



Environmental Report Month 2024

Glashaboy Flood Relief Scheme

Prepared by: Rory O Connor

Date of issue: 08/01/2024

Document code: FFEC-GFRS-2023-004

The following is the clients Ecological Clerk of Works (ECoW) monthly review of the Glashaboy River (Glanmire/Sallybrook) Drainage Scheme. It details observations made on site regarding environmental and ecological factors involved in the scheme. This formulates a monthly review to be submitted to the Environmental Monitoring Group (EMG).

The report also includes:

- Comments on Sorensen's December Environmental audit.

The main work areas for December 2023 included:

- Bleach Hill (Cuil Chluthair) – Grading and surfacing.
- Springmount - Culvert Works and Drainage works.
- Hazelwood Shopping Centre – Drainage works.
- Sallybrook house – Storm drainage and foul works.
- Pat O Donnell's/Eurofins – Drainage works.
- Meadow brook – Drainage works.
- Coppervalley housing estate – Emergency temporary works installation of barrier and raising of road bridge.

Overall site conditions are positive, with satisfactory housekeeping standards. The Sallybrook industrial estate area, initially in poor condition, underwent a cleanup during the month and is now deemed satisfactory. Some minor waste incidents occurred on-site, the majority of which were addressed after notifying the site ecologist.




Two environmental tours took place this month (ET002 and ET003), with Sorcha Dale and Lisa Dolan in attendance. The structure of these tours was developed collaboratively. A grading system was employed to assess the severity of environmental observations, the most important of which were time sensitive. Additionally, efforts were made to document positive observations. Overall, the tours are proving to be a positive and are encouraging collaboration.

A minor fuel leak from a water pump occurred at Meadowbrook housing estate where drainage works were taking place. The water pump remained in operation for two days following the initial report. In the interim, mitigation measures were implemented to contain the spill while sourcing an alternative water pump. These measures included surrounding the pump with sandbags to contain the spill and restricting access to a nearby storm drain. The oil spill on the ground was cleaned up when the pump was replaced.

Contamination at Eurofins: During the installation of the drainage line along the approach road to Pat O'Donnell's, groundwater emerged with surface residues indicative of hydrocarbons. Though unconfirmed, it is highly likely that this contamination aligns with observations from the trial holes at the Pat O'Donnell site which also indicated hydrocarbon contamination in ground water. Work at the location was halted a few days prior to the Christmas break until a solution could be found.

A siltation event occurred at Meadowbrook housing estate during drainage works. This incident arose when sediment-laden water, originating from groundwater seepage in the excavation area, was pumped into an adjacent surface drain. Despite the presence of environmental protocols and the involvement of an environmental champion prior to pumping, this event took place. Queries have been directed to the site ecologist regarding potential improvements to the permit-to-pump system and the feasibility of training additional environmental champions to address overcapacity concerns.



Memo GFRS-23-009 has been issued regarding the Environmental appraisal of the Copper Valley Emergency Temporary Flood Defence Work. The memo specifically highlights the birch trees, emphasizing the need for monitoring throughout the duration of the works and defects period. The focus is on identifying any signs of terminal damage that may have resulted from these works.




Item number	Date	Comment	Image	ECoW Action/Recommendation	Sorensens's Action response
1.	04/12/2023	There are two sandbags present in the Springmount watercourse at the outlet of the diversion. These are considered waste and require removal.		Discussed with site ecologist.	Sandbag waste was removed from the waterway.
2.	04/12/2023	Cut hose (waste) left in entrance to diversion inlet at Springmount. Hydrocarbon slick visible in settlement tank at Joinery (Sallybrook). Oil boom added to tank and discharge location – Tue 5th.		Discussed with site ecologist.	Removed from stream during Springmount site tidy up.
3.	04/12/2023	Minor amounts of oil-based residue were present in the siltation tank and attenuation channel at Sallybrook. This relates to surface water from the Sallybrook Industrial Estate that is pumped from the furniture shop works area.		Discussed with site ecologist.	An oil boom was installed within the siltation tank and within the attenuation channel.

<p>4.</p>	<p>06/12/2023</p>	<p>Heavily silted water was observed flowing from the attenuation area outlet. It was observed that fencing and dams within the attenuation channel were poor and ineffective. The siltation tank at the furniture works area was observed to be full with its water heavily silted.</p>		<p>Informed site ecologist.</p>	<p>Site ecologist was there immediately to investigate. Pumping from the Eurofins drainage works was stopped. The following day, silt fencing was installed, and the siltation tank pumped out into a tanker. A tool box talk on the importance of silt mitigation was given to workers by site ecologist 7/12/2023.</p>
<p>5.</p>	<p>07/12/2023</p>	<p>The Circus Field storage area has experienced an increase in its use for stockpiling in the month of December. Despite this heightened usage, the integrity of the otter fence has been maintained.</p>		<p>Discussed with site ecologist.</p>	<p>No Action required. Otter license expires end of December 2024. License extension to be applied for by site ecologist.</p>
<p>6.</p>	<p>07/12/2023</p>	<p>Some containers in use throughout the worksites lack clear and permanent labelling.</p>		<p>Discussed with site ecologists on ET002.</p>	<p>Create a protocol to guarantee that containers utilised across all work sites have distinct and permanent labelling.</p>


7.	07/12/2023	The wheeled generator at the Springmount work site was operating without being placed on a spill tray.		Discussed with site ecologists on ET002.	Immediate action was taken to address the situation, and the generator was promptly positioned onto a spill tray.
8.	07/12/2023	During discussions, it was proposed that the bank along the downstream section of the Springmount watercourse could potentially benefit from erosion control measures, such as the implementation of Coirmesh 900g. This could be especially beneficial in a flood event.		Discussed with site ecologists on ET002.	Sorensen to develop an erosion plan for this bank.
9.	07/12/2023	During the ET002 inspection, a dipper (Cinclus cinclus) was observed foraging within the waters of the Springmount watercourse downstream of the diversion outlet. This serves as a positive indicator of a functioning aquatic habitat, demonstrating that environmental safeguard actions are yielding positive results despite the ongoing intensive works.		Discussed with site ecologists on ET002.	No action required.

<p>10.</p>	<p>07/12/2023</p>	<p>It was observed that a slight discoloration in the water of the Springmount stream at both the diversion outlet and inlet. The consistent presence of discoloration at both points indicates that it is unrelated to the ongoing works.</p>		<p>Investigated with site ecologists on ET002.</p>	<p>No action required.</p>
<p>11.</p>	<p>07/12/2023</p>	<p>Good housing keeping at Hazelwood area. Good use of bins</p>		<p>Discussed with site ecologists on ET002.</p>	<p>No action required.</p>
<p>12.</p>	<p>07/12/2023</p>	<p>The silt screens installed at Sallybrook attenuation area, were not installed according to the manufacturer's recommendation (embedded up to the red line). Recognising the current saturated site conditions, it was mutually agreed to address this by securing the fencing with the use of stone instead.</p>		<p>Discussed with site ecologists on ET002.</p>	<p>Silt screens were embedded as per discussions on site. Silt screens were removed from the area for the duration of the Christmas break in case of a flood event.</p>




<p>13.</p>	<p>07/12/2023</p>	<p>During discussions on the attenuation area, it was emphasized that the silt dams/screens would need periodic silt removal to ensure their optimal functioning. Regular removal is necessary to prevent the buildup of sediment and to mitigate the risk of washout, particularly in the event of a flood that might lead to overtopping of the temporary sheet piles.</p>		<p>Discussed with site ecologists on ET002.</p>	<p>Sorensen to monitor the accumulation of sediment behind dams within the attenuation area.</p>
<p>14.</p>	<p>07/12/2023</p>	<p>Housing keeping in the region of the furniture shop needs improvement. The area currently has a mixture of accumulated waste, including metal and wood off-cuts, broken fencing, old spray cans, and pipe sections.</p>		<p>Discussed with site ecologists on ET002.</p>	<p>This area received a tidy up within a week following the discussion.</p>

15.	07/12/2023	Good storage in compound storage area.		Documented.	No action required.
16.	07/12/2023	The southern end of the JKW exclusion zone has been adjusted. Currently the timber log pile and works area here is open. Discussed the need to provide fencing and demarcation here to adhere to biosecurity measures.		Discussed with site ecologists on ET002.	No fencing or demarcation was installed at timber log pile in December 2023.
17.	14/12/2023	A siltation event occurred in the works area at Meadowbrook estate, where dirty water was pumped from excavations to the nearby gully		Informed site ecologist. Followed up with an email.	Site ecologists and environmental manager on site immediately to investigate. Pumping stopped. Sump installed. Time allowed for settlement prior to pumps being turned back on. A larger silt sock was fitted.

18.	15/12/2023	Oil spill at Meadowbrook works area. Following investigations, the source was found to be from the water pump.		Informed site ecologist. Followed up with an email.	Spill kit was deployed by ground personnel consisting of absorbent mats and oil booms. Spills trays were installed underneath the water pump.
19.	18/12/2023	Water was being pumped from the works area at Meadowbrook estate, displaying elevated sediment levels.		Informed site ecologist. Followed up with an email.	Site ecologist on site. Siltation tank was later deployed to the area. Siltation did slacken after initially pumping. However, there were sporadic bursts of high sediment levels for the duration of the site inspection.
20.	18/12/2023	It was observed again that diesel is leaking from a water pump (same as No. 18) currently in operation at Meadowbrook estate		Informed site ecologist. Followed up with an email.	Sandbags and oil booms were initially deployed. The pump was banded with sandbags. Pump was replaced the 20/12/2023. Oil spill was cleaned up with absorbent granules.

<p>21.</p>	<p>18/12/2023</p>	<p>The works area in operation today and yesterday at Eurofins has been dewatered into the upper section of the attenuation area at Sallybrook house (See attached photos). As discussed on site, this section of the attenuation area now contains water with a sheen on it and strong odour that could be potentially contaminated.</p>		<p>Informed site ecologist. Followed up with an email.</p>	<p>Oil booms installed around outtake and discharge point. Pumping ceased 19/12/23 to assess extent of contamination. Water samples taken and sent for testing.</p>
<p>22.</p>	<p>18/12/2023</p>	<p>Gully blocked up with mud related to archaeology trenching works at Meadowbrook.</p>		<p>Informed site ecologist.</p>	<p>Gully was unblocked the following day.</p>

<p>23.</p>	<p>20/12/2023</p>	<p>It was discussed the need for erosion control on the upstream slope of the Bleach Hill watercourse due to the exposed bare ground and steep incline. The use of Core-Mesh 900g was also considered, particularly when the area receives its final topsoil layer.</p>		<p>Discussed with site ecologists on ET003.</p>	<p>Silt fencing to be installed at the base of the slope above the watercourse.</p> <p>Core-Mesh 900g to be used when topsoiling and seeding takes place in 2024.</p>
<p>24.</p>	<p>20/12/2023</p>	<p>A birch tree (<i>Betula pubescens</i>) was removed from the Bleach hill site. This tree was not part of the project's design and was removed for health and safety reasons. It was discussed that this tree needs to be replaced with a tree of the similar species and comparable size as the one that was removed. There was specific emphasis on planting the replacement tree at the appropriate time of the year.</p>		<p>Discussed with site ecologists on ET003.</p>	<p>Replacement tree to be planted in line as per the Works Requirements.</p>
<p>25.</p>	<p>20/12/2023</p>	<p>Topsoiling was discussed and the related Work Requirements particularly concerning the grade of topsoil and seeding and ensuring that these activities</p>		<p>Discussed with site ecologists on ET003.</p>	<p>Bleach hill graded areas to be topsoiled and reseeded in line with the Work Requirements specifically section Appendix 6/8: Topsoiling, Grass Seeding and Turfing.</p>

		are carried out during the appropriate time of the year.			
26.	20/12/2023	The upper section of the attenuation area at Sallybrook house, which underwent dewatering from the Eurofins works area, is found to contain potentially hazardous material. It is recommended that this material be removed before the removal of the silt fence and before the Christmas break and a possible flood event.		Discussed with site ecologists on ET003.	It was proposed that the ground be scraped, and the material to be relocated to a trial hole in Pat O'Donnell's or the works area at Eurofins, essentially returning the material to its original location. Sorensen confirmed this action was carried out.
27.	20/12/2023	The ongoing plans for the removal of the timber stockpile were discussed. Need for demarcation agreed to separate drainage works area from timber pile.		Discussed with site ecologists on ET003.	Timber removal ongoing. Demarcation to be installed around timber in adhere with biosecurity measures.
28.	20/12/2023	It was agreed that following the drainage works in this area, the fence is to be reinstated according to the JKW exclusion zone layout as it was prior to these works.		Discussed with site ecologists on ET003.	Fence to be reinstated following drainage works.

Appendix A. Sorensen's Environmental Audit 29/11/2023 To 20/12/23

Attached separately.

Appendix B. Comments on Sorensen's December 2023 Environmental Audit:

- No mention of the siltation event on 14/12/2023 at Meadowbrook, where sedimented water was pumped into a nearby gully with insufficient measures in place to contain the heavy sediment loads.
- No mention of the siltation event on 18/12/2023 at Meadowbrook, where sedimented water was pumped into a nearby gully with insufficient measures in place to contain the heavy sediment loads.
- The investigation into the environmental incident reported on 15/12/2023 appears to be progressing at a slow pace. It is concerning that results are still pending.
- Revision of the Permit-to-Pump is necessary based on the siltation events at Meadowbrook on the 14th and 18th of December. No mention of gully as a designation.
- The Environmental Champion system needs to be reviewed, particularly concerning capacity and backup plans in case of absence from work. This is prompted by the siltation events observed at Meadowbrook on the 14th and 18th of December.
- Absence of mention regarding changes to fencing and use of space at the JKW exclusion area at Sallybrook.
- Absence of mention or follow up action regarding the timber log pile at Sallybrook without designation or barriers, as raised in ET002 and ET 003.