



**SPURLOCK STATION LANDFILL
AREA C PHASE 4-B CELL CONSTRUCTION**

**CCR RULE – POST-CONSTRUCTION
RUN-ON & RUN-OFF CONTROLS CERTIFICATION**



EAST KENTUCKY POWER COOPERATIVE

COAL COMBUSTION RESIDUAL RULE COMPLIANCE

REV. 0 (1/27/21)

CERTIFICATION

EAST KENTUCKY POWER COOPERATIVE
SPURLOCK STATION LANDFILL – AREA C PHASE 4-B CELL CONSTRUCTION
CCR RULE – RUN-ON AND RUN-OFF CONTROLS CERTIFICATION

CERTIFICATION

I hereby certify, as a Professional Engineer in the Commonwealth of Kentucky, that the constructed Area C Phase 4-B CCR waste cell at East Kentucky Power Cooperative's Spurlock Station Landfill has been constructed to meet the project plans, specifications and requirements of 40 CFR 257.81 (Run-on and run-off controls for CCR landfills.) The information in this document was assembled under my direct supervisory control. This report is not intended or represented to be suitable for reuse by East Kentucky Power Cooperative or others without specific verification or adaptation by the Engineer.



S. Tim Oakes, P.E. [21,483] – Kenvirons, Inc.

Date: 1/28/21

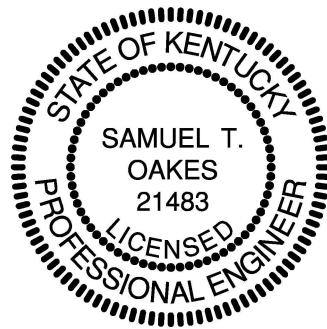


TABLE OF CONTENTS

| | | |
|-----|-------------------------|---|
| 1.0 | INTRODUCTION | 3 |
| 2.0 | RUN-ON CONTROLS | 3 |
| 3.0 | RUN-OFF CONTROLS..... | 4 |
| 4.0 | REPORT LIMITATIONS..... | 4 |

LIST OF TABLES

| | | |
|-----------|---|---|
| TABLE 1-1 | RUN-ON AND RUN-OFF CONTROLS CERTIFICATION SUMMARY | 3 |
|-----------|---|---|

LIST OF ATTACHMENTS

| | |
|--------------|----------------|
| ATTACHMENT 1 | RECORD DRAWING |
|--------------|----------------|

1.0 INTRODUCTION

On April 17, 2015, the Environmental Protection Agency (EPA) issued the final version of the federal Coal Combustion Residual Rule (CCR Rule) to regulate the disposal of coal combustion residual (CCR) materials generated at coal-fired units. The rule will be administered as part of the Resource Conservation and Recovery Act [RCRA, 42 United States Code (U.S.C.) §6901 et seq.], under Subtitle D.

East Kentucky Power Cooperative (EKPC) is subject to the CCR Rule and as such will demonstrate compliance with 40 Code of Federal Regulations (CFR) §257.81. This document serves as EKPC's verification that Area C Phase 4-B lateral expansion was constructed in accordance with the run-on and run-off controls criteria as set forth by 40 CFR 257.81. The Area C Phase 4-B lateral cell expansion was designed by Kenvirons, Inc. and the CQA for cell construction was certified by Kenvirons, Inc. A Record drawing displaying the surface water controls related to Area C Phase 4-B waste cell can be found in Attachment 1.

TABLE 1-1 RUN-ON AND RUN-OFF CONTROLS CERTIFICATION SUMMARY

| CONSTRUCTION CRITERIA | | | |
|--|-------------------------------------|--------------------------|------------------|
| Unit: Area C Phase 4-B Cell Construction | | | |
| DESCRIPTION | CCR RULE COMPLIANCE | | |
| | YES | NO | REPORT REFERENCE |
| Run-On Controls | <input checked="" type="checkbox"/> | <input type="checkbox"/> | See Section 2.0 |
| Run-Off Controls | <input checked="" type="checkbox"/> | <input type="checkbox"/> | See Section 3.0 |

2.0 RUN-ON CONTROLS

Storm water diversion structures were constructed as part of Area C Phase 4-B cell project to divert run-on from intercepting the active cell area. Grout lined ditches parallel the waste limits of Area C Phase 4-B to divert storm water to an existing sediment basin (Pond 1) to the southeast. Diversion controls that aide in minimizing stormwater generation within the Area C Phase 4-B cell limits include intermediate geosynthetic rain gutters. Stormwater run-on is effectively diverted through the installed rain gutters to flow excess stormwater out of the cell and into the perimeter ditches prior to contact with CCR wastes that will be placed below the gutters. The gutters aide in minimizing leachate generation and help control CCR sediment

migration. All ditches were constructed to meet the project plans and specifications which are based on water flows generated by a minimum 25-year/24-hour storm event.

3.0 RUN-OFF CONTROLS

The constructed grout lined perimeter ditches will convey stormwater run-off to an existing sediment basin (Pond 1) to the southeast. All ditches were constructed to meet the project plans and specifications which are based on water flows generated by a minimum 25-year/24-hour storm event.

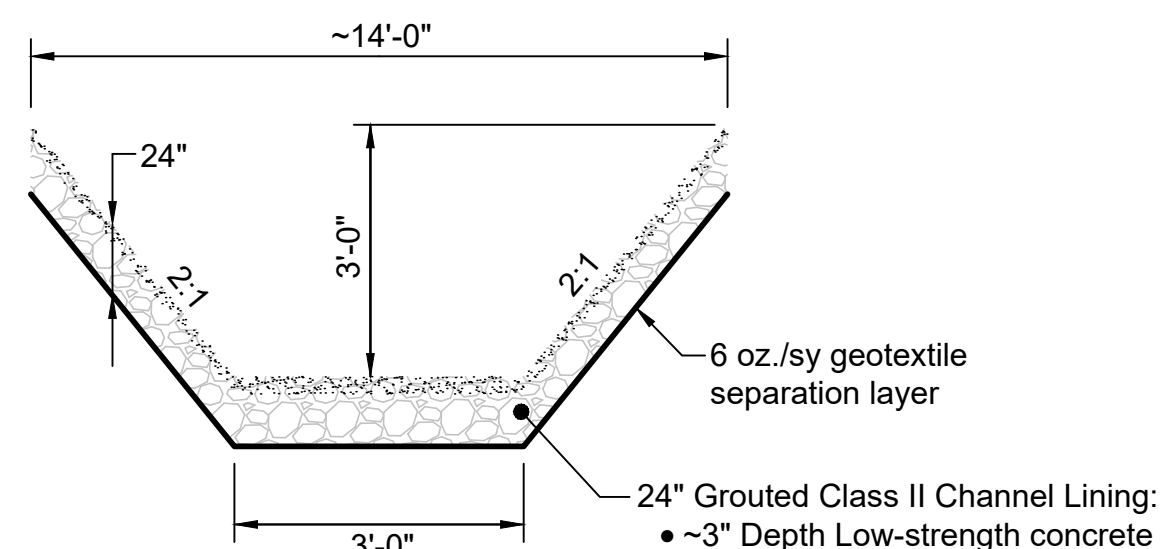
4.0 REPORT LIMITATIONS

This report is based on data collected and observations made during construction that could be visually seen. Review of design documents and survey information provided by EKPC as well as CQA work performed by Kenvirons design of Area C Phase 4-B lateral expansion. This run-on and run-off controls certification is based on Kenvirons' understanding of design plans for the Area C Phase 4-B lateral expansion and EKPC's plant operations, maintenance, storm water and CCR handling procedures for the newly constructed lateral expansion. Changes in any of these operations or procedures may result in deviation from the intended design and operation of Area C Phase 4-B storm water controls.

The run-on and run-off controls certification is based on established engineering principles and provided in a manner consistent with the level of care and skill ordinarily exercised by the engineering consultants under similar circumstances. No other representation is intended.

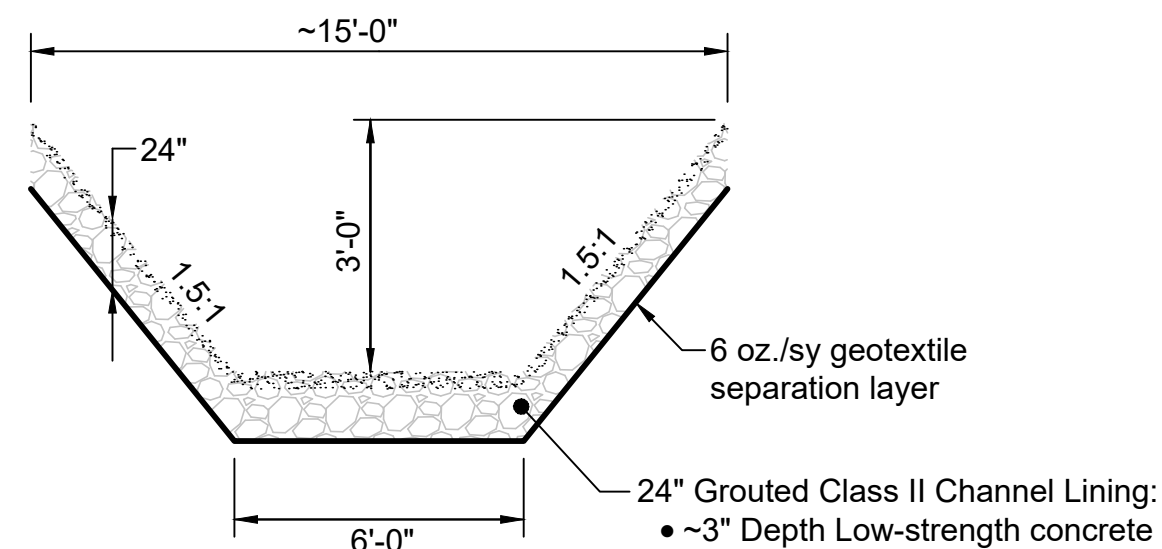
ATTACHMENT 1

RECORD DRAWING



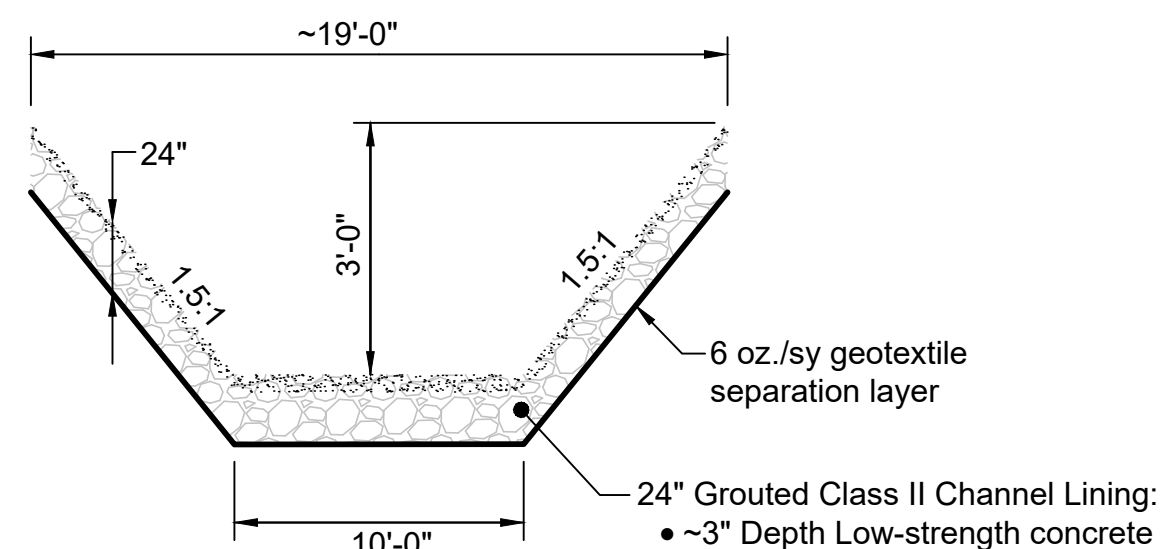
CLASS III - TRAPEZOIDAL

A-A' TEMPORARY DIVERSION DITCH
N.T.S.



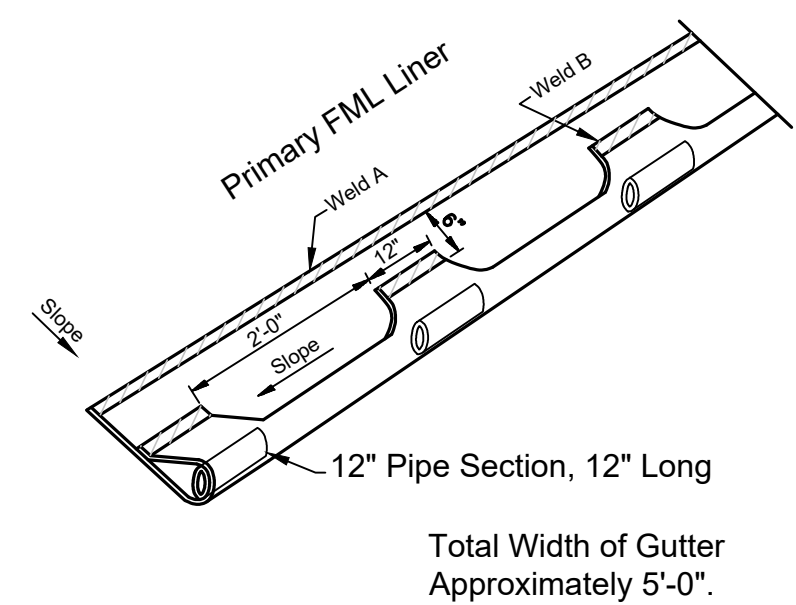
CLASS III - TRAPEZOIDAL

B-B' PERMANENT DIVERSION DITCH
N.T.S.

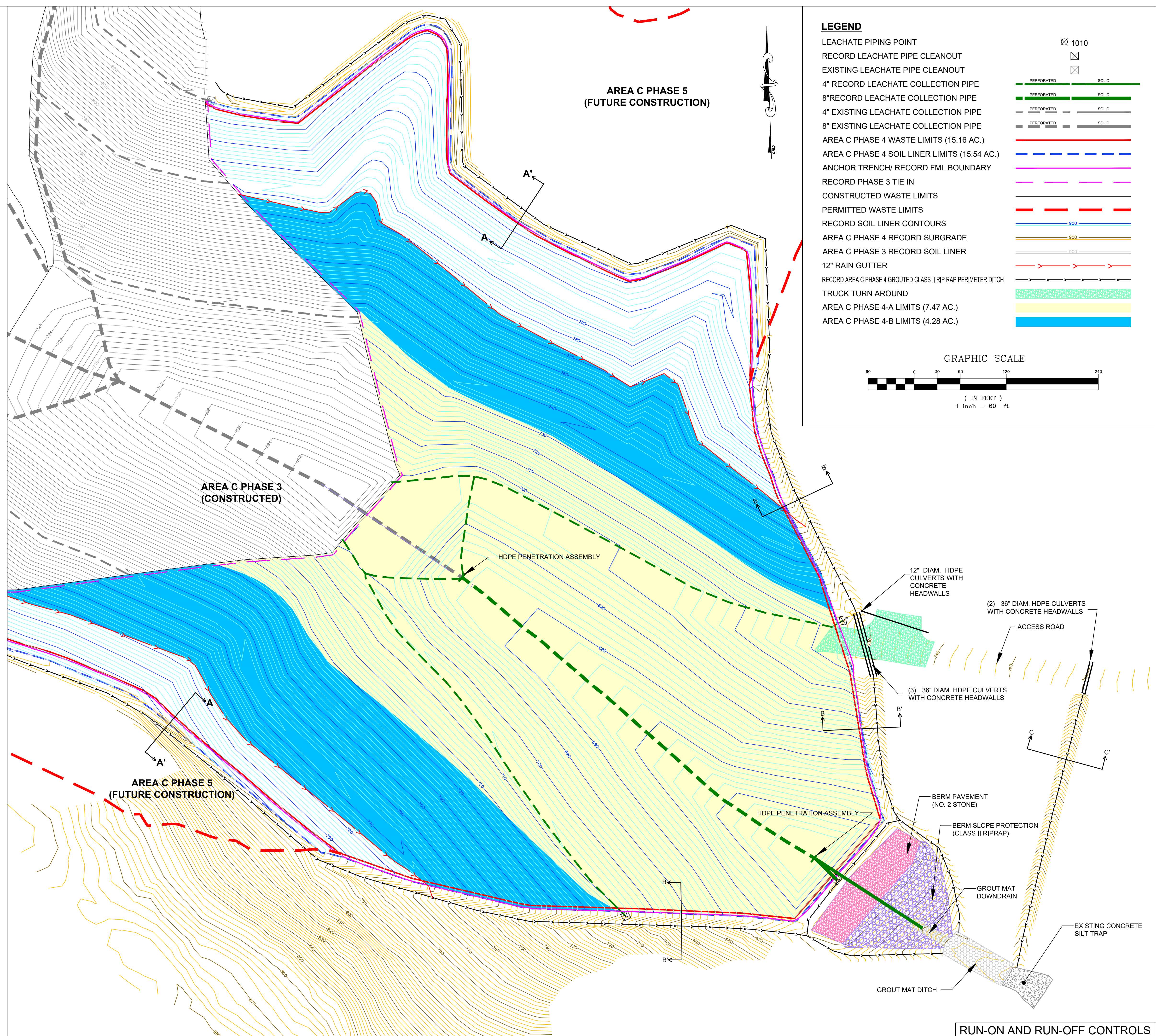


CLASS III - TRAPEZOIDAL

C-C' ROAD DOWNDRAIN
N.T.S.

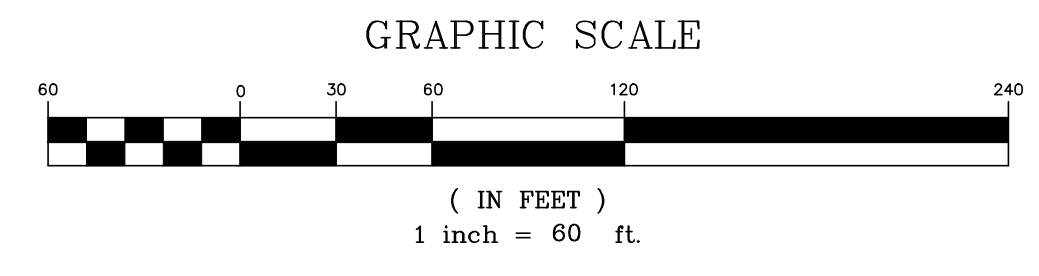


RAIN GUTTER SYSTEM DETAIL

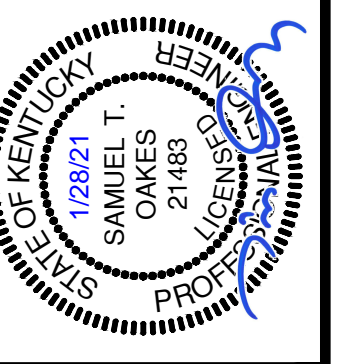


LEGEND

| | |
|--|--------|
| LEACHATE PIPING POINT | ⊗ 1010 |
| RECORD LEACHATE PIPE CLEANOUT | ⊗ |
| EXISTING LEACHATE PIPE CLEANOUT | ⊗ |
| 4" RECORD LEACHATE COLLECTION PIPE | |
| 8" RECORD LEACHATE COLLECTION PIPE | |
| 4" EXISTING LEACHATE COLLECTION PIPE | |
| 8" EXISTING LEACHATE COLLECTION PIPE | |
| AREA C PHASE 4 WASTE LIMITS (15.16 AC.) | |
| AREA C PHASE 4 SOIL LINER LIMITS (15.54 AC.) | |
| ANCHOR TRENCH/ RECORD FML BOUNDARY | |
| RECORD PHASE 3 TIE IN | |
| CONSTRUCTED WASTE LIMITS | |
| PERMITTED WASTE LIMITS | |
| RECORD SOIL LINER CONTOURS | |
| AREA C PHASE 4 RECORD SUBGRADE | |
| AREA C PHASE 3 RECORD SOIL LINER | |
| 12" RAIN GUTTER | |
| RECORD AREA C PHASE 4 GROUTED CLASS II RIP RAP PERIMETER DITCH | |
| TRUCK TURN AROUND | |
| AREA C PHASE 4-A LIMITS (7.47 AC.) | |
| AREA C PHASE 4-B LIMITS (4.28 AC.) | |



SPURLOCK STATION LANDFILL
MASON COUNTY, KENTUCKY
PERMIT NO. 081-00005
AREA C, PHASE 4-B
RECORD DRAWINGS



| | |
|------------------------|--|
| DRAWN BY: NTW | |
| CHECKED BY: STG | |
| DATE: JANUARY 2021 | |
| SCALE: AS NOTED | |
| REVISIONS | |
| 06/04/2018 WASTE LIMIT | |

KENVIRONS, INC.
FRANKFORT, KENTUCKY



PROJECT NO.
2018122

SHEET NO.