

East Lancashire Paper Mill Island, Radcliffe, Bury M26 2GU

CONDITION 14: ASSESSMENT OF ECOLOGICAL POTENTIAL OF CULVERTED BROOK AND PROTECTION MEASURES

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Document Control

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1.0 BACKGROUND AND RATIONALE

- 1.1 Condition 14 of the planning permission granted for the redevelopment of the East Lancashire Paper Mill Island site to residential development (Bury Council reference 67965) states:

“No development shall take place until it can be demonstrated that there will be no negative impacts on the ecological potential of the culverted Brook resulting from the disposal of foul water and surface water post-development submitted to and approved in writing by the Local Planning Authority. The details, as approved, shall be implemented in full in accordance with a timetable which has first been agreed in writing by the Local Planning Authority.”

- 1.2 ERAP (Consultant Ecologists) Ltd completed an ecological survey and assessment of the site between September and November 2021, comprising bat activity surveys at trees identified as having features suitable for use by roosting bats and an Extended Phase 1 Habitat Survey. The results of the surveys are presented at:

Trees at East Lancashire Paper Mill Island, Radcliffe, M26 2GU, Bat Activity Surveys (ERAP (Consultant Ecologists) Ltd, 2021); and

East Lancashire Paper Mill Island, Radcliffe, M26 2GU, Ecological Survey and Assessment (ERAP (Consultant Ecologists) Ltd, 2021).

- 1.3 The culverted brook, which lies in the western area of the site, is entirely enclosed by the culvert; there is no open water or riparian habitat within the site.
- 1.4 It is advised that the culverted brook and immediate downstream habitats have no statutory or non-statutory designation for nature conservation. The culverted section of brook is identified as Environment Agency Main River (Environment Agency, 2018) and it flows into the River Irwell (also Main River) with the confluence located approximately 91 metres to the south of the site boundary.
- 1.5 Avoidance of adverse effects on water quality, particularly downstream of the site, is essential to maintain the ecological value of off-site riparian habitats. This report identifies the potentially damaging operations on the watercourse / culverted brook and downstream habitats as a result of the proposals and describes the protection and mitigation measures to be applied to avoid an adverse effect.

2.0 DESCRIPTION OF PROPOSALS IN TERMS OF FOUL / SURFACE WATER DRAINAGE

Foul Water Discharge

- 2.1 In accordance with *East Lancs Paper Mill, Radcliffe, Manchester, Preliminary Drainage Strategy Drawing, Dwg. No. 21-B-12866-200* (Carley Daines and Partners Ltd, 2021) foul water will be collected via the proposed foul water sewage pipes which will connect to the existing combined sewer system and be removed from the site. No impacts to the culverted brook or water quality are expected during normal operation as a consequence of the proposals in relation to foul water drainage.

Surface Water Discharge

- 2.2 The *Preliminary Drainage Strategy Drawing* accommodates the collection of surface water from roofs and road surfaces (via gully pots on Baybutt Street) and discharge into the culverted brook. The system accommodates an overflow into an attenuation tank (55m³) to ensure a controlled rate of flow into the culverted brook.
- 2.3 The specific method of construction of the connection of the surface water pipes to the culverted brook is not known at this stage but it is likely to involve the construction of a manhole in the top of the culvert.
- 2.4 It has been confirmed by the drainage engineer (Carley Daines) that there are no proposals / no requirement to directly affect other areas of the culvert (i.e. no internal pointing of the brickwork is proposed).

3.0 IDENTIFICATION OF POTENTIALLY DAMAGING ACTIVITIES DURING INSTALLATION / USE OF THE NEW SURFACE WATER DRAINAGE SYSTEM

- 3.1 The design of the foul and surface water strategy has minimised the potential / risk of potentially damaging operations on water quality and the ecological value of downstream habitats.
- 3.2 In the absence of appropriate protective / mitigation measures the ecological value of the culverted brook and water quality of the brook (including at downstream sections) is at risk of:
- Habitat degradation / water quality impacts as a result of via hydrocarbon pollution incidents (both during construction and operation); and
 - Siltation and sedimentation during construction.

4.0 PROTECTIVE / AVOIDANCE, MITIGATION MEASURES AND RECOMMENDATIONS

4.1 Measures to be Applied During Construction

- 4.1.1 Additional protective measures and mitigation recommendations to be applied during the construction phase will be included in the contractor's method statements for the works and comprise:
- Adherence to the relevant Pollution Prevention Guidelines (PPG) namely:
 - PPG1: Basic good environmental practices (Environment Agency, 2013);
 - PPG5: Works in, near or over watercourses (Environment Agency, 2014);
 - PPG6: Construction and demolition sites (Environment Agency, 2012); and
 - PPG7: Operating refuelling sites (Environment Agency, 2011).
 - A detailed protocol to be followed in the event of an environmental / ecological incident in accordance with current Environment Agency guidelines; and
 - A record sheet to confirm that all contractors are aware of and understand what is required under the method statements.

4.2 Long-term Protection, Management and Maintenance

- 4.2.1 To secure the protective measures are effective over the long-term ERAP (Consultant Ecologists) Ltd has been advised that a management and maintenance regime to include inspection of the Aco drains will be implemented. The inspections will provide the mechanism to secured the implementation of remedial actions, if needed.

5.0 CONCLUSION

- 5.1 The design of the foul and surface water strategy has minimised the potential / risk of potentially damaging operations on water quality and the ecological value of downstream habitats.
- 5.2 Protective measures will be implemented (as described in the Construction Method Statements to include adherence to the relevant Pollution Prevention Guidelines) during the construction phase to minimise the risk of adverse effects on water quality and the ecological value of downstream habitats.

6.0 REFERENCES

Carley Daines and Partners Ltd, 2021. *East Lancs Paper Mill, Radcliffe, Manchester, Preliminary Drainage Strategy Drawing, Dwg. No. 21-B-12866-200*. Manchester: Carley Daines and Partners Ltd.

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