

APPENDIX C: XERXES SPLIT BACKFILL INSTRUCTIONS

C1. GENERAL

C1.1. Use select rounded or crushed stones for primary backfill material as specified in the *Xerxes Installation Manual in effect at time of installation, and the Xerxes APPENDIX B (and supplement), Primary Backfill Requirements*.

C2. SPLIT BACKFILL INSTALLATION

C2.1. Use the primary backfill material vertically up to at least 75 percent of the tank diameter. See *FIGURE C1-1*.

C2.2. Follow the instructions in *SECTION 6 of the Installation Manual* on the placement of this backfill material.

C2.3. Install a layer of geotextile filter fabric over the entire surface of the primary backfill material. See *SECTION 9* for more information about geotextile filter fabric.

C2.3.1. All joints in the filter fabric should be overlapped a minimum of 12 inches.

C2.3.2. Geotextile fabric must overlap onto the tank and excavation surface a minimum of 12 inches.

C2.3.3. Installations with unstable soil may require that the fabric line the entire excavation. See *SECTION 9* for specific information about using geotextile filter fabric in unstable-soil conditions.

C2.4. Clean native backfill may be used as secondary backfill material above the geotextile fabric to subgrade.

C2.4.1. Secondary backfill material must be clean, free-flowing, and free of large rocks, roots, organic materials, debris, ice and snow. Backfill material shall not be frozen or contain lumps of frozen material at any time during installation.

C2.5. Secondary backfill must be compacted to achieve a minimum of 85 percent standard proctor density.

C2.5.1. Do not use rammer-type compactors over the top of the tank.

C2.5.2. Some tank owners may require sample testing and written reports to verify the compaction of the backfill.

C2.6. Material must be installed in 12-inch to 24-inch lifts compatible with the compaction equipment used.

C2.7. In some conditions, frost heave may be encountered when using secondary backfill. Therefore, consider any problems that may occur.

C2.8. Specifications for secondary backfill material and compaction above the filter fabric layer may be determined by the requirements of the piping, surface slab or roadway.

C2.9. Refer to applicable codes or standards for base course and sub-base course material and compaction requirements.

C2.10. The following are examples of acceptable secondary backfill material:

C2.10.1. clean native backfill

C2.10.2. coarse sand or gravel

C2.11. One hundred percent (100%) of all backfill material must pass through a 1-inch sieve.

FIGURE C1-1 – Split Backfill Installation

