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NEW ENGLAND CLEAN POWER LINK PROJECT

VEGETATION MANAGEMENT PLAN

Prepared for:

Champlain VT, LLC d/b/a TDI New England

Prepared by:

TRC Environmental Corp.
650 Suffolk Street
Lowell, MA 01854

In collaboration with

Vanasse Hangen Brustlin (VHB), Inc.
7056 U.S. Route 7
North Ferrisburgh, VT 05473

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NEW ENGLAND CLEAN POWER LINK PROJECT

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Table of Contents

Vegetation Management Plan

1.0 Introduction and Project Description

On behalf of Champlain VT, LLC d/b/a TDI New England (TDI-NE), TRC Environmental Corp. (TRC) and Vanasse Hangen Brustlin, Inc. (VHB) have prepared this document to outline the proposed protocols, goals, and objectives for vegetation management during construction and long-term operation of the overland component of the New England Clean Power Link (Project). This document outlines an overall Vegetation Management Plan (VMP), a Non-Native Invasive Species (NNIS) Monitoring and Control Plan, and a vegetation management protocol with regard to natural resource areas of special concern. Additional resource protection measures and Best Management Practices (BMPs) for construction-phase vegetation management activities will be outlined in the Erosion Prevention and Sediment Control Plan (EPSC Plan), which will be prepared as part of the application for a Vermont Construction Stormwater Discharge Permit.

The Project is a high voltage direct current (HVDC) electric transmission line that will provide electricity generated by renewable energy sources in Canada to the New England electric grid. The line will run from the Canadian border at Alburgh, Vermont to Ludlow, Vermont along underwater and underground routes.

The transmission line will be comprised of two approximately 5" diameter cables – one positively charged and the other negatively charged – and will be of solid-state manufacture containing no fluids or gases. The nominal operating voltage of the line will be approximately 300 to 320 kV, and the system will be capable of delivering 1,000 megawatts (MW) of electricity.

The overland portion of the transmission line, approximately 56 miles in length, generally will be buried approximately four feet underground within existing public (state and town) road rights-of-way (ROWs).[1] The cables will be installed within a railroad ROW for approximately 3.5 miles in the town of Shrewsbury and Wallingford. Very short sections of the route at the Lake Champlain entry and exit points, as well as at the converter site in Ludlow, will be located on private land that is owned or controlled by TDI-NE.

In Ludlow, the HVDC line will terminate at a converter station that will convert the electrical power from direct current (DC) to alternating current (AC). An underground AC transmission line will then run to the existing 345 kV Coolidge Substation in Cavendish, Vermont located approximately 0.3 miles to the south, which is owned and operated by the Vermont Electric Power Company (VELCO).

Along the overland route, the transmission cables will be installed underground by utilizing a combination of open trench excavation, horizontal directional drilling (HDD), and jack-and-bore construction. Along town roads (in Alburgh, Benson and Ludlow), the cables will be installed in the existing roadways. No tree removal is expected on these town roads, although limited trimming of overhead branches may occur. Along roads managed by the Vermont Agency of Transportation (VTrans)

[1] The only potential areas where underground burial may not occur is at two stream/river crossings in Ludlow where the cables may be placed in conduit and attached to a bridge or culvert headwall.

and railroads owned by VTrans, but managed by Vermont Railway System, the cables will be installed within regularly managed areas known as "Clear Zones" to the extent possible.

The general sequence for installing the underground transmission cables along the overland ROWs will be as follows: (i) survey work and flagging (including resource area flagging), initial clearing/mowing operations (if necessary) and installation of erosion prevention and sediment control (EPSC) measures; (ii) trench excavation and soil stockpiling; (iii) cable installation; (iv) backfilling; and (v) final stabilization/restoration and revegetation). Once construction is complete, an approximately 12-foot-wide area along the transmission line route will be kept clear of deep-rooted trees for the life of the Project.

The construction and long-term operation of the Project is regulated or reviewed by authorities pursuant to a number of State and Federal regulatory programs that regulate impacts to natural resources, including:

Presidential Permit and NEPA (Executive Order (EO) 10485 of 1953)
Federal Clean Water Act Section 10 and Section 404 Permit
Vermont Section 401 Water Quality Certification
Vermont Certificate of Public Good (Section 248)
Vermont Stream Alteration Permit
Vermont Wetland Permit
Vermont Construction Stormwater Discharge Permit
Vermont Operational Stormwater Permit
Vermont Lake Encroachment Permit
Vermont Ch 47 Discharge Permit (potential)
VTrans 1111 Permit

2.0 General Management and Techniques

Both a Permanent Project Corridor and a temporary construction area will be developed for the overland route. The Permanent Project Corridor, typically a 12-foot wide area centered over the buried cables[2], will extend the full overland route. The temporary construction area will be positioned adjacent to the Permanent Project Corridor in some areas to provide additional workspace during construction activities. The approximate width of the temporary construction area will vary depending on topography, environmental and land use constraints, and constructability considerations. Overall, temporary clearing widths will generally not exceed 50 feet (combined Permanent Project Corridor and temporary construction area), except in some limited instances for HDD setup areas. Areas crossed by HDD or Jack and Bore typically will not require clearing for a temporary construction area nor a cleared Permanent Project Corridor, although vegetation removal may be required at HDD setup and pull-back locations on either end of the drill and in areas where the HDD is less than 15 feet deep. Finally, vegetation clearing and management at the converter site is also discussed below.

[2] The Permanent Project Corridor will be centered on the cable trench or, in limited restricted areas, extend only so far as the edge of the existing road/rail ROWs.

Vegetation management of construction areas will cease following final stabilization/restoration and revegetation. Vegetation management will be ongoing along the Permanent Project Corridor.

Management techniques during the operational phase of the Project will be customized in areas within the road and railroad ROW Clear Zones and in areas with special consideration resources.

General Construction Activity

Many of the construction methods (i.e., "typical" Construction Method Details) proposed for the overland route (see Exhibit TDI-AW-3) do not require tree clearing or trimming since these methods will be followed where the Project is located along roadway and railway ROWs. In general, construction methods 3A, 3B, 3C, 4A, 4B, 4C, 4D, 5A, 5B, 5C, and 5D will require clearing/trimming. [3] These methods are proposed to be applied for approximately 33 miles of the 57-mile overland route. The width of the temporary construction area will be approximately 20 feet to 50 feet depending on existing constraints and the width of the existing VTrans and railroad ROWs.

Based on current route design, it may be conservatively assumed that approximately 34 acres will be cleared for the temporary construction areas and 12 acres will be cleared for the Permanent Project Corridor. Additionally, approximately 10 acres will be cleared for the new converter station in Ludlow.

Pre-construction Clearing/Trimming

Pre-construction vegetation clearing will be carried out using a combination of methods, such as mechanical clearing machines (non-selective), hand-cutting, mowing, and mechanical whole-tree felling (selective). Vegetation will be cut at ground level. The existing root systems will generally remain intact in all areas other than the immediate 4-foot-wide trench area, except where grubbing or grading is required to support construction activities within the temporary construction areas.

Brush and tree limbs will be chipped and spread in approved upland locations or transported away from the construction site to an approved disposal site. Wood chips which are spread will be at depths no more than approximately three to five inches thick. Timber will be removed from the construction site for salvage or to approved locations depicted on EPSC Plans.

Temporary Construction Areas

Prior to construction, the temporary construction areas will be cleared where applicable according to the pre-construction ground-clearing specifications (above) and per approved plans. Where HDD is employed and installation depths are generally greater than approximately 15 feet, no vegetation clearing is expected to be necessary (subject to cable manufacturer's confirmation). Post-construction, the temporary construction areas will be allowed to regenerate to pre-existing conditions and will not be maintained during the operation of the Project. Applicable restoration and revegetation measures for the temporary ROW will be specified in the Project EPSC Plan.

Temporary Workspaces

[3] Refer to Construction Method Details – Champlain-Ludlow HVDC, Sheets CM-1 through CM-4.

Temporary staging areas to support construction activities will be developed in various locations along the overland route. These staging areas will be located near the roads and in areas that require minimal vegetation alteration (flat fields, for example) and avoid sensitive environmental resources to the extent possible. If additional workspace is needed away from roadways, previously cleared but undeveloped areas will be utilized where feasible to minimize impacts. Four temporary staging areas have been identified in Alburgh, Ludlow and Benson and additional staging areas will be identified prior to construction. Post-construction, the temporary workspaces will be allowed to regenerate to pre-existing conditions and will not be maintained during the operation of the Project. Restoration and revegetation measures for the temporary workspaces will be specified in the Project EPSC Plan.

Permanent Project Corridor

Prior to construction, the Permanent Project Corridor will be cleared where necessary according to the pre-construction ground-clearing specifications (above). Where HDD is employed, no soil disturbance or vegetation clearing will occur except where the HDD is less than 15 feet deep (generally extending approximately 60 feet from the edge of HDD setup areas in the direction of the HDD installation). Post-construction, the Permanent Project Corridor will be permanently stabilized in accordance with the EPSC Plan.

As described in Section 3.0, a large portion of the Permanent Project Corridor is proposed to be located within actively maintained road and railway ROWs (Clear Zones). Existing vegetation management practices employed by others will take precedence over TDI-NE vegetation management requirements unless such practices by others are discontinued or insufficient so as to prevent a hazard to the operation of the Project.

To the extent not addressed through these existing management practices, the 12-foot-wide Permanent Project Corridor (centered on the underground transmission cables) will be managed as needed during the life of the Project through a combination of mowing, brush-hogging, and selective clearing to limit the vegetation to shallow-rooted growth since deep roots could potentially impact the cable operation. This will require vegetation management at a frequency that prevents the establishment of large trees within the Permanent Project Corridor. Operation phase vegetation management of the Permanent Project Corridor may be completed with mechanized equipment (e.g., brush hog, mower), herbicide use, hand equipment, or a combination of methods. It is expected that the Permanent Project Corridor will be managed primarily through mechanical means. No herbicide use is proposed beyond that which may be deemed necessary for NNIS management and in connection with the Ludlow Converter Station, as described in this document.

Where HDD is employed and installation depths are generally greater than 15 feet, vegetation will not be maintained during the operation phase since the cables are installed at a greater depth from the surface.

Ludlow Converter Station

The Ludlow Converter Station will be developed at the terminus of the cable route in Ludlow, VT and approximately 10 acres will be permanently cleared and grubbed at the site, including the associated workspaces and grading areas. The approximate 10-acre footprint includes a cleared area around the proposed converter station yard that will be kept free of large trees. However, small shrubs and trees

will be planted and maintained as part of a post-construction landscaping plan. Throughout the operation phase of the Project, the crushed stone-surfaced converter station yard will be kept clear of vegetation. The yard will be built with an open graded stone topping, which will eliminate nuisance weed and plant growth. Herbicide treatment may be periodically utilized to control vegetation growth if necessary within the stone-surfaced yard.

3.0 Management within the Existing VTrans ROW and Railroad ROW

Efforts have been made to site the Project within areas of existing town road ROW, VTrans ROW and Vermont Rail System ROW that are actively maintained free of deep-rooted vegetation, referred to as the "Clear Zone." For the long-term operation of the Project, the Permanent Project Corridor needs to maintain these same conditions. Since operation phase vegetation management of the Permanent Project Corridor may duplicate the efforts of towns, VTrans, and the railroad operator, the post-construction vegetation management practices described in this VMP shall not apply to Clear Zones except when they may be required to support the safe operation of the Project (e.g., in the event vegetation management completed by others does not sufficiently prevent deep-rooted vegetation from establishing in the Permanent Project Corridor).

As such, TDI-NE expects that it will generally assume vegetation management responsibilities over the long-term operation of the Project only for areas of the Permanent Project Corridor which do not overlap with pre-existing Clear Zones.

4.0 Management for Special Consideration Resources

The following resources along the Project route have been identified as requiring special consideration during the construction and long-term operation of the Project. Measures to avoid and mitigate impacts to these resources will be developed in the Section 248 proceedings and associated environmental permits required for the Project. In addition, the EPSC Plan and RTE Protection Plans (to be developed where avoidance of RTE is not possible) will describe BMPs for safeguarding these resources during construction. Standard protocol includes limiting clearing methods to hand cutting, marking buffer areas in the field and on EPSC Plans, and identification of buffer areas likely to be encountered that day by the environmental inspector or construction supervisor.

Rare, Threatened, and Endangered ("RTE") Plant Species and State Significant Natural Communities

TRC and VHB have been in regular consultation with VT Agency of Natural Resources (ANR) and VT Fish and Wildlife Department (FWD) with regard to RTE species and significant natural communities that may be impacted by the Project. In April of 2014, TRC (in collaboration with VHB, HDR, and Arrowwood Environmental) submitted the *Rare, Threatened, and Endangered Species, Necessary Wildlife Habitat, and Natural Community Survey Program* (survey program) to these agencies. Following the survey protocol in that program, RTE, significant natural communities, and necessary wildlife habitat were surveyed from May to September of 2014.

No state-endangered or state-threatened species identified during field surveys will be impacted by the construction and long-term operation of this Project based on the current design. No federally-endangered or federally-threatened species were encountered during the surveys.

Potential roosting trees (habitat) for the state and federally endangered Indiana Bat were identified during RTE surveys and will be avoided by construction and operation of the Project.

The overland route is expected to traverse areas containing rare plant species. These areas will be avoided to the extent possible. Where avoidance of rare plants has not been feasible, a Rare Plant Protection Plan outlining the mitigation of impacts to these resources is being developed in consultation with the VT ANR pertaining primarily to construction and post-construction monitoring. Additional operation phase vegetation management practices are described as follows.

For the operation phase management of the Permanent Project Corridor, several limited areas hosting herbaceous rare plants may be impacted, although most are within the existing Clear Zones and will thus not require ongoing vegetation management by TDI-NE. However, should vegetation management by TDI-NE be necessary, to minimize impacts to these herbaceous plants, vegetation management activities in these localized areas shall be conducted to avoid individual RTE plants to the extent feasible, such as by limiting management activities (e.g., mowing, brush hogging, or selective clearing) to the plant dormancy period.

As noted in Section 2, herbicides will not be utilized except potentially for NNIS control and at the Ludlow Converter site, where RTE are absent. Soil disturbance will be minimized during operation phase vegetation management, through the use of low ground-pressure equipment or by conducting management during dry or frozen conditions.

Permanent monumentation of the population boundaries (i.e., marking boundaries of RTE populations with permanent signage or boundary indicators) might be suggested, but the location of the route within the railway and VTrans and town road ROWs makes this impractical. Therefore, operation phase vegetation management plans (i.e., maps) depicting the location of RTE populations and the Permanent Project Corridor will be developed and relied upon to avoid unnecessary impacts during operation-phase vegetation management.

TDI-NE will update and re-delineate previously identified RTE species within the Permanent Project Corridor that are not superseded by other ongoing management regimes every eight years to begin no later than 2021 and to occur for no more than two survey cycles (e.g., once in 2021 and once in 2029).

These operation phase vegetation management practices will not be applicable within the actively managed Clear Zones that are maintained by others (e.g., VTrans), unless TDI-NE is required to complete vegetation management in these areas as discussed in Section 3.0.

Limited tree removal along the edges of larger forested blocks along the Route 4 corridor will impact eight potentially significant uncommon (rank S3) and widespread (rank S4) forested natural communities. However the degree of impact will be very small, and none of these communities will be fragmented or significantly affected by the Project. Throughout construction and operation of the Project, TDI-NE will minimize cutting to the greatest extent practicable, and the communities will be clearly marked in the field prior to any clearing or construction and depicted in the EPSC Plans. The Permanent Project Corridor will avoid these communities in most instances, but where it overlaps these,

the area will be managed for shallow-rooted vegetation through mowing, brush hogging, or selective clearing, as described in Section 2.0. Approximately 0.79 acres of potential and likely significant natural communities will be traversed by the Permanent Project Corridor and subject to operation phase vegetation management. These areas are along Route 4 adjacent to the Clear Zone, and ongoing vegetation management will not result in undue adverse effects. Approximately 5.37 acres of potential and likely significant natural communities will be subject to temporary tree removal within temporary construction areas. Post-construction restoration of temporary construction areas in these communities will be completed in accordance with the EPSC Plan and will allow for regeneration of the forested communities.[4]

Necessary Wildlife Habitat

An assessment of biologically critical black bear habitat determined that Project impacts would be non-existent or very limited due to existing habitat fragmentation, traffic, and human activities along the Project route. Five areas along the overland route were identified as having suitable habitat characteristics for Deer Wintering Areas (DWA) that might attract white-tailed deer. However, there were no observations of these areas being used by deer as overwintering habitat. Approximately 0.29 acres of potential DWA will be cleared for the Permanent Project Corridor that will be subject to operation phase vegetation management, and approximately 0.32 acres of potential DWA will be cleared temporarily in the temporary construction area. This will be located within a single potential DWA stand adjacent to and along Route 103 near milepost 140.8. Potential DWAs occur in fragmented, mixed land use areas where human uses such as vehicular traffic and residential activities are commonplace, so noise and temporary vibrations from construction and ongoing vegetation management in the vicinity of DWAs are not expected to affect deer during winter months, should construction work or operation phase vegetation management be required during this time period.

Wetlands and Class II Wetland Buffers

Clearing in wetlands and their buffers along the overland route has been avoided to the extent possible. For areas in which avoidance has not been feasible, BMPs (as defined in the EPSC Plan) will be employed during construction to protect wetland resources. Wetland resources that cannot be avoided will be cleared during dry conditions, when the ground is frozen, or with the use of construction mats to minimize the disturbance to wetland biota. Wetland or wetland buffer areas that are cleared temporarily for construction (i.e., within the temporary construction area) will be restored in accordance with the EPSC Plan.

Wetland and buffer zone areas that require ongoing maintenance along the Permanent Project Corridor will be managed for shallow-rooted vegetation as described in Section 2.0. If conducted during dry or frozen conditions, normal mechanical means could be utilized (e.g., brush hog). If vegetation management needs to occur outside of dry or frozen ground conditions, hand cutting methods shall be used (i.e., no mechanized entry).

These operation phase vegetation management practices will not be applicable within the actively managed Clear Zones that are maintained by others (e.g., VTrans), unless TDI-NE is required to complete vegetation management in these areas as discussed in Section 3.0.

[4] Areas will receive additional protection through monitoring under the NNIS plan (below).

Streams and Riparian Buffers

The overland cable route avoids stream crossings to the extent feasible. Most of these streams have already had their channels altered and have been culverted to accommodate the construction and upkeep of roadways or railroad. The EPSC Plan will outline the standard BMPs for working in and near streams and designed riparian buffers, and these will be implemented for all stream crossings to ensure minimal impacts to banks and water quality.

In riparian buffers requiring open trench excavation, vegetation debris shall be cut sufficiently or removed so as not to interfere with animal crossings. Any cut stumps near the stream shall remain in the ground for soil stabilization unless they are located directly over the trench or will interfere with the integrity of the transmission line. The temporary construction area will be restored in accordance with the EPSC Plan. For the operation phase vegetation management, only those streams crossed with open-trench excavation (and where HDD installation is less than approximately 15 feet deep, subject to manufacturer confirmation) will require a 12-foot Permanent Project Corridor maintained free of deep-rooted vegetation.

Riparian buffers that require ongoing maintenance along the Permanent Project Corridor will be managed for shallow-rooted vegetation as described in Section 2.0.

These operation phase vegetation management practices will not be applicable within the actively managed Clear Zones that are maintained by others (e.g., VTrans), unless TDI-NE is required to complete vegetation management in these areas as discussed in Section 3.0.

Shorelines

Potential impacts to shorelines would be limited to areas where the Project transitions between the Lake Champlain route and the overland routes in Alburgh and Benson, VT, where the route crosses Lake Bomoseen, and where it crosses or parallels seven named rivers as follows: Hubbardton River, Castleton River, Clarendon River, Otter Creek, Cold River, Mill River, and Black River.

Impacts at these locations will be entirely avoided by utilizing HDD to install the cables. Temporary work spaces required to support the HDD equipment in the vicinity of (but not in) shorelines will be sited to employ previously-cleared and impacted sites, so no new tree clearing is anticipated on shorelines during construction or operation of the Project, except in instances where HDD installation is less than 15’ deep. In these limited areas, the Permanent Project Corridor will be managed for shallow-rooted vegetation as described in Section 2.0.

These operation phase vegetation management practices will not be applicable within the actively managed Clear Zones that are maintained by others (e.g., VTrans), unless TDI-NE is required to complete vegetation management in these areas as discussed in Section 3.0.

Conserved Lands/Organic Farms/Other Special Use Agricultural Lands

If applicable, TDI-NE will adhere to any applicable pre-existing management restrictions regarding operational management for conserved lands (e.g., areas under conservation easement or other conservation restrictions) and special agricultural areas, including organic farm operations, so long as such restrictions do not interfere with the integrity of the cable. Prior to clearing and construction, TDI-

NE will coordinate with applicable conservation organizations and landowners to verify the schedule, location, and type of activity to occur within conserved areas and special agricultural areas and will develop site-specific vegetation management protocols as necessary. At this time, TDI-NE is not aware of any such conserved lands or special agricultural areas as the cable will be constructed and operated within existing road and railroad ROWs and lands owned or leased by TDI-NE that are not conserved.

5.0 NNIS Management, Monitoring, and Control Plan

NNIS are designated noxious weeds (Class A and B) in the Vermont Agency of Agriculture, Food and Markets Quarantine #3 – Noxious Weeds, Amended Rule (2012). This NNIS Monitoring and Control Plan (NNIS Plan) was developed to reduce the unnecessary transport of invasive seeds and fragments into or out of the Project area and increase the opportunity for native vegetation to establish after soil disturbance. Due to the proximity of this project to roads, railroads, and perennial streams (dispersal vectors), the likelihood of preventing further invasive species dispersal is low. However, TDI-NE will implement targeted measures to minimize the spread of existing populations, and protect sensitive resources along the overland route, as described in the following sections.

NNIS Inventory

A field-based inventory of NNIS populations was completed for the Project route in August and September 2014. This provided a baseline estimate of the locations and densities of NNIS. A summary of the NNIS identified during this survey is in the *Non-Native Invasive Species Inventory Report* dated August 30, 2014, by Arrowwood Environmental, and NECPL Project Survey Memorandum dated October 22, 2014, by Gilman & Briggs Environmental (for the Railroad route and Ludlow converter site). GPS data was obtained as described in the aforementioned documents.

Training

TDI-NE will ensure that all contractors and onsite personnel receive training regarding the conditions set forth in this NNIS Plan. In addition, they will be informed of the locations and extent of the known NNIS species populations and the general identification principles of known NNIS species.

Equipment

All construction equipment will be cleaned such that it is free of observable soil and vegetation prior to entering the Project area, in order to minimize the spread of invasive species by reducing the transportation and introduction of seeds and plant material. If the equipment utilized on the Project site is suspected to have encountered pre-existing NNIS populations within the Project area, the equipment will be cleaned such that it is free of excess soil and vegetation prior to leaving the Project area. Additionally, construction mats will be cleaned prior to relocating them from an area with pre-existing NNIS populations.

Stabilization

Topsoil and seed mix for temporary or permanent stabilization will be free of noxious weeds (per the 2006, amended 2008, *Vermont Standards and Specifications for Erosion Prevention and Sediment Control*).

Soil Transport

Onsite topsoil salvaged from an area where pre-existing NNIS populations have been documented shall be re-utilized in the same locations and will not be transported to other areas of the site to the extent practicable. Otherwise, the topsoil should be buried under a 24-inch or greater layer of weed-free soil or select backfill material to inhibit the potential NNIS seed and root stock from germination or reestablishment.

Post-construction Monitoring and Control

Efforts shall be made to minimize the spread of invasive plants as a result of construction activities into areas with documented natural resources of special consideration. Where these areas will have unavoidable soil disturbances, the likelihood of invasive colonization increases. TDI-NE shall conduct annual post-construction monitoring and control of NNIS species that colonize the following areas for a period of no more than three years following construction of the Project. For the overland Project route, the following areas where earth disturbance takes place as a consequence of construction will be subject to post-construction NNIS control and monitoring, subject to areas where TDI-NE will retain permanent land control:

- Class II Wetlands and Buffers
- Riparian Buffers of Perennial Streams
- Significant Natural Communities
- RTE Species Populations and 25’ buffers
- Shorelines and 100’ buffers
- Conserved Lands (as applicable per specific requirement)

NNIS monitoring and control in these areas shall target species and populations which germinate outside the existing documented populations. TDI-NE will not assume responsibility for post-construction monitoring, control or management of areas along the Project route that have pre-existing, documented invasive infestations or for areas that overlap with the VTrans or Vermont Rail System Clear Zone (it may be assumed that NNIS management will be precluded by routine mowing by VTrans and Vermont Rail System in these areas).

Monitoring and control shall take place annually during the growing season for a period of three years beginning the first full growing season following construction completion. Should annual monitoring determine that no new NNIS populations are present, or there is no risk posed to economic or resource value impacts from NNIS occurrences within the monitoring areas during the first two consecutive growing seasons of the three year period, further monitoring and control obligations will stop. As the NNIS monitoring and control areas are located in the vicinity of active road and railway ROWs, NNIS

establishment that occurs following a two year monitoring period that results in no observation of new NNIS cannot be reasonably attributed to the Project.

Monitoring and control activities will not continue beyond Year 3. The possibility of release from NNIS monitoring and control will be evaluated upon review of each annual report.

If feasible, NNIS control will be completed with manual control methods, to include hand pulling and uprooting with tools. NNIS will be disposed by burning, burial, exposure, or in a manner of good practice to avoid spreading of seeds, soil and plant material.[5] If manual control methods are not feasible, are ineffective, or are proving to be ecologically detrimental, TDI-NE may implement applications of herbicide with a targeted approach in accordance with state and federal regulation and landowner requirements. The chemical selected for treatment will be suitable for the surrounding environment.

Should it be determined that a particular area has been overspread by population(s) of NNIS that are beyond the extent or control of Project activities, this information will be reported in the annual report and no control activities will be undertaken. Useful information for determining the proper BMP for NNIS control is located at website: http://www.vtinvasives.org/plants/prevention-and-management/forestry-best-management-practices, which should be consulted prior to determining proper control BMPs.

6.0 Reporting

For the vegetation management activities described in the Vegetative Management Plan, no reporting by TDI-NE shall be prepared. For the activities conducted as part of the NNIS Plan, TDI-NE will submit reports annually (by January 31st) to the VT ANR Fish and Wildlife Department, Natural Heritage Inventory program. Reports should include monitoring results and recommendations and a summary of NNIS controls that were applied. The reporting will be concise and contain a brief presentation of: 1) background, 2) monitoring methods, 3) results (to include both monitoring and control action summary), and 4) recommendations summary (to include both future monitoring and threats/controls). Supporting documentation to be prepared and included with the reporting will include a summary table of new NNIS occurrences, NNIS occurrence maps, and photograph documentation.

7.0 Administration

The implementation of this Vegetation Management Plan will be conducted by TDI-NE or its contractor. Any record keeping required as proof of special permit conditions by regulatory agencies will be the responsibility of TDI-NE or its contractor. Additionally, TDI-NE will be responsible for contractor and public safety training and for the notification of VTrans and adjacent landowners (where warranted) prior to management activities. The ANR will be responsible for providing regulatory review of the NNIS impact monitoring requirements.

[5] Species-specific methods of disposal for NNIS may be conducted in accordance with the University of New Hampshire Cooperative Extension "Methods for Disposing Non-native Invasive Species" (Ed. Karen Bennett, 2010)

8.0 Summary

On behalf of TDI-NE, TRC and VHB have prepared this Vegetation Management Plan in order to begin to define vegetation management requirements, goals/objectives, and NNIS monitoring/control protocols to be implemented during the construction and long-term operation of the terrestrial portion of the Project, including:

- Required vegetation management in the Permanent Project Corridor and temporary construction workspaces
- The natural resources which intersect the Project corridor
- The programs which regulate impacts to such resources
- NNIS monitoring/controls and protocols