

DRAINAGE MONITORING REPORT

GEOTECHNICAL | ENVIRONMENTAL | ECOLOGICAL | WATER | CONSTRUCTION MANAGEMENT

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TYPE OF INSPECTION:
TYPE OF INSPECTION: ☐ Daily ☐ Weekly ☐ Storm Event ☐ Reduced Frequency ++
☐ Other:
Date: 11/23/2020 Time: 1445 ⁺ 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 in early morning hours turning to steady rain and thunderstorms late morning and early afternoon of 11/23
Amount of rainfall (inches): 1.59
++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): Variable clouds, no measurable precipitation until 11/23
Weather conditions (time of inspection): Cloudy, mid 40's
pH Meter Information (make/model): Hanna HI98107
Calibration Method: 2 Point Date: 11/23/20 Time: 1440
Notes:

PROJECT TEAM

PROJECT OWNER

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Eversource Transmission

F107 - Seacoast

Reliability Project

Newington, New Hampshire

04.0190967.00

Line:

Location:

GZA Project No:

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CURRENT/RECENT SITE WORK ACTIVITIES / NOTES

None



29 Gundalow -1 (Drainage Area)



64 Gundalow - 1 (Drainage Course)



4 Brickyard Circle – 1 (Drainage Course)



29 Gundalow - 2 (Culvert)



64 Gundalow - 2 (Drainage Course)



4 Brickyard Circle – 2 (Drainage Course)



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: 6.0
Observations/Notes: Intermittent areas of standing water in grass, max depth approx. 0.5"
Location: 29 Gundalow − 2 (Culvert) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 11.6
Observations/Notes: Water extending approx. 12" beyond culvert inlet into stone area, approx. max depth 4". Flow visible through culvert. Precipitate observed on stone and leaf litter below water.
Location: 64 Gundalow – 1 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 10.8
Observations/Notes: Accessible flowing water extending approx. 8" from culvert outlet, approx. 1" deep.
Location: 64 Gundalow – 2 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 9.5
Observations/Notes: Large area of pooled water extending approx. 6" from culvert inlets, max depth approx. 8". Visible flow through culverts.
Location: 4 Brickyard Circle – 1 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 9.0
Observations/Notes: Water flowing through culvert with pools at outlet, max depth approx. 10". Visible flow through culvert and into raceway.
Location: 4 Brickyard Circle – 2 (Drainage Course) Status of surface water at the time of inspection? ☐ Dry ☐ Standing ☑ Flowing pH: 7.6
Observations/Notes: Water flowing through center and adjacent to east wall of raceway, approx. 4" deep.
Location: 4 Brickyard Circle – 3 (Drainage Course) Status of surface water at the time of inspection? ☐ Dry ☐ Standing ☐ Flowing pH: 7.2
Observations/Notes: Water flowing with pooled area in center of raceway, max depth approx. 6".
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.



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TYPE OF INSPECTION: □ Daily □ Weekly □ Storm Event □ Reduced Frequency □ Other:
Date: 11/25/2020 Time: 0925 *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): Variable clouds, no measurable precipitation
Weather conditions (time of inspection): Cloudy, mid 30's
pH Meter Information (make/model): Hanna HI98107
Calibration Method: 2 Point Date: 11/25/20 Time: 0920
Notes:

PROJECT TEAM

PROJECT OWNER

Eversource

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CURRENT/RECENT SITE WORK ACTIVITIES / NOTES

None



29 Gundalow -1 (Drainage Area)



64 Gundalow - 1 (Drainage Course)



4 Brickyard Circle – 1 (Drainage Course)



29 Gundalow - 2 (Culvert)



64 Gundalow - 2 (Drainage Course)



4 Brickyard Circle – 2 (Drainage Course)



4 Brickyard Circle – 3 (Drainage Course)

DRAINAGE AREA MONITORING
Location: 29 Gundalow − 1 (Drainage Area) Status of surface water at the time of inspection?
Location: 29 Gundalow – 2 (Culvert) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 12.5
Observations/Notes: Water extending approx. 12" beyond culvert inlet into stone area, approx. max depth 4". Flow visible through culvert. Precipitate observed on stone and leaf litter below water.
Location: 64 Gundalow – 1 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 12.1
Observations/Notes: Accessible flowing water in rip rap extending approx. 8" from culvert outlet, approx. 1" deep.
Location: 64 Gundalow – 2 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 9.3 Observations/Notes: Small area of pooled water adjacent to culvert inlets, max depth approx. 4". Minor flow through culverts.
Location: 4 Brickyard Circle −1 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 7.4 Observations/Notes: Water extending approx. 14" beyond culvert outlet, max depth approx. 8". Minor flow through raceway.
Location: 4 Brickyard Circle – 2 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 7.5 Observations/Notes: Minor flow through center and adjacent to east wall of raceway, approx. 3" deep.
Location: 4 Brickyard Circle – 3 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 7.4 Observations/Notes: Minor flow with pooled area in center of raceway, max depth approx. 4".
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.



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TYPE OF INSPECTION: ☐ Daily ☐ Weekly ☐ Storm Event ☐ Reduced Frequency++
☐ Other:
Date: 11/27/2020 Time: 0930 ⁺ 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): Variable light rain beginning late evening of 11/25 and continuing through the evening of 11/26
Amount of rainfall (inches): 0.26
++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): Variable clouds, no measurable precipitation until evening of 11/25
Weather conditions (time of inspection): Cloudy, mid 40's
pH Meter Information (make/model): Hanna HI98107
Calibration Method: 2 Point Date: 11/27/20 Time: 0925
Notes:

PROJECT TEAM

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Email: rebecca.cox@gza.com

Attn: Lucas Turcotte Phone: 603-380-5017

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CURRENT/RECENT SITE WORK ACTIVITIES / NOTES

4 Brickyard Circle – 1 (Drainage Course)

None

PHOTOGRAPHS 29 Gundalow -1 (Drainage Area) 29 Gundalow - 2 (Culvert) 64 Gundalow - 1 (Drainage Course) 64 Gundalow - 2 (Drainage Course)

4 Brickyard Circle – 2 (Drainage Course)



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: Saturated soil but no standing water
Location: 29 Gundalow – 2 (Culvert) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 12.2
Observations/Notes: Water extending approx. 12" beyond culvert inlet into stone area, approx. max depth 4". Flow visible through culvert. Precipitate observed on stone and leaf litter below water.
Location: 64 Gundalow – 1 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing □ Flowing pH: 11.4
Observations/Notes: Accessible flowing water extending approx. 8" from culvert outlet, approx. 1" deep.
Location: 64 Gundalow – 2 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 9.8
Observations/Notes: Area of pooled water adjacent to culvert inlets, max depth approx. 5". Visible flow through culverts.
Location: 4 Brickyard Circle − 1 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 9.4
Observations/Notes: Standing water extending approx. 14" beyond culvert outlet, max depth approx. 8". Visible flow into raceway.
Location: 4 Brickyard Circle – 2 (Drainage Course) Status of surface water at the time of inspection? ☐ Dry ☐ Standing ☑ Flowing pH: 7.8
Observations/Notes: Flow through center and adjacent to east wall of raceway, approx. 3" deep.
Location: 4 Brickyard Circle – 3 (Drainage Course) Status of surface water at the time of inspection? □ Dry □ Standing ☑ Flowing pH: 7.4
Observations/Notes: Minor flow with pooled water in center of raceway, max depth approx. 4".
Location: Knight's Brook – 1 (Upstream in Brook) Status of surface water at the time of inspection?

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.