

**ITEM #0915004A – TREE ROOT BARRIER**

Section 9.15 will be modified as follows:

**Description:**

This is a materials specification covering root control barrier in trenches and alongside hardscape structures such as sidewalks, curbing, pavements, and building foundations to prevent structural damage due to tree root penetration. The product functions to provide both a physical and chemical barrier to restrict vegetative root encroachment.

This is a material purchasing specification and design review of its use is recommended.

**Material:**

The contractor shall use 19.5” wide Biobarrier® where shown on the drawings or as required by the Engineer.

The tree root barrier shall meet the requirements of the following ASTM and EPA Standards:

ASTM Standards

D-5261	Test Method for Measuring Mass per Unit Area of Geotextiles
D-4632	Test Method for Grab Breaking Load and Elongation of Geotextiles
D-4833	Test method for Index Puncture Resistance of Geotextiles, Geomembranes and Related Products
D-4533	Test Method for Trapezoidal Tear Strength of Geotextiles
D-4491	Test Method for Water Permeability of Geotextiles by Permittivity
D-4751	Test Method for Determining the Apparent Opening Size of a Geotextile
D-4355	Test Method for Deterioration of Geotextiles from Exposure to Ultraviolet Light and Water (Xenon-Arc Type Apparatus)

EPA Standards (Reference EPA Label)

EPA	CG	1500	Water Solubility
EPA	CG	1600	Vapor Pressure

Physical and Chemical Requirements:

Fibers used in the manufacture of root control barrier substrate fabric shall consist of long chain synthetic polyolefins (at least 95% by weight) and a UV stabilizer. They shall be formed into a stable network such that the filaments or yarns retain their dimensional stability relative to each other.

Nodules consisting of trifluralin, carbon black, and polyethylene are permanently attached to the substrate fabric on 1-1/2” centers by a through injection molding process.

All substrate property values, with the exception of apparent opening size (AOS), in these specifications represent minimum average roll values (MARV) in the weakest principal direction (i.e., average test results of any roll in a lot sampled for conformance or quality assurance testing shall meet or exceed the minimum values provided herein). Values for AOS represent maximum average roll values.

Property values for the trifluralin are average run values.

**Shipments and Storage:**

Product labels will clearly show the manufacturer or supplier name, style number, and roll number and shall include a compliance statement certifying that all ingredients and inspection standards for this product have been met.

Each root control product roll shall be wrapped with a protective EVOH bag and placed in a box that will protect the product from damage due to shipment, water, sunlight, and contaminants and to prevent premature release of herbicide. The protective wrapping shall be maintained during periods of shipment and storage.

During storage, root control product shall be elevated off the ground and out of direct sunlight. It shall remain sealed in EVOH protective bag inside shipping box at a temperature of not more than 110° F.

**Construction Methods:**

The Tree Root Barrier shall be installed where shown on the drawings or as directed by the Engineer. It shall be installed in conformance with the manufacturer's instructions.

**Method of Measurement:**

This item shall be measured for payment by the actual number of linear feet of tree root barrier.

**Basis of Payment:**

This work will be paid for at the contract unit price per linear foot for "Tree Root Barrier." This price shall include all equipment, labor, and tools necessary to complete the work, disposal of the removed material, furnishing and placing suitable backfill material as necessary and leaving the site in a condition suitable for turf establishment.

<b>Pay Item</b>	<b>Pay Unit</b>
Tree Root Barrier	l.f.