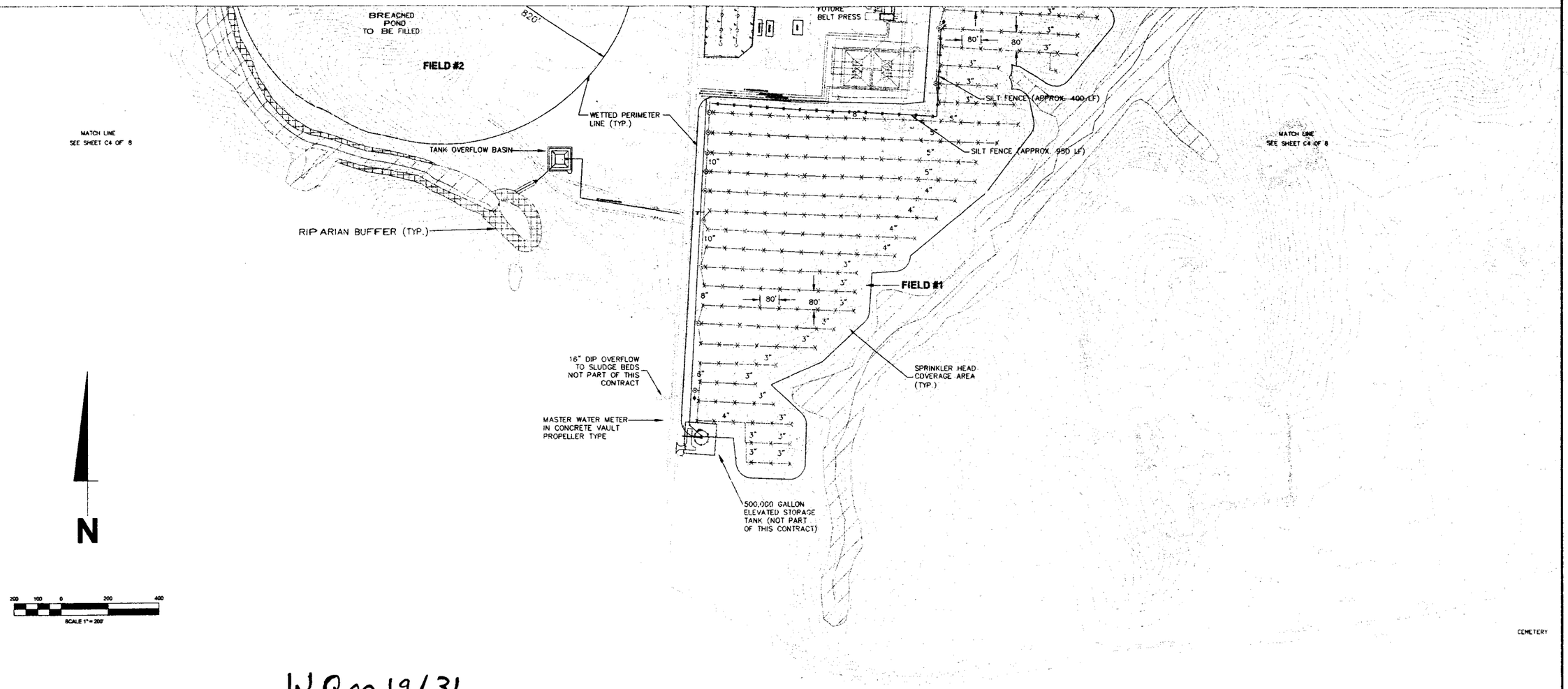
Wetted Aeras Plan - Area B

LANDFILL RECLAIMED EFFLUENT IRRIGATION SYSTEM

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SHEET
EXHIBT 2
of 3

Attachment 1



WQ00 19631
Johnston County
Reclaimed Water Spray Irrigation
Johnston County Landfill

REVISION INFORMATION				DRAWING INFORMATION		
Num	Description	Date	Init		Init	Date
				Drawn By	SRM	06/01
				Checked By	KCY	06/01
				Approved By	RES	06/01

February 11, 2002

Wetted Areas Plan - Area C

LANDFILL RECLAIMED EFFLUENT IRRIGATION SYSTEM

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SHEET
EXHIBT 3
of 3

Attachment 2

RECEIVED
AUG 13

Map showing wells:
CDLMW-5
MW-3
PZ-3

SW-2
MW-5
MW-5A
TOC=173.7
DTW=13.34
WTE=160.36
MW-12B
TOC=156.12
DTW=28.78
WTE=127.34
TOC=166.6
DTW=34.92
WTE=131.68
MW-6
MW-13D
MW-13
TOC=179.57
DTW=16.18
WTE=163.39
PZ-1
MW-4C
MW-4D
MW-4B
TOC=201.7
DTW=6.22
WTE=195.48
MW-4
PZ-4
PZ-3
TOC=194.91
DTW=8.74
WTE=186.17
CDLMW-5
MW-7C
MW-7B
MW-7D
MW-7
TOC=164.5
DTW=23.86
WTE=140.64
PZ-7
PZ-10
PZ-9D
PZ-9
PZ-8
PZ-6
PZ-5
PZ-5D
DRY
TOC=155.43
MW-8
MW-8D
MW-11
TOC=144.32
DTW=8.72
WTE=135.60
MW-10
TOC=175.65
DTW=3.52
WTE=172.13
MW-9
MW-9B
MW-9D
MW-9C
TOC=167.89
DTW=7.30
WTE=160.59
MW-3
TOC=234.16
DTW=22.62
WTE=211.54
MW-3B
SW-1

PHASE 3
PHASE 1 & 2
PHASE 4
PHASE 5

140 150 160 170 180 190 200 210

LEGEND

- ◑ EXISTING MONITORING WELLS.
- ● ASSESSMENT DEEP WELLS.
- ● PERMIT SHALLOW PIEZOMETER

NOTE:

1. GROUNDWATER DATA COLLECTED APRIL, 2001.

0 400' 800' 1200'

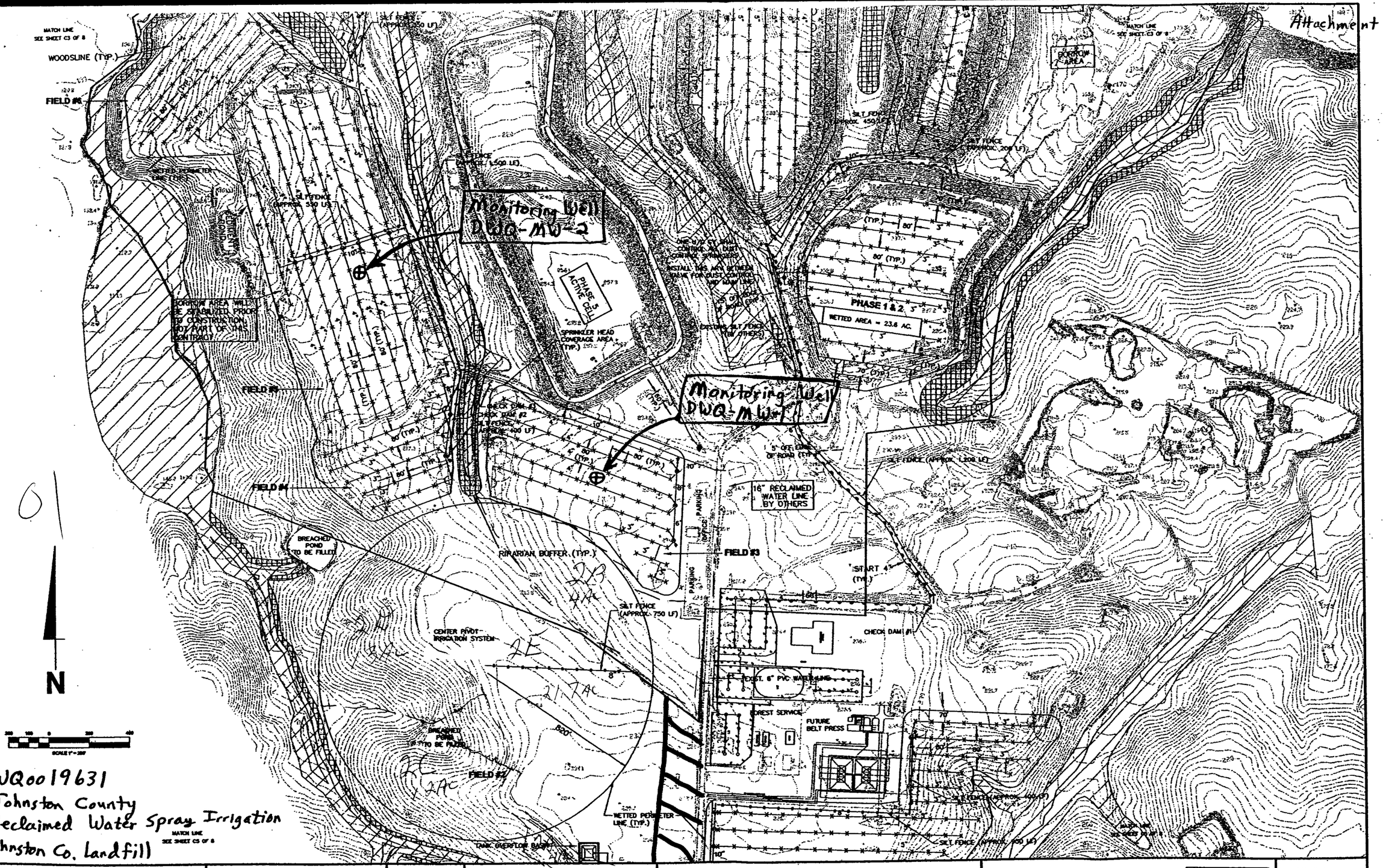
G.N. RICHARDSON & ASSOCIATES, INC.
Engineering and Geological Services
425 N. Boylan Avenue Raleigh, North Carolina
(919)-828-0577 Fax:(919)-828-3899 www.gnra.com

FIGURE NO.	1
FILE NAME	JOHN-B0209
SCALE:	AS SHOWN
PROJECT NO.	JOHN-4
CHECKED BY:	J.A.S.
DRAWN BY:	C.T.J.
DATE:	AUG. 2001

TITLE: GROUND WATER POTENTIOMETRIC SURFACE MAP

C:\GNR\JOHNSTON\JOHNSTON-4\FIGURES\JOHN-B0209.dwg DATE: AUG 03, 2001 TIME: 4:41 PM

Attachment 1



WQ0019631
Johnston County
Reclaimed Water Spray Irrigation
Johnston Co. Landfill

REVISION INFORMATION				DRAWING INFORMATION		
Num	Description	Date	Init		Init	Date
				Drawn By:	SRM	06/01
				Checked By:	KCY	06/01
				Approved By:	RES	06/01

NORTH CAROLINA PROFESSIONAL ENGINEER RONALD E. SNIPES February 11, 2002

Wetted Aeras Plan - Area B

LANDFILL RECLAIMED EFFLUENT IRRIGATION SYSTEM

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SHEET
EXHIBT 2
of 3

Attachment 1

WQ0019631
Johnston County
Reclaimed Water Spray Irrigation
Johnston County Landfill

N

SCALE 1" = 200'

SPRINKLER COVERAGE AREA (TYP.)

MIDDLE CREEK

BORROW AREA WILL BE STABILIZED PRIOR TO CONSTRUCTION, NOT PART OF THIS CONTRACT

SILT FENCE (APPROX. 900 LF)

FIELD #10

SILT FENCE (APPROX. 250 LF)

BORROW AREA WILL BE STABILIZED PRIOR TO CONSTRUCTION, NOT PART OF THIS CONTRACT

WETTED PERIMETER (TYP.)

LEACHATE POND

FIELD #9

EXISTING SILT FENCE (BY OTHERS)

ERODED AREA WILL BE STABILIZED PRIOR TO CONSTRUCTION, NOT PART OF THIS CONTRACT

RECLAIMED WATER MAIN NOT PART OF THIS CONTRACT

Monitoring Well
DWQ-MW-3

FIELD #8

RIPARIAN BUFFER (TYP.)

FIELD #7

PHASE 4

PHASE 5

BORROW AREA

MATCH LINE
SEE SHEET C6 OF 8

MATCH LINE
SEE SHEET C8 OF 8

REVISION INFORMATION			
Num	Description	Date	Init

DRAWING INFORMATION		
	Init	Date
Drawn By:	SRM	06/01
Checked By:	KCY	06/01
Approved By:	RES	06/01

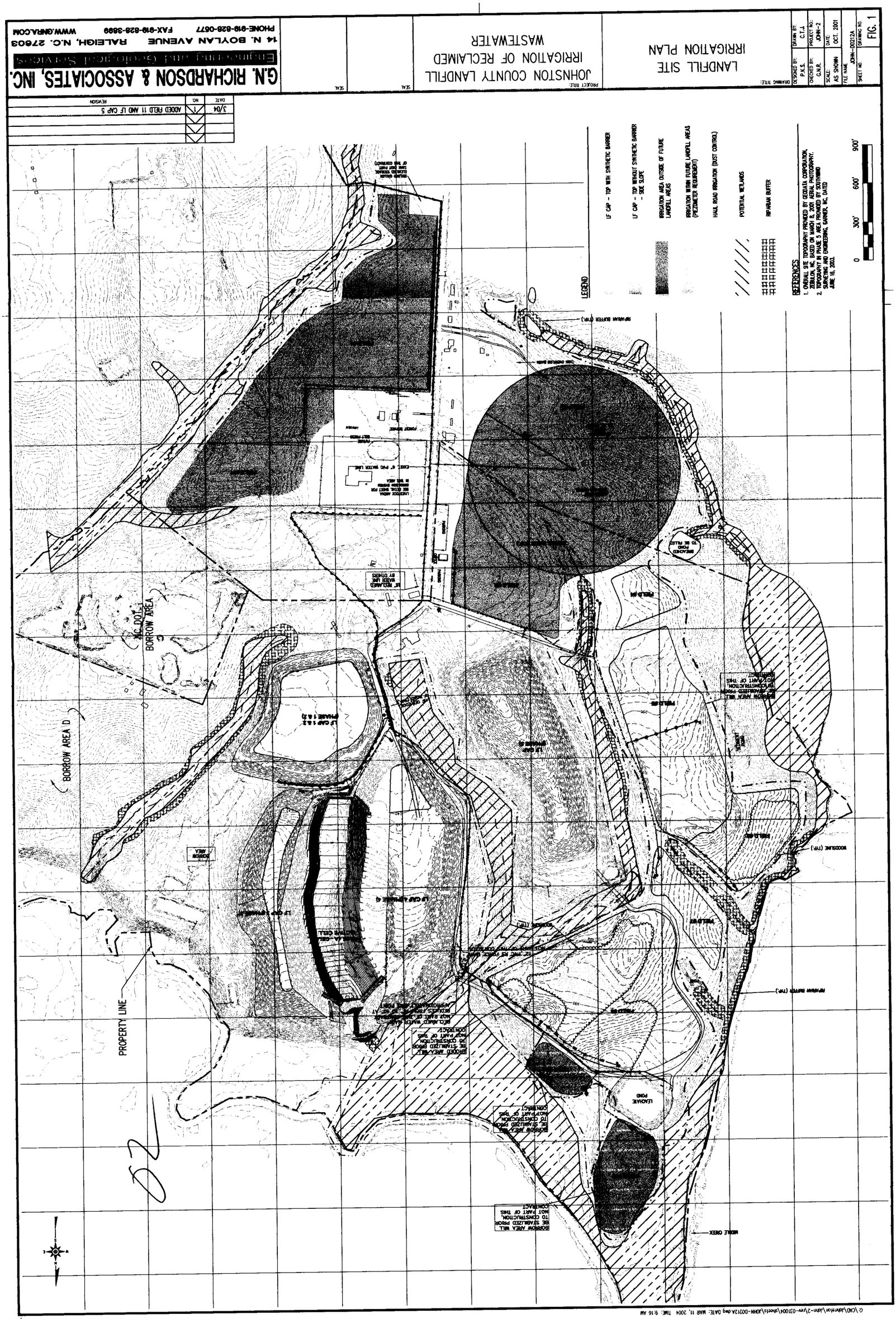
NORTH CAROLINA PROFESSIONAL ENGINEER RONALD E. SHEW
February 11, 2002

Wetted Areas
Plan - Area A

LANDFILL RECLAIMED EFFLUENT IRRIGATION SYSTEM

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SHEET
EXHIBT 1
of 3


LANDFILL SITE
IRRIGATION PLAN
JOHNSTON COUNTY LANDFILL
IRRIGATION OF RECLAIMED
WASTEWATER
G.N. RICHARDSON & ASSOCIATES, INC.
Engineering and Geological Services
14 N. BOYLAN AVENUE RALEIGH, N.C. 27603
PHONE-919-828-0677 FAX-919-828-3899 WWW.GNRA.COM
DESIGNED BY: P.K.S.
DRAWN BY: C.T.J.
CHECKED BY: G.N.R.
PROJECT NO: JOHN-2
SCALE: AS SHOWN
DATE: OCT. 2001
FILE NAME: JOHN-00212A
SHEET NO:
DRAWING NO: FIG. 1
NO DATE REVISION
1 3/04 ADDED FIELD 11 AND LF CAP 5
LEGEND
LF CAP - TOP WITH SYNTHETIC BARRIER
LF CAP - TOP WITHOUT SYNTHETIC BARRIER - SEE SLOPE
IRRIGATION AREA OUTSIDE OF FUTURE LANDFILL AREAS
IRRIGATION WITHIN FUTURE LANDFILL AREAS (PIEZOMETER REQUIRED!!)
HAUL ROAD IRRIGATION (DUST CONTROL)
POTENTIAL WETLANDS
RIPARIAN BUFFER
REFERENCES
1. OVERALL SITE TOPOGRAPHY PROVIDED BY GEORGIA CORPORATION, FIELD RUN SURVEY DATED 10/2000 AND AERIAL PHOTOGRAPHY.
2. TOPOGRAPHY IN PHASE 5 AREA PROVIDED BY SOUTHWIND SURVEYING AND ENGINEERING, GARNER, NC, DATED JUNE 16, 2001
0 300' 600' 900'
NC DOT BORROW AREA 5
BORROW AREA D
PROPERTY LINE
MOSLE CREEK
RIPARIAN BUFFER (TYP.)
WOODLINE (TYP.)
LEACHATE POND
BORROW AREA MAY BE STABILIZED PRIOR TO CONSTRUCTION, MAY PART OF THIS CONTRACT
BORROW AREA MAY BE STABILIZED PRIOR TO CONSTRUCTION, MAY PART OF THIS CONTRACT
BORROW AREA MAY BE STABILIZED PRIOR TO CONSTRUCTION, MAY PART OF THIS CONTRACT
BORROW AREA MAY BE STABILIZED PRIOR TO CONSTRUCTION, MAY PART OF THIS CONTRACT
LF CAP PHASE 4
LF CAP PHASE 4A
LF CAP PHASE 4B
LF CAP PHASE 5
LF CAP PHASE 1 & 2
PHASE 5A
PHASE 5B
PHASE 5C
PHASE 5D
PHASE 5E
PHASE 5F
PHASE 5G
PHASE 5H
PHASE 5I
PHASE 5J
PHASE 5K
PHASE 5L
PHASE 5M
PHASE 5N
PHASE 5O
PHASE 5P
PHASE 5Q
PHASE 5R
PHASE 5S
PHASE 5T
PHASE 5U
PHASE 5V
PHASE 5W
PHASE 5X
PHASE 5Y
PHASE 5Z
BORROW AREA
BORROW AREA
BORROW AREA