

Permit No.	Date	DIN
11-07	September 3, 2015	24949

RECEIVED  
 August 26, 2015  
 Solid Waste Section  
 Asheville Regional Office

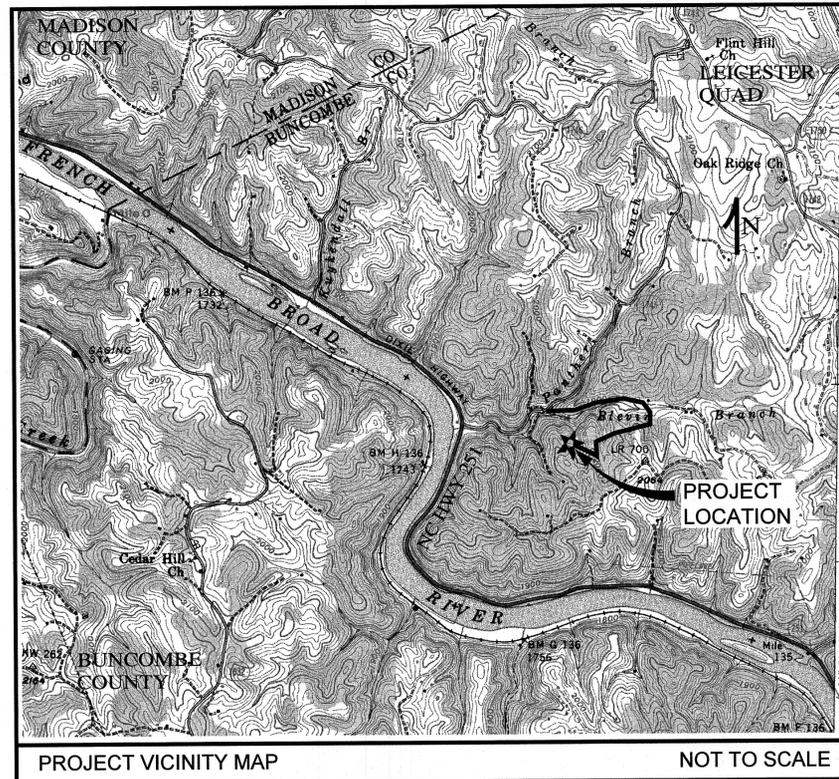
# BUNCOMBE COUNTY LANDFILL CDLF PHASE 5 EXPANSION AREA PERMIT TO CONSTRUCT

# BUNCOMBE COUNTY

BUNCOMBE COUNTY, NORTH CAROLINA



PROJECT LOCATION:  
 35° 43' 33.20" N, 82° 38' 26.71" W



## SCHEDULE OF DRAWINGS

- G-001 . . . COVER SHEET
- C-101 . . . OVERALL SITE PLAN
- C-102 . . . CDLF PHASE 5 EXPANSION AREA SUBGRADE
- C-103 . . . CDLF PHASE 5 EXPANSION AREA FINAL CAP
- C-104 . . . CDLF PHASE 5 EXPANSION AREA CROSS-SECTIONS
- C-501 . . . MISCELLANEOUS DETAILS



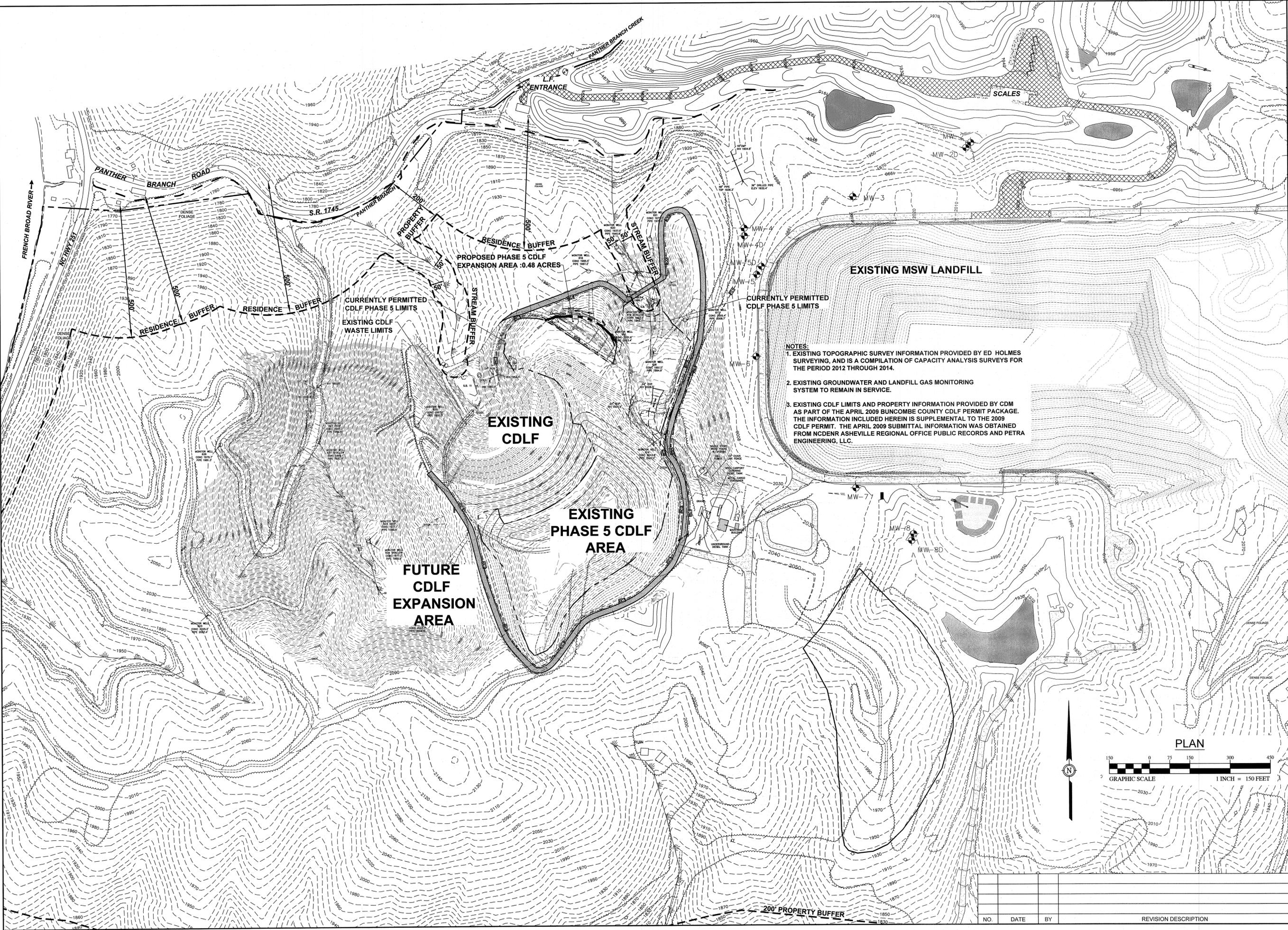
55 BROAD STREET ASHEVILLE, NC 28801 PH. (828) 252-0575 FIRM LICENSE # C-0459



MAY 2015

FOR  
 REGULATORY  
 REVIEW

Q:\2014\14.00713 - Bun Co CDLF - Joe Wickman\Design\Solid Waste\Drawings\Permit To Construct\CDLF-PTC-C-101 Overall Site Plan 4-1-15.dwg 5/8/2015 4:22 PM SCOTT BURWELL



**NOTES:**  
1. EXISTING TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY ED HOLMES SURVEYING, AND IS A COMPILATION OF CAPACITY ANALYSIS SURVEYS FOR THE PERIOD 2012 THROUGH 2014.  
2. EXISTING GROUNDWATER AND LANDFILL GAS MONITORING SYSTEM TO REMAIN IN SERVICE.  
3. EXISTING CDLF LIMITS AND PROPERTY INFORMATION PROVIDED BY CDM AS PART OF THE APRIL 2009 BUNCOMBE COUNTY CDLF PERMIT PACKAGE. THE INFORMATION INCLUDED HEREIN IS SUPPLEMENTAL TO THE 2009 CDLF PERMIT. THE APRIL 2009 SUBMITTAL INFORMATION WAS OBTAINED FROM NCDENR ASHEVILLE REGIONAL OFFICE PUBLIC RECORDS AND PETRA ENGINEERING, LLC.



JOB NO.: 14.00713  
DATE: APRIL 2015  
DESIGNED BY: DP  
CADD BY: DP  
DESIGN REVIEW: M.L.C.  
CONST. REVIEW:  
FILE NAME:  
CDLF-PTC-C-101 Overall Site  
Plan 4-1-15.dwg

OVERALL  
SITE PLAN

SHEET  
**C-101**

NO.	DATE	BY	REVISION DESCRIPTION

DIVERT ALL SEDIMENTATION ASSOCIATED WITH PHASE 5 EXPANSION TO DITCH 11.3 LEADING TO EXISTING SEDIMENT BASIN 11

SEE PERMANENT WASTE LIMITS #1 DETAIL, SHEET C-501

PHASE 5 CDLF EXPANSION LIMITS: 0.48 ACRES

CDLF PHASE 5 EXPANSION AREA SUBGRADE ELEVATIONS

BEDROCK ELEVATION, TYP.

SEASONAL HIGH WATER ELEVATION, TYP.

CURRENTLY PERMITTED PHASE 5 LIMITS

CURRENT CDLF WASTE LIMITS

EXISTING SEDIMENT BASIN 11 TO REMAIN IN SERVICE AND RECEIVE RUNOFF FROM PHASE 5 EXPANSION AREA THROUGH FINAL CAP CONSTRUCTION

EXISTING CDLF

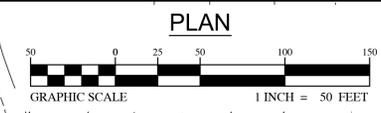
EXISTING PHASE 5 CDLF AREA

EXISTING MSW LANDFILL

- NOTES:**
- EXISTING SURVEY INFORMATION PROVIDED BY ED HOLMES SURVEYING, AND IS A COMPILATION OF CAPACITY ANALYSIS SURVEYS FOR THE PERIOD 2012 THROUGH 2014.
  - EXISTING SEDIMENT BASIN 11 TO REMAIN IN SERVICE AND RECEIVE ALL SEDIMENTATION ASSOCIATED WITH THE CDLF PHASE 5 EXPANSION. THE CONTRACTOR SHALL INSTALL DIVERSION DITCHES AS NECESSARY DURING THE CONSTRUCTION OF THE SUBGRADE TO ENSURE THAT SEDIMENTATION IS DIVERTED TO SEDIMENT BASIN 11.
  - BEDROCK AND POTENTIOMETRIC ELEVATIONS SHOWN PROVIDED BY CDM IN DESIGN HYDRO REPORT FOR THE APRIL 2009 CDLF PERMITTING. PROPOSED PHASE 5 EXPANSION AREA SUBGRADE ELEVATIONS HAVE MINIMUM 4' SEPARATION FROM ROCK AND SEASONAL HIGH WATER ELEVATIONS. THE APRIL 2009 SUBMITTAL INFORMATION WAS OBTAINED FROM NCDENR ASHEVILLE REGIONAL OFFICE PUBLIC RECORDS AND PETRA ENGINEERING, LLC.

**LEGEND**

- 1940 SEASONAL HIGH WATER ELEVATIONS
- 1940 BEDROCK ELEVATIONS
- 2014 PROPOSED CDLF SUBGRADE ELEVATIONS
- PROPOSED CDLF WASTE LIMITS
- EXISTING CDLF PHASE 5 WASTE LIMITS
- EXISTING CDLF WASTE LIMITS (PRIOR TO PH 5)



MW-4

MW-4D

MW-5D

MW-5

MW-6

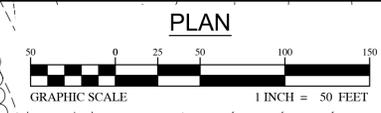
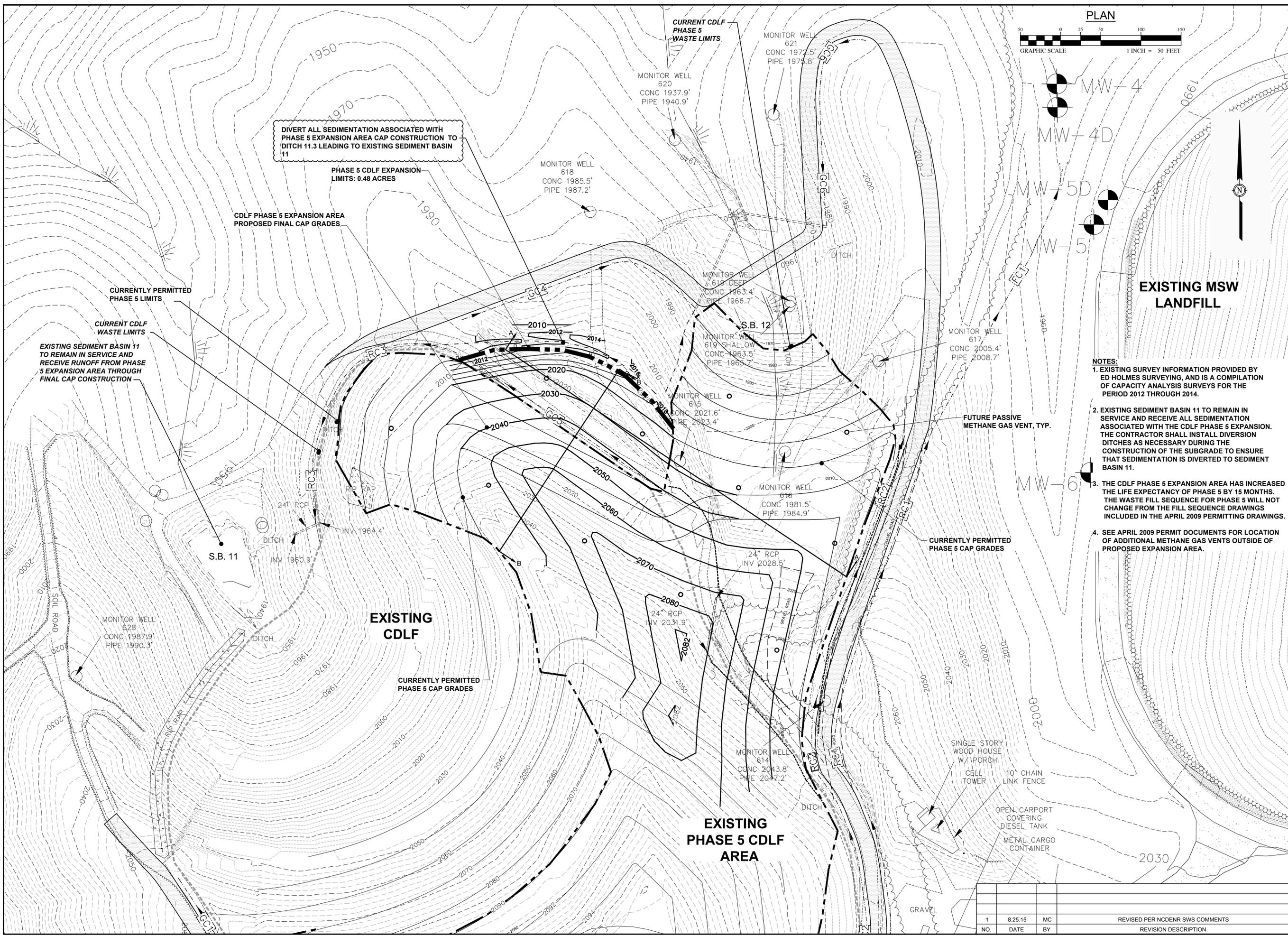
0:201414.00715 - BunC Co CDLF - Job Worksheet/Design/Solid Waste/Drawing/Permit To Construct/CDLF-PTC-C-102 - C-103 and C-503 4-1-15.dwg 2/25/2015 4:42 PM ADAM WALDRUP



JOB NO.: 14.00713  
DATE: APRIL 2015  
DESIGNED BY: DP  
CADD BY: DP  
DESIGN REVIEW: —  
CONST. REVIEW: —  
FILE NAME: CDLF-PTC-C-102 - C-103 and C-503 4-1-15.dwg

NO.	DATE	BY	REVISION DESCRIPTION
1	8.25.15	MC	REVISED PER NCDENR SWS COMMENTS

0:201414.00713 - BunC Co CDLF - Joe Wieman\Design\Solid Waste\Drawings\Permit To Construct\CDLF-PTC-C-103 - C-103 and C-503 4-1-15.dwg 8/25/2015 4:42 PM ADAM WALDRUP



- NOTES:**
- EXISTING SURVEY INFORMATION PROVIDED BY ED HOLMES SURVEYING, AND IS A COMPILATION OF CAPACITY ANALYSIS SURVEYS FOR THE PERIOD 2012 THROUGH 2014.
  - EXISTING SEDIMENT BASIN 11 TO REMAIN IN SERVICE AND RECEIVE ALL SEDIMENTATION ASSOCIATED WITH THE CDLF PHASE 5 EXPANSION. THE CONTRACTOR SHALL INSTALL DIVERSION DITCHES AS NECESSARY DURING THE CONSTRUCTION OF THE SUBGRADE TO ENSURE THAT SEDIMENTATION IS DIVERTED TO SEDIMENT BASIN 11.
  - THE CDLF PHASE 5 EXPANSION AREA HAS INCREASED THE LIFE EXPECTANCY OF PHASE 5 BY 15 MONTHS. THE WASTE FILL SEQUENCE FOR PHASE 5 WILL NOT CHANGE FROM THE FILL SEQUENCE DRAWINGS INCLUDED IN THE APRIL 2009 PERMITTING DRAWINGS.
  - SEE APRIL 2009 PERMIT DOCUMENTS FOR LOCATION OF ADDITIONAL METHANE GAS VENTS OUTSIDE OF PROPOSED EXPANSION AREA.



BUNCOMBE COUNTY LANDFILL  
 CDLF PHASE 5 EXPANSION  
**BUNCOMBE COUNTY**  
 BUNCOMBE COUNTY, NORTH CAROLINA

JOB NO.: 14.00713  
 DATE: APRIL 2015  
 DESIGNED BY: DP  
 CADD BY: DP  
 DESIGN REVIEW: \_\_\_\_\_  
 CONST. REVIEW: \_\_\_\_\_  
 FILE NAME: CDLF-PTC-C-102 - C-103 and C-503 4-1-15.dwg

CDLF PHASE 5  
 EXPANSION AREA  
 FINAL CAP

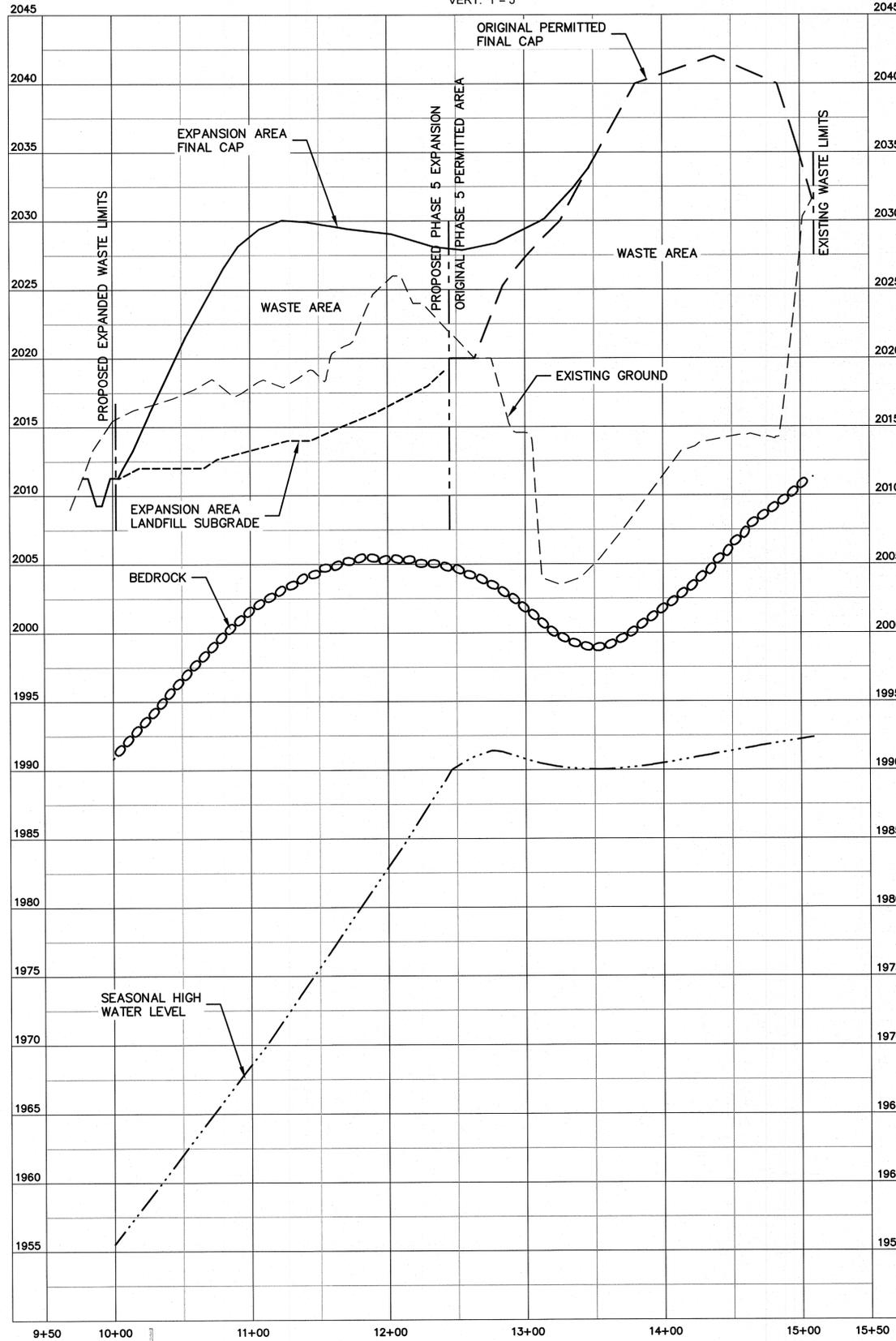
SHEET  
**C-103**

NO.	DATE	BY	REVISION DESCRIPTION
1	8.25.15	MC	REVISED PER NCDNR SWS COMMENTS

Q:\2014\14.00713 - Blue Co CDLF - Joe Wilmann\Design\Solid Waste\Drawings\Permit To Construct\CDLF-PTC-C-104\_Cross Sections 4-1-15.dwg 5/20/15 2:28 PM SCOTT BURWELL

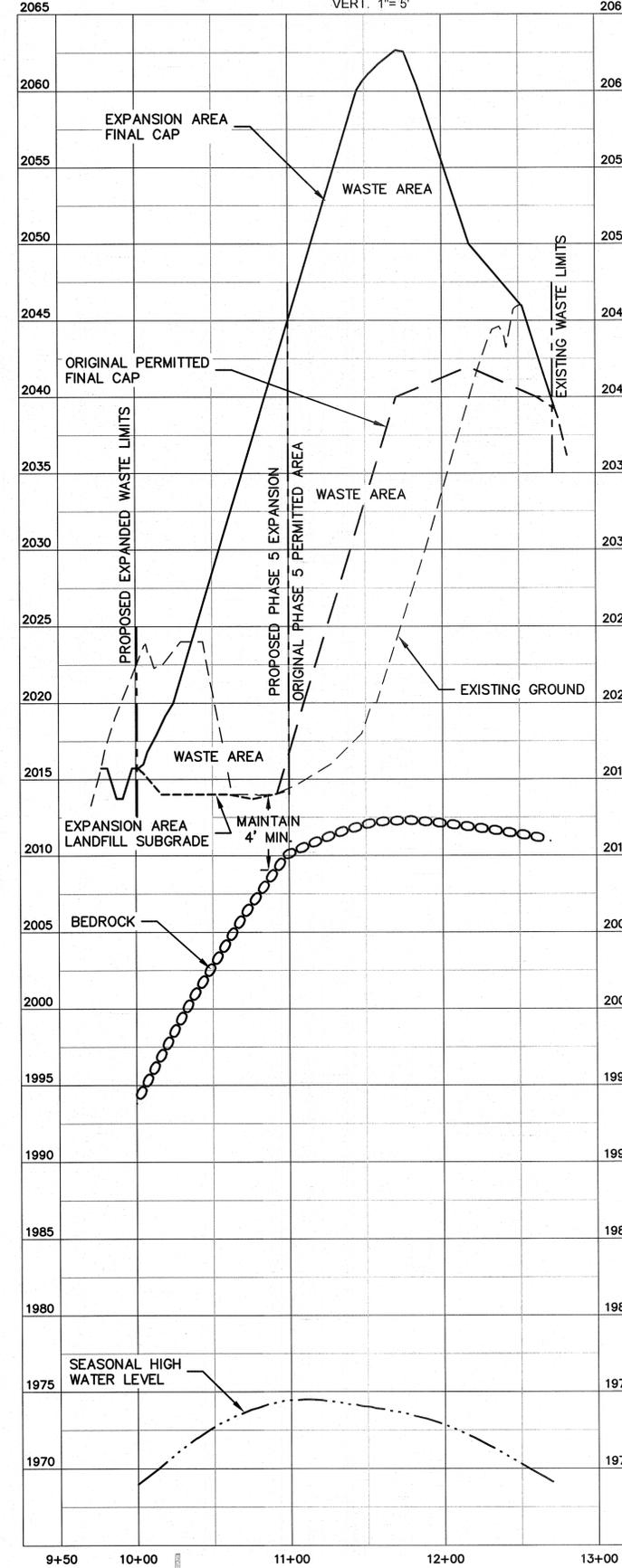
**SECTION A-A**

SCALE: HORIZ. 1"= 50'  
VERT. 1"= 5'



**SECTION B-B**

SCALE: HORIZ. 1"= 50'  
VERT. 1"= 5'



NO.	DATE	BY	REVISION DESCRIPTION

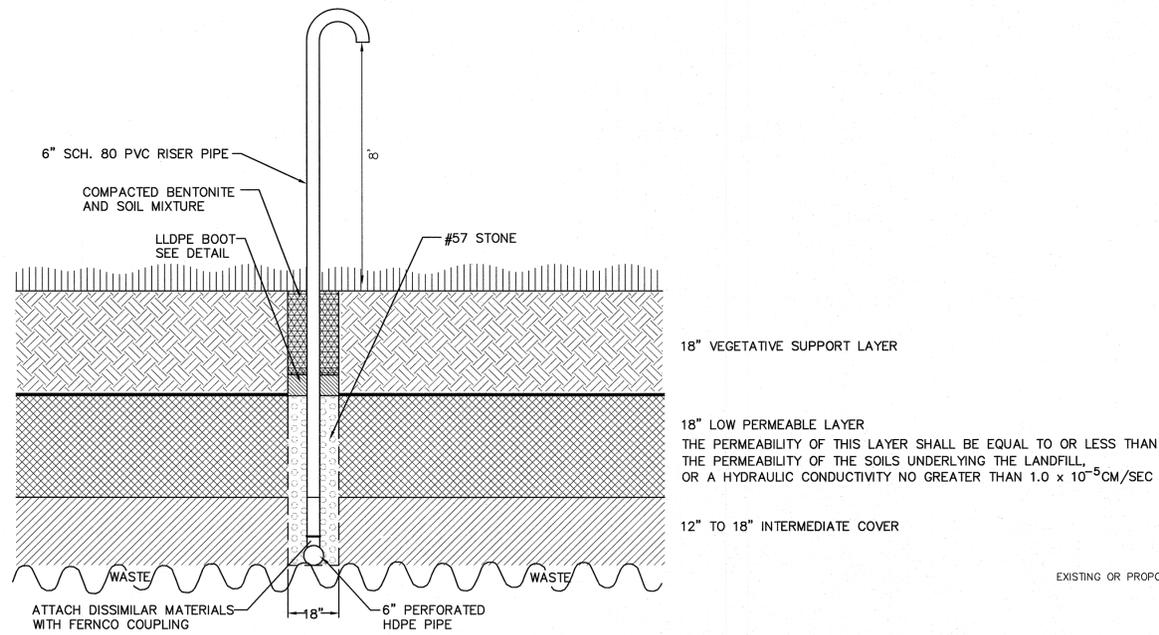


BUNCOMBE COUNTY LANDFILL  
CDLF PHASE 5 EXPANSION  
**BUNCOMBE COUNTY**  
BUNCOMBE COUNTY, NORTH CAROLINA

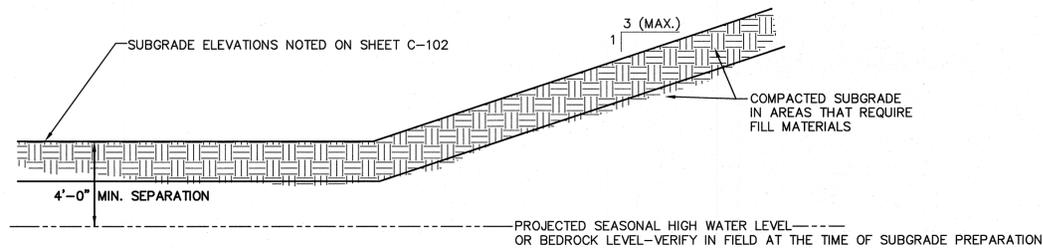
JOB NO.: 14.00713  
DATE: APRIL 2015  
DESIGNED BY: DP  
CADD BY: BS  
DESIGN REVIEW: *MC*  
CONST. REVIEW: *MC*  
FILE NAME: CDLF-PTC-C-104\_Cross Sections 4-1-15.dwg

CDLF PHASE 5  
EXPANSION AREA  
CROSS-SECTIONS

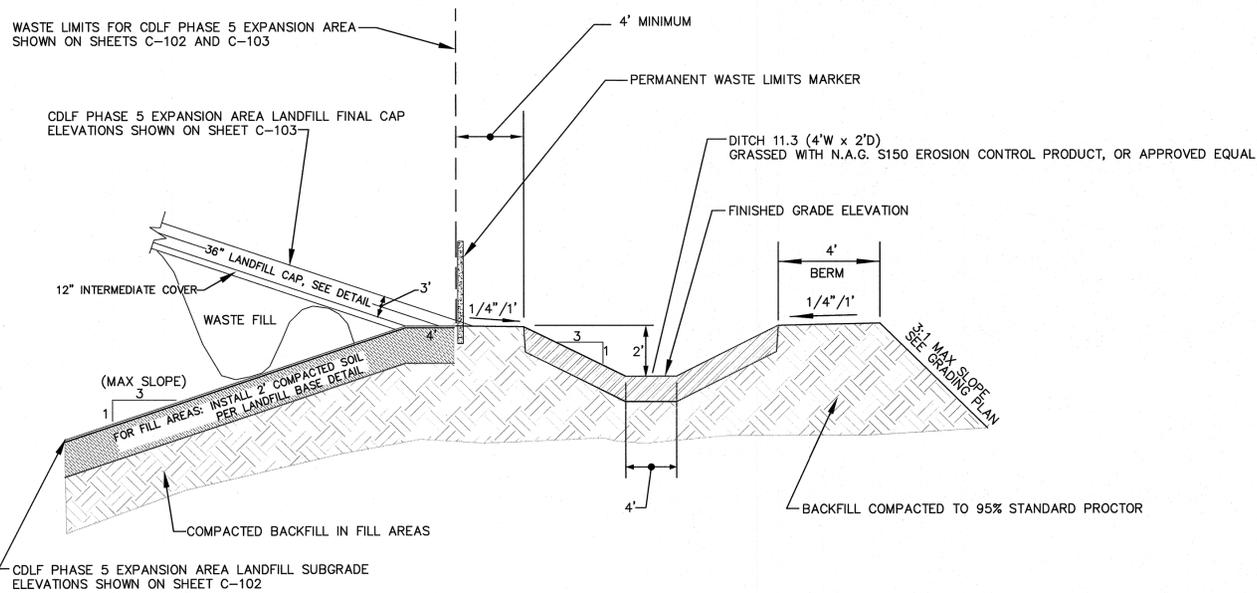
SHEET  
**C-104**



**METHANE GAS VENT**

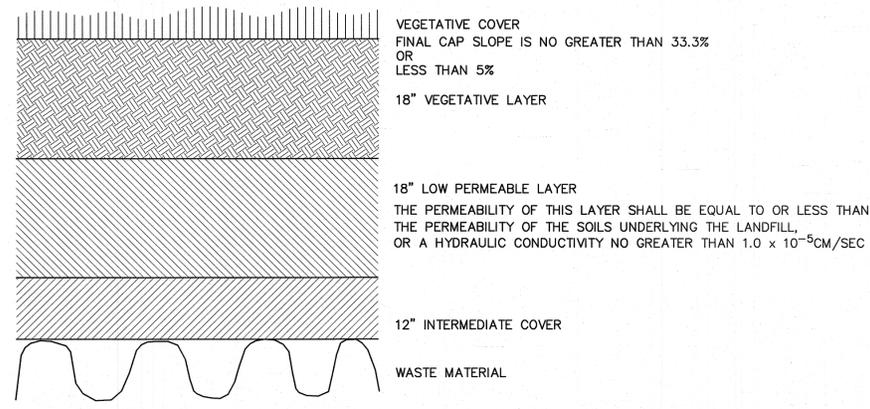


**LANDFILL BASE**

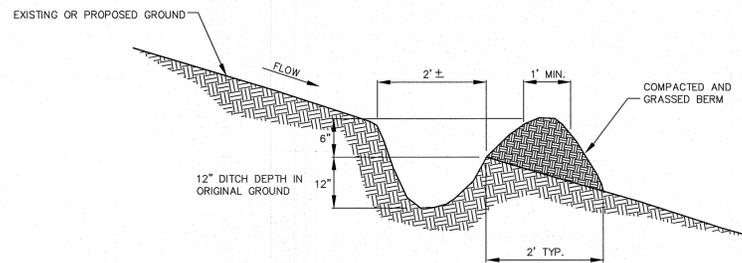


**PERMANENT WASTE LIMITS #1**

NTS



**CAP DETAIL**



**TEMPORARY DIVERSION DITCH**

GENERAL: ALL EROSION CONTROL MEASURES ARE TO BE PERFORMED IN STRICT ACCORDANCE WITH REQUIREMENTS OF THE BUNCOMBE COUNTY. THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE COMPLIED WITH FOR ALL WORK.

- UTILIZE EXISTING LAND DISTURBING PERMIT.
- CONTRACTOR IS TO PLACE PERMANENT STAKES MARKING CLEARLY THE 30' BUFFER FOR STREAMS AND THE MARKERS ARE TO BE VISIBLE AT ALL TIMES DURING CONSTRUCTION.
- INSTALL ALL EROSION CONTROL MEASURES AS REQUIRED BY BUNCOMBE COUNTY.
- OBTAIN GRADING PERMIT THROUGH ON-SITE INSPECTION BY A REPRESENTATIVE OF BUNCOMBE COUNTY SOLID WASTE DEPARTMENT.
- PROCEED WITH GRADING, CLEARING AND GRUBBING. NOTE: NO OFF SITE DISPOSAL OF MATERIAL IS ALLOWED UNLESS THE DISPOSAL SITE HAS AN APPROVED EROSION CONTROL PLAN.
- SEED AND MULCH DENUDED AREA WITHIN 15 DAYS AFTER FINISHED GRADE ARE ESTABLISHED. SEED AND SOIL AMENDMENTS SHALL BE PLACED ON A PREPARED SEEDBED AT THE FOLLOWING RATES PER ACRE:

**SUMMER (PERMANENT) SEEDING (MAY 15 TO AUGUST 15)**  
 LIME 4,000 LBS.  
 FERTILIZER (10-10-10) 1,000 LBS.  
 KY-31 FESCUE 100 LBS.  
 STRAW MULCH 4,000 LBS. (ANCHORED)  
 GERMAN MILLET 40 LBS.  
 (OR SMALL-STEMMED SUDAN GRASS @ 40 LBS.)

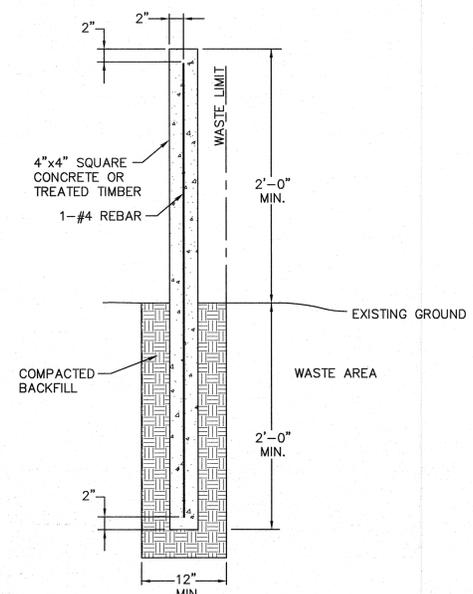
**WINTER (TEMPORARY) SEEDING (AUGUST 15 TO MAY 15) MOUNTAINS**  
 LIME 4,000 LBS.  
 FERTILIZER (10-10-10) 1,000 LBS.  
 KY-31 FESCUE 100 LBS.  
 STRAW MULCH 4,000 LBS. (ANCHORED)  
 RYE (GRAIN) 120 LBS.

**FOR ALL SLOPES 2:1 OR STEEPER ADD TO THE ABOVE:**  
 SERICEA LESPEDEZA (KOREAN) 50 LBS.

IF HYDROSEEDING, WOOD CELLULOSE MAY BE USED IN ADDITION TO STRAW MULCH AT THE RATE OF 1,000 LBS. PER ACRE.

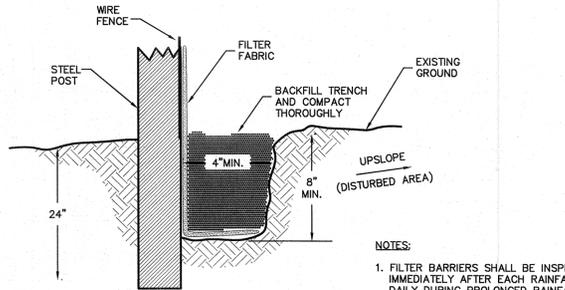
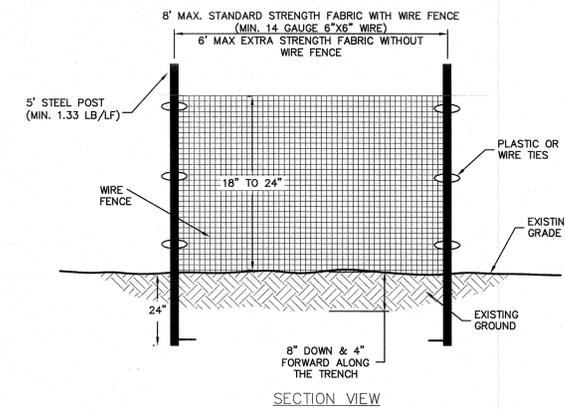
- ALL SEEDING SHALL BE MAINTAINED, WATERED, ETC., UNTIL A PERMANENT VEGETATIVE GROUND COVER IS ESTABLISHED OVER ALL DISTURBED AREAS.
- ALL SLOPES 2:1 OR STEEPER SHALL BE COVERED BY EROSION CONTROL MATTING.
- MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- REMOVE SOIL EROSION CONTROL MEASURES AND STABILIZE THESE AREAS.
- REQUEST FINAL APPROVAL BY BUNCOMBE COUNTY.

**BUNCOMBE COUNTY  
 EROSION CONTROL NOTES**



- NOTES:
- AT THE DIRECTION OF THE LANDFILL OPERATOR, USE THIS DETAIL TO MARK WASTE LIMITS OR UTILIZE EXISTING WASTE LIMIT MARKERS SIMILAR TO THOSE USED AT THE CDLF.
  - WASTE MARKERS INSTALLED ALONG WASTE EDGE AT MAX 200' INTERVALS AND AS SHOWN ON SHEETS C-102 AND C-103.
  - WASTE MARKERS SHALL BE PAINTED CAUTION YELLOW.

**PERMANENT WASTE LIMIT MARKER DETAIL**



SLOPE	SLOPE LENGTH(FT)	MAXIMUM AREA(SQFT)
<2%	100	10,000
2 TO 5%	75	7,500
5 TO 10%	50	5,000
10 TO 20%	25	2,500
>20%	15	1,500

- NOTES:
- FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND DAILY DURING PROLONGED RAINFALL. REPAIR SHALL BE MADE AS NECESSARY.
  - FABRIC SHALL BE REPLACED PROMPTLY IF FOUND TO BE IN DISREPAIR.
  - SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT AND WHEN DEPOSITS REACH APPROXIMATELY 1/3 HEIGHT OF BARRIER.
  - REFERENCE NCDENR LAND QUALITY SECTION DESIGN MANUAL: 6.62.

**SEDIMENTATION/SILT FENCE**



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NO.	DATE	BY	REVISION DESCRIPTION