

Ecology Technical Note

Proposed Development: The Ironworks, Land at Crabtree Lane, Openshaw, M11 4GU
 LPA Application Ref: Not yet submitted (previous application to Manchester City Council ref: 134463/FO/2022)
 Date: 19th February 2025
 Biora Ref: SE1044-02_G01_JAJO

1.0 Introduction

- 1.1 Biora Nature Gain was instructed by Keepmoat Homes to address the comments received from pre-planning enquiries and from the Canal and River Trust in relation to protected aquatic vegetation populations in the stretch of the Ashton Canal adjacent to this proposed development site.

2.0 Ecological Context

- 2.1 Although the proposed development has not yet been submitted to planning, a previous planning application at this site was submitted and withdrawn in 2022. In preparation for both proposals, the site has been subject to a number of ecological and biodiversity surveys over recent years. In addition Solar (overshadowing) Analysis was undertaken that is relevant to the ecology of the adjacent Canal corridor – this was summarised in a pre-application document. Each of the following documents has been reviewed to inform this Technical Note:

Our Ref	Date	Previous/ Current Application	Scope of Ecological Work Undertaken	Ecologist
SE1044-02_E01	June 2022	Previous application	Preliminary Ecological Appraisal Report	Ascerta Ecology
SE1044-02_E02	June 2022	Previous application	Bat Nocturnal Surveys	Ascerta Ecology
SE1044-02_E03	July 2022	Previous application	Bat and Bird Box Plan	Ascerta Ecology
SE1044-02_E04	September 2024	Current application	Preliminary Ecological Appraisal Report	Collington Winter Environmental
SE1044-02_E05	September 2024	Current application	Updated Bat Emergence Surveys Report (NB: awaiting analysis of infrared camera surveys)	Collington Winter Environmental
SE1044-02_E06	January 2025	Current application	Extract from Biodiversity Net Gain Plan – Section on River Conditions Assessment (Word document)	Collington Winter Environmental
SE1044-02_E07	January 2025	Current application	Extract from The Statutory Biodiversity Net Gain Metric (spreadsheet) – Watercourses tab only	Collington Winter Environmental
SE1044-02_E08	January 2025	Current application	Pre-application Document (contains Solar Analysis Summary)	JTP/ Urban Green/ Keepmoat Homes

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- 2.2 In addition to reviewing the above documents, the Biora team conducted a wider desktop review of this site and the ecology of the Ashton Canal in January 2025, consulting the following additional sources:

Date Reviewed	Desktop Sources	Reviewed by
January 2025	MAGiC map	Jacob Ashley, Ecologist
January 2025	Biodiversity Impact Assessment, Edge Lane, Droylsden Rachel Hacking Ecology September 2022	Jacob Ashley, Ecologist
January 2025	Ecological Scoping Survey Of Canal Towpath Adjacent To Seamark House, Droylsden, Greater Manchester. Reachel Hacking Ecology 19 th March 2019	Jacob Ashley, Ecologist
January 2025	Extended Phase 1 Habitat Survey & Daytime Bat Survey, Edge Lane, Droylsden Rachel Hacking Ecology September 2021	Jacob Ashley, Ecologist
January 2025	Manchester City Council Planning Portal: Application (Manchester) 126420/FO/2020	Jacob Ashley, Ecologist
January 2025	Tameside Metropolitan Borough Council Planning Portal: Application (Tameside) 20/01116/Ful	Jacob Ashley, Ecologist
January 2025	Tameside Metropolitan Borough Council Planning Portal: Application (Tameside) 19/00962/FUL	Jacob Ashley, Ecologist
January 2025	Natural England Commissioned Report NECR130 The ecology of grass-wrack pondweed <i>Potamogeton compressus</i>	Jacob Ashley, Ecologist
January 2025	Ecology of the Floating Water-plantain, Conserving Natura 2000 Rivers, Ecology Series No. 9, RV Lansdown & PM Wade	Jacob Ashley, Ecologist
January 2025	Report to the Executive Cabinet 16 December 2015 SITES OF BIOLOGICAL IMPORTANCE UPDATE REVIEW.	Jacob Ashley, Ecologist

- 2.3 The extent of survey, reporting, mitigation, avoidance and compensation for ecology has been proportionate to the proposed development scheme, as set out in the relevant British Standards. This British Standard states that:

“The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.”¹

- 2.4 The issue of proportionality should be first determined by the professional ecological consultant, and we are satisfied that the scope of ecological works recommended at this site has been proportionate and has been implemented in full by the client and design team.

¹ BS:42020 (2013) Biodiversity. Code of practice for planning and development, British Standards Institute

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3.0 Pre-planning Comments Received

3.1 On 17th January 2025 , Greater Manchester Ecology Unit made the following comments pre-application:

"I would therefore consider that any shading on the canal and the impact it will have on the aquatic plant species/status of the SBI, does need to be considered within the Ecological Impact Assessment undertaken by your ecologists..."

...Depending on if an impact is identified and the significance of this impact, further information/action may be required to either avoid the impact or to further assess what the impact will be (understand the status of the aquatic plants in this stretch of canal)..."

...I would anticipate that your ecologist will need to undertake an assessment of the aquatic vegetation in the canal as part of the condition assessment for the BNG".

3.2 On 17th January 2025 Canal and River Trust made the following comments:

"At the meeting we briefly discussed the presence of Luronium within the canal. In terms of Luronium we have historic records of it being present between Lock 12 - 15, this was in isolated areas so a vulnerable population.

These records were from 2013. We do not have any more recent surveys. We would recommend as part of the shading study that a Luronium survey/aquatic plant survey is undertaken to ensure the new apartment blocks do not have a negative impact on the aquatic plant population. (In addition Potamogeton species have been noted along the canal too, but we do not hold a comprehensive record).

Furthermore, as the development is within 10m of the canal a River Condition Assessment (MoRPH) survey will be required as part of the BNG assessment.

Finally, it is unclear from the submitted details whether external lighting would be provided, especially along the canalside boundary/parking courts. We would welcome this being clarified to limits light spill towards the canal."

4.0 Results of Biora Desktop Survey

4.1 Biora's desktop survey was conducted in January to February 2025.

4.2 The stretch of Canal immediately adjacent the proposed development site is the Ashton Canal East, which has non-statutory designation as a Site of Biological Importance. The site was designated in June 1985, however importantly - following re-survey in 2014, it was downgraded from Grade A to Grade B in-line with SBI selection criteria, due to a decline in its aquatic flora. GMEU have further confirmed that the SBI was reviewed again last year, but that no change was recommended to its status and grade as a result.

4.3 This stretch of the Ashton Canal had fallen into a state of disrepair over consecutive decades until, in the 1960s, it became unnavigable. By 1974 the Canal had been restored for recreational use, and, over its six-mile stretch, it contains 18 locks, many of which are classed as listed buildings. There are current campaigns to restore the Hollinwood Branch and Stockport branch of the Ashton Canal, however neither stretch is within close proximity of this site.

4.4 Until the SBI citation is received (this has been requested from GMEU and from the project ecologist), the reason for the Canal's SBI designation cannot be fully confirmed. However it appears to have been designated for supporting two key aquatic vegetation species:

- Floating Water-plantain *Luronium natans* – protected under Schedule 8 of the Wildlife and Countryside Act 1981; and

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- Grass-wrack pondweed *Potamogeton compressus*: nationally scarce in Britain, generally protected under the Wildlife and Countryside Act 1981, this has been a priority species under the UK Biodiversity Action Plan (BAP) system and is categorised as 'endangered' according to IUCN criteria.
- 4.5 In the most recent Preliminary Ecological Appraisal, the project ecologist (Collington Winter Environmental) has also referenced records of a third aquatic vegetation species - Common water moss *Fontinalis antipyretica* in leats adjacent to locks and on lock walls of the Ashton Canal. However as this species is not specifically protected under wildlife legislation, it has been scoped out of the need for further assessment.
- 4.6 Neither the Ashton Canal SBI nor the species for which it is designated are highlighted as priorities in the new Greater Manchester Local Nature Recovery Strategy.
- 4.7 The following characteristics of Floating water plantain *Luronium natans* are relevant to the assessment of impacts of the proposed development. This species:
 - likes clean, unpolluted and nutrient-poor water with low levels of nitrates and phosphates;
 - likes moderately alkaline to neutral pH water (6.5 – 8.0);
 - likes shallow water (up to 1.5m) and a stable water level;
 - prefers open, well-lit areas with minimal shading (including from trees);
 - dislikes high levels of Carp *Cyprinus carpio* (which feed on emergent vegetation);
 - dislikes high levels of waterfowl (which feed on emergent vegetation);
 - dislikes high levels of nutrients (eutrophication) from eg urban wastewater, leading to algal blooms;
 - dislikes heavy metals or other pollutants that degrade water quality; and
 - would be very highly disturbed term by dredging.
- 4.8 The following characteristics of Grass-wrack pondweed *Potamogeton compressus* are relevant to the assessment of impacts of the proposed development. This species:
 - is slightly ephemeral;
 - likes some shade but not deep shade;
 - is often transient in its early successional communities and can be easily outcompeted by other aquatic vegetation;
 - likes a degree of disturbance to stop being outcompeted;
 - likes slightly alkaline conditions;
 - dislikes high levels of Carp *Cyprinus carpio* (which feed on emergent vegetation);
 - dislikes high levels of waterfowl (which feed on emergent vegetation); and
 - would be very highly disturbed term by dredging.

5.0 Results of Biora Field (Sub-optimal Walkover) Survey, January 2025

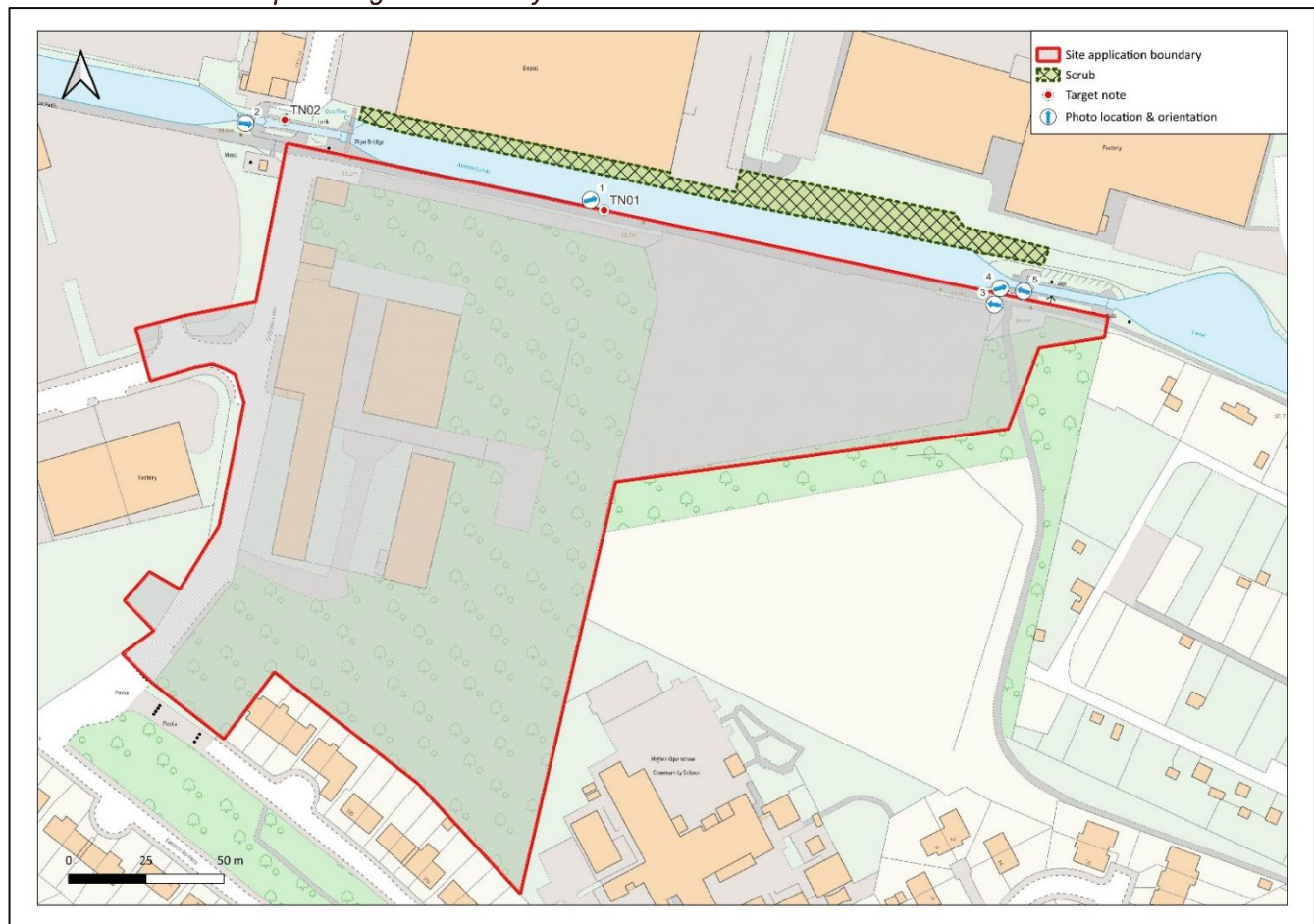
- 5.1 A walkover survey of this site took place on 31st January 2025, led by Dr David Hackett, Ecology Director and assisted by Gary Spriggs, Ecological Assistant. There is no specific best practice methodology for this type of aquatic vegetation survey, however the following sources when combined provide a suitable methodology, recommended by the Chartered Institute of Ecology and Environmental Management:
 - Lansdown, R.V. A field guide to the riverine plants of Britain and Ireland. Ardeola, Stroud. For the best guide to aquatic plants; and
 - Anon. (2009) Ecological Surveying Techniques for Protected Flora and Fauna during the Planning of National Road Schemes. National Roads Authority.
- 5.2 January is sub-optimal for this type of survey, which is best undertaken in Summer, when aquatic vegetation species are most apparent. However general conditions of the Canal, including broadbrush conditions and presence of waterfowl, can be usefully assessed at any time of year.
- 5.3 Credentials of the survey team are as follows:
 - **Dr David Hackett BSc MLD PhD MCIEEM CEnv** is a Founding Director and has led the Biora team for the past sixteen years. David is a highly experienced ecologist, project manager and qualified landscape

architect with over 25 years' professional experience, who regularly project manages and co-ordinates teams of ecologists conducting surveys for multiple protected species to inform planning applications and Environmental Impact Statements. David is a full member of the Chartered Institute of Ecology and Environmental Management, a Chartered Environmentalist and a member of Cheshire Bat Group. He is highly experienced in designing and conducting National Vegetation Classification and other vegetation and habitat surveys and in preparing associated management packages for both ecology and landscape. David has surveyed, mapped, calculated, designed and agreed Biodiversity Net Gain offsite compensation schemes for over fifteen separate sites in England over the past three years.

- **Gary Spriggs BSc (Hons)** is a highly experienced Ecological Assistant with over ten years of ecological survey experience. Gary is experienced in conducting National Vegetation Classification and other vegetation and habitat surveys and is highly skilled in GIS mapping and visualisations.

- 5.4 The area surveyed, along with its relation to the proposed development site, is shown at **Plan 1** below. It comprised approximately 300m of the Ashton Canal situated immediately north of Crabtree Lane, primarily focused on the stretch of Canal located between Locks 13 and 14.

Plan 1: Ashton Canal Aquatic Vegetation Survey Plan



- 5.5 Weather conditions during this field survey were cold and dry, with an approximate temperature of 3°C and with a 6km/h wind from WSW. Approximately one third of the western portion of the Canal was frozen and the remaining water was visibly discoloured, which restricted visibility beneath the water's surface.
- 5.4 No aquatic vegetation was identified within the section of the Ashton Canal during this survey. Two target notes were recorded (both are illustrated at **Plan 1** above):

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- TN01 Rock spray *Cotoneaster horizontalis* (a Schedule 9 invasive species) was present along the southern towpath; and
- TN02 A small number of Canada goose *Branta canadensis* were noted adjacent the Canal to the west, by Lock 13.

5.5 The only other ecological feature noted during survey was a stretch of continuous and relatively species-rich Birch and Bramble Scrub, running along the Canal's northern boundary.

5.6 The following photographs were taken during field survey:



Photograph P01: TN01 Rock spray *Cotoneaster horizontalis* (a Schedule 9 invasive species)



Photograph P02: TN02 Lock 13 with family of Canada Goose *Branta canadensis*

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Photograph P03: Eastern section of Ashton Canal



Photograph P04: Ashton Canal, Lock 14



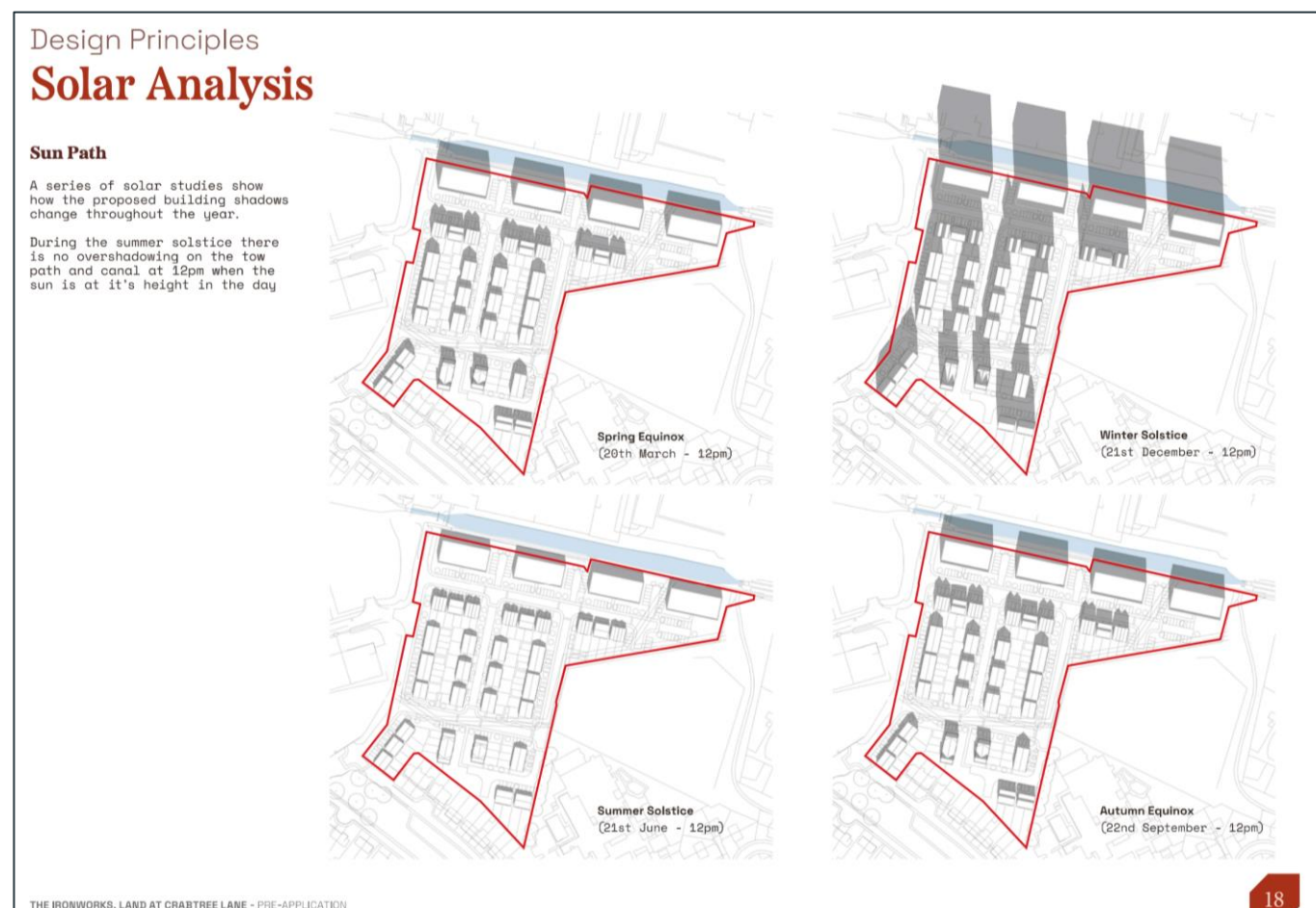
Photograph P05: View from Lock 14 looking west along Ashton Canal

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6.0 Proposed Development (including Predicted Shading on Canal)

- 6.1 The proposed development includes approximately 194 dwellings, comprising a mix of 70 apartments and 124 dwelling/ houses, including both one-bedroomed and two-bedroomed apartments, with spaces between. Each apartment block is four-storeys high, with individual houses of two- and three-storeys. The proposals also include car parking, landscaping and areas of public open space.
- 6.2 The previous proposal was for a slightly smaller scale development, with three-storey apartment blocks. Although the apartment blocks are higher in the latest application, the spaces between them (through which light will reach the Canal) are wider.
- 6.3 The masterplanning team describe the solar analysis impacts as follows (as illustrated at **Figure 1** below).
- *“During the Summer Solstice, there is no overshadowing on the canal itself, as per the previous application and despite the additional storey of height.”*
 - *In the winter months, the canal is overshadowed by the proposals, however, this was also the case with the previous scheme at this time of year.*
 - *In summary whilst there is some increase in overshadowing there remains large portions of the year where there is no greater or limited increased impact on the canal and a varied condition of full sun, and some overshadowing occurs in both the current and previous proposals.*
 - *It is also worth noting that along the canal to the east & west, there are many examples of larger buildings situated in close proximity to the canal”.*

Figure 1: Solar Analysis extract from Pre-Application Document



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7.0 Assessment of Impacts on Ashton Canal SBI and Aquatic Vegetation Species

- 7.1 Overall the two aquatic vegetation species for which this SBI has likely been designated would be affected to only a very limited degree by overshadowing from the proposed development. Although Floating water plantain *Luronium natans* prefers open, well-lit areas with minimal shading, Grass-wrack pondweed *Potamogeton compressus* prefers some shade to flourish. The Solar Assessment shows that sufficient areas of the Canal would remain unshaded throughout the spring, summer and autumn months to allow both species to fare well in this stretch of Canal (should other conditions suit), with only the winter months (when the species is largely dormant) seeing significant overshadowing.
- 7.2 It is likely however that the populations of both species have been declining in this section of the Ashton Canal for a number of years, as highlighted by the downgrading of the SBI in 2014. This is likely due to a combination of factors including:
- high levels of Carp *Cyprinus carpio*;
 - high levels of waterfowl including Canada goose *Branta canadensis*;
 - polluted water;
 - invasive species;
 - debris from antisocial behaviour (including associated with drug misuse);
 - natural vegetation succession and
 - canal dredging.
- 7.3 The noted presence of Canada goose *Branta canadensis* at this stretch of the Ashton Canal is likely to be a significant deterrent to both species flourishing at this location. This waterfowl (along with Carp *Cyprinus carpio*) will feed on the emergent vegetation of both Floating water-plantain *Luronium natans* and Grass-wrack pondweed *Potamogeton compressus*, effectively clearing it as it begins to grow and stopping vegetation communities from thriving and colonising. The absence of any other aquatic vegetation during field survey is a further indication of this likely predation by both waterfowl and fish.

8.0 Recommendations

- 8.1 It was useful to discuss these findings and a draft version of this Technical Note with the client team and the GMEU team on 11th February 2025 in an online meeting.
- 8.2 Although further optimal-season aquatic vegetation survey is possible, it is not deemed necessary at this location. Sufficient data has been obtained from desktop data sources and from sub-optimal field survey to determine that neither Floating Water-plantain *Luronium natans* nor Grass-wrack pondweed *Potamogeton compressus* is present in this stretch of the Ashton Canal SBI in any significant numbers.
- 8.3 Although the Canal and River Trust are “seeking large scale growers of aquatic plants to work with over the next few years, to propagate and translocate specimens into nature reserves²”, it is unlikely that any communities of these two species introduced to the Ashton Canal at this location would survive and/ or flourish, for the reasons set out at 7.2 above. Subsequently no introduction of either species is recommended as part of the proposed development’s landscape scheme.
- 8.4 Subsequently it is considered that the proposed development is highly unlikely to negatively impact this SBI or the species for which it has been designated. It is our professional opinion that the extent of survey, reporting, mitigation, avoidance and compensation for ecology employed at this site has been in line with best practice methodologies and fully conforms to the latest British Standards³, and that no further aquatic vegetation surveys are required at this site prior to determination of the planning application.

² Canal and River Trust website, retrieved January 2025: [Canal & River Trust | Making life better by water](https://www.canalrivertrust.org.uk/making-life-better-by-water)

³ BS:42020 (2013) Biodiversity. Code of practice for planning and development, British Standards Institute; and

8.5 For any further information please contact:



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BS:8683 (2021) Process for designing and implementing biodiversity net gain, British Standards Institute.