

CORRECTIVE MEASURES WORK PLAN



Elderlee, Inc.

Prepared for:

**Elderlee, Inc.
729 Cross Road
Oaks Corners, New York**

Site Location:

**729 Cross Road
Oaks Corners, New York**

September 2017

Prepared by:



NEU-VELLE^{LLC}

1667 Lake Avenue
Building 59, Suite 101
Rochester, New York 14615
585-313-9683

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Section 1

NEU-VELLE, LLC.

Introduction

1.0 Introduction

This Corrective Measures (CM) Work Plan (WP) has been prepared by NEU-VELLE, LLC. (NEU-VELLE) on behalf of Elderlee, Inc. The objective of this work plan is to:

- Minimize migration of groundwater from the site due to the on-site dewatering pump station;
- Minimize the impact from off-site stormwater sheet flow onto the site and institute Best Management Practices (BMP's) to insure facility compliance with the NYSDEC SPDES Multi-Sector General Permitting for Stormwater Discharges Associated with Industrial Activity (Site Permit No. NYR00B870); and
- Reduce the inflow and infiltration (I&I) of groundwater into the existing stormwater system.

This document is intended to be taken in the field and will be read, understood, and followed by all personnel working on the project. This WP, and the activities proposed herein, have been developed in accordance with the guidance presented in the NYSDEC MSGP corrective action procedures detailed in Part IV.B.1.c.(6).

Section 2

NEU-VELLE, LLC.

Site Location and Description

2.0 Site Description

The Elderlee Facility is located at 729 Cross Road in the hamlet of Oaks Corners, Ontario County, New York, in a generally rural area. Several residences are located to the north of the plant on the north side of Cross Road. Several residences and municipal and commercial buildings are located to the west of the property. Property to the east consists of a former gravel pit, while lands to the south consist of a pond and farm fields.

2.1 Site Location and Use

The subject site is located at 729 Cross Road, Oaks Corners, New York. Elderlee's steel processing area is located on 55 acres and includes seven buildings: galvanizing plant, steel plants No. 1 and No. 2, sign manufacturing plant, steel storage shed, Quonset Hut, and main office. A large portion of the steel processing area is dedicated to the storage and staging of galvanized products prior to shipping.

Latitude (North): 42°55'51.72"N

Longitude (West): 77°0'22.04"W

2.2 Site History

A portion of this Site is listed by the NYSDEC as an inactive hazardous waste disposal site under ID# 835014. The site has been utilized to manufacture road signs, galvanized highway bridge rail, and guide rails since approximately 1968.

Area A is a location of two (2) former settling lagoons that are located north of the galvanizing plant and used for neutralizing waste sulfuric acid until approximately 1984. Elevated levels of zinc and lead were detected in soil samples collect from the former lagoon area. A Remedial Investigation/Feasibility Study (RI/FS) was conducted at the Site in the fall of 1995. The RI/FS was finalized in 1998 and a Record of Decision (ROD) was signed in March 1998. The ROD specified asphalt capping of the former lagoon area combined with continued semi-annual ground water monitoring of selected wells located within, and downgradient, from Area A. The sampling frequency was subsequently reduced to annual sampling.

2.3 Physical Setting

As previously stated, the current land use of the area immediately surrounding the site is urban and surrounding uses are primarily residential in nature with some commercial and industrial properties. The features surrounding the subject site is described below. A Site Location Map is presented as Figure 1. A detailed plan of the Site is presented as Figure 2.

North	Cross Road and buildings to the north residential properties
South	Farm fields to the south.
East	Former Gravel Quarry to the east.
West	The properties are residential properties to the west.

2.3.1 Site Topography and Hydrology

The subject site is relatively flat and slightly slopes to the Southeast with a site elevation at 460 feet above mean sea level. Groundwater flow direction in the area is anticipated to flow Northeast. Surface water in the area percolates into surrounding soil, evaporates, or flows via sheet flow towards the on-site pond. The nearest significant body of water is an unnamed creek which is located approximately 0.4 miles northeast of the subject property which ultimately discharges into Flint Creek. National wetlands and 100-year FEMA flood zone is identified to be outside of the subject site in Zone C.

Section 3

NEU-VELLE, LLC.

Scope of Work

3.0 Scope of Work

The corrective measures approach for the site will involve three (3) main areas: the closure of the existing dewatering pump station, the design and installation of a drainage swale to reduce sheet flow onto the site, and reduce inflow and infiltration (I&I) of groundwater into the existing stormwater drainage system. The corrective measures activities will be overseen and supervised by a Qualified Environmental Professional or equivalent (i.e., professional engineer). Based on the activities proposed for this project, no permits (i.e., construction, etc.) will be required to initiate or complete the work.

3.1 Health and Safety

Health and safety issues associated with the project will be addressed in a Site-specific Health and Safety Plan (HASP) developed for the project. Subcontractors working on the site will be responsible for the preparation and implementation of their own Site-specific HASP.

3.1.1 Community Air Monitoring

During invasive activities, air monitoring will be performed to evaluate the exposure of project personnel to chemical and physical hazards, verify the effectiveness of engineering controls, evaluate the effectiveness of Site control measures, and to determine the proper level of PPE. The effectiveness of dust controls will be evaluated through the use of real-time monitoring utilizing a dust meter (i.e., RAM-1 Real Time Aerosol Monitor or equivalent). The use of water spray will be optimized so that fugitive dusts are sufficiently controlled, while preventing generation of surface-water runoff. The ambient air monitoring program will consist of one monitoring station located immediately downwind of subgrade excavation, grading, and material handling activities and one monitoring location located upwind of invasive activities.

Normal operating conditions for fugitive dust control are dictated by ambient air monitoring results. In accordance with the NYSDEC TAGM No. 4031, "Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites (October 27, 1989), the ambient air monitoring action level for PM-10 is 150 ug/m^3 , integrated over a fifteen minute period. If the 150 ug/m^3 action level is exceeded, then an upwind background measurement will be taken. If the downwind levels are less than 100 ug/m^3 , then no further action is required.

However, if the number is higher than 100 ug/m^3 , additional dust control measures must be taken or workers must utilize air purifying respirators.

3.1.2 Fugitive Dust Control

The components of fugitive dust control include the following:

- Identification of fugitive dust sources; and
- Baseline dust suppression measures.

The major potential source of dust during the project is during the installation of the new drainage swale which will include excavation, material staging, handling and transport, and material placement and grading.

Dust control will be implemented in areas of project activities that have intrusive work and material handling activities. Accordingly, dust control will be required on the project site, on major haul roads, access roads, and material staging areas. Dust suppression methods will be employed when visible observations show dust remains suspended for 5 minutes in the air. Dust control will be achieved primarily through application of water or an approved dust palliative. Water for dust abatement will not be appropriated from surface waters. Application rates for the dust palliative will follow the manufacturer's recommendations. All dust palliatives used will be biodegradable. Based on this guidance the following techniques may be employed to mitigate the generation and migration of fugitive dust during the project:

- Applying water on surfaces prior to excavation activities;
- applying water on the right-of-ways, stockpiles, trenches, and other surfaces which may give rise to airborne dust;
- spraying water on temporary roads at the end of the work shift to form a thin crust;
- misting equipment and excavation faces;
- spraying water on buckets during excavation and dumping;
- watering of any visibly dry disturbed soil surface areas of operation;
- covering, when in motion, open-bodied vehicles transporting materials likely to create air pollution;
- restricting vehicle traffic; and

- reducing the size of any open excavation.

If the dust suppression techniques are ineffective, the specific task generating the fugitive dust may be suspended until appropriate corrective measures are identified and implemented to remedy the situation.

3.2 Inflow and Infiltration Reduction

In an effort to identify groundwater migration pathways at the site, NEU-VELLE conducted a visual inspection of the existing stormwater system at the site. The inspection was conducted during dry weather conditions to identify any inflow or infiltration issues at the site which could contribute to groundwater migration and result in elevated zinc levels within stormwater samples. Based on the inspection, significant flow was observed (5 to 10 gallons per minute) in one segment of the stormwater sewer system. A video inspection of the storm sewer was then conducted within this segment of the system and confirmed that two areas of damage (separated joints) was allowing groundwater to enter the storm sewer system. In addition, the stormwater inlet was allowing groundwater to enter the system at its invert. Therefore, as a corrective measure and to minimize the migration of groundwater from the site, this segment of the stormwater system will be repaired. The repair will include either replacement of the affected piping or lining of the line segment (cast-in-place resin lining system) and repair of the stormwater inlet.

3.3 Drainage Swale

To reduce the amount of sheet flow stormwater from entering the site from the east and causing on-site flooding issues during significant precipitation events, a drainage swale will be installed along the eastern side of the site and convey stormwater to the existing stormwater retention pond located southeast of the facility. The drainage swale will be approximately 20 feet in width, with a 2 on 1 side slope, and in a “V” design configuration. The swale will be approximately 550 foot in length and will be unlined with natural vegetative sides and bottom (i.e., grass) and will be seeded following construction. The swale will be designed (i.e. soil bermed) along the westside so that no stormwater associated with industrial activities at the site will be able to enter the system. Due to the amount of disturbance anticipated (i.e., less than 1

acre), a NYSDEC stormwater permit for construction activities will not be required. However, erosion control measures will be established (i.e., silt fencing, hay bales, etc.) during construction of the drainage swale and maintained until vegetation within the swale is established. It is assumed that no material will be imported to or exported from the site to complete the construction of the drainage swale. Appendix A includes a map which presents the proposed location of the stormwater swale. Specifications for the stormwater swale is are presented in Appendix B.

3.4 Closure of Dewatering Pump Station

To minimize the potential for migration of groundwater off the site, the existing dewatering pump station will be closed. The existing dewatering pump station consists of a concrete pit and submersible pumping system (see drawing in Appendix A). To complete the closure, the existing submersible pump will be removed, all piping exiting the pit will be capped/plugged, and the pit will be filled with clean stone (i.e., NYSDOT #2 stone) to grade. Once the submersible pump is removed, piping capped/plugged, and the sump filled to grade, migration of groundwater into the existing stormwater system cannot occur due to there being no inlet or outlet to the sump.

3.5 Groundwater Flow Direction

Following completion of the activities presented above, groundwater elevation level will be collected and recorded to verify groundwater flow direction on the site with Area A.

3.6 Proposed Schedule

Following completion presents a proposed schedule to compete the project.

- Mobilization – 10/2/17 to 10/4/17
- Storm sewer lining/repair – 10/9/17 to 10/13/17
- Drainage Swale Installation – 10/9/17 to 10/20/17
- Closure of dewatering pump station – 10/23/17 to 10/27/17

- Groundwater flow direction readings – Initial (10/30/17) then quarterly for 1 year
- Final report submission – 11/30/17

Section 4

NEU-VELLE, LLC

Summary Report

4.0 Summary Report

4.1 Corrective Measures Report

Information obtained as part of implementation of the corrective measures presented in this work plan will be included in a summary report to be prepared at the completion of the project. The summary report will include the following information and will be signed and stamped by a Professional Engineer licensed to practice in New York State: In addition, upon completion of the work, the existing site O&M plan will be updated to a Site Management Plan (SMP) in accordance with NYSDEC requirements.

- Summary of corrective measures activities completed
- Appropriate field forms and documents
- Photographs
- Groundwater flow direction
- As-built figures of corrective measures

Appendix A

NEU-VELLE, LLC.

Figures



NO.	DATE	APPR.	REVISION	NO.	DATE	APPR.	REVISION

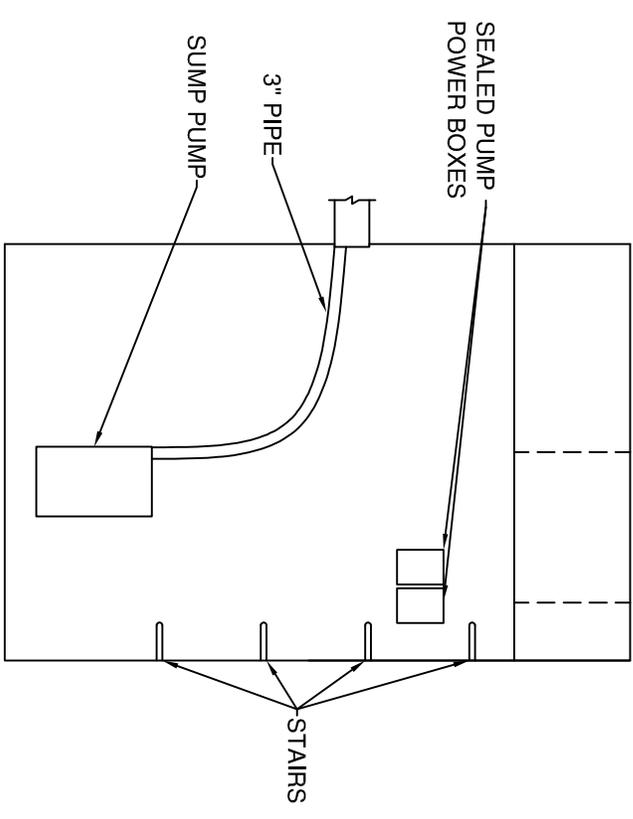
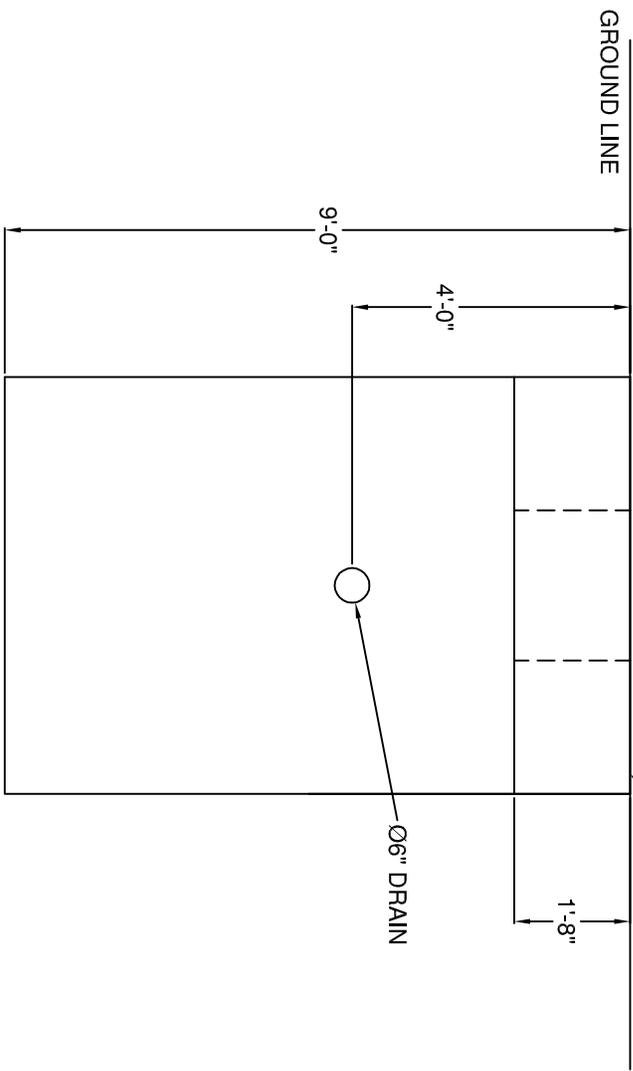
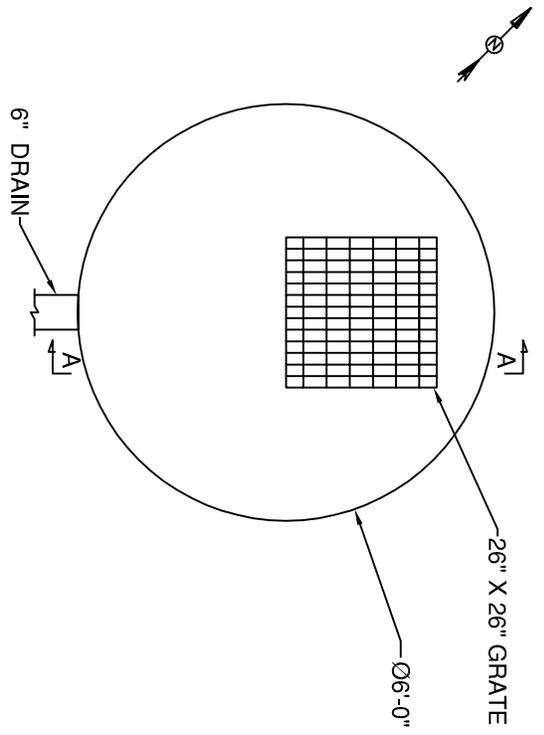
ELDERLEE, INC
 729 CROSS ROAD, OAKS CORNERS, NY

 1667 LAKE AVENUE
 ROCHESTER, NEW YORK 14615

CHECKED	DATE	DESIGN ENGINEER	DATE
JAM	8/2017	AL	8/2017
PROJECT ENGINEER	AL	8/2017	
PROJECT MANAGER	JAM	8/2017	
APPROVED	AL	8/2017	
APPROVED	AL	8/2017	

PROPOSED CORRECTIVE ACTION MAP
 SCALE: 1" = 100'
 DATE: AUGUST 2017
 FILE NAME:

DRAWING NO.	1
SHEET	1 OF 1



CATCH BASIN PUMP STATION DETAILS

Appendix B

NEU-VELLE, LLC.

Drainage Swale Specification

STANDARD AND SPECIFICATIONS FOR GRASSED WATERWAY

Definition

A natural or man-made channel of parabolic or trapezoidal cross-section that is below adjacent ground level and is stabilized by suitable vegetation. The flow channel is normally wide and shallow and conveys the runoff down the slope.

Purpose

The purpose of a grassed waterway is to convey runoff without causing damage by erosion.

Conditions Where Practice Applies

Grass waterways are used where added vegetative protection is needed to control erosion resulting from concentrated runoff.

Design Criteria

Capacity

The minimum capacity shall be that required to confine the peak rate of runoff expected from a 10 year frequency rainfall event or a higher frequency corresponding to the hazard involved. This requirement for confinement may be waived on slopes of less than one (1) percent where out-of-bank flow will not cause erosion or property damage.

Peak rates of runoff values used in determining the capacity requirements shall be as outlined in Chapter 2, Estimating Runoff, *Engineering Field Handbook*, Section 10 of this manual or by TR-55, *Urban Hydrology for Small Watersheds*.

Where there is base flow, it shall be handled by a stone center, subsurface drain, or other suitable means since sustained wetness usually prevents adequate vegetative cover. The cross-sectional area of the stone center or subsurface drain size to be provided shall be determined by using a flow rate of 0.1 cfs/acre or by actual measurement of the maximum base flow.

Velocity

Maximum permissible velocities (1) of flow shall not exceed the values shown:

Slope	Channel Lining	Permissible Velocity ¹ (ft/sec)
0-5%	Reed canarygrass	5
	Tall fescue	
	Kentucky bluegrass	
	Grass-legume mixture	4
	Red fescue	2.5
	Redtop	
	Sericea lespedeza	
	Annual lespedeza	
5-10%	Small grains	
	Reed canarygrass	4
	Tall fescue	
	Kentucky bluegrass	
	Grass-legume mixture	3

¹ For highly erodible soils, permissible velocities should be decreased 25%. An erodibility factor (K) greater than 0.35 would indicate a highly erodible soil. Erodibility factors (K factors) for New York soils are listed on the Soils 5 forms available in each NRCS office.

Cross Section

The design water surface elevation of a grassed waterway receiving water from diversions or other tributary channels shall be equal to or less than the design water surface elevation in the diversion or other tributary channels.

The top width of parabolic waterways shall not exceed 30 feet and the bottom width of trapezoidal waterways shall not exceed 15 feet unless multiple or divided waterways, stone center, or other means are provided to control meandering of low flows.

Structural Measures

In cases where grade or erosion problems exist, special control measures may be needed such as stone centers, drop structures, or grade stabilization measures. Where needed, these measures will be supported by adequate design computations. For typical cross sections of waterways with riprap sections or stone centers, refer to Figure 5B.8 on page 5B.13.

The design procedures for parabolic and trapezoidal channels are available in the SCS Engineering Field Handbook; Figure 5B.9 on page 5B.14 also provides a design chart for parabolic waterway.

Outlets

Each waterway shall have a stable outlet. The outlet may be another waterway, a stabilized open channel, grade stabilization structure, etc. In all cases, the outlet must discharge in such a manner as not to cause erosion. Outlets shall be constructed and stabilized prior to the operation of the waterway.

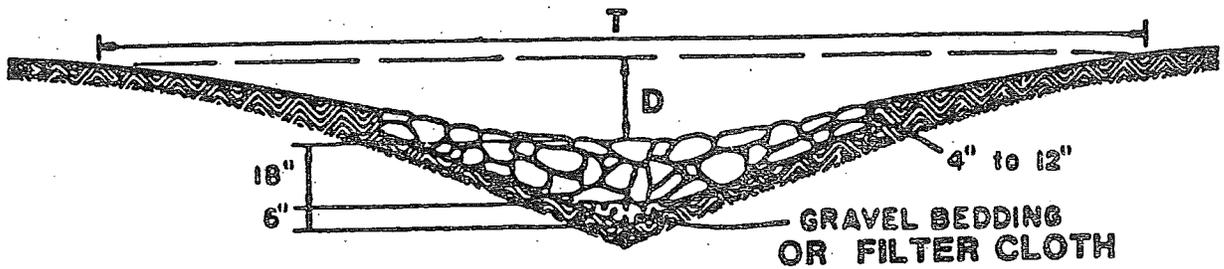
Stabilization

Waterways shall be stabilized in accordance with the appropriate vegetative stabilization standard and specifications.

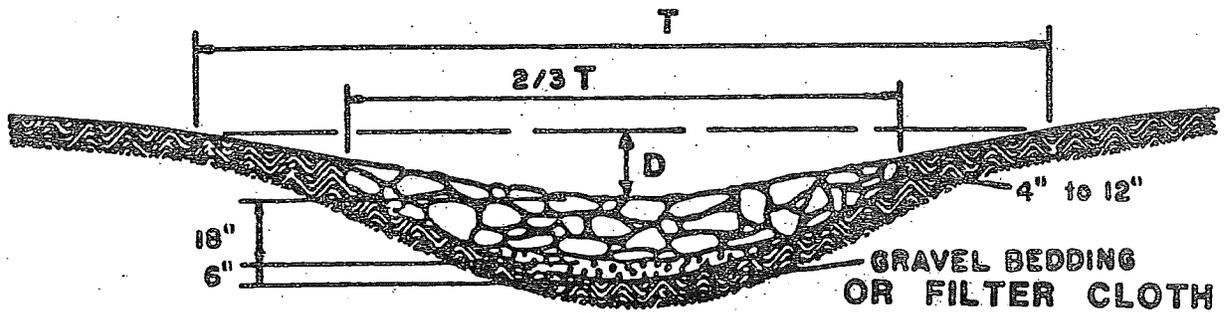
Construction Specifications

See Figure 5B.10 on page 5B.15 for details

Figure 5B.8
Typical Waterway Cross Sections



Waterway with stone center drain. "V" section shaped by motor grader.



Waterway with stone center drain. Rounded section shaped by bulldozer.

Figure 5B.9
Waterway-Parabolic Design Chart

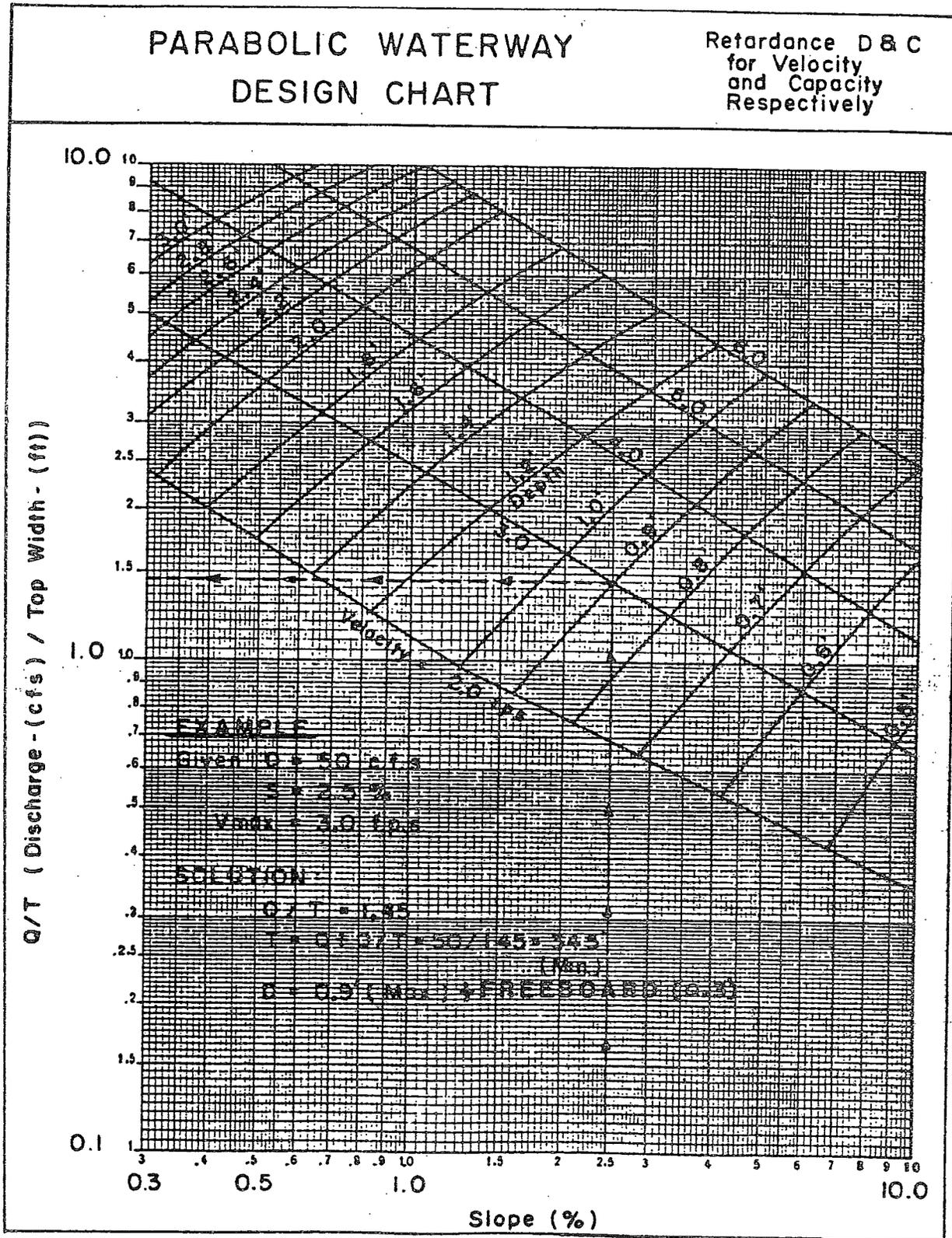
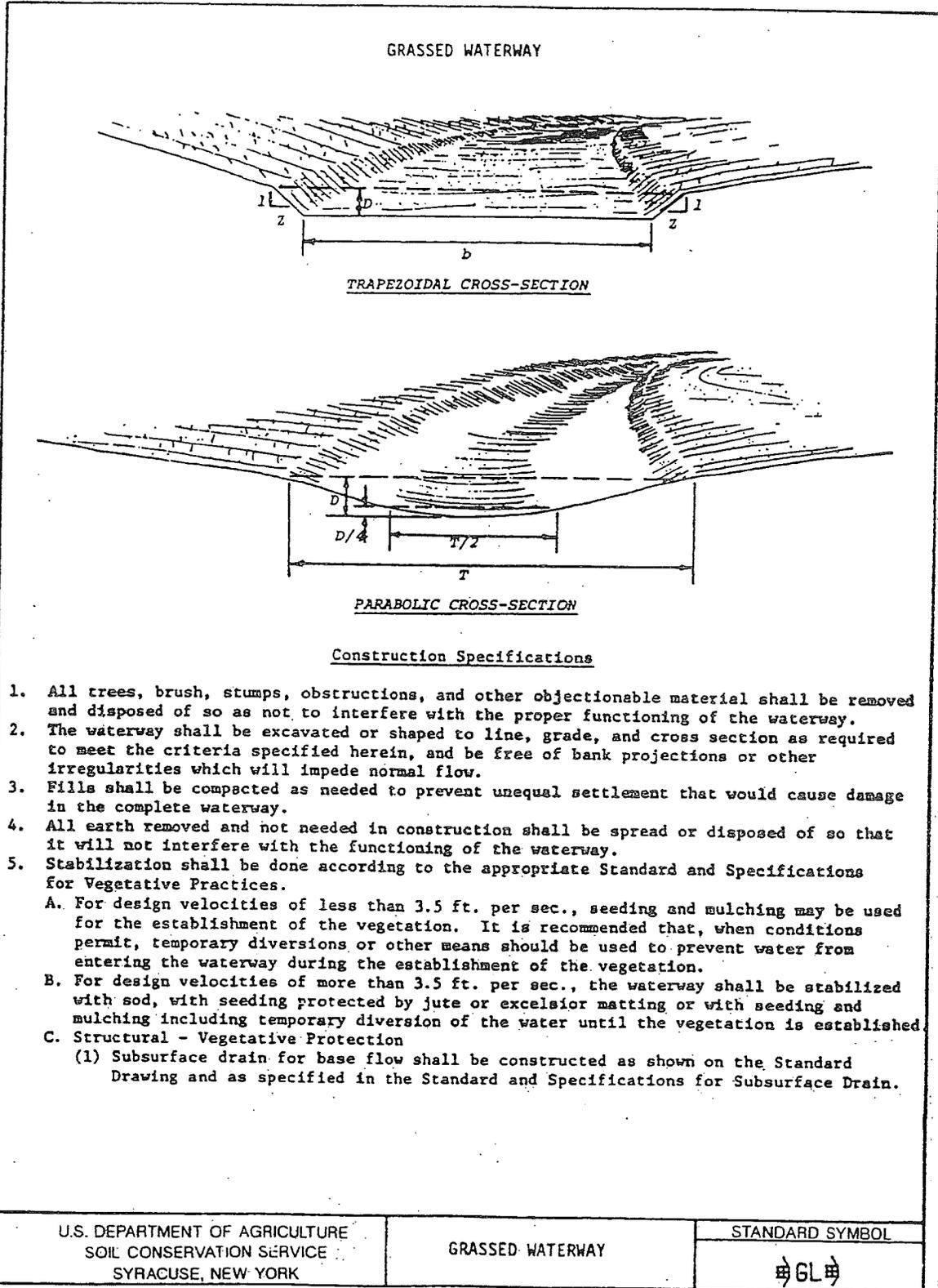


Figure 5B.10
Grassed Waterway Construction Details



Appendix C

NEU-VELLE, LLC.

Change of Use Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



**60-Day Advance Notification of Site Change of Use, Transfer of
Certificate of Completion, and/or Ownership**
Required by 6NYCRR Part 375-1.11(d) and 375-1.9(f)

To be submitted at least 60 days prior to change of use to:

Chief, Site Control Section
New York State Department of Environmental Conservation
Division of Environmental Remediation, 625 Broadway
Albany NY 12233-7020

I. Site Name: Elderlee, Inc. **DEC Site ID No.** 835014

II. Contact Information of Person Submitting Notification:

Name: Jim Morlang
Address1: 729 Cross Road, Oaks Corners, New York
Address2: _____
Phone: (315) 828-7235 E-mail: jmorlang@elderlee.com

III. Type of Change and Date: Indicate the Type of Change(s) (check all that apply):

- Change in Ownership or Change in Remedial Party(ies)
 Transfer of Certificate of Completion (CoC)
 Other (e.g., any physical alteration or other change of use)

Proposed Date of Change (mm/dd/yyyy): Aug 1, 2017

IV. Description: Describe proposed change(s) indicated above and attach maps, drawings, and/or parcel information.

Installation of stormwater drainage swale, repair of stormwater system, closure of dewatering station.
Corrective Measures Work Plan is attached which presents detailed information of proposed changes.

If "Other," the description must explain and advise the Department how such change may or may not affect the site's proposed, ongoing, or completed remedial program (attach additional sheets if needed).

V. **Certification Statement:** Where the change of use results in a change in ownership or in responsibility for the proposed, ongoing, or completed remedial program for the site, the following certification must be completed (by owner or designated representative; see §375-1.11(d)(3)(i)):

I hereby certify that the prospective purchaser and/or remedial party has been provided a copy of any order, agreement, Site Management Plan, or State Assistance Contract regarding the Site's remedial program as well as a copy of all approved remedial work plans and reports.

Name: James H. Morlang (Signature) 06-21-12 (Date)

James H. Morlang
(Print Name)

Address1: 729 Cross Road, Oaks Corners, NY 14518

Address2: _____

Phone: 315-789-6670 E-mail: jmorlang@elderlee.com

VI. **Contact Information for New Owner, Remedial Party, or CoC Holder:** If the site will be sold or there will be a new remedial party, identify the prospective owner(s) or party(ies) along with contact information. If the site is subject to an Environmental Easement, Deed Restriction, or Site Management Plan requiring periodic certification of institutional controls/engineering controls (IC/ECs), indicate who will be the certifying party (attach additional sheets if needed).

Prospective Owner Prospective Remedial Party Prospective Owner Representative

Name: NOT APPLICABLE

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

Certifying Party Name: NOT APPLICABLE

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

VII. Agreement to Notify DEC after Transfer: If Section VI applies, and all or part of the site will be sold, a letter to notify the DEC of the completion of the transfer must be provided. If the current owner is also the holder of the CoC for the site, the CoC should be transferred to the new owner using DEC's form found at <http://www.dec.ny.gov/chemical/54736.html>. This form has its own filing requirements (see 6NYCRR Part 375-1.9(f)).

Signing below indicates that these notices will be provided to the DEC within the specified time frames. If the sale of the site also includes the transfer of a CoC, the DEC agrees to accept the notice given in VII.3 below in satisfaction of the notice required by VII.1 below (which normally must be submitted within 15 days of the sale of the site).

Within 30 days of the sale of the site, I agree to submit to the DEC:

1. the name and contact information for the new owner(s) (see §375-1.11(d)(3)(ii));
2. the name and contact information for any owner representative; and
3. a notice of transfer using the DEC's form found at <http://www.dec.ny.gov/chemical/54736.html> (see §375-1.9(f)).

Name: _____
(Signature)

(Date)

NOT APPLICABLE

(Print Name)

Address1: _____

Address2: _____

Phone: _____ E-mail: _____

Appendix D

NEU-VELLE, LLC.

Health & Safety Plan

Health & Safety Plan (HASP) for Corrective Measures Work Plan

Prepared for:



Elderlee, Inc.

**Elderlee, Inc.
729 Cross Road
Oaks Corners, New York**

September 2017

Prepared by:



NEU-VELLE_{LLC}

1667 Lake Avenue
Building 59, Suite 101
Rochester, New York 14615
585-313-9683

STATEMENT OF COMMITMENT AND PLAN APPROVAL

**Elderlee, Inc.
729 Cross Road
Oaks Corner, New York**

The personal health and safety of all project personnel and contractors of Elderlee, Inc. is of primary importance. The control of occupational injuries and illnesses is so important that it is given precedence over operating productivity whenever necessary. To the greatest degree possible, project management will provide all mechanical and physical facilities required for personal safety and health in keeping with the highest standards.

Elderlee, Inc. and its project contractor will implement a safety and health plan for this project conforming to government regulations and the best proven practices. To be successful, such a plan must embody the proper attitudes toward injury and illness control on the part of both management and project personnel. It also requires cooperation in all safety and health matters, not only between management and employee, but also between each employee and his fellow workers. Only through such a cooperative effort can a safety record in the best interest of all be established and preserved.

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APPENDIX A - SITE SAFETY REVIEW ACKNOWLEDGMENT

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Health and Safety Plan (HASP) is to establish minimum standards, practices, and procedures related to personnel protection and safety for the corrective measure project at the Elderlee facility located at 729 Corss Road in Oaks Corners, New York. This plan includes:

- Responsibilities for Elderlee, Inc. onsite personnel;
- Serves as a minimum health and safety standard for Elderlee, Inc. and its contractors;
- Defines the potential hazards and associated risks that may exist at the site;
- Describes action levels for the use and upgrading of personal protective equipment (PPE);
- Identifies work practices and use of work zones during the conduct of potential hazardous activities at the site.

The provisions of this plan are mandatory for all onsite personnel performing related project operations, monitoring, and maintenance. Visitors to the site will check with the Safety Officer (SO) to learn which sections of this HASP will affect them.

All on-site personnel who engage in project activities must be familiar with this plan and comply with its requirements. All visitors must be accompanied by authorized personnel while onsite. The SO will ensure that all visitors have been briefed on site safety and security, and have been provided with temporary identification.

1.2 Project Description

The project site is located at the Elderlee, Inc. facility which is located at 729 Corss Road in Oaks Corners, New York (See Figure in Work Plan). The project objective includes the following scope of work:

- Minimize migration of groundwater from the site due to the on-site dewatering pump station;
- Minimize the impact from off-site stormwater sheet flow onto the site and institute Best Management Practices (BMP's) to insure facility compliance with the NYSDEC SPDES Multi-Sector General Permitting for Stormwater Discharges Associated with Industrial Activity (Site Permit No. NYR00B870); and
- Reduce the inflow and infiltration (I&I) of groundwater into the existing stormwater system.

2.0 SCOPE OF WORK

The general summary of work to be performed for this project will include but not be limited to the following:

- Site control;
- Mobilization;
- Temporary soil erosion and stormwater controls;
- Storm sewer repair;
- Excavation of drainage swale;
- Material staging;
- Dewatering pump station closure
- Decontamination procedures;
- Field documentation; and
- Worker Contamination Prevention.

Section 4.0 of this document will identify the hazards of the site based on the above scope.

3.0 HEALTH & SAFETY ORGANIZATION

RESPONSIBILITIES

Elderlee, Inc. and its contractor(s) are responsible for ensuring this HASP is adhered to during all project activities. NEU-VELLE LLC. (NEU-VELLE) on site representatives will perform the role of Site Health and Safety Coordinator (HSC) and site Safety Officer (SO) as well as project oversight.

3.1 Health and Safety Coordinator (HSC):

- a. Will be provided by NEU-VELLE.
- b. Responsibility for the overall development and implementation of the HASP.
- c. Responsibility for the initial training of on-project personnel with respect to the contents of the HASP.
- d. Availability during normal business hours for consultation by the Safety Office, and
- e. Availability to assist the Safety Officer in follow-up training and if changes in site conditions occur,
- f. Primarily responsible for conducting air monitoring, maintaining constant contact with both the work zone entrants and SO, and overall safety
- g. Responsibility for assuring all site personnel will be trained in hazardous waste operations and emergency response as provided by OSHA 1926.65 and 1910.120.

3.2 Safety Officer (SO):

- a. Will be provided by NEU-VELLE,
- b. Implement, enforce, and monitor the HASP on a day-to-day basis,
- c. Hold pre project safety meeting, daily update meetings in regard to site health and safety,
- d. Responsibility for alerting other on-site entities such as Elderlee, Inc. operators prior to starting any particular hazardous work,
- e. Responsibility for informing project personnel of the New York State Labor Law Section 876 (Right-to-Know Law)
- f. If necessary, the establishment and maintenance of separation of Exclusion Zone (Dirty) from the Support Zone (Clean) areas as described hereafter,
- g. Assure all site personnel have training in regard to this safety plan and other safety requirements to be observed during the project, including:
 1. Potential hazards
 2. Personal hygiene principles
 3. Personal protective equipment (PPE)
 4. Respiratory protection equipment usage and fit testing
 5. Emergency procedures dealing with fire and medical situations, and

3.3 Project Personnel

- a. Prior to the start of work on this project, all personnel performing project activities (project personnel) will be properly trained in all hazards described herein.
- b. All project personnel are required to correct and/or report any unsafe job conditions and/or any unsafe act to their foreman. Suggestions for improving job safety are welcome. All suggestions and recommendations will be given careful consideration by project management. Superintendents and/or general foremen will cooperate fully in putting into effect all practical suggestions that will reduce job hazards.
- c. Each employee must comply with the safety requirements set forth in this plan, along with the safe practices and methods inherent to the craft. Safety will be an integral part of each job and each employee will be responsible for the safety phase of his work just as much as he is for any other phase. Project personnel should exercise good judgment in carrying out the safety plan. Appropriate disciplinary action will be taken for violations.
- d. Each employee will ensure that his/her personal protective equipment is in working order. If this equipment is defective in any manner, the employee must inform his/her supervisor to obtain new personal protective equipment.
- e. Project personnel will report any injuries to their immediate supervisor without delay.

4.0 SITE HAZARD ASSESSMENT

4.1 Inactive Hazardous Waste Disposal Site

A portion of this site is listed by the New York State Department of Environmental Conservation (NYSDEC) as an inactive hazardous waste disposal site under ID# 835014. The site has been utilized to manufacture road signs, galvanized highway bridge rail, and guide rails since approximately 1968.

Area A (see figure in Work Plan) is a location of two (2) former settling lagoons that are located north of the galvanizing plant and used for neutralizing waste sulfuric acid until approximately 1984. Elevated levels of zinc and lead were detected in soil samples collect from the former lagoon area. A Remedial Investigation/Feasibility Study (RI/FS) was conducted at the Site in the fall of 1995. The RI/FS was finalized in 1998 and a Record of Decision (ROD) was signed in March 1998. The ROD specified asphalt capping of the former lagoon area combined with continued semi-annual ground water monitoring of selected wells located within, and downgradient, from Area A. The sampling frequency was subsequently reduced to annual sampling. No excavation or disturbance of this area will be conduct as part of this project.

4.2 Worker Hazards

Hazards associated with the proposed work require the use of personal protective equipment. These hazards range from working around heavy equipment to exctivities. Project management must ensure that project personnel are provided with, and use, protective clothing and equipment. Goggles, face shields, hearing protection devices, gloves and appropriate respirators for dust must be provided as necessary.

The main hazards to health this project are:

- a. Working in or around heavy equipment.
- b. Exposure to lead. Project personnel need to wear the appropriate personal protective equipment (PPE) at all times during project activities.

4.3 Heavy Equipment Operation

- a. Owner/Operator will inspect equipment daily and keep a weekly documented log. All discrepancies will be corrected before placing equipment in service.
- b. Keep blades, buckets, and other heavy equipment fully lowered when not in use. Parking brakes must be engaged. After work hours, bucket may be elevated if the locking pin is in place.
- c. Chock or block the wheels of equipment parked on inclines and at end of the day. Set parking brake. Never get off or on moving equipment.
- d. Never use equipment on unstable or unsafe inclines.
- e. Use hand signals, radios (as appropriate), and line of sight confirmation to communicate effectively with operator. Make sure everyone is in the clear prior to starting up or moving any part of the equipment.

- f. Never leave heavy equipment unattended while it is in operation. Stay in a position where you have ready access to control levers. Stay clear of lifting loads. Utilize competent riggers, spotters, and operators.
- g. Subsurface work will not be initiated without first clearing underground utility services.
- h. Heavy equipment should not be operated within 20 feet of overhead wires. This distance may be increased if windy conditions are anticipated or if lines carry high voltage. The site should also be sufficiently clear to ensure the project staff can move around the heavy machinery safely.
- i. Care should be taken to avoid overhead wires when moving heavy-equipment from location to location.
- j. Hard hats, safety boots and safety glasses should be worn at all times in the vicinity of heavy equipment. Hearing protection is also recommended.
- k. The work site should be kept neat. This will prevent personnel from tripping and will allow for fast emergency exit from the site.
- l. Proper lighting must be provided when working at night.
- m. Project activities should be discontinued during an electrical storm or severe weather conditions.
- n. The presence of combustible gases should be checked before igniting any open flame.
- o. Personnel will stand upwind of any project operation when not immediately involved in sampling/logging/observing activities.

4.4 Excavations

During any excavation or trenching operation the following work practices will be observed per OSHA 1926.650 and 1926.651;

- a. No employee will be permitted underneath loads handled by lifting or digging equipment.
- b. Entry into any excavation will be permitted by the HSC or SO only.
- c. Entry into any excavation will adhere to the following:
 - All surface encumbrances will be removed or supported as necessary to safeguard project personnel.
 - The use of proper hazardous atmosphere protection as described in 1926.651(g) and confined space entry procedures described in 1910.146
 - Project personnel will not be permitted in excavations in which there is an accumulation of water.
 - Adequate protection will be provided to protect project personnel from loose rock or soil that could pose a hazard by falling or rolling from an excavation face.
 - Project personnel in excavations will be protected from cave-ins by a protective system designed and complying with 1926.652 through the use of shoring trench boxes, sloping, etc.
- d. Daily inspections of excavation and the adjacent areas will be made by either the SO or the HSC. The inspector will be a competent person.
- e. Walkways will be installed for crossing over excavations. Guardrails will be provided where walking surfaces are 6 feet or more above lower levels. The guardrails will comply with 1926.502(b).

4.5 Fall Protection

Fall protection will be used any time on-site personnel work or walk on surfaces 6 feet or more above a lower level with an unprotected side or edge. This includes areas around excavations, near the shore line or when constructing the stone revetment.

Any time fall protection is required it will be applied in conformance with 1926.502 and documented in a fall protection plan. Project personnel required to use fall protection will be trained per 1926.503.

Slip, trip, and fall injuries will be reduced by avoiding slippery surfaces, wearing slip resistant footwear, practicing good housekeeping, and working with a low center of gravity and making slow and deliberate movements.

4.6 Electrical

- a. Project personnel should not work close to any unprotected electrical power circuit unless that circuit is de-energized and grounded.
- b. All switches must be enclosed and grounded. Panel boards must have provisions for closing and locking the main switch and fuse box compartment.
- c. Extension cords used with portable electric tools and appliances must be heavy duty (110 less than 12 gauge conductors) of the three wire grounding type, and must conform to OSHA standards. **NO FLAT ELECTRICAL CORDS ARE ALLOWED ON SITE.**
- d. All electrical tools and cords must be protected by a ground fault circuit interrupter.
- e. Voltages must be clearly labeled on all electrical equipment and circuits. Circuits must also be clearly marked for the areas of service they provide.
- f. Electrical cords should be protected from damage. Any exposed wiring and cords with frayed or deteriorated insulation must be removed from service immediately.
- g. Extension cords should "be used as little as possible and all plugs must be the dead front type.
- h. Temporary lighting should be used in areas where there is not adequate natural or artificial lighting. Temporary lights must be equipped with guards to prevent accidental contact with bulbs.
- i. Working spaces, walkways, and similar locations must be kept clear of cords.
- j. Electrical tools and equipment must be appropriately protected when used in wet or damp areas.

4.7 Material Handling & Back Safety

- a. Know the approximate size/volume of your load and make certain your equipment is rated appropriately. (All powered equipment and rigging is rated as to safe working load. This rating is posted on the equipment. Never exceed the manufacturer's recommended safe working load).
- b. Use all appropriate, approved lifting devices (i.e. special trucks, racks, hoists, and other devices) for lifting very heavy, bulky, large or unyielding objects.
- c. All ropes, chains, cables, slings etc., and other hoisting equipment must be inspected each time before use.
- d. A load should never be lifted and left unattended.

- e. Properly stack and secure all materials prior to lifting or moving to prevent sliding, falling, or collapse.
- f. Avoid moving or lifting loads by hand whenever possible.

Tips for manual lifting:

1. Get a good footing.
2. Place feet about shoulder width apart.
3. Bend at the knees to grasp the weight.
4. Keep back as straight as possible.
5. Get a firm hold.
6. Lift gradually by straightening the legs.
7. Don't twist your back to turn. Move your feet.
8. When the weight is too heavy or bulky to comfortably lift - GET HELP.
9. When putting the load down, reverse the above steps.

4.8 Housekeeping

- a. Unless otherwise specified, waste material and scrap must be put in the proper Man O' Trees containers and removed from the job site by the subcontractor.
- b. Work areas, passageways and stairs, in and around buildings and structures must be kept clear of debris. Project materials should be stored in an orderly manner. Job site storage areas and walkways must be maintained free of dangerous depressions, obstructions, and debris.
- c. The entire job site should be cleaned daily and debris must be disposed of in dumpsters, or off site, in accordance with all EPA regulations.
- d. Failure to maintain adequate housekeeping and clean-up will result in contractual action by Elderlee, Inc.

4.9 Worker Noise Exposure

In accordance with the Hearing Conservation Regulations (29 CFR 1910.95), hearing protection will be provided for voluntary use. If noise generating heavy equipment is operating and its known noise generating levels are above 90 dB, then hearing protection will be mandatory when working in, on, or in proximity to the equipment.

5.0 TRAINING

5.1 Project Personnel

Project personnel shall be trained and competent in project activities they are performing such as:

- Heavy Equipment Operations
- Confined Space Entry and Rescue
- Personnel Protective Equipment
- Fall Protection
- Hazard Communication/Awareness
- Rigging (as needed)

5.2 Site Training

- a. Project personnel will have access to a copy of the HASP, and a site-specific briefing prior to the start of work to ensure they are familiar with the HASP and the information and requirements it contains. The site briefing will be provided by the SO prior to initiating field activities.
- b. Health and safety briefings will also be conducted by the SO and/or a HSC on a daily basis during the course of the work. Supplemental briefings will be provided as necessary to notify project personnel of any changes to this HASP because of information gathered during ongoing site work activities. Conditions for which the SO may schedule additional briefings include, but are not limited to: a change in site conditions (visually or based on monitoring results); changes in the work schedule/plan; newly discovered hazards; and safety incidents occurring during site work.
- c. Elderlee, Inc. will be responsible for, and guarantee that, personnel not successfully completing the required training are not permitted to enter the project site to perform work.

6.0 WORK AREAS/ZONES

6.1 Site Control

Elderlee, Inc. will provide and maintain security and personnel identification at all times during the project. Only authorized vehicles will be allowed on-site and then only in designated areas.

Use of on-site designated parking areas will be restricted to vehicles of the Engineer, Engineer's on-site representative, contractor, Elderlee, Inc., and NEU-VELLE personnel assigned to the project and authorized visitors.

All approved visitors will be briefed by the SO on safety and security, provided with safety equipment and escorted throughout the visit.

7.0 STANDARD OPERATING PROCEDURES AND ENGINEERING CONTROLS

The following safe work practices will be observed during all on-site work activities or as specifically prescribed.

General:

1. The HSC and/or SO will ensure that all safety equipment and protective clothing is kept clean and well maintained.
2. The SO will approve all disposable or reusable gloves worn on the site.
3. All PPE used on site will be decontaminated or disposed of at the end of the workday. The SO will be responsible for ensuring decontamination of PPE before reuse.
4. On-site personnel found to be disregarding any provision of this plan will, at the request of the SO, be barred from the project.
5. Protective coveralls that become torn or badly soiled will be replaced immediately.
6. Eating, drinking, chewing gum or tobacco, smoking, etc., will be prohibited in the work areas.
7. All personnel will thoroughly cleanse their hands, face, and forearms and other exposed areas prior to eating, smoking or drinking.
8. All personnel will wash their hands, face, and forearms before using toilet facilities.
9. No alcohol, firearms or drugs (without prescriptions) will be allowed on site at any time.
10. All personnel will be familiar with standard operating safety procedures and additional instructions contained in this HASP.
11. On-site personnel will use the “buddy” system. No one may work alone (i.e., out of earshot or visual contact with other workers).
12. All project personnel have the obligation to immediately report and if possible, correct unsafe work conditions.

8.0 HEAT AND COLD STRESS

Heat stress may occur even in moderate temperatures when personnel protective clothing is in use. Symptoms of heat stress are heat rash, heat cramps, heat exhaustion and stroke.

When work zone temperatures exceed 70 degrees Fahrenheit and Level C PPE is being used, the HST will monitor project personnel for heat stress by having each worker take a pulse. Heat Stress may be combated through proper training, fluid intake, acclimatization and work/rest regime. It will be the SO's to determine an adequate break/rest routine.

Cold Stress will be monitored by the SO primarily by maintaining constant communication and contact with the workers. Anyone showing signs of fatigue or feeling of pain in extremities will be given the opportunity to warm themselves in the project trailer or other suitable location. Wind chills below 32 degrees Fahrenheit will signal the beginning of cold stress monitoring.

9.0 PERSONAL PROTECTIVE EQUIPMENT

The purpose of personal protective equipment (PPE), including clothing, is to shield or isolate individuals from the physical and chemical hazards encountered on the site. Hardhats, steel toe shoes, protective eyewear, and appropriate work gloves will be necessary on site at all times (Level D). Respiratory protection such as a filtering face piece, air-purifying respirator may be necessary if it is determined that the atmosphere is unsafe, or may be used voluntarily (Level C). See Section 13.0 for Hazardous Atmospheres and worker monitoring.

Level D: Hard hat, safety glasses with side shields. Upgrade with hard hat and/or leather gloves as needed. Note: P100 filtering face-pieces may be worn voluntarily.

Specific protection garments are selected on the basis of a variety of criteria. In general, greater hazard levels require greater the levels of PPE. No single combination of protective equipment and clothing is capable of protecting against all hazards, and PPE must be used in conjunction with other protective measures (i.e., engineering and administrative controls). The use of PPE can create significant worker hazards, such as heat stress, physical and psychological stress, and impaired vision, mobility and communication. Use of PPE is required by OSHA regulations in 29 CFR Part 1910/1926 and reinforced by U.S. Environmental Protection Agency (EPA) regulations and American National Standards Institute (ANSI) standards and guidelines.

Level D will continue to be used at a minimum during the project.

10.0 PERSONAL HYGIENE AND DECONTAMINATION

Worker exposures to site hazards are expected during project activities.

- a. Eating, smoking, chewing gum and drinking will be prohibited within the project site.
- b. All personnel will be required to wash their face, hands and any body parts coming in contact with excavated materials.
- c. The primary expected means of contamination control at this time is through use of disposable PPE.
- d. More formal controls will be evaluated and instituted by the SO if required to control the spread of contaminated materials.

The HSC and SO anticipates the most likely form of decontamination will be a soap and water wash. All decontamination wash water will be collected for proper disposal. If necessary, the decontamination will include the use of;

- A portable "Boot Wash" station;
- Drums/containers/poly bags for handling contaminated clothing;
- If necessary, a formal exclusion zone and contamination reduction zone will be established to delineate contaminated and contaminate reduction areas.

11.0 FUGITIVE DUST CONTROL

This section addresses standard and contingent fugitive dust suppression measures to be implemented as an integral component of the project. The components of fugitive dust control include the following:

- Identification of fugitive dust sources; and
- Baseline dust suppression measures.

11.1 **Dust Sources and Control**

This section identifies potential fugitive dust sources and control techniques associated with project activities. The potential sources include those associated with this project such as excavation, material staging, handling and transport, and material placement and grading. Also, a potential dust source is from adjacent upwind Elderlee, Inc. operations. This section addresses fugitive dust control associated with the project. The following potential dust sources have been identified for this project:

Excavation and soil handling - The primary contributing factors to fugitive dust emissions at the point of excavation are material properties (moisture and PM-10 content), geometry of the excavation face, bucket capacity, drop heights, excavation rate, and meteorological conditions, including wind speed and precipitation. Excavation and handling of soils can potentially result in fugitive dust emissions.

Vehicular traffic - The primary source of fugitive dust from vehicular traffic is a result of contact between the vehicle wheels and ground surface. Fugitive dust emissions associated with movement of vehicles on-site will be a function of vehicle speed, vehicle weight, number of wheels, silt content of the road material, moisture content of the road material, and frequency of precipitation events. Of these factors, control of moisture content and vehicle speeds for on-site areas will be implemented as the primary fugitive dust control measures.

Material stockpiles - Material stockpiles includes the working piles and clean fill. Fugitive dust emissions associated with stockpiles will be generated during the transfer of material onto and off of the piles and wind erosion. Significant contributing factors include silt content, moisture content, stockpile dimensions/alignment, wind speed/direction, and the general stockpile activity.

Dust control will be implemented in areas of project activities and material handling activities. Accordingly, dust control will be required on the project site, on major haul roads, access roads, and material staging areas. Dust suppression methods will be employed when visible observations show dust remains suspended for 5 minutes in the air.

Dust control will be achieved primarily through application of water or an approved dust palliative. Water for dust abatement will not be appropriated from surface waters. Application rates for the dust palliative will follow the manufacturer's recommendations. All dust palliatives used will be biodegradable.

Based on this guidance the following techniques may be employed to mitigate the generation and migration of fugitive dust during the project:

- Applying water during excavation activities;
- applying water on the right-of-ways, stockpiles, trenches, and other surfaces which may give rise to airborne dust;
- spraying water on temporary roads at the end of the work shift to form a thin crust;
- misting equipment and excavation faces;
- spraying water on buckets during excavation and dumping;
- watering of any visibly dry disturbed soil surface areas of operation;
- covering, when in motion, open-bodied vehicles transporting materials likely to crease air pollution;
- restricting vehicle traffic; and
- reducing the size of any open excavation.

If the dust suppression techniques are ineffective, the specific task generating the fugitive dust may be suspended until appropriate corrective measures are identified and implemented to remedy the situation.

12.0 EMERGENCY RESPONSE & CONTINGENCY PLAN

12.1 Emergency Vehicle Access

All personnel will immediately move operations (equipment, materials, etc.) to allow emergency vehicles access in the event that such vehicles (police, fire, ambulance) need access to a location that is blocked by the working crew operations. Emergency crews will be briefed as to site conditions and hazards by the SO. All vehicles and personnel will be decontaminated prior to leaving the site.

12.2 Personal Injury Response Plan

In cases of personal injuries, the injured person or the crew personnel in charge will notify to SO. The SO will assess the seriousness of the injury, and give first aid treatment if advisable. Consult by telephone with a physician if necessary, and arrange for hospitalization if required.

Wrap the injured person in blankets if soiled clothing cannot be removed for transportation to the hospital.

For contaminant exposure, flush the area having skin contact with chemically contaminated liquids or soils with water after any wet or soiled clothing has been removed. Personnel should be observed by the SO to ascertain whether there are any symptoms resulting from the exposure. If there is any visible manifestation of exposure such as skin irritation, the project personnel will refer to the consulting physician. All episodes of obvious chemical contamination will be reviewed by the SO in order to determine whether changes are needed in work procedures.

All injuries shall be documented as according to OSHA's recording criteria 29 CFR 1904.

12.3 Route to the Hospital

Notify the hospital to determine if they can handle emergencies involving hazardous chemicals. The SO will maintain at site with other site documentation, a map with written directions to the nearest hospital or emergency treatment facility.

Geneva General Distance: 9.1 mi Time: 14 minutes

369 East Main Street
Waterloo, New York
(315) 539-1258

1. Start at 729 Cross Road, Oaks Corner going east towards Carter Road - go 2.12 mi
2. Cross Road becomes Millard Road – go 0.4 mi
3. Turn Right on State Route 96 - go 2.6 mi
4. Turn Right on ELMWOOD AVE(CR-119) - go 4.92 mi
5. Turn Right on Virginia Street – go 0.81 mi

6. Turn Left on Main Street – go 0.84 mi
7. Arrive at 369 East Main Street on the Left

Clifton Springs Distance: 7.8 mi Time: 16 minutes

2 Coulter Road
Clifton Springs, New York
(315) 462-1050

1. Start at 729 Cross Road, Oaks Corner going east towards County Road 23 - go 0.2 mi
2. Turn Right on County Road 6 – go 1.0 mi
3. Turn Left on State Route 96 – go 5.1 mi
4. Turn Left on Lester Road – go 1.2 mi
5. Turn Left (0.1 mi and Right 173 ft.) Arrive at 2 Coulter Road on Left

12.4 Emergency Equipment/First Aid Requirements

The emergency response procedure followed will be that of Elderlee’s Emergency Response Plan. In the event of an emergency or medical emergency, Elderlee, Inc. facility management will be immediately contacted. The list of contacts is in the following table.

Elderlee, Inc. maintains a fully-stocked First Aid kit on site at all times. All first aid kits will meet requirements of 29 CFR 1910.151

Communications

Contracted project personnel will utilize mobile communication devices primarily, and Elderlee, Inc. will provide land line telephone communication for secondary communication at the site.

Safety & Emergency Inventory

Safety glasses
Hearing Protection
Hard hats
Gloves

13.0 HAZARD EVALUATION AND CONTROL

The purpose of this section is to identify standards, practices, and procedures to minimize personnel exposure to project contaminants (i.e., airborne particulates) generated as part of the material handling activities. This section describes procedures that must be followed to minimize exposures to workers, the public, as well as the environment.

13.1 Hazard Evaluation

Based on the activities to be conducted at the site, the principal hazard identified is airborne particulates generated as part of the excavation and material handling operations. Workers have the potential for exposure to airborne particulates during the project activities that manage or process the material. The principal routes of exposure would be through incidental ingestion or inhalation of dust from the construction activities. These exposures will be negligible if workers use proper personal hygiene, as well as engineering and administrative controls as defined in this section.

Construction activities that involve material handling at the site require that site workers to undertake protective measures. This section identifies potential fugitive dust sources and control techniques associated with the material moving activities. The potential sources include those associated with typical construction activities, such material staging, handling and transport of the material. The following potential dust sources have been identified for this project:

13.1.1 Material Excavation, Handling and Staging

The primary contributing factors to fugitive dust emissions during material excavation, handling, and staging is based on moisture content of the materials, type of handling equipment (i.e., loader, excavator, etc.), drop heights, handling rate, and meteorological conditions, including wind speed and precipitation. The management of the material handling can potentially result in fugitive dust emissions.

13.1.2 Vehicular Traffic

The primary source of fugitive dust from vehicular traffic is a result of contact between the vehicle wheels and the ground surface. Fugitive dust emissions associated with movement of vehicles on-site will be a function of vehicle speed, vehicle weight, number of wheels, silt content of the road material, moisture content of the road material, and the frequency of precipitation events. Of these factors, control of moisture content and vehicle speeds for on-site areas will be implemented as the primary fugitive dust control measures. In addition, vehicular tires will be periodically inspected for cleanliness and cleaned as necessary, to prevent excessive material (i.e., materials) from being tracked onto paved surfaces.

13.2 Hazard Control Strategies

Hazard control strategies will be implemented in all areas of the material handling activities to insure both worker and public safety. Control measures will be required any time dust stays in the air for 5 minutes or reaches 20 feet in height. In addition, control measures are required when dust plumes exceed 20 percent visual opacity.

Dust control will be achieved primarily through application of water or an approved dust palliative. Water for dust abatement will not be appropriated from surface waters. Application rates for the dust palliative will follow the manufacturer's recommendations, as necessary. All dust palliatives used will be biodegradable. Based on this guidance the following control strategies may be employed to mitigate the generation and migration of fugitive dust during material excavation and handling activities.

13.3 Engineering Controls

Typical engineering controls to be utilized to control airborne hazards during the material handling activities are as follows:

- applying water on the stockpiles and other surfaces which may give rise to airborne dust;
- spraying water on temporary roads at the end of the work shift to form a thin crust;
- misting equipment;
- covering, when in motion, open-bodied vehicles transporting materials likely to release airborne particulates;
- A windsock will be installed and maintained so that wind direction can be determined

If the dust suppression techniques do not lower visual observations, the specific task generating the fugitive dust may be suspended until appropriate corrective measures are identified and implemented to remedy the situation.

13.4 Administrative Controls

All workers must have site-specific training relative to the safe work practices necessary to minimize exposure to dust as part of the material handling activities. The training will include at a minimum:

- the use of proper Personal Protective Equipment (PPE);
- a job site walk-over to show the designated "work zones" at the site;
- areas where eating and drinking are permitted;
- proper worker decontamination procedures;
- proper equipment decontamination procedures; and
- proper use of the windsock

13.5 Personal Hygiene

The following personal hygiene rules will be observed at all times at the site.

- Eating, drinking, chewing gum or tobacco smoking, or any practice that increases the probability of hand-to-mouth contact is strictly prohibited in the work areas.
- Eating, drinking, chewing gum or tobacco, smoking, or any practice that increases the probability of hand-to-mouth contact of contaminants is permitted only in designated areas after hands and face are thoroughly washed.
- Carrying food, beverage, matches, lighters, Chap-Stick, cosmetics, etc., around the worksite is prohibited.
- Be conscious of any personal habit that could introduce dust into the body (i.e., wiping face or nose with a dirty hand, running a dirty hand through hair, etc.)
- Check that- any regularly worn item is Clean. Examples include dirty watchbands, neck chains and/or a dirty liner on your safety helmet.

13.6 Personal Protective Equipment (PPE)

The purpose of PPE is to minimize contact of the worker or his/her clothing with dust at work site. PPE may include:

- Washable or disposal cloth coveralls
- Steel toe work boots
- Safety glasses meeting ANSI 287
- Hardhat meeting ANSI Z89
- Leather/cotton gloves as needed
- Hearing protection
- Respirator for particulates

13.7 Air Monitoring

The effectiveness of dust controls will be evaluated through the use of real-time monitoring utilizing a dust meter (i.e., RAM-1 Real Time Aerosol Monitor or equivalent). The use of water spray will be optimized so that fugitive dusts are sufficiently controlled, while preventing generation of surface-water runoff. The ambient air monitoring program will consist of one monitoring station located immediately downwind of subgrade excavation, grading, and material handling activities.

Normal operating conditions for fugitive dust control are dictated by ambient air monitoring results. In accordance with the NYSDEC TAGM No. 4031, "Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites (October 27, 1989), the ambient air monitoring action level for PM-10 is 150 ug/m^3 , integrated over a fifteen minute period. If the 150 ug/m^3 action level is exceeded, then an upwind background measurement

will be taken. If the downwind levels are less than 100 ug/m^3 , then no further action is required. However, if the number is higher than 100 ug/m^3 , additional dust control measures must be taken or workers must utilize air purifying respirators.

An on-site safety professional will evaluate all air monitoring data and determine the appropriate PPE to be utilized to continue project activities.

Appendix A

NEU-VELLE LLC

Project Safety Review Acknowledgement

