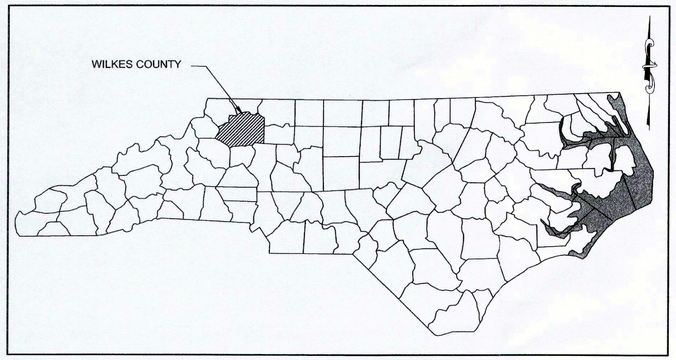
ROARING RIVER LANDFILL
PHASE 4 EXPANSION

WILKES COUNTY, NORTH CAROLINA



NORTH CAROLINA
COUNTY LOCATION MAP

OWNER INFORMATION

PREPARED FOR:	WILKES COUNTY DEPARTMENT OF SOLID WASTE
ADDRESS:	9219 ELKIN HIGHWAY ROARING RIVER, NORTH CAROLINA, 28669
CONTACT:	KENT BRANDON (336) 696-5806 (336) 927-4117

PROPERTY INFORMATION

ADDRESS:	9219 ELKIN HIGHWAY ROARING RIVER, NORTH CAROLINA, 28669
NCDENR PERMIT:	97-04
ACREAGE:	145 ACRES

VICINITY MAP

DRAWING INDEX

SHEET	DESCRIPTION
EP-T	TITLE SHEET
EP-L	LEGEND AND GENERAL NOTES
EP-01	EXISTING CONDITIONS
EP-02	GRADING PLAN: SUBGRADE
EP-03	GRADING PLAN: FINAL GRADE
EP-04	PROFILES A-A AND B-B
EP-05	PROJECT DETAIL
EP-06	EROSION AND SEDIMENT CONTROL DETAILS

SCANNED 4/24/15 (CK)

ENGINEERING PLAN
JANUARY 2011

97-04

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

DESIGNED SJC
DRAWN RWH
CHECKED LBB
APPROVED EEA
DATE 1/27/11

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GREENSBORO, NC 27407
PHONE: (336) 323-0092
NC CORP LIC: C-0782

ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA

TITLE SHEET

PROJECT NO.
356.10.02

SCALE
N.T.S.

DRAWING NO.
EP-T

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CONVENTIONAL SYMBOLS AND GENERAL NOTES

ENVIRONMENTAL MONITORING FEATURES

MW-X	EXISTING GROUNDWATER MONITORING WELL
MW-#	PROPOSED GROUNDWATER MONITORING WELL
MW-OW-#	EXISTING OBSERVATION WELL
MW-OW-X	PROPOSED OBSERVATION WELL
NES-OW-X	EXISTING NES WELL
NES-OW-#	PROPOSED NES WELL
MW-PW-X	EXISTING PERFORMANCE WELL
MW-PW-#	PROPOSED PERFORMANCE WELL
MW-X	EXISTING SENTINEL WELL
MW-#	PROPOSED SENTINEL WELL
EW-X	EXISTING EXTRACTION WELL
EW-#	PROPOSED EXTRACTION WELL
PZ-#	WETLANDS PIEZOMETER
PZ-X	PIEZOMETER
GP-X	GAS PROBE
GV-X	EXISTING GAS VENT
GV-#	PROPOSED GAS VENT
GW-X	EXISTING GAS WELL
GW-#	PROPOSED GAS WELL
SMP-X	SURFACE WATER MONITORING POINT
LMP-1	LEACHATE MONITORING POINT
B-X	BORE HOLE LOCATION
C-X	CORING LOCATION
SS-X	SOIL SAMPLING LOCATION
TP-X	TEST PIT LOCATION
W	WELL LOCATION
S-X	SPRINGHEAD LOCATION

SURVEY FEATURES

BM	BENCHMARK
CP	CONTROL POINT
	PROPERTY LINE
	EASEMENT
R/W	RIGHT OF WAY
X	FENCE LINE
	RAILROAD
	GUARDRAIL
	RESOURCE PROTECTION AREA

UTILITIES

	UTILITY POLE
	HYDRANT
	LIGHT POLE
	TANK (SIZE VARIES)
	TRANSFORMER
M	MANHOLE
	CLEANOUT
	VALVE
OHE	OVERHEAD ELECTRIC
UGE	UNDERGROUND ELECTRIC
OHT	OVERHEAD TELEPHONE
UGT	UNDERGROUND TELEPHONE
FM	LEACHATE FORCE MAIN
DCFM	DUAL CONTAINED LEACHATE FORCE MAIN
SS	SANITARY SEWER
PS	PROCESS SEWER
G	LANDFILL GAS LINE
UGG	NATURAL GAS LINE
W	POTABLE WATER
	SOLID PIPE (TYPE NOTED)
	PERFORATED PIPE (TYPE NOTED)
	CULVERT (SIZE NOTED)

LANDFILL AND ROAD FEATURES

	PAVED ROAD
	GRAVEL/DIRT ROAD
	EDGE OF PAVEMENT
	LIMIT OF WASTE/EDGE OF LINER
	FACILITY BOUNDARY/CELL LIMITS/PHASE LIMITS

BUILDINGS AND STRUCTURES

	BUILDING
	DAM
	FOUNDATION

HYDROLOGY

	APPROXIMATE 100 YEAR FLOOD PLAIN
	DITCH FLOW
	STREAM OR RIVER

VEGETATION

	SINGLE TREE
	TREE LINE
	SHRUB

EROSION AND SEDIMENT CONTROL FEATURES

SF SF	SILT FENCE
IP	INLET PROTECTION
	OUTLET PROTECTION (SIZE VARIES)
	DIVERSION BERM

TOPOGRAPHICAL FEATURES

100	EXISTING 10' TOPO CONTOUR
	EXISTING 2' TOPO CONTOUR
100	PROPOSED 10' TOPO CONTOUR
	PROPOSED 2' TOPO CONTOUR
100	GROUNDWATER SURFACE CONTOUR (FT ABOVE MEAN SEA LEVEL)
100	BEDROCK SURFACE CONTOUR (FT ABOVE MEAN SEA LEVEL)
100.00	SPOT ELEVATION

HATCHING

	WETLANDS
	RIPRAP
	WASHED STONE
	BUFFER AREA
	PROPOSED ROAD
	COMPACTED BACKFILL

SURVEY NOTES:

1. TOPOGRAPHIC CONTOUR INTERVAL = 2 FEET, UNLESS INDICATED OTHERWISE.
3. ON-SITE TOPOGRAPHY PROVIDED BY SPATIAL DATA CONSULTANTS, INC. , 1008 HUTTON LANE, HIGH POINT, NORTH CAROLINA 27262, DATED MARCH 19, 2010.
4. FEDERAL INSURANCE ADMINISTRATION, FLOOD INSURANCE RATE MAP, WILKES COUNTY, NC, INDICATES NO 100 YEAR FLOOD PLAINS ON SITE.
5. PROPERTY BOUNDARY BEARING AND DISTANCES PROVIDED BY TOM FRAZIER, R.L.S 1286 NC. ON MAY 8, 1989.
6. SITE CONTROL INFORMATION UPDATED BY SPATIAL DATA CONSULTANTS, INC. , 1008 HUTTON LANE, HIGH POINT, NORTH CAROLINA 27262, DATED MARCH 19, 2010.
5. THE SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE SEARCH AND ALL EASEMENTS AND ENCUMBRANCES MAY NOT BE SHOWN.

GENERAL NOTES:

1. SITE LIGHTING IS NOT PROPOSED FOR THIS PROJECT.
2. LANDSCAPING IS NOT PROPOSED FOR THIS PROJECT. HOWEVER THE BUFFER AREA SHOWN ON DRAWINGS WILL REMAIN UNDISTURBED EXCEPT FOR THE INSTALLATION OF UTILITIES, STORMWATER DRAINAGE FEATURES AND ACCESS TO THE SITE. WHEN POSSIBLE CLEARING WITHIN THE BUFFER WILL BE ALIGNED TO MINIMIZE VISUAL IMPACTS.
3. SOIL STOCKPILE AREAS WILL BE ESTABLISHED TO FACILITATE PHASED CONSTRUCTION. STOCKPILE LOCATIONS AND SIZE MAY VARY AND MAY NOT BE LIMITED TO THE AREAS SHOWN. SILT FENCE WILL BE INSTALLED AROUND THE BASE OF THE STOCKPILE.

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 015544 STEPHEN L. CUMMINGS

DESIGNED S.JC
DRAWN RWH
CHECKED LBB
APPROVED EEA
DATE 1/27/11

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ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA

LEGEND AND GENERAL NOTES

PROJECT NO.
356.10.02

SCALE
N.T.S.

DRAWING NO.
EP-L

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97-04

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

NORTH CAROLINA PROFESSIONAL SEAL 035644 ENGINEER STEPHEN J. COWIE

DESIGNED SJC
DRAWN RWH
CHECKED LBB
APPROVED EEA
DATE 1/27/11

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ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA

EXISTING CONDITIONS

PROJECT NO.
356.10.02

SCALE
AS SHOWN

DRAWING NO.
EP-01

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97-04

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

NORTH CAROLINA PROFESSIONAL ENGINEER 035644 STEPHEN J. COMIE

DESIGNED SJC
DRAWN RWH
CHECKED LLB
APPROVED EEA
DATE 1/27/11

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ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA

GRADING PLAN: SUBGRADE

PROJECT NO.
356.10.02

SCALE
AS SHOWN

DRAWING NO.
EP-02

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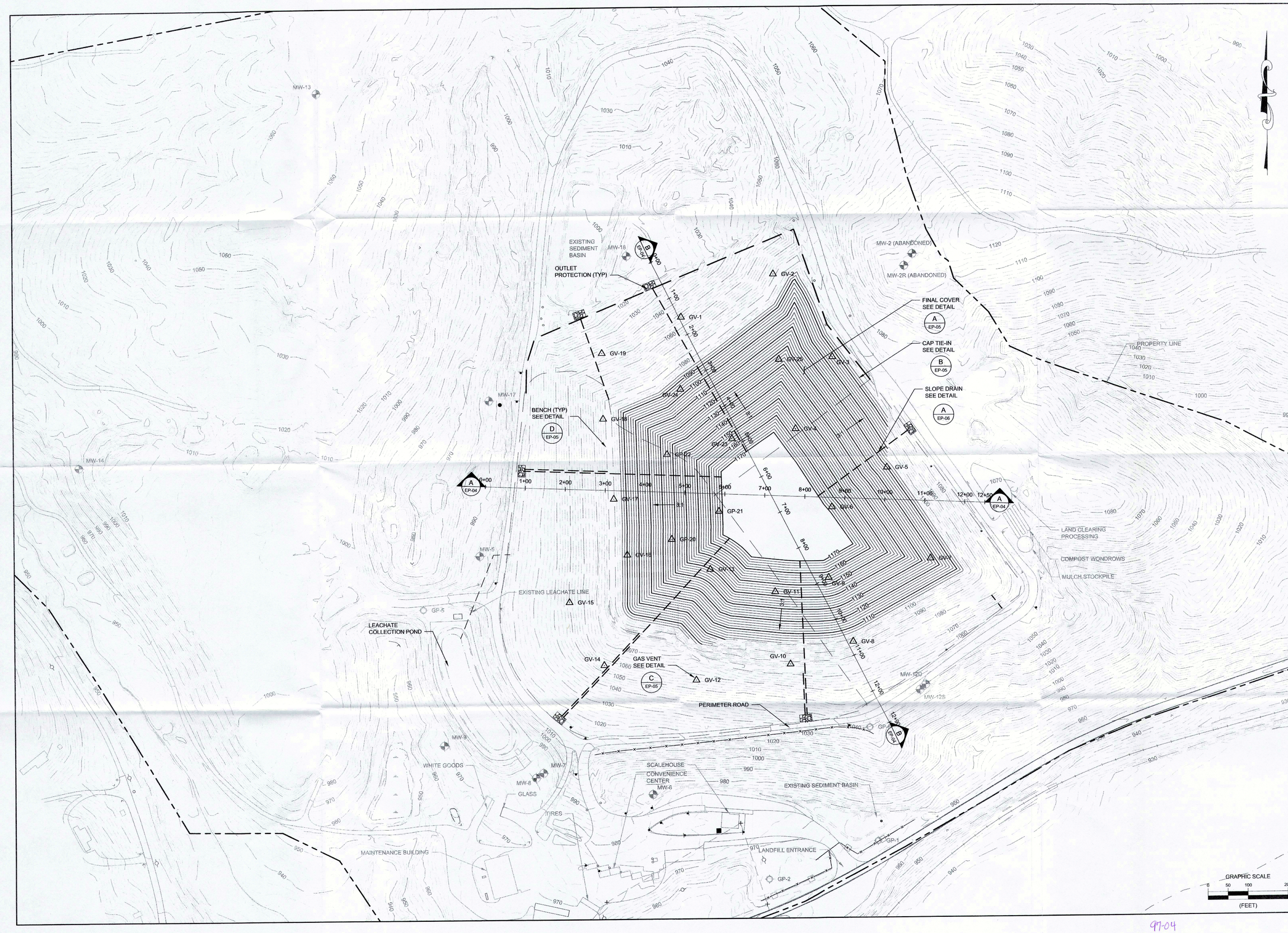
97-04



DATE	REVISIONS AND RECORD OF ISSUE	NO.	BY	CK	APP

NORTH CAROLINA PROFESSIONAL SEAL 035844 ENGINEER STEPHEN J. JOYCE

DESIGNED	SJC
DRAWN	RWH
CHECKED	LBB
APPROVED	EEA
DATE	1/27/11

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NC CORP LIC: C-0732

ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA

GRADING PLAN: FINAL GRADE

PROJECT NO. 356.10.02

SCALE AS SHOWN

DRAWING NO. EP-03

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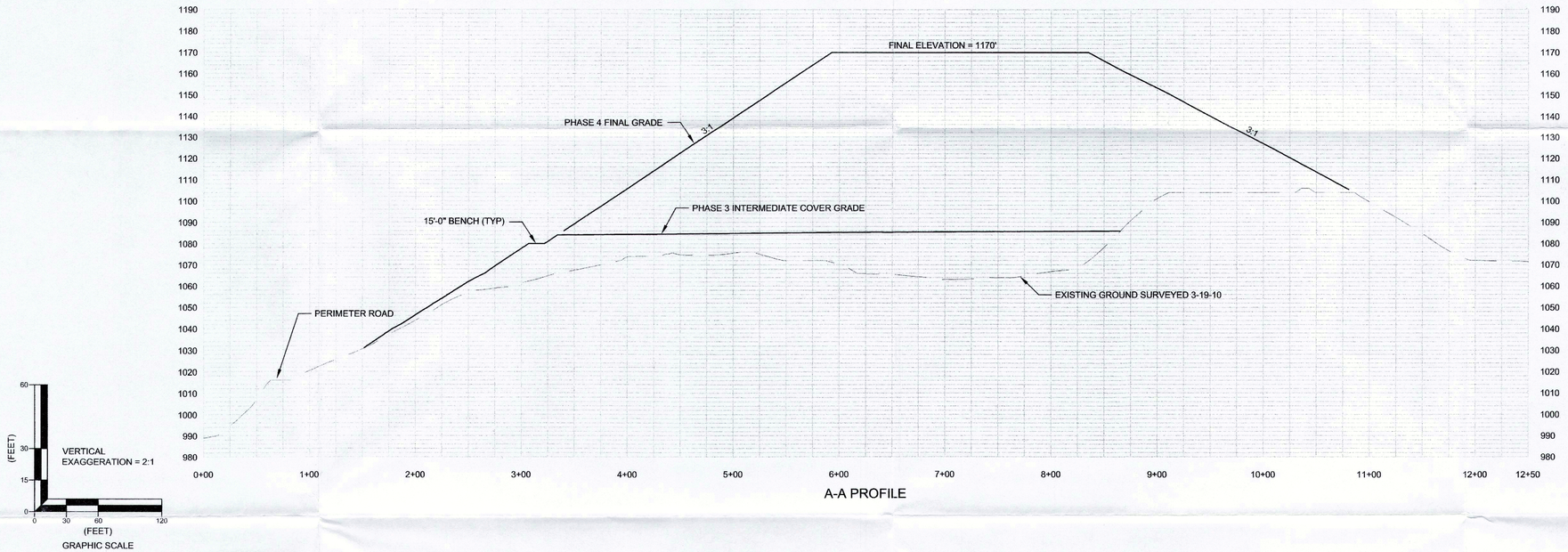
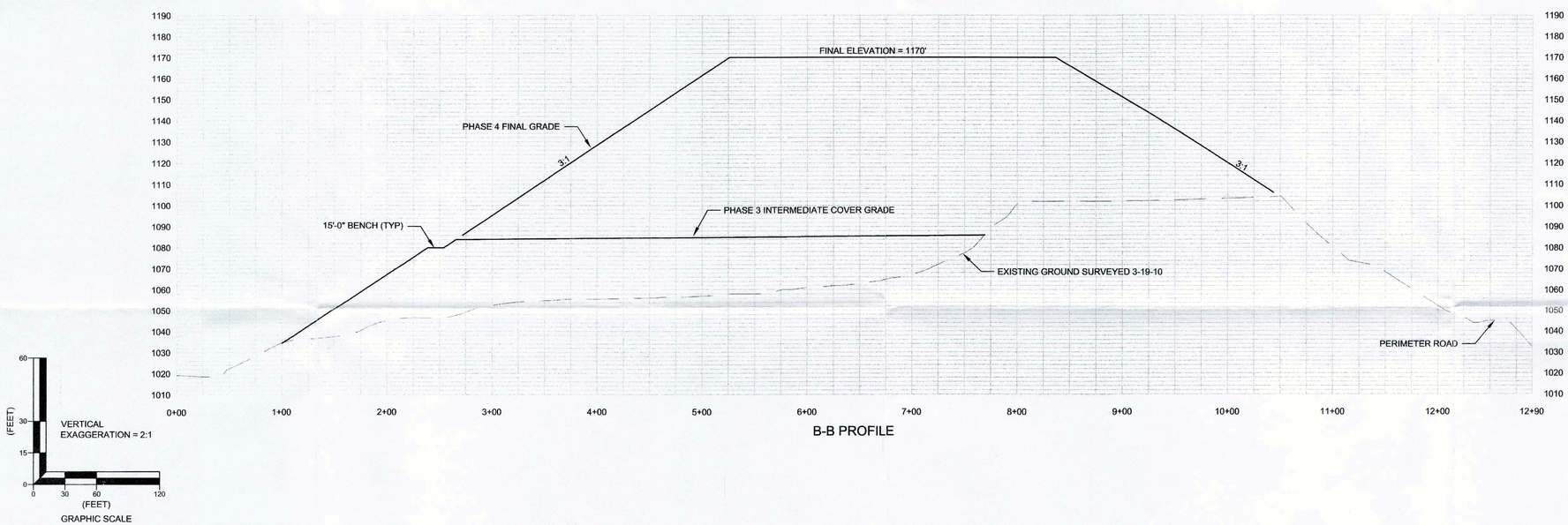
97-04



A-A PROFILE



B-B PROFILE

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 035644 STEPHEN J. COWIE

DESIGNED SJC
DRAWN RWH
CHECKED LBB
APPROVED EEA
DATE 1/27/11

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ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA

PROFILES A-A AND B-B

PROJECT NO.
356.10.02

SCALE
AS SHOWN

DRAWING NO.
EP-04

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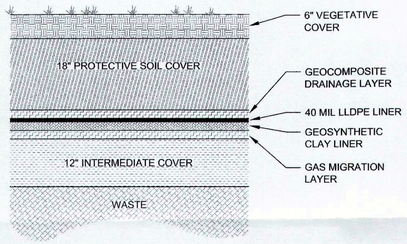
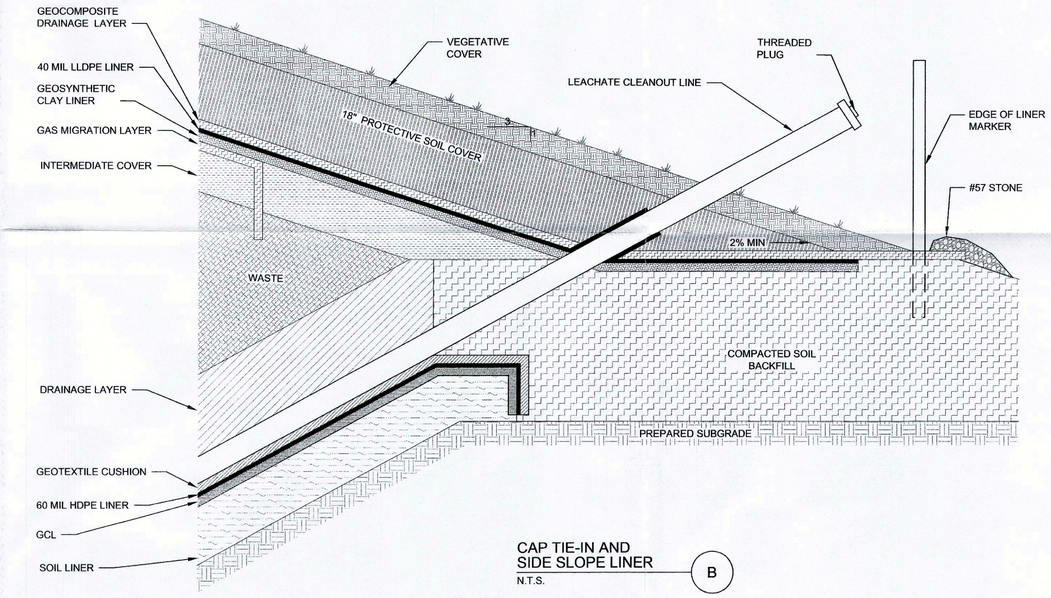
97-04



FINAL COVER DETAIL (A)
N.T.S.



CAP TIE-IN AND SIDE SLOPE LINER (B)
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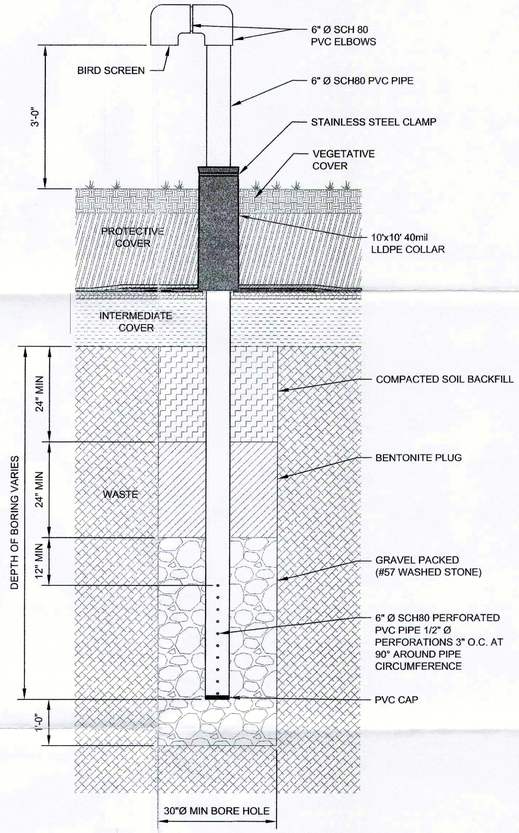

GAS VENT DETAIL (C)
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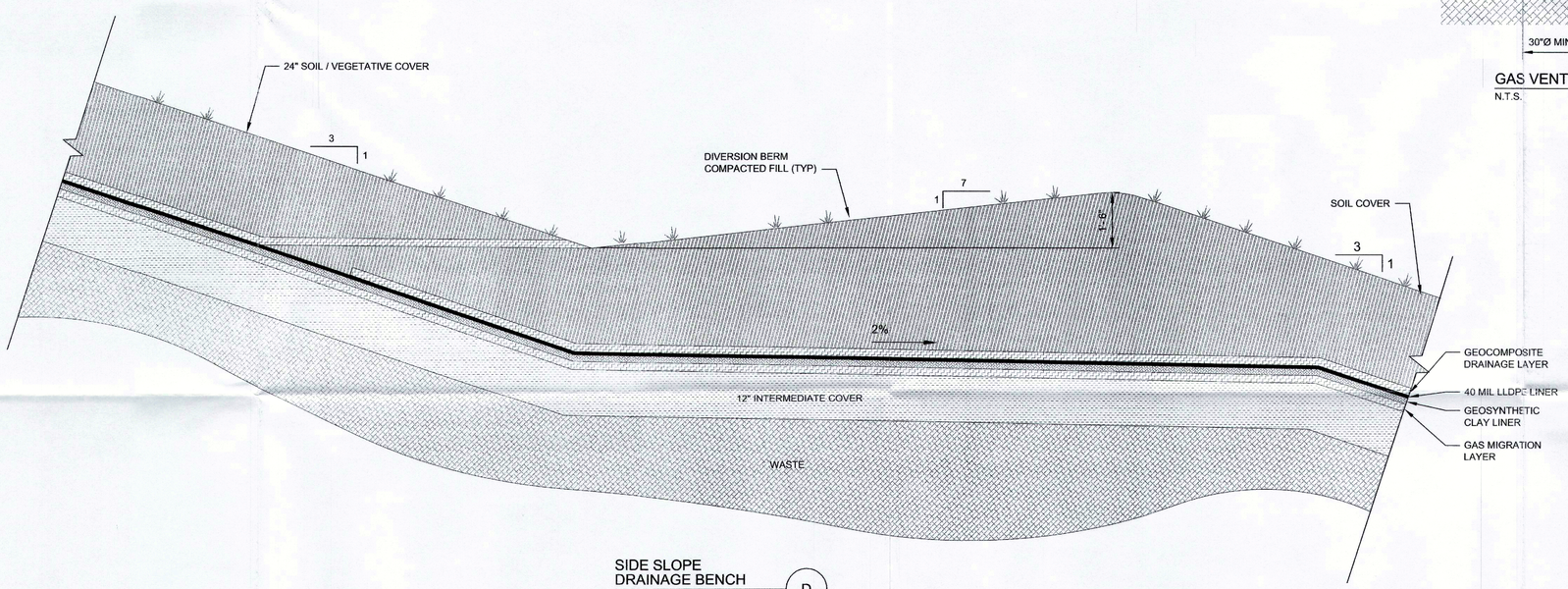

SIDE SLOPE DRAINAGE BENCH (D)
N.T.S.

DATE	REVISIONS AND RECORD OF ISSUE	NO	BY	CK	APP

NORTH CAROLINA PROFESSIONAL SEAL 035644 1/27/11 STEPHEN J. COMIE

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ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA

PROJECT DETAILS

PROJECT NO.
356.10.02

SCALE
AS SHOWN

DRAWING NO.
EP-05

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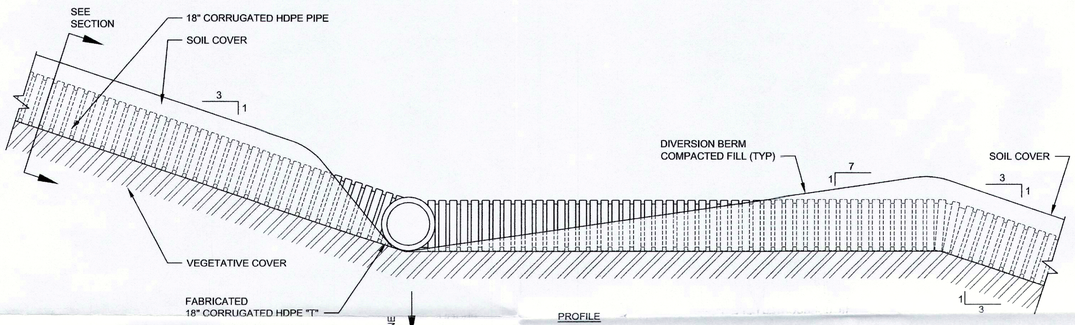
97-04



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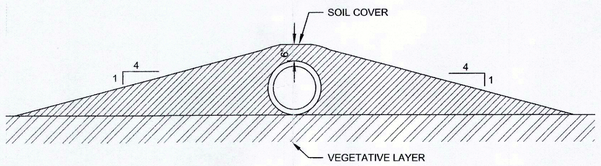

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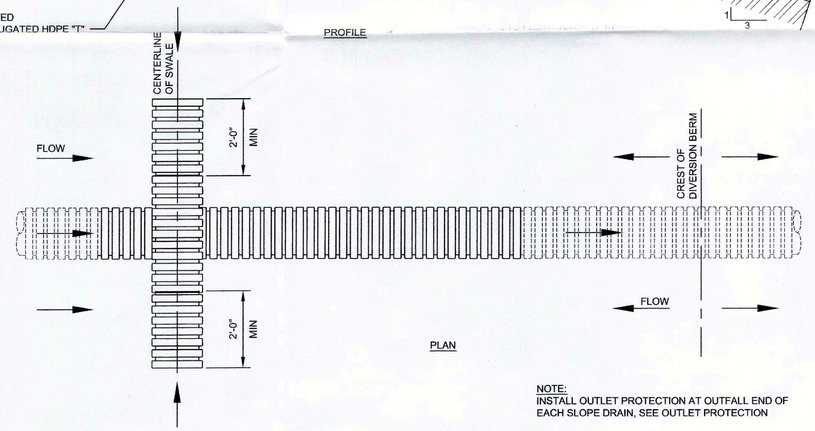
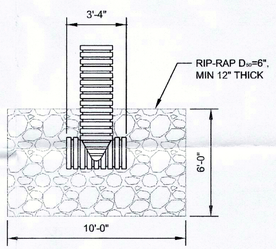


PLAN

NOTE:
INSTALL OUTLET PROTECTION AT OUTFALL END OF EACH SLOPE DRAIN, SEE OUTLET PROTECTION

SLOPE DRAIN DETAIL (A)
N.T.S.



OUTLET PROTECTION DETAIL - (TYP)
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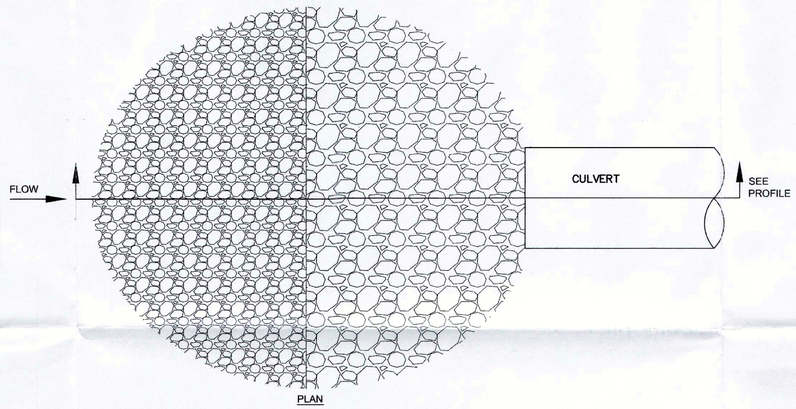
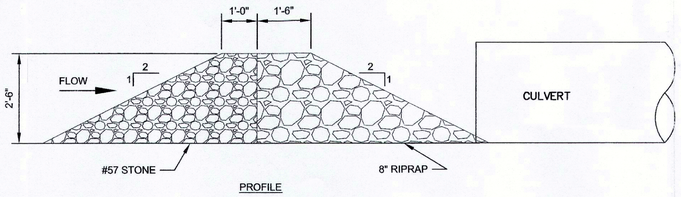


PLAN



PROFILE

INLET PROTECTION DETAIL - (TYP)
N.T.S.

NO	BY	CK	APP

REVISIONS AND RECORD OF ISSUE

DATE

NORTH CAROLINA PROFESSIONAL SEAL 035641 ENGINEER STEPHEN J. CAMPBELL

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ROARING RIVER LANDFILL
WILKES COUNTY, NORTH CAROLINA

EROSION AND SEDIMENT CONTROL DETAILS

PROJECT NO.
356.10.02

SCALE
AS SHOWN

DRAWING NO.
EP-06

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97-04