



# DRAINAGE MONITORING REPORT

GEOTECHNICAL | ENVIRONMENTAL | ECOLOGICAL | WATER | CONSTRUCTION MANAGEMENT

Known for excellence. Built on trust.

Eversource Transmission  
Line:

## F107 - Seacoast Reliability Project

Location:

### Newington, New Hampshire

GZA Project No:

04.0190967.00

#### TYPE OF INSPECTION:

- Daily 
  Weekly 
  Storm Event<sup>+</sup>
 Reduced Frequency<sup>++</sup>  
 Other:

Date: 11/10/2020 Time: 0935 <sup>+</sup>Was this inspection triggered by a 0.25" storm event?  Yes  No

If yes, how did you determine whether a 0.25" storm event has occurred?  Rain Gauge  Weather Station  
 Other If other, please describe

+Storm event info (approx):

Amount of rainfall (inches):

++Reason for Reduced Frequency  
(i.e., Monthly due to dry conditions):

Inspector name(s) and title(s): Matt Deane, Technical Specialist

Others present/affiliation(s):

Weather conditions (since last inspection): Mostly fair with some clouds, no measurable precipitation

Weather conditions (time of inspection): Sunny, High 50's

pH Meter Information (make/model): Hanna HI98107

Calibration Method: 2 Point

Date: 11/10/20 Time: 0930

Notes:

## PROJECT TEAM

### PROJECT OWNER

#### Eversource

Attn: Dena Champy-Project Manager

Phone: 508-954-2736

Email: [dena.champy@eversource.com](mailto:dena.champy@eversource.com)

Attn: Kurt Nelson-Permitting Specialist

Phone: 603-714-3031

Email: [kurt.nelson@eversource.com](mailto:kurt.nelson@eversource.com)

Attn: Tom Meister

Phone: 339-987-7901

Email: [thomas.meister@eversource.com](mailto:thomas.meister@eversource.com)

Attn: Sam Eames

Phone: 603-915-0073

Email: [samual.eames@eversource.com](mailto:samual.eames@eversource.com)

### EVERSOURCE COMPLIANCE

Attn: Matt Cardin

Phone: 603-988-6635

Email: [matthew.cardin@eversource.com](mailto:matthew.cardin@eversource.com)

### FIELD SERVICES SAFETY MANAGER

#### Transmission ROW

Attn: Joshua Scott

Phone: 603-848-7759

Email: [joshua.scott@eversource.com](mailto:joshua.scott@eversource.com)

### ENVIRONMENTAL CONSULTANT

#### GZA GeoEnvironmental, Inc.

Attn: Deborah Zarta Gier

Phone: 603-380-5024

Email: [Deborah.zartagier@gza.com](mailto:Deborah.zartagier@gza.com)

Attn: Rebecca Cox

Phone: 603-315-7520

Email: [rebecca.cox@gza.com](mailto:rebecca.cox@gza.com)

Attn: Lucas Turcotte

Phone: 603-380-5017

Email: [lucas.turcotte@gza.com](mailto:lucas.turcotte@gza.com)

**CURRENT/RECENT SITE WORK ACTIVITIES / NOTES**

- None

**PHOTOGRAPHS**



29 Gundalow - 1 (Drainage Area)



29 Gundalow - 2 (Culvert)



64 Gundalow - 1 (Drainage Course)



64 Gundalow - 2 (Drainage Course)



4 Brickyard Circle - 1 (Drainage Course)



4 Brickyard Circle - 2 (Drainage Course)



**PHOTOGRAPHS**



4 Brickyard Circle – 3 (Drainage Area)

**DRAINAGE AREA MONITORING**

**Location: 29 Gundalow – 1 (Drainage Area)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: ---

Observations/Notes:

**Location: 29 Gundalow – 2 (Culvert)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 12.5

Observations/Notes: Water observed in the culvert and extending approx. 8" beyond culvert inlet into stone area, approx. max depth 4"

**Location: 64 Gundalow – 1 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: \*\*11.1

Observations/Notes: \*\*Measurement taken from standing water just inside culvert outlet (no standing water in drainage course), water approx. 0.5" deep.

**Location: 64 Gundalow – 2 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.5

Observations/Notes: Small area of standing water in stone riprap approx. 3" deep. No visible flow through culvert.

**Location: 4 Brickyard Circle – 1 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.2

Observations/Notes: Standing water extending approx. 20" beyond culvert outlet, approx. 10" deep. No visible flow through culvert.

**Location: 4 Brickyard Circle – 2 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.3

Observations/Notes: Standing water adjacent to east wall of raceway, approx. 2" deep. No visible flow.

**Location: 4 Brickyard Circle – 3 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.2

Observations/Notes: Small area of standing water in center of raceway, approx. 3" deep. No visible flow.

**Location: Knight's Brook – 1 (Upstream in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Knight's Brook – 2 (Downstream in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Knight's Brook – 3 (Above Duct Bank in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Hannah – 1 (Wetland NW-22)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Hannah – 2 (Wetland NW-24)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Flynn Pit – 1 (Wetland NW-4)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location:**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH:

Observations/Notes:

**OTHER COMMENTS AND OBSERVATIONS**

- None.



# DRAINAGE MONITORING REPORT

GEOTECHNICAL | ENVIRONMENTAL | ECOLOGICAL | WATER | CONSTRUCTION MANAGEMENT

Known for excellence. Built on trust.

Eversource Transmission  
Line:

## F107 - Seacoast Reliability Project

Location:

### Newington, New Hampshire

GZA Project No:

04.0190967.00

#### TYPE OF INSPECTION:

- Daily  Weekly  Storm Event<sup>+</sup>  Reduced Frequency<sup>++</sup>  
 Other:

Date: 11/12/2020 Time: 0950 <sup>+</sup>Was this inspection triggered by a 0.25" storm event?  Yes  No

If yes, how did you determine whether a 0.25" storm event has occurred?  Rain Gauge  Weather Station  
 Other If other, please describe Weather Underground

+Storm event info (approx): Light rain mid to late morning of 11/12

Amount of rainfall (inches): 0.04

++Reason for Reduced Frequency  
(i.e., Monthly due to dry conditions):

Inspector name(s) and title(s): Matt Deane, Technical Specialist

Others present/affiliation(s):

Weather conditions (since last inspection): Mostly cloudy on 10/11, cloudy with light rain mid to late morning on 11/12

Weather conditions (time of inspection): Light rain, High 50's

pH Meter Information (make/model): Hanna HI98107

Calibration Method: 2 Point

Date: 11/12/20 Time: 0945

Notes:

## PROJECT TEAM

### PROJECT OWNER

#### Eversource

Attn: Dena Champy-Project Manager  
Phone: 508-954-2736  
Email: [dena.champy@eversource.com](mailto:dena.champy@eversource.com)

Attn: Kurt Nelson-Permitting Specialist  
Phone: 603-714-3031  
Email: [kurt.nelson@eversource.com](mailto:kurt.nelson@eversource.com)

Attn: Tom Meister  
Phone: 339-987-7901  
Email: [thomas.meister@eversource.com](mailto:thomas.meister@eversource.com)

Attn: Sam Eames  
Phone: 603-915-0073  
Email: [samual.eames@eversource.com](mailto:samual.eames@eversource.com)

### EVERSOURCE COMPLIANCE

Attn: Matt Cardin  
Phone: 603-988-6635  
Email: [matthew.cardin@eversource.com](mailto:matthew.cardin@eversource.com)

### FIELD SERVICES SAFETY MANAGER

#### Transmission ROW

Attn: Joshua Scott  
Phone: 603-848-7759  
Email: [joshua.scott@eversource.com](mailto:joshua.scott@eversource.com)

### ENVIRONMENTAL CONSULTANT

#### GZA GeoEnvironmental, Inc.

Attn: Deborah Zarta Gier  
Phone: 603-380-5024  
Email: [Deborah.zartagier@gza.com](mailto:Deborah.zartagier@gza.com)

Attn: Rebecca Cox  
Phone: 603-315-7520  
Email: [rebecca.cox@gza.com](mailto:rebecca.cox@gza.com)

Attn: Lucas Turcotte  
Phone: 603-380-5017  
Email: [lucas.turcotte@gza.com](mailto:lucas.turcotte@gza.com)



**CURRENT/RECENT SITE WORK ACTIVITIES / NOTES**

- None

**PHOTOGRAPHS**



29 Gundalow - 1 (Drainage Area)



29 Gundalow - 2 (Culvert)



64 Gundalow - 1 (Drainage Course)



64 Gundalow - 2 (Drainage Course)



4 Brickyard Circle - 1 (Drainage Course)

**DRAINAGE AREA MONITORING**

**Location: 29 Gundalow – 1 (Drainage Area)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: ---

Observations/Notes:

**Location: 29 Gundalow – 2 (Culvert)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 12.5

Observations/Notes: Water observed in the culvert and extending approx. 8" beyond culvert inlet into stone area, approx. max depth 4"

**Location: 64 Gundalow – 1 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: \*\*10.6

Observations/Notes: \*\*Measurement taken from standing water just inside culvert outlet (no standing water in drainage course), water approx. 0.5" deep.

**Location: 64 Gundalow – 2 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.3

Observations/Notes: Small area of standing water in stone riprap approx. 3" deep. No visible flow through culvert.

**Location: 4 Brickyard Circle – 1 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 6.8

Observations/Notes: Standing water extending approx. 20" beyond culvert outlet, approx. 10" deep. No visible flow through culvert.

**Location: 4 Brickyard Circle – 2 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: 4 Brickyard Circle – 3 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Knight's Brook – 1 (Upstream in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:



**Location: Knight's Brook – 2 (Downstream in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Knight's Brook – 3 (Above Duct Bank in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Hannah – 1 (Wetland NW-22)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Hannah – 2 (Wetland NW-24)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Flynn Pit – 1 (Wetland NW-4)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location:**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH:

Observations/Notes:

**OTHER COMMENTS AND OBSERVATIONS**

- None.



# DRAINAGE MONITORING REPORT

GEOTECHNICAL | ENVIRONMENTAL | ECOLOGICAL | WATER | CONSTRUCTION MANAGEMENT

Known for excellence. Built on trust.

Eversource Transmission  
Line:

## F107 - Seacoast Reliability Project

Location:

### Newington, New Hampshire

GZA Project No:

04.0190967.00

**TYPE OF INSPECTION:**  Daily  Weekly  Storm Event<sup>+</sup>  Reduced Frequency<sup>++</sup>  
 Other:

Date: 11/13/2020 Time: 1525 <sup>+</sup>Was this inspection triggered by a 0.25" storm event?  Yes  No

If yes, how did you determine whether a 0.25" storm event has occurred?  Rain Gauge  Weather Station  
 Other If other, please describe Weather Underground

+Storm event info (approx): Light rain afternoon of 11/13

Amount of rainfall (inches): 0.03

++Reason for Reduced Frequency  
(i.e., Monthly due to dry conditions):

Inspector name(s) and title(s): Matt Deane, Technical Specialist

Others present/affiliation(s):

Weather conditions (since last inspection): Mostly cloudy with light rain afternoon of 11/13

Weather conditions (time of inspection): Light rain, High 30's

pH Meter Information (make/model): **Hanna HI98107**

Calibration Method: 2 Point

Date: 11/13/20 Time: 1520

Notes:

## PROJECT TEAM

### PROJECT OWNER

#### Eversource

Attn: Dena Champy-Project Manager

Phone: 508-954-2736

Email: [dena.champy@eversource.com](mailto:dena.champy@eversource.com)

Attn: Kurt Nelson-Permitting Specialist

Phone: 603-714-3031

Email: [kurt.nelson@eversource.com](mailto:kurt.nelson@eversource.com)

Attn: Tom Meister

Phone: 339-987-7901

Email: [thomas.meister@eversource.com](mailto:thomas.meister@eversource.com)

Attn: Sam Eames

Phone: 603-915-0073

Email: [samual.eames@eversource.com](mailto:samual.eames@eversource.com)

### EVERSOURCE COMPLIANCE

Attn: Matt Cardin

Phone: 603-988-6635

Email: [matthew.cardin@eversource.com](mailto:matthew.cardin@eversource.com)

### FIELD SERVICES SAFETY MANAGER

#### Transmission ROW

Attn: Joshua Scott

Phone: 603-848-7759

Email: [joshua.scott@eversource.com](mailto:joshua.scott@eversource.com)

### ENVIRONMENTAL CONSULTANT

#### GZA GeoEnvironmental, Inc.

Attn: Deborah Zarta Gier

Phone: 603-380-5024

Email: [Deborah.zartagier@gza.com](mailto:Deborah.zartagier@gza.com)

Attn: Rebecca Cox

Phone: 603-315-7520

Email: [rebecca.cox@gza.com](mailto:rebecca.cox@gza.com)

Attn: Lucas Turcotte

Phone: 603-380-5017

Email: [lucas.turcotte@gza.com](mailto:lucas.turcotte@gza.com)



**CURRENT/RECENT SITE WORK ACTIVITIES / NOTES**

- None

**PHOTOGRAPHS**



29 Gundalow - 1 (Drainage Area)



29 Gundalow - 2 (Culvert)



64 Gundalow - 1 (Drainage Course)



64 Gundalow - 2 (Drainage Course)



4 Brickyard Circle - 1 (Drainage Course)



4 Brickyard Circle - 2 (Drainage Course)



**PHOTOGRAPHS**



4 Brickyard Circle – 3 (Drainage Course)

**DRAINAGE AREA MONITORING**

**Location: 29 Gundalow – 1 (Drainage Area)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: ---

Observations/Notes:

**Location: 29 Gundalow – 2 (Culvert)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 12.4

Observations/Notes: Water observed in the culvert and extending approx. 8" beyond culvert inlet into stone area, approx. max depth 4"

**Location: 64 Gundalow – 1 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: \*\*10.4

Observations/Notes: \*\*Measurement taken from standing water just inside culvert outlet (no standing water in drainage course), water approx. 0.5" deep.

**Location: 64 Gundalow – 2 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.3

Observations/Notes: Small area of standing water in stone riprap approx. 3" deep. No visible flow through culvert.

**Location: 4 Brickyard Circle – 1 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.3

Observations/Notes: Standing water extending approx. 20" beyond culvert outlet, approx. 10" deep. No visible flow through culvert.

**Location: 4 Brickyard Circle – 2 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.3

Observations/Notes: Standing water adjacent to east wall of raceway, approx. 2" deep. No visible flow.

**Location: 4 Brickyard Circle – 3 (Drainage Course)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: 7.2

Observations/Notes: Small area of standing water in center of raceway, approx. 3" deep. No visible flow.

**Location: Knight's Brook – 1 (Upstream in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Knight's Brook – 2 (Downstream in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Knight's Brook – 3 (Above Duct Bank in Brook)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Hannah – 1 (Wetland NW-22)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Hannah – 2 (Wetland NW-24)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location: Flynn Pit – 1 (Wetland NW-4)**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH: **Not Monitored**

Observations/Notes:

**Location:**

Status of surface water at the time of inspection?  Dry  Standing  Flowing

pH:

Observations/Notes:

**OTHER COMMENTS AND OBSERVATIONS**

- None.