SECTION 729– ERADICATION OF INVASIVE SPECIES

729.01 DESCRIPTION

This work shall consist of eradicating numerous invasive species within the limits specified in the Contract Documents. Species to be removed include but not limited to (provide list of major invasive species within the site to be removed)

729.02 REFERENCE STANDARDS

MNCPPC Section 721 – Tree Preservation
“Best Management Practices for Control of Non-Native Invasives”

729.03 DEFINITIONS

Not applicable.

729.04 MATERIALS

A. The contractor shall furnish the appropriate hand and power tools required to perform vegetation removal operations. This can include chainsaws, brush-cutters, all associated safety equipment and incidentals necessary to complete the work. Additional tools, if needed, require approval by the M-NCPPC Construction Manager.

B. A backpack sprayer with low pressure and coarse spray pattern shall be used to spray invasives.

C. The ester form of triclopyr (GarlonR 3A or approved equal) shall be applied to basal bark or cut stem. Triclopyr should not be used when the temperature is above 85o. All manufacturers recommendations must be strictly followed including personal protection.

D. Glyphosate (Roundup, Rodeo, Aqua Neat, or approved equal) can be used for foliar spraying and basal bark or cut stem treatment. Foliar spraying should be done between 60 and 90 degrees F, the air is humid, minimal breeze and rain not expected for 8-12 hours. All manufacturers recommendations must be strictly followed including personal protection.

E. If the product used does not already contain nonionic surfactant, a surfactant shall be used for all foliar spraying.
729.05 **SUBMITTALS**

A. Contractor must submit to M-NCPPC a list with reference of three (3) projects of similar magnitude, where this type of work has been completed within the last five (5) years.

B. Contractor to submit name of individual performing pesticides application and provide current MD Department of Agriculture Certified Pesticide Applicator Number.

C. A copy of label information from the glyphosate or triclopyr shall be submitted to the M-NCPPC Construction Manager prior to application or any other herbicide that is approved by M-NCPPC and applied by a contractor to control non-native invasive plant species.

D. A schedule for eradication shall be provided to the M-NCPPC Construction Manager for approval. The schedule should be appropriate to allow for two periods of re-growth and follow-up glyphosate and/or triclopyr application after the initial mechanical removal stage.

E. Qualifications certificate shall be submitted to the M-NCPPC Construction Manager for the contractor’s arborist with current verification from the International Society of Arboriculture and the American Society of Consulting Arborists. Also, verification of membership in good standing in the National Arborist Association shall be submitted.

729.06 **QUALITY ASSURANCE**

A. The Sub-contractor for performing the work required under this Section shall be approved by M-NCPPC prior to execution of the contract. Invasive removal and related work shall be performed by a firm with a minimum of five (5) years’ experience specializing in this type of work.

B. Contractor must be a current MD Department of Agriculture Certified Pesticide Applicator for any use of herbicides. All work shall meet applicable Federal, State and County regulations and requirements.

C. Contractor’s arborist must have a current verification from the International Society of Arboriculture and the American Society of Consulting Arborists. Also, he shall have membership in good standing in the National Arborist Association.

729.07 **CONSTRUCTION**

A. It shall be the responsibility of the Contractor to walk the limits of invasive eradication with the M-NCPPC Construction Manager and Forest Conservation Inspector (if required) before clearance operations have begun. As identified by M-NCPPC, the Contractor shall tag existing trees and shrubs to remain.

B. Protection of existing trees: Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and
bruising of bark or excavated materials outside of the limits of disturbance. All requirements of Section 721 Tree Preservation must be observed.

C. Removal of Invasives:


b. In general, the woody invasives shall be cut down using a rough-cut walk-behind mower and/or a gas-powered hedge trimmer (e.g. Stihl Articulated 23-inch-Long Hedge Trimmer), and/or chainsaw. Mowing shall occur between February 1st and April 15th.

c. Any tree removal shall be performed by using chainsaws and manually dropping sections of the tree to minimize damage to the surrounding vegetation.

d. No large equipment will be allowed, due to potential disturbance to wet soils and tree roots.

e. Invasive species including trees that are cut shall be removed from the site and legally disposed of unless directed otherwise by the M-NCPPC Construction Manager.

D. Treatment of Invasives:

a. After a period of approximately three months of the growing season, during which time invasive stems have produced new leafy growth, the stand shall be sprayed with a water-soluble triclopyr product (varying %s) or a glyphosate product @2%. A backpack sprayer with low pressure and coarse spray pattern shall be used to reduce spray drift damage to trees and shrubs that are identified to remain. The air temperature shall be above 65°F to ensure absorption of herbicide. Spraying shall be done uniformly to wet the leaves and green stems, but avoid runoff. The optimal period is when plants are actively growing, but before fruit formation. This application must be made on a windless day, in accordance with the manufacturer’s instructions.

b. Spraying should not occur within twenty-five (25) feet of any waterway.

c. A second application of triclopyr or glyphosate shall be made after a two to three-month period during which any additional leafy growth may emerge, following the procedure described above.
d. Alternative herbicide treatments are basal bark and cut-stump treatments as outlined in the M-NCPPC Best Management Document above as approved by the M-NCPPC Construction Manager.

E. Replacement of damaged trees: A concerted effort shall be made by the Contractor to protect the trees adjacent to the limits of clearance. If trees outside the limits or clearance are damaged or have been flagged for preservation Section 721 Tree Preservation should be followed. Any added work that must be performed in this regard shall be at no cost to the Commission.

F. Protection and restoration of existing improvements: Restore any improvements damaged by this work to their original condition, as acceptable to M-NCPPC or other parties or authorities having jurisdiction.

729.08 MEASUREMENT AND PAYMENT

Payment shall be full compensation for all material, labor, equipment, tools, permits and licenses, and incidental items necessary to complete this work. Payment shall be made on a unit price or lump sum basis as stated in the Bid Form.