**GENERAL**

* 1. Related Documents
		1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
	2. Summary
		1. Section Includes:
			1. Furnishing and installation of ArborTie – Staking & Guying system
		2. Related Sections:
			1. Division 32 – Exterior Improvements
	3. Definitions
		1. Flat, woven material designed to establish newly planted and/or transplanted trees secured to the ground typically with stakes or anchors.
	4. Submittals
		1. Product data: Manufacturers standard literature defining materials for use on the Project.
		2. Samples, if required by Architect:
			1. ArborTie: One linear foot.
		3. Quality control: Complete installation instructions specified, may be combined with product data.
	5. Quality Assurance
		1. Manufacturer’s qualifications:
			1. Minimum twenty-five (25) years experience in tree and plant protection.
	6. Delivery, Storage and Handling
		1. Packing and Shipping
			1. Provide materials in original, unopened containers with manufacturer’s labels intact and legible.
		2. Acceptance at Site
			1. Damaged materials will not be accepted, as determined by visual inspection.
			2. Rejected materials shall be removed from project site immediately.
		3. Storage and Protection
			1. Store materials in dry area in manufacturer’s protective packaging, in original containers with labels and instructions intact.

**PRODUCTS**

* 1. MANUFACTURERS
		1. Acceptable manufacturers:
			1. Products specified as standard of quality are manufactured by DeepRoot Green Infrastructure, LLC. (DeepRoot), 530 Washington Street, San Francisco, CA 94111; 800.458.7668; fax 800.277.7668; [www.deeproot.com](http://www.deeproot.com)
			2. Products meeting standards listed within this specification may be acceptable for use subject to approval of product list and samples.
	2. MANUFACTURED UNITS
		1. ArborTie Green
			1. Color: Green
			2. Material: flat, woven polypropylene. Rounded weave and lock stitch. Made in the USA.
			3. Dimensions: ¾” (20mm) wide, varying lengths per project specifications.
			4. Available in the following spool lengths: 100’ (30.5m), 250’ (76m), 500’ (152.5m), 750’ (228.5m), 3,000’ (914.5m).
			5. Tensile Strength: 900 lb (708 kg)
		2. ArborTie White
			1. Color: White
			2. Material: flat, woven polyester. Rounded weave and lock stitch. Made in the USA.
			3. Dimensions: ¾” (20mm) wide, varying lengths per project specifications.
			4. Available in the following spool lengths: 250’ (76m), 500’ (152.5m), 3,000’ (914.5m).
			5. Tensile Strength: 2500 lb (1134 kg)
		3. Accessories
			1. Steel Eye Anchors
				1. 15” Steel Eye Anchors with 4” helix and 1” diameter eye opening.
				2. 30” Steel Eye Anchors with 4” helix and 1” diameter eye opening.
			2. Steel Eye Stakes
				1. 15” Steel Eye Stakes with 1” diameter eye opening.

**INSTALLATION**

1. Staking Applications
	* 1. See manufacturer’s details.
		2. ArborTie shall be nailed to wooden stakes, or tied around a ‘T’ stake with a rolling hitch.
		3. No anchors or nails shall be used on the tree itself.
2. Guying Applications
	* 1. See manufacturer’s details.
		2. Use ArborKnot details to secure ArborTie around newly planted tree. If appropriately tied, ArborTie shall provide a secure, girdle free attachment to the tree, which will expand as the tree grows.
		3. No anchors or nails shall be used on the tree itself.
		4. Secure long end of ArborTie to the eye of the stake or anchor. Add tension to the ArborTie by driving the stake or anchor into the ground outside of the planting hole at a 45 degree angle to the tree trunk.
		5. When driving the stake or anchor into the ground, ensure eye opening is not buried. Final stake placement shall ensure eye opening is even to soil level.
		6. Stakes or anchors shall be evenly spaced around the tree.

NOTE TO SPECIFIER: *Tree guying and staking systems are intended for newly planted trees, not for long term tree support. Project specifications should include requirements for Contractor to remove tree staking or guying system, often at the end of the landscape maintenance period.* *Ensure any tree system does not remain attached to the tree long-term.*