Fw: Swallow-Wart Invasive Species info Update, Bendix Landfill, HW#401005

O'neill, Christopher (DEC) <christopher.oneill@dec.ny.gov>

Thu 6/4/2020 4:47 PM

To: Warren, Kyle <Kyle.Warren@arcadis.com>; Traudt, Susanne <Susanne.Traudt@Honeywell.com>
Cc: jeffrey.bonsteel@arcadis.com <jeffrey.bonsteel@arcadis.com>; Fleck, Andrew (DEC) <andrew.fleck@dec.ny.gov>; Deming, Justin H (HEALTH) <justin.deming@health.ny.gov>; Selmer, Stephanie L (HEALTH) <stephanie.selmer@health.ny.gov>

1 attachments (2 MB)

Honeywell Bendix LF_SwallowwortControlPlan_06022020.pdf;

Swallow-Wart Plan (attached for reference) is approved for the Bendix Landfill site (site #401005).

Chris O'Neill
NYSDEC -- Schenectady
518-357-2394 (office)
518-376-7605 (mobile)

From: Warren, Kyle <Kyle.Warren@arcadis.com>
Sent: Tuesday, June 2, 2020 12:39 PM
To: O'neill, Christopher (DEC) <christopher.oneill@dec.ny.gov>
Cc: jeffrey.bonsteel@arcadis.com <jeffrey.bonsteel@arcadis.com>; Traudt, Susanne <Susanne.Traudt@Honeywell.com>
Subject: RE: Swallow-Wart Invasive Species info Update, Bendix Landfill, HW#401005

Good Morning Chris,

Honeywell and Arcadis have developed a plan of action to manage the swallow wart at the Former Bendix Landfill in Green Island, NY. Please see attached for a copy of our Work Plan.

While you review the work plan, I will start visits to the site this week to check on the growth status of the swallow wart and their pods. Please feel free to contact me at any time via email or on my cell phone to discuss.

I hope all is well and everyone is staying safe and healthy.
Thank you,
Kyle

518.928.3775 (c)

From: O'neill, Christopher (DEC) <christopher.oneill@dec.ny.gov>
Sent: Monday, August 19, 2019 2:58 PM

To: Traudt, Susanne <Susanne.Traudt@Honeywell.com>; Warren, Kyle <Kyle.Warren@arcadis.com>
Cc: Richard Mustico <richard.mustico@dec.ny.gov>; Selmer, Stephanie L (HEALTH) <stephanie.selmer@health.ny.gov>; Justin Deming <justin.deming@health.ny.gov>
Subject: Swallow-Wart Invasive Species info Update, Bendix Landfill, HW#401005

The NYSDEC's Bureau of Invasive Species and NYSDEC Schenectady Pesticide Unit have provided some incite on the swallow-wart plants present on the northwestern slope of the Bendix Landfill in Green Island (site #401005).

Invasive Species advises that the 'prime' time to mow the swallow-wart is late July to early August, to catch the plant before its seeds mature. They also advise, based on photographs provided, that there seems to be clover and other plants mixed in with the swallow-wart so a 'species-specific' herbicide would be recommended to only impact the swallow-wart if treatment options were being considered. Furthermore, the mowing approach would require consistent/persistent practice for many years to get good control of the swallow-wart due to its seed viability duration.

Pesticides advises that there is likely no 'species-specific' herbicide for swallow-wart. For this reason, treatment would likely lead to killing of the total weed population and removal, then replacement with new grasses.

Honeywell/Arcadis may be able to come up with additional options through further research, but please provide an assessment of the slope stability protection and plan for controlling the swallow-wart plants at the Bendix Landfill as part of the landfill inspection following the next scheduled landfill mowing.

Please contact me at 518-357-2394 if you have any questions.

Christopher O'Neill, P.E.
Professional Engineer 1, Division Of Environmental Remediation

New York State Department of Environmental Conservation
1130 N. Westcott Road, Schenectady, NY 12306
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ARCADIS Design & Consultancy for natural and built assets

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Subject:
Invasive Species Management Plan
Former Bendix Landfill, Green Island, New York
DEC Site #401005

Environment

Date:
June 2, 2020

Contact:
Jeffrey Bonsteel

Phone:
267.685.1874

Email:
Jeffrey.Bonsteel@arcadis.com

Our ref:
30032764

Dear Mr. O'Neill:

On behalf of **Honeywell Friction Materials** (Honeywell), Arcadis of New York, Inc. (Arcadis) prepared this Invasive Species Management Plan (ISMP) for the control of pale swallow-wort (*Vincetoxicum rossicum*) and black swallow-wort (*Vincetoxicum nigrum*), both to be referred to as swallow-wort for the remainder of this correspondence, at the Former Bendix Landfill (Landfill) in Green Island, New York. This ISMP was developed from effective control methods published by sources (e.g., Cornell University Cooperative Extension[1]) to address New York State Department of Environmental Conservation (NYSDEC) concerns regarding the presence of swallow-wort currently growing on a portion of the Landfill. This concern was communicated by NYSDEC to Honeywell in an email dated August 19, 2019.

Target Species

Swallow-worts are perennial herbaceous climbing vines that can form extensive patches and overgrow/smother native vegetation. Although cut stems may produce axillary tillers, the primary form of reproduction is by seed. Since a one square meter stand of swallow-wort can produce 1000-2000 seeds per growing season, limiting seed production is critical to the long-term control of swallow-wort.

[1] New York Invasive Species Information. Cornell University Cooperative Extension & Sea Grant New York. nyis.info/invasive_species/swallow-wort

Control Strategy Overview

Based on recent work conducted in central New York State, Cornell University Cooperative Extension recommends a control strategy that includes a combination of strategically timed mowing followed by herbicide application to place multiple stressors on the target plants. To exhaust the existing seed bank and prevent future seed production, mowing will occur once seed pods start forming but have not developed viable seeds (typically early July). A foliar application of herbicide will be conducted later in the growing season to target remaining mature plants and kill the rhizomes (root system). Areas treated for swallow-wort will be seeded with native grasses to re-establish and provide slope stability and limit recolonization by invasive plants by filling in the void spaces created by swallow-wort removal. The anticipated area of concern is highlighted in Figure 1 attached.

Strategic Mowing

Mowing activities will be timed to target the initial stage of seed pod formation. Areas of the landfill that contain swallow-wort will be mowed with a brush hog or similar commercial mowing equipment to a standing height that ensures the developing seed pods have been removed from live portions of the plant. Cut material will be left in place on the landfill cap to naturally decompose. Site visits will be made once a week starting in June 2020 to monitor the growth progress of the swallow-wort. Once seed pod formation has been noted during a site visit, mowing activities will be scheduled.

Chemical Treatment

Chemical treatment will be a component of the invasive species management plan to target mature swallow-wort plants. Approximately 3-4 weeks following the strategic mowing (e.g., early/mid-August), a foliar spot application of a glyphosate-based herbicide approved for use in New York State will be performed targeting mature plants. The herbicide to be used at the Landfill is proposed to be AquaNeat, or equivalent. AquaNeat is an approved herbicide to be used in New York State under the management of a licensed pesticide applicator. The treatment will be conducted by Arcadis ecologists authorized by the NYSDEC to apply pesticides using a UTV-mounted sprayer and/or backpack-style sprayers, as appropriate. Herbicides will be applied in accordance with the product labels and applicable state and federal regulations.

Prior to pesticide application, Arcadis field personnel will post the treatment area(s) with the appropriate signage as required by Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, Section 325.40-Commercial Lawn Applications.

Since glyphosate is a broad-spectrum systemic herbicide, initial treatments can be a glyphosate-based product. However, as the presence of swallow-wort decreases over time herbicide treatments during subsequent growing seasons will likely transition to more selective products, such as a triclopyr-based herbicide. The use of selective herbicides, after primary control has been established, would promote the development of native grasses and serve as a place holder to limit recolonization of swallow-wort on the Landfill. Future and additional herbicide use at the Landfill will be evaluated in subsequent years, starting in 2021.

Site Inspection and Seeding

Arcadis ecologists will perform an inspection of the treatment area in September 2020 to evaluate herbicide effectiveness. At that time Arcadis will apply a seed mix of native grasses (e.g., ERNMX-117 or equivalent) to the treatment area by hand. The seed mix applied will re-establish and provide slope stability and limit recolonization by invasive plants by filling in the void spaces created by the treatment of pale and black swallow-wort.

Upon completion of the 2020 ISMP field activities, Arcadis will submit a brief summary email to NYSDEC which will provide a description of the control activities performed, observations regarding treatment effectiveness, and recommendations (if any) moving forward.

Should you have any questions, please feel free to contact either Jeffrey Bonsteel (267-685-1874) or Susanne Traudt at Honeywell (518-270-0322).

Sincerely,

Arcadis U.S., Inc.

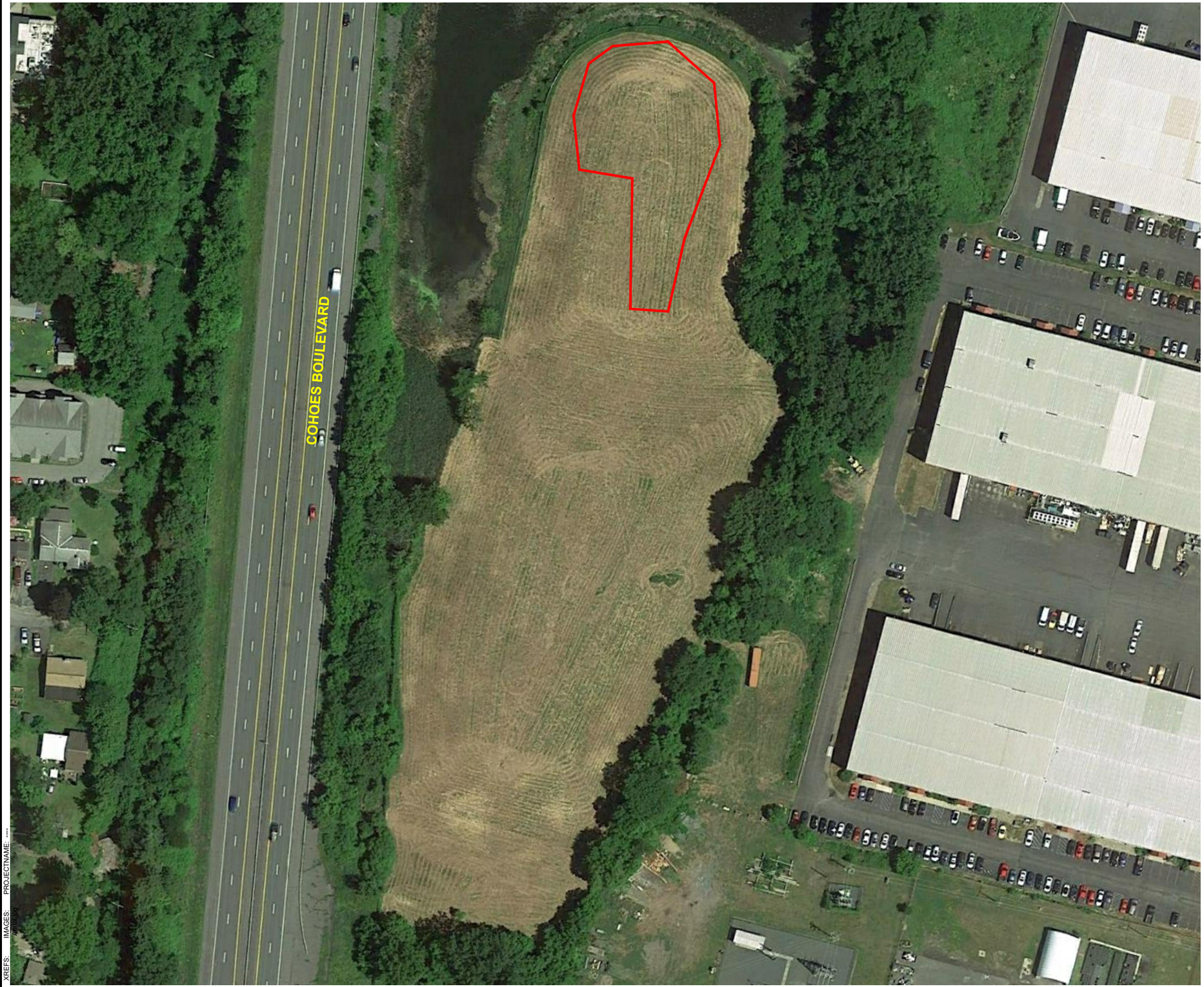
Jeffrey Bonsteel
Associate Vice President

Copies:
S. Traudt (Honeywell)
K. Warren (Arcadis)
G. Markiewicz (Arcadis)
M. Long (Arcadis)
E. Copeland (Arcadis)

Enclosures:

Figures

1 Anticipated Swallow Wort Maintenance Area



LEGEND:

ANTICIPATED SWALLOW WORT MAINTENANCE AREA

SOURCE:

AERIAL PHOTOGRAPH FROM GOOGLE EARTH PRO - JUNE, 25, 2018.

0 100' 200'

GRAPHIC SCALE

FORMER BENDIX LANDFILL
GREEN ISLAND, NEW YORK
INVASIVE SPECIES MANAGEMENT PLAN

ANTICIPATED SWALLOW WORT MAINTENANCE AREA

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1