SECTION 31 31 19 VEGETATION CONTROL

PART 1-GENERAL

1.01 WORK INCLUDED

A. The work includes the cutting and removal of vegetation and the application of commercial grade stump preventative herbicide to prevent re-growth of the remaining stumps within the clearing limits indicated on the bid documents.

1.02 SUMBITTALS

- A. Product data: At least 21 days before commencing work described in this Section submit:
 - 1. Manufacturer's product literature.
 - 2. Manufacturer's specifications and other data needed to prove compliance with specific requirements.

1.03 CERTIFICATIONS

A. Herbicide application shall only be performed by certified applicators approved by the State of Michigan for working in or near surface water.

PART 2-PRODUCTS

2.01 MATERIALS

- A. Commercial grade herbicide containing Triclopyr or Isopropylamine Salt of Imazapyr as active ingredients specifically formulated for control for brush, trees and vegetation near surface waters and banks of waterways.
- B. Acceptable products:
 - 1. Renovate by Dow Agro Sciences.
 - 2. Habitat by BASF.
 - 3. Garlon 4 Ultra.
 - 4. Approved equal.
- C. The selected herbicide shall have a colored dye added to indicate where the herbicide has been applied.

PART 3-EXECUTION

3.01 VEGETATION REMOVAL

- A. Remove brush, shrubs, trees, fallen timber and logs from designated areas. The Contractor's operations must not cause more than minimal damage to public and private property and improvements, including existing trees, shrubbery and lawns.
- B. Herbicides shall be applied in accordance with the manufacturer's recommendations.

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- C. Brush and shrubs with individual stems or clusters of stems having a stem diameter of less than ½", as measured 3' above the ground, may be left uncut and eradicated by the use of spray applied herbicides. At his option, the Contractor may cut the stems of said brush and shrubs no more than 6" above the ground, in such case, the resulting stump shall be treated with herbicide to prevent re-growth.
- D. All woody vegetation having a stem diameter larger than 1/2", as measured 3' above the ground, shall be cut not more than 6 inches above the ground. Remaining stumps shall be treated with herbicide applied by brush or spray applicator within 5 minutes of cutting. The herbicide shall thoroughly wet the entire cambium area of the stump. Roots need not be removed.
- E. Protect all vegetation that is not designated to be removed. The Contractor shall exercise care to minimize damage to adjacent vegetation due to over spray. Repair or replace trees and shrubs adjacent to the work area damaged by the Contractor's operations at no additional cost to the contract.
- F. Removed brush, shrubs, trees, logs and debris becomes the property of the Contractor and shall be tucked from the project site and disposed of by the Contractor.
- G. For vegetation lying within the access easements, the Contractor shall notify the property owner in advance of cutting down tree (s) and offer the wood to the property owner. If the property owner wants the wood, the Contractor shall cut the tree(s) into 4 feet long sections and stack the wood on the landowner's property.
- H. Disposal of removed vegetation shall be in compliance with all applicable statutes and regulations. Do not dispose materials in any wetland, floodplain or open channel.
- I. Vegetation may be disposed of by chipping, but chips must be removed from the project site. Burning of materials is not allowed on the project site, but is allowed offsite where approved by local ordinances. Burving of materials on the project site will not be allowed.

3.02 FOLLOW UP HERBICIDE TREATMENT

A. An inspection of the cleared areas shall be performed by the Engineer and Contractor after one growing season has passed. Stumps exhibiting re-growth shall be re-treated with herbicide by the Contractor at no additional cost to the project.

END OF SECTION

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