UTAH TOPSOIL & HAULING CO.
URBAN TREE STRUCTURAL SOIL

PART 1: MEDIA BLEND COMPONENTS

Structural Soil Media

A. Lightweight Aggregate	80%
B. Screened Topsoil	20%

Tree Pit Backfill Media

A. Structural Soil Media	50%
B. Screened Topsoil	50%

PART 2: SUPPLIER CONTACT INFORMATION

Utah Topsoil & Hauling Co.
Scott Jenson – 801-243-9348
scott@utahtopsoil.com

PART 3: COMPONENT PROPERTIES

A. Screened Topsoil

Texture	Loam, Clay Loam, Sandy Clay Loam
pH	6.5 – 8
Soluble Salts	<4
Sodium Adsorption Ratio	<7
Organic Matter %	>2

B. Lightweight Aggregate

Acceptable Sources:

MagmaLite Volcanic Aggregate
Gradation – ¾” graded (½” to 1 ½”)

Utelite Expanded Shale Aggregate
Gradation – Coarse (1/2” to 1”)

C. Organic Compost

pH	6 – 8
Soluble Salts	<5
Sodium Adsorption Ratio	<10
Carbon / Nitrogen Ratio	<30:1
Moisture %	25 – 35
Coarse Material 98% Passing	3/8”

PART 4: COMPONENT BLENDING

Structural Soil Media

1. Mechanically mix sand, clay, and loam (if necessary) to meet screened topsoil requirements.
2. Mechanically mix 4 parts lightweight aggregate and 1 part screened topsoil until a uniform distribution of the components is achieved. Lightly wetting the lightweight aggregate prior to blending can aid the blending process.
3. When stockpiling the finished mix, cover the pile with a plastic tarp to prevent drying out and soil separation from rain.

Tree Pit Backfill Media

1. Mechanically mix 1 part blended structural soil media to 1 part screened topsoil until a uniform distribution of the components is achieved.
2. When stockpiling the finished mix, cover the pile with a plastic tarp to prevent drying out and soil separation from rain.

PART 5: INSTALLATION

Structural Soil Media

1. Ensure subgrade has been properly prepared by removing all organic matter, debris, loose materials, and large rocks. Remove any soft or mucky areas and replace with suitable subgrade material. Subgrade should be compacted to 90% of its maximum density.
2. Place structural soil media in lifts not exceeding 12 inches deep. Compact using a vibratory plate, performing a minimum of two passes

of not less than 10 seconds per pass, before moving to the next adjacent location. Additional passes may be required as determined by the field engineer. Continue placing and compacting in 12-inch lifts until the specified depth is reached.

3. For large areas, a small vibratory roller can be used. Compacted lifts should not exceed 12 inches and should receive 2 – 4 passes as determined by the field engineer.

Tree Pit Backfill Media

1. Ensure the excavated tree pit has been properly prepared so that the root ball adequately fits within the tree pit with sufficient room for backfill media to be placed around the root ball.
2. Backfill the tree pit with the specified backfill media and hand tamp around the root ball until the specified grade is met.
3. Water the root ball and backfill media within 2 hours of placement to prevent excessive drying out.