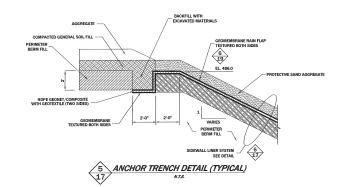
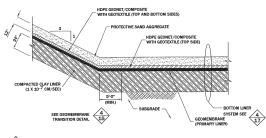


GEOTEXTILE FILTER GEOTEXTILE (CUSHION 5'-0" (MIN.) BOTTOM LINER SYSTEM SEE DETAIL 3 SIDEWALL BOTTOM / LEACHATE COLLECTION SYSTEM TRANSITION DETAIL (TYPICAL)

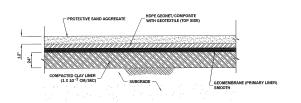
GEOTEXTILE FILTER - CLEAN AGGREGATE (SEE NOTES) GEOMEMBRANE (PRIMARY LINER) SMOOTH

BOTTOM LINER AND LEACHATE COLLECTION SYSTEM DETAIL (TYPICAL)

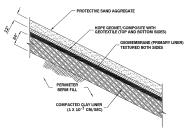




ALTERNATE SIDEWALL / BOTTOM LEACHATE COLLECTION SYSTEM TRANSITION DETAIL (TYPICAL)



ALTERNATE BOTTOM LEACHATE COLLECTION SYSTEM DETAIL (TYPICAL)



6 SIDEWALL LINER SYSTEM DETAIL (TYPICAL)

## NOTES:

- 1. NON-CARBONATE AGGREGATE DRAINAGE MATERIAL SHALL HAVE A MINIMUM PERMEABILITY OF 0.25 CM/SEC. AND A PARTICLE SIZE BETWEEN 0.425 mm AND 13.0 mm.
- GEOCOMPOSITE SHALL HAVE A MINIMUM TRANSMISSIVITY OF 10 CM²/SEC PER MANUFACTURER PRODUCT DATA SHEET.
- 3. SUMP GRAVEL WILL BE 1-INCH CLEAN UP TO SPRINGLINE
  OF SUMP PIPE AND CLEAN 3-INCH NOMINAL SIZE NON-CARBONATE
  GRAVEL OR EQUIVALENT ABOVE SPRINGLINE.
- 12-INCH PROTECTIVE SAND AGGREGATE IS PLACED DURING CONSTRUCTION OF LINER AND LEACHATE COLLECTION SYSTEM.
- PROTECTIVE SAND AGGREGATE SHALL CONSIST OF A WELL-GRADED NON-CARBONATE PROTECTIVE SAND AGGREGATE SHALL CONSIST OF A WELL-GHAULD NO. AGGREGATE WITH A PARTICLE SIZE BETWEEN 9.5 mm AND 0.075 mm, WITH 0 TO 10% PASSING THE NO. 100 U.S. SIEVE, A d<sub>50</sub> PARTICLE SIZE BETWEEN 0.5 AND 0.9 mm, AND A d<sub>15</sub> PARTICLE SIZE BETWEEN 0.2 AND 0.4 mm.
- COLLECTION TRENCH GRAVEL WILL BE CLEAN 1-INCH NOMINAL SIZE NON-CARBONATE GRAVEL OR EQUIVALENT.



MISSOURI ONE CALL SYSTEM, INC.

REITZ & JENS, INC.
CONSOLITING ENGINEERING
SIGOSOOFOGRIT EQUARE DENVI
ST. LOUIS, MISCOST 60522

ST. LOUIS, MISCOST 60523

ST. LOUIS, MISCOST 60523 SHEET 17 PROPOSED UTILITY WASTE LANDFILL LINER DETAILS LABADIE ENERGY CENTER 02010 0 JANUARY 2013