## SPSRW-XX, INVASIVE SPECIES REMOVAL

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### DESCRIPTION

The work covered by this special provision includes but is not limited to the removal of large, contiguous populations of invasive plants that can be treated using mowing or cutting, excavation or the application of pre-emergent herbicides, foliar herbicide application or application of herbicides to soil. The Contractor shall remove invasive species along the channel improvement areas of the Construction Plans for the permanent establishment of native riparian vegetation. All work shall be in compliance with this contract and referenced standard specification. Vegetation to be removed that exhibits re-growth at the end of the warranty period shall be retreated at no cost to the City. Retreated areas shall include a new one-year warranty period, and will require subsequent retreatments and one-year warranties until re-growth has been eliminated at the end of the warranty period.

### METHODS AND MATERIALS

This work includes removal, and acceptance by the Engineer, including all labor, equipment, maintenance, and hauling of the item to complete the work in an acceptable manner.

The Contractor is responsible for providing herbicides, application equipment, mowing/cutting equipment, excavation equipment, and is responsible for the health and safety of potential users of the sprayed area. No herbicides shall be applied in areas of high use as indicated on the Construction Plans or as otherwise determined by the Project Manager. Herbicides shall be applied in accordance with North Carolina State Herbicide Applicator’s License specifications.

All herbicides must be labeled for use near water by the U.S. Environmental Protection Agency (USEPA) and the North Carolina Department of Agriculture (NCDA). Herbicides must be properly labeled, stored and transported according to standards and shall not have exceeded the expiration date prior to use. Fresh herbicides shall be purchased from the distributor the same year or season as the anticipated application and mixed within days of application. No herbicides shall be used in a manner that is not consistent with the labeling.

Invasive species removal must be supervised by a certified/licensed commercial herbicides application specialist with the appropriate sub-categories for landscape, aquatic, forestry and/or right-of-way as applicable. The certified/licensed herbicide applicator will use the appropriate herbicide for the material being treated.

The Contractorshall provide specific information related to the removal methodology regarding the following items:

* The method of removal anticipated for each species present at the site
* The method of application for any herbicides including product labels for approval
* The means to protect non-target species
* An estimated percentage of control these methods should yield under ideal conditions in the first growing season following the initial removal effort

### WARRANTY

Treatment of invasive species with herbicide shall occur prior to site disturbance. During the following growing season the Engineer will assess areas treated for invasive species removal at three separate times. At the end of the growing season, if it is deemed by the Engineer that successful removal of the invasive species has not been satisfactorily accomplished, then the Contractor shall treat all remaining invasive vegetation with herbicide during the following growing season. This will begin a new warranty period, and the Engineer will inspect for appropriate levels of removal of invasive species during the subsequent growing season.

Success of the removal will be quantified in the following manner:

* No seed-bearing age privet and only one non-bearing privet per 100 square feet
* No invasive foliage taller than six feet vertically as measured from base to highest foliage.
* Plants that are prostrate spreaders or spread by rhizomes may not have an area of coverage greater than two square feet per 100 square feet.
* Any area so chosen by the Engineer that has a coverage of more than two square feet per 100 square feet of other invasive species.

Failure in one or more of these criteria during the warranty inspections may be grounds to require additional treatment and an extension of the warranty period.

### MEASUREMENT

The quantity of “Invasive Species Removal” to be measured shall be the total number of square yards, indicated on the Construction Plans and measured along the surface of the ground, which has been completed by the Contractor and accepted by the City.

### PAYMENT

The quantity of “Invasive Species Removal”, measured as provided above, will be paid for at the contract unit price per square yard for “Invasive Species Removal”. Such payment will be full compensation for all work covered in this special provision, including furnishing herbicides, mixing and spraying equipment, mowing/cutting equipment, excavation equipment and other materials. This special provision includes hauling of removed plants to the sanitary landfill.

Payment will be made under:

**INVASIVE SPECIES REMOVAL SY**