Wigan Local Development Framework – Examination in Public

Hearing Statement

Prepared by Gerald Eve LLP on behalf of Gordon Moon Properties and Merepark Project Management LLP

13 January 2012

Contents

Appendix

1 Introduction

1.1 Gerald Eve LLP is instructed by Gordon Moon Properties and Merepark Project Management LLP (Merepark) to provide a statement to the Inspector in advance of the Wigan Borough Council Core Strategy EIP. Gordon Moon Properties is the owner of the site and Merepark is their development partner.

1.2 The site lies within the East Lancashire Road Corridor and is identified as land at Pocket Nook Land, Lowton. Our client's site forms one part of the wider land at 'Pocket Nook, Lowton' proposed allocation. A plan showing the extent of our client's ownership and an additional parcel of land (south of Pocket Nook Lane), which will allow connection to Pocket Nook Lane (and on to Newton Road), subject to contract, is attached at **Appendix 1**. Contracts should be signed in relation to the parcel of land to the west of our clients site in advance of the Examination in Public.

1.3 The site has been promoted through the Local Development Framework process and this statement follows the Inspector's comments having undertaken an initial review of the submitted Core Strategy and supporting documents in November 2011.

2 Background and Information Submitted with these Representations

2.1 As noted above, this statement follows concerns raised by the Inspector over soundness of the draft Core Strategy. An exploratory meeting was held on 8 November 2011 and the Council:

> *"Recognised the need for additional clarity in relation to the proposal for a broad location for new development at the East Lancashire Road corridor and indicated the potential for changes to be suggested"* (Note of exploratory meeting held on 8 November – Paragraph 13).

2.2 The Council wrote to the Inspector (Mr Kevin Ward) to confirm its position in relation to the East Lancashire Road corridor and stated:

> *"There is a need for clarity on how the amount and location of housing development at the East Lancashire Road corridor will be determined."* (Letter from Wigan Borough Council dated 11 November 2011 – Page 1).

2.3 The Inspector has raised 7 specific questions in relation to the East Lancashire Road corridor (Planning Policy ST4). A list of the Inspector's 7 questions is included at **Appendix 2**.

2.4 The following information will also assist with responding to these detailed points and is referenced within these representations:

- A Site Plan – **Appendix 1**;
- Inspector's Questions – **Appendix 2**;
- Opportunities Drawing – **Appendix 3**;
- Residential Schematic Plan – **Appendix 4**;
- Deliverability Drawing and Statement – **Appendix 5**;
- Flooding Report (prepared by LK Associates Limited – 20 May 2009) – **Appendix 6**;
- A Preliminary Highway Access Assessment (prepared by Dennis Wilson – 6 May 2009) – **Appendix 7**; and
- Ecological Appraisal (prepared by Waterman – 1 April 2009) – **Appendix 8**.

2.5 The technical reports referred to above have been referenced in earlier representations and are included for completeness.

3 Planning Policy Background

3.1 The key planning policy statement relevant to plan making procedures is **Planning Policy Statement 12** (PPS12): Local Spatial Planning (June 2008). The key issues identified by PPS12 are that all core strategies should provide: a vision; strategic objectives; description of how much development, how, where, when and by what means; and arrangement for management and monitoring (paragraph 4.1).

3.2 In addition, core strategies must be justifiable (robust and credible evidence) and the most appropriate strategy when considered against alternatives (paragraph 4.36 – 4.38). In addition Core Strategy's must be effective (deliverable, flexible and able to be monitored) as set out in paragraphs 4.44 – 4.47.

3.3 The other key planning policy guidance and statements relevant to the consideration of these representations are:

- **Planning Policy Statement 1** (PPS1): Delivering Sustainable Development (2005);
- **Planning Policy Guidance 2** (PPG2): Green Belts (2001);
- **Planning Policy Statement 3** (PPS3): Housing (2006);
- **Planning Policy Statement 9** (PPS9): Biodiversity and Geological Conservation (1994);
- **Planning Policy Guidance 13** (PPG13): Transport (March 2001, updated January 2011; and
- **Planning Policy Statement 25** (PPS25): Development and Flood Risk (2010).

4 The Inspector's Questions

4.1 The Inspector has raised 7 specific questions in relation to the East Lancashire Road Corridor (**Policy SP4**). These questions are set out at **Appendix 2** of this Statement.

4.2 It is understood that Wigan Council is currently preparing a formal response to these questions and we reserve the right to make further representations on those comments at the appropriate time. We consider it is not appropriate to comment further on questions 1 – question 5 (inclusive) until we have had the opportunity to consider the Council's formal responses.

4.3 We do however provide specific responses on questions 6 and 7 as set out below:

Question 6 – What potential adverse effects are there e.g. traffic, capacity of local infrastructure, open land/green space, biodiversity and residential amenity?

4.4 We deal with each of the specific issues raised by the Inspector in turn below. The responses are based on the Council's assessment of the Pocket Nook site and the detailed technical reports that have been undertaken by our client's consultants.

- **Traffic**

  The Council identifies that:

  "*The Local Highway Authority has advised that it would be acceptable for future development broad location to be accessed from a number of existing highway connections leading to Newton Road and St Helens Road, but not from the A579 Lowton Street, St Mary's Bypass."* (Reference: Paragraph 12.7 of the Council's Evidence Paper, August 2011).

  The Evidence Paper went on to state that:

  "The site is a sustainable location with good transport links to the surrounding areas. Implementation of appropriate pedestrian/cycle links to the development site could potentially offset an provide carbon reductions." (Reference: Paragraph 12.8 of the Council's Evidence Paper, August 2011).

  The summary/conclusions of the preliminary Highway Access Assessment undertaken by Royal Haskoning / Dennis Wilson (**Appendix 7**) states that:

  "*Our preliminary design, based on the National Design Standard (DMRB), suggest that a new site access junction off the A579 is feasible. Wigan Council may resist the*

proposals on the basis that they may interfere with the operation of the A580/A579 junction. There is scope to increase the junction spacing between the new junction and the A580/A579 junction further, if required, but this may involve costly underpass widening highway works.

Wigan Council may also request peak hour Junction Capacity Assessments to demonstrate that the potential queues from the proposed junction do not interfere with the operation of the A580/A579 junction. Initial indications are that the queues at the proposed junction will not interfere with the operation of the A580/A579 junction, however, to definitively confirm this junction, Capacity Assessments will be necessary." (Our emphasis) (Reference: Page 3).

The above demonstrates that the Council and our clients Highway Consultant believe access to the site is achievable and they do not appear any insurmountable issues in terms of existing queuing on the surrounding highway network. Clearly further works would be necessary to confirm the suitability of an access directly onto the A579, particularly given the Council's comments, but the access onto Newton Road (via Pocket Nook Lane) is agreed by both parties to be acceptable in principle, subject to further technical advice.

Given the above, there are not considered to be any adverse effects in relation to access to the site or traffic issues generally. The proposals are therefore considered to comply with PPS13: Transport.

- **Capacity of Local Infrastructure**

The Council's comments on capacity of local infrastructure can be summarised as follows:

"Utilities and waste - telecommunications, gas and electric providers do not foresee any infrastructure constraints, and any requirements for reinforcement will be agreed directly with the developers." (Reference: Paragraph 12.11 – Council's Evidence Paper, August 2011).

"Primary Schools – Lowton St Mary's (immediately adjacent to the site) Guilded Hollins (approximately 875m to the boundary at the northern end of the site) and Lowton J&L immediately adjacent to the site. Secondary schools – Lowton High (immediately adjacent to the site); GP's and health centres – surgeries on Newton Road (1.3km away), Braithwaite Road (2km away) and Slagg Lane (2.3km away)."

(Reference: Existing Infrastructure Section – the Council's Evidence Paper, August 2011).

"Sustainable Development – land at Pocket Nook is identified as a broad location for new development, it accords with PPS1: Delivering Sustainable Development." (Reference: Paragraph 12.4 – Council's Evidence Paper, August 2011).

In addition to these comments from the Council, there are a number of shops and services located along Newton Road, Lowton. These are approximately 10-15 minutes walk from the site.

Given the above, the site is considered to have entirely appropriate capacity of local infrastructure for residential development not just on this site, but the wider Pocket Nook site.

- **Open Land/Greenspace**

The Council identifies that the site lies adjacent to Lowton High School playing fields, but there is a deficit in playing pitches in Lowton. This deficit could be resolved with appropriate financial contributions from the potential new residential developments or part or all of the Pocket Nook site.

With regard to greenspace, and particularly given the scale of this site and the wider Pocket Nook site, significant opportunities exist for high quality greenspace within the residential development and to link green corridors between the sites for amenity and ecological benefits.

The allocation of this site for residential development is considered to be an opportunity for enhancing existing provision within the local community and securing high quality open space/greenspace within the new development.

- **Biodiversity**

The Ecological Appraisal (**Appendix 8**) undertaken by our clients on this site concludes that:

"Following further survey work to ascertain the status of protected species on site, the development proposals should integrate any protected species requirements into the landscape design. If this can be achieved, together with the incorporation of ecological enhancement, it would ensure that there is a net biodiversity gain. This

would ensure that the development accords with national, regional and local planning policy." (Reference: Paragraph 7.5).

The Ecological Appraisal therefore demonstrates that residential development on this site could come forward without harm to biodiversity and could even lead to a net biodiversity gain. Given the above, the proposals are considered to accord with PPS9: Biodiversity

- **Residential Amenity**

Residential amenity can take many forms and must be very carefully considered during the planning application process. At this stage, when the principle of different land uses is being strategically considered, the relationship with surrounding uses is of significant importance. In this case, given the size and scale of this site and the wider Pocket Nook site, there is considered to be sufficient space to allow well designed residential to come forward without material harm to the residential amenity of the surrounding houses.

There is not considered to be a specific residential amenity issue that would prevent the principle of residential development on this site and the issue must be considered carefully at the planning application stage.

Question 7 – Are the sites realistically viable and deliverable? What evidence is there?

4.5 The issue of viability is difficult to assess at this stage, given that the principle of residential development on this site is being assessed and it is not yet clear what levels of density may be achieved or the overall likely unit numbers. A Deliverability Statement prepared by Merepark is included at **Appendix 5**.

4.6 **Planning Policy Statement 3** provides helpful commentary on when sites should be considered deliverable. It states:

"To be considered deliverable, sites should, at the point of adoption of the relevant local development document:

- ***Be available** – the site is available now;*
- ***Be suitable** – the site offers a suitable location for development now and would contribute to the creation of sustainable, mixed communities;*
- ***Be achievable** – there is a reasonable prospect that housing would be delivered on the site within 5 years."* (Reference: paragraph 54- PPS3)

4.7 Dealing with these issues in turn, we can confirm that our client owns the freehold of this site and it is **available** for development now. There are no clear infrastructure issues that would prevent development coming forward and our client has made a significant financial investment to exist with bringing forward this site at the earliest opportunity.

4.8 The site is considered to be **suitable** for residential development. It was safeguarded in the adopted Unitary Development Plan as appropriate for development, albeit to serve development needs in the longer term. The second strand of the suitability of a site relates to the creation of sustainable, mixed communities. The council clearly believes that the site is suitable for residential development and states:

> *"Land at Pocket Nook is identified as a broad location for new development, it accords with PPS1: Delivering Sustainable Development."* (Reference: Paragraph 12.4 – Council's Evidence Paper, August 2011).

4.9 Furthermore, the Council specifically comments that the type of housing proposed could meet a need and therefore assist with creating mixed communities. It states that:

> *"The development of the option site would allow for a lower density, higher value, residential development, the type of which is presently under represented in the borough as a whole."* (Reference: Paragraph 12.4 – Council's Evidence Paper, August 2011).

4.10 Turning to whether the site is **achievable**, we would specifically refer to our clients development partner (Merepark) who has agreed, subject to finalising legal documentation, to bring its significant development, housing, energy, sustainability and construction experience to this project to assist with achieving the development on this site.

4.11 Given the above, this site is considered to be viable and deliverable within the next 5 years. The proposal is therefore considered to accord with the thrust of PPS3.

5 Strategy Planning Commentary

5.1 The entire Pocket Nook site is currently allocated in the adopted Unitary Development Plan as safeguarded land (Policy GB2). That policy clearly states that although the site is not currently allocated for development it will;

> *"Be kept free of permanent development so that it may fulfil its purpose of meeting possible longer term development needs."* (Reference: Policy GB2).

5.2 The justification of the policy further explains the reason for this policy allocation in that safeguarded land:

> *"Comprises areas and sites between the urban area and the Green Belt which may be required to meet longer – term development needs beyond the plan period without the need to alter the Green Belt boundary. The designation of such land therefore helps to strengthen the performance of Green Belt, suggested in paragraph 2.12 of PPG2."* (Reference: Policy GB2 – Justification text).

5.3 Given the above, it follows that the principle of development on the entire Pocket Nook site, although not allocated for development, has been considered to be broadly appropriate for future development. The natural defensible boundaries around the site - built development to the north and west and the existing road network to the south and east, allow this parcel of land to be developed without leading to urban sprawl or built up areas merging together.

5.4 Releasing such a parcel of land is considered by the Council to potentially remove pressure on the Green Belt and therefore accord with the principles of PPG2. (Reference: UDP Policy GB2).

5.5 This site could be the catalyst for the wider development of the Pocket Nook site and an indicative residential layout is attached at **Appendix 4**. The plan identifies access points to the site (from Newton Road and the A579) and clear connections with the land to the north and west. A principle issue with unlocking the potential of the wider site is considered to be appropriate access and this part of the site is felt to have the potential to overcome that obstacle.

5.6 There are not considered to be any barriers to development of this particular site and the issues such as sustainability, access/highway safety, flooding, ecology, and local infrastructure have been considered within our clients technical reports (**Appendices 6-8**) and the Council's Evidence Paper (August 2011).

5.7 The allocation of this site is considered to accord with **PPS1** (Sustainable location for development), **PPS2** (supporting the thrust of Green Belt policy), **PPS3** (appropriate location for housing), **PPS9** (potential net biodiversity gain), **PPG13** (suitable access and no issues of highway safety) and **PPS25** (appropriate flooding mitigation can be provided).

5.8 The site is considered to be appropriate for development in isolation, although it would clearly improve the deliverability of other sites with the creation of key access points and it is likely to form the initial phase of the wider residential development of the entire Pocket Nook site.

5.9 In summary, the site itself, and the wider Pocket Nook site is considered to have excellent potential for residential development. The current safeguarded land designation identifies that the site has previously been considered as broadly appropriate for development and it is a naturally contained site.

5.10 There are no barriers to the development to this site and it could come forward in isolation or as part of a phased approach to the wider Pocket Nook site.

5.11 The site offers the flexibility to be developed at a range of densities, although the Council's current suggestion is for lower density and higher value dwellings in order to create and help balance the housing market (Paragraph 12.10 of the Evidence Paper, August 2011). The issue of assisting with the cross subsidy of improvements to the east west corridor is noted and will clearly require an appropriate quantum of residential development to raise funds to assist with cross subsidy, while ensuring financially viable residential development comes forward on the site.

6 Summary

6.1 The summary of this Hearing Statement is as follows:

- These comments have been submitted following the Inspector's concerns over soundness of the draft Core Strategy and the 7 questions specifically raised in relation to Policy 7b. We consider that questions 1 – 5 should most appropriately be responded to by Wigan Council and we understand those comments/proposed changes will be available in advance of the examination in public. We reserve the right to make comments on the subsequent changes proposed at the Examination in Public.

- Detailed comments have been provided in relation to question 6 – potential adverse effects of development of this site and the wider Pocket Nook site. From the technical reports prepared by our clients consultants and the Council's Evidence Paper, detailed matters such as highway safety/access, ecology, residential amenity, open land/greenspace and local infrastructure have been carefully considered and are not felt to be barriers to development of this site.

- Question 7 raises the issue of viability and deliverability of the site. It is difficult to specifically address the issue of financial viability at this stage in the strategic planning process, although our client has entered into an agreement (subject to final legal sign off) with a development partner (Merepark) which demonstrates an appetite from the market for residential development on this site.

  Turning to deliverability, the site is clearly available, is considered a suitable location for development and there is felt to be strong prospects that the site is achievable i.e. delivered within 5 years. Detailed comments on these matters are set out in paragraphs 4.6 – 4.8 above.

- The site is currently allocated as safeguarded land within the adopted Unitary Development Plan. This allocation suggests that the site was considered broadly appropriate for future development at the time of adoption of the UDP and its release could remove pressure on Green Belt sites.

- This site is considered to be appropriate for development in isolation, or as part of the wider Pocket Nook site. The site is felt to have the best opportunity to create appropriate access to the wider Pocket Nook site (from Newton Road and A579, subject to

appropriate further technical advice) and could be the catalyst for the wider residential development on the Pocket Nook site.

- The Residential Schematic Plan (attached at **Appendix 4**) demonstrates clear linkages with the sites to the north and west.

- The principle of this site assisting with the cross subsidy of infrastructure projects in the east west corridor is acknowledged, subject to the detail of an appropriate mechanism which does not prevent development coming forward. The issue of the quantum of residential development necessary to deliver meaningful contributions to such infrastructure projects must be carefully considered and we reserve the right to comment on the Council's detailed responses to questions 1 – 5 raised by the Inspector, at the Examination in Public.

- The Pocket Nook site has natural defensible boundaries on all sides, existing development to the north and west and the existing road network to the south and east. This site therefore offers a fixed area of potential development land, which could be developed in phases. The development of this site would not lead to further urban sprawl.

- The Council considers that the site is located in a sustainable location (Paragraph 12.4 – Evidence Paper, August 2011) and accords with PPS 1: Delivering Sustainable Development. The conclusions of the technical reports submitted with this statement (**Appendices 6-8**) suggest that the allocation of this site for residential development is also considered to accord with **PPS1**, **PPS2**, **PPS3**, **PPS9**, **PPG13** and **PPS25**.

- Given the above, the wider Pocket Nook site is considered to be appropriate for residential development, which could come forward in a phased manner. This site is felt to have the ideal land holding to unlock the wider Pocket Nook site, with the potential to introduce the most appropriate access points and thus should be brought forward in the first phase of development.

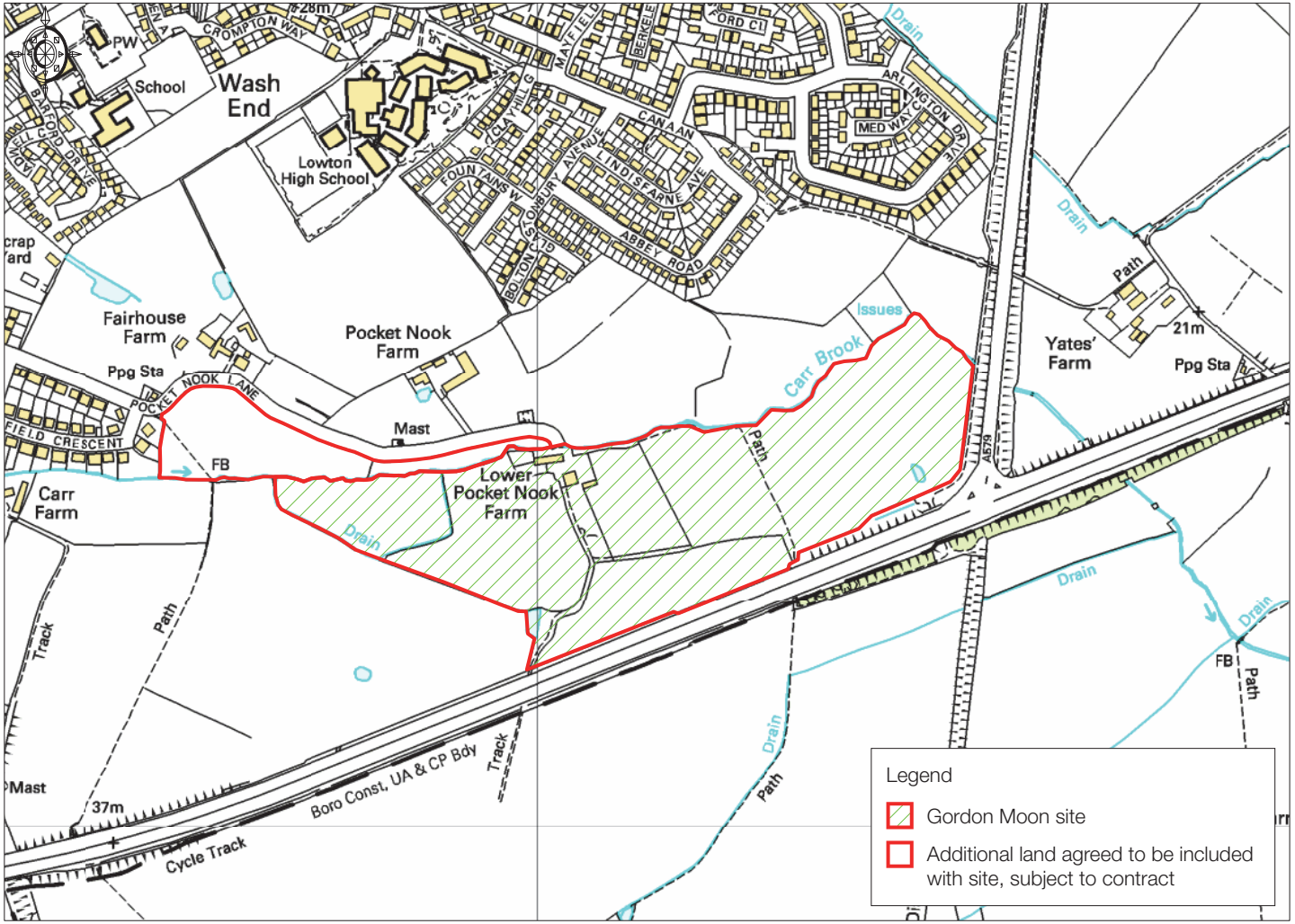
Appendix

1 A Site Plan (Reference MC0269/2921)
2 The Inspector's Questions
3 Opportunities Drawing
4 Residential Schematic Plan
5 Deliverability Drawing and Statement
6 Flooding Report (prepared by LK Associates Limited – 20 May 2009)
7 Preliminary Highway Access Assessment (prepared by Dennis Wilson – 6 May 2009)
8 Ecological Appraisal (prepared by Waterman – 1 April 2009)

Appendix 1

A Site Plan (Reference MC0269/2921)

Gordon Moon Properties Site (Reference 2921)



Promap®

Plan no. MC0269/2921

Appendix 2

The Inspector's Questions

Inspector's Questions

Matter 7b – East Lancashire Road Corridor

1) What is the justification for including four site options spread over a broad area in a submitted Core Strategy and retaining the potential for more than one or even all the sites to be developed? Does it provide sufficient guidance for later DPDs? How?

2) How much housing could be delivered on each site option or all of them together? How would this relate to the overall scale and pattern of housing development planned in the Borough?

3) What is the justification for development on this scale outside the EW core? How would the proposal fit with the spatial strategy?

4) How in practical terms will development in the East Lancs Road Corridor benefit regeneration in the EW core? How will it be phased? Could investment and demand be diverted from the EW core, particularly in difficult market conditions?

5) What are the benefits of seeking lower density housing and how will this be achieved?

6) What potential adverse effects are there e.g. traffic, capacity of local infrastructure, open land/greenspace, biodiversity and residential amenity?

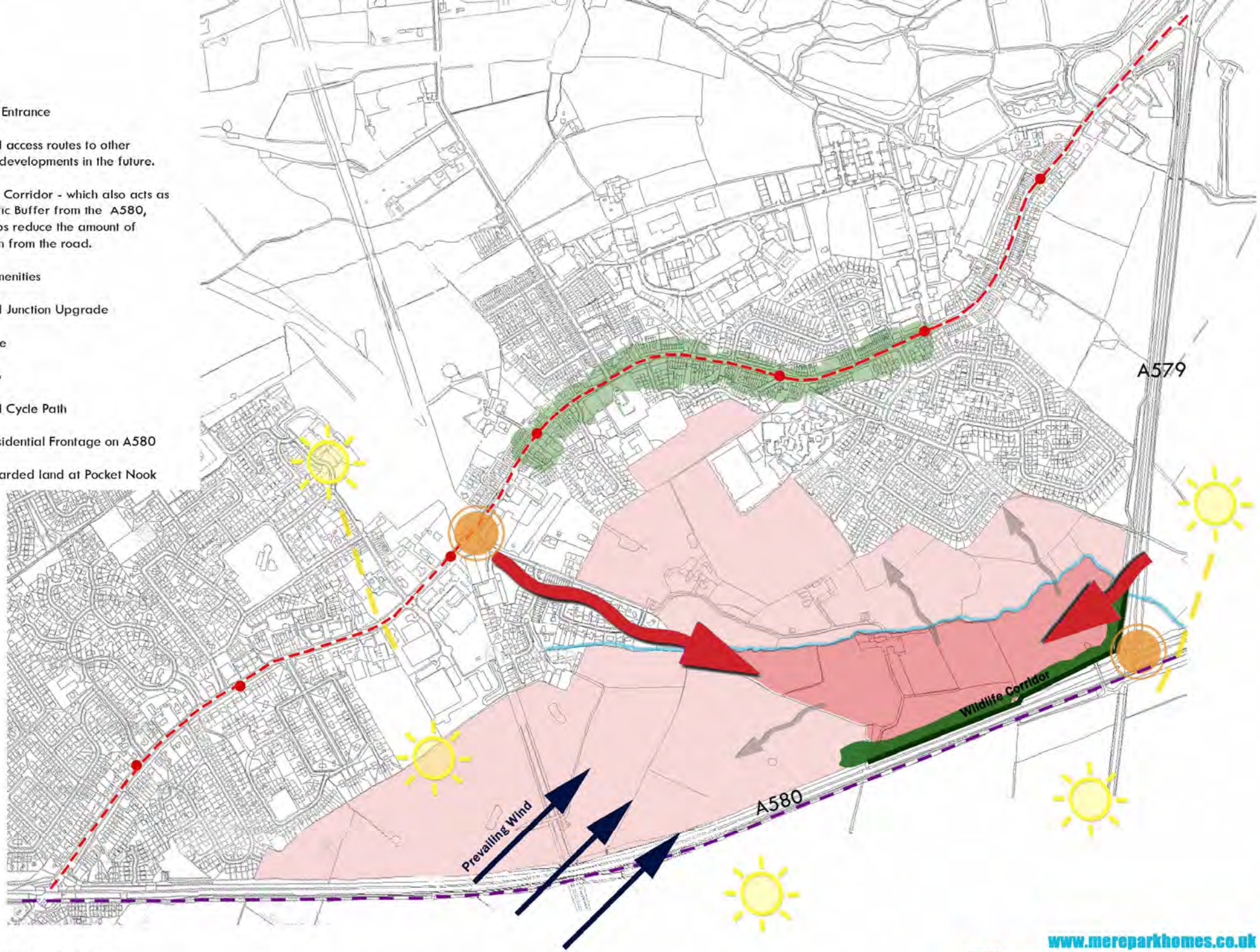
7) Are the sites realistically viable and deliverable? What evidence is there?

Appendix 3

Opportunities Drawing

Key:

- Site
- Primary Entrance
- Potential access routes to other housing developments in the future.
- Wildlife Corridor - which also acts as a Acoustic Buffer from the A580, and helps reduce the amount of pollutioin from the road.
- Local Amenities
- Potential Junction Upgrade
- Bus Route
- Bus Stop
- National Cycle Path
- New Residential Frontage on A580
- Safe guarded land at Pocket Nook Lane



Opportunities Drawing

Land at Pocket Nook Lane, Lowton

www.mereparkhomes.co.uk

Merepark Homes

Appendix 4

Residential Schematic Plan

Schematic Residential layout

Land at Pocket Nook Lane, Lowton

1:1250@A1

www.morepark homes.co.uk

Morepark Homes

Appendix 5

Deliverability Drawing and Statement

Phasing Plan

Land at Pocket Nook Lane, Lowton

1:1250@A1

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Key to developing any large scale residential development is deliverability. This is recognised by Merepark and has been translated in to the proposed residential schematics. There are a multitude of phasing and deliverable variations and we have illustrated one. To achieve deliverability, the residential scheme has been structured to provide a primary spine road which will provide the logical access to Lower Pocket Nook Farm and neighboring sites, which all form part of the safeguarded land at Pocket Nook Lane.

The construction of the spine road leading East/West through the site is a key strategic step in releasing manageable and deliverable residential development packages of land. Phase 1 will involve the construction of the spine road, upgrade to the junction of Pocket Nook Lane and Newton Road (A572) and construction of a new junction to the A579 (subject to negotiations with the Highways Department and ongoing negotiations with neighboring land owners) together with associated services, infrastructure and obviously the associated residential.

Going forward, further parcels of land can then be released, some as small as 5 acres and providing between 60 & 100 houses, the optimum size for most major house builders in this current market.

Appendix 6

Flooding Report (prepared by LK Associates Limited – 20 May 2009)

LAND AT POCKET NOOK, LOWTON, WIGAN

FLOODING ISSUES – CONSTRAINTS AND OPTIONS APPRAISAL

The Site

The site is shown on Figure 1 (OS grid reference 364200, 397350) and is bounded to the north by Carr Brook, to the south by the A580 East Lancs Road, to the east by the A579 and to the west by farmland. It is accessed from Pocket Nook Lane via Lower Pocket Nook Farm. It is largely rectangular with a triangular section at the western end and generally falls gently to the north towards the brook and to the west. The whole ownership extends to the south of the East Lancs Road but we understand that only the northern section is to be promoted for development and this report therefore addresses this area only. It is approximately 12ha in area

The site is shown on the Environment Agency's (EA) website Flood Zone Mapping (Figure 2) as being partly in Flood Zones 3 and 2 (PPS25 Annex D Table D.1) – High and Medium Probability of flooding, but mostly in Flood Zone 1 – minimal risk. From EA data it appears not to benefit from formal flood defences and is likely to be at most risk of direct flooding from the brook. The proposed use for housing is classified as 'More Vulnerable' in PPS25. PPS25 requires that a Flood Risk Assessment will be required to accompany the Planning Application and it is likely that some Sequential Test evidence will also need to be produced.

Information Supplied and Gathered

Information supplied by the Client
A topographic survey for the site is not available at this stage but may be available later in the development process. An outline development plan has not been provided, but it is understood that the site is to be promoted for housing.

Site visits
A site visit was undertaken on 7 May, at which photographs were taken of the site and surroundings, specifically to note the hydrology, local falls, threshold levels of existing and recently-constructed buildings and the relationship between the site, adjacent properties, the accesses and the brook. The occupiers of Lower Pocket Nook Farm were not approached. A United Utilities borehole pumping installation was noted on Pocket Nook Lane close to the farm.

The brook flows in an easterly direction, turning south-east at the eastern end of the site and flowing south under the A 579 and A580. Piped culverts are provided at farm crossings close to Lower Pocket Nook Farm and under the A 579 and A580 there are rectangular concrete box culverts. A footbridge takes a public footpath over the brook to the east of the farm. There is a pipe bridge (300mm dia?) across the brook close to the footpath crossing and the footpath follows the alignment of this pipe in a southerly direction across the site to the A580, passing a number of chambers on and close to the alignment. A surface water sewer (400mm dia?) discharges into the brook from a south-westerly direction to the east of the farm and a manhole was observed on its alignment

The brook is relatively small as it passes the farm but increases in size towards the east. Little flow was observed at the time of the visit. Ground levels were noted to rise generally to the south and low spots were observed to the east and west of Lower Pocket Nook farm close to the brook. The southern bank of the brook appears to have developed a low 'levee' over most of the length to the east of the farm which will act to defend these low spots against inundation to some extent.

The site is currently sown with grass and cereal crop.

Environment Agency
Flood risk data (attached) was purchased from the Environment Agency (EA). They were able to provide flood level and flow data for Carr Brook and detailed flood mapping. No historic flooding or flood defences are indicated on the flood map. The flood data includes some cross-sections of the brook at model nodes from which some preliminary ground level data has been obtained. Node and section locations are shown on Figure 4 and sections are provided on separate drawings. The EA is able to supply 'LiDAR' ground level data for a cost of £200 per 1km tile which would provide a reasonable appreciation of levels over the site in advance of a full topographical survey being undertaken. Two tiles would be required to cover the site.

The EA has not confirmed what historic flood data they hold for the vicinity and if there is a flood warning system in place for the area. We have asked for clarification and, if no such data is available, it may indicate that the site is at lower risk than indicated.

The Groundwater Source Protection Zone (GSPZ) information was accessed on the EA website (Figure 3). The entire site is within the outer abstraction zones of two abstraction wells in the vicinity, except for the western end of the site, which is within the inner zone of the borehole pumping station observed on Pocket Nook Lane. There appear to be further abstraction points to the east and west. This being so, it is very likely that the use of soakaways on site will be constrained if ground conditions are suitable. The EA will require that any surface water intended for infiltration into the ground is suitably treated and safeguards are put in place to protect groundwater against pollution. It is likely that no infiltration will be allowed within the inner abstraction zone except possibly for roof water, which is notionally clean and unlikely to suffer from accidental pollution.

The following comprises a summary of the usual EA guidance that would apply to this site:

- Normal EA requirements in the North-west are to allow a minimum freeboard for habitable ground floors of 600mm above the flood level which would result from a 1% annual probability flood event allowing for the additional effects of climate change (20% additional flow). Compromise can sometimes be negotiated.
- Car parking should ideally be above the 1% level, but can be accommodated lower with suitable safeguards.
- Similarly, safe access for pedestrians should be above the 1% probability plus climate change allowance level, although compromise can sometimes be made where this is not possible provided the access is still 'safe' under flood conditions.
- The EA will need to be consulted with the detail of drainage issues and would need to be contacted for permission to discharge any surface water to Carr Brook. It is very likely that they would require the maximum rate to be restricted to the current 'greenfield' runoff rate, by reduction and/or attenuation.

Local Council
It was not considered that the Council's input would be critical to the viability of the site with respect to flooding issues and so they were not contacted. It would, however, be necessary to obtain their comments for inclusion in a FRA to support the planning application. The Local Authority should also be contacted to determine their policy and requirements for site drainage and any Sustainable Drainage System (SuDS) requirements. Common guidance is to aim to reduce total runoff from redeveloped brownfield sites by 20% and to control the rate of runoff from greenfield sites to the original rate.

Drainage Undertaker
United Utilities (UU) were not contacted as part of this assessment but would need to be contacted as part of any FRA to obtain any information they may have recorded on local

drainage or flooding issues and any constraints they may have with regard to foul and surface water discharges from the site. It is likely that a significant development on this site would require some reinforcement of their sewage treatment facilities off-site, or the provision of facilities for the development on-site.

Discussion and Summary of Constraints

Flood levels
The extent of 'Functional Floodplain', which may preclude development, is defined by the 5% annual probability event (once in 20 years) but the EA has not provided this information. However, comparison of the cross-sections with the flood level data provided indicates that the brook flows 'in bank' up to the current 1:100 year (1%) event and therefore, and since there is no reported history of flooding, this lesser event will be 'in bank' within the brook also. There should therefore be no reason to constrain development on the grounds that any part of the site is in functional floodplain'.

Building habitable floor level and site level
The 'design' flood level for the site should be the 1% annual probability event plus an allowance for climate change. The EA has provided this information and from that it can be seen that the design flood level will vary from 24.83m at the western end of the site to 22.05m at the eastern end. This should be taken as the minimum general site platform level for initial site planning.

The Environment Agency requires floor levels for habitable use to be above the 1% probability fluvial flooding level, increased to account for a possible 20% increase in flow, and then with a freeboard allowance on top. The EA NW Region generally requires a freeboard of 600mm, which would result in floor levels between 25.43 in the west and 22.65m in the east. The 0.1% (1000-year) flood levels have also been given for the site and, in some cases, they would be above this assumed floor level. It may therefore be prudent to set floor levels at this level where it is slightly higher.

A precautionary view of a reasonably 'worst case' position should be taken for development planning and site viability. The minimum site levels and ground floor levels of properties should therefore initially be set at or above these levels. If this is shown to be a problem at later project stages, consultation with the EA and possible modelling of the brook could result in lowering these levels in agreement with EA and LPA.

Compensatory flood storage
On the information currently available, the area available for site development is likely to be constrained by the necessity to provide compensatory flood storage. Inspection of the EA data shows that there are at least two, and there are possibly other, sections of the brook where the bank is slightly lower than the 1% plus climate change flood level (the design level). This would allow the lower areas to the south of the 'levee' to flood and provide relief to land further downstream by storing floodwater over high flow periods. A detailed analysis of volumes is outside the scope of this assessment but the likely outcome will be that a 'sacrificial' corridor would be set aside along the brook that could be allowed to flood.

Later topographical data and river modelling (if thought prudent) may help to quantify compensatory flood storage that would need to be retained. This should be equivalent to the net free volume on the current site below the flood design level. This could be achieved by providing the above sacrificial corridor and lowering ground levels in open spaces and garden areas. We note from the cross-section data provided by the EA that a large part of the area in the west of the site is up to 900mm below the design flood level and it may be found that this area (coloured blue on the EA flood map attached – 1% probability flood zone) is not economically developable. The turquoise area indicates that area of land likely to flood in the

0.1% (1000 year) event and inspection of the data indicates that depth of flooding is generally quite shallow at existing levels.

Surface Water Drainage
It is very likely that UU will not allow any surface water from the site into their sewerage system. Permission from the EA will be required to discharge to Carr Brook and they will probably require flows to be reduced and/or attenuated at least to the 'greenfield' runoff rate from the site. Installation of soakaways is possible but is constrained by the need to site them at least 5m away from buildings and feasibility is determined by GSPZ requirements, ground conditions (including any contamination), permeability and local water table. It is therefore wise to assume for now that attenuation should be included for runoff from roofs, roads and hardstandings before discharge to the brook. Treatment by interceptor should not be necessary for runoff from roofs. Driveways and front parking may be made permeable to reduce total runoff. Allowance for attenuation generally has to be made at levels above the design flood level. The management of surface water runoff can have a significant effect on developable area, and therefore it is recommended that outline runoff calculations are undertaken as soon as initial impermeable areas are obtained from the first round of masterplanning.

Safe Access
Permanent vehicular and pedestrian access to the site is currently from Pocket Nook Lane where road levels adjacent to the site access appear to be safely above design flood level. Alternative access arrangements may be included in the masterplan, and these should also be situated above design flood level. Both the A580 and the A579 are well above all the provided flood levels and would provide safe access points. Safe means of access to and egress from the site and buildings to higher ground for pedestrians and emergency services is required under flood conditions, ideally above the 1% flood level increased for additional 20% flow (the design event).

Mitigation
The following comprises a schedule of mitigation elements that can be provided to the EA and LPA as support for any planning application.

- Ground floor levels and general access levels can be set above likely flood level.
- Site falls can be arranged to be free draining
- Flood storage can be compensated for in a sacrificial 'wildlife' strip and in open areas and gardens below ground floor level
- Surface water runoff can be reduced/attenuated to existing/greenfield rate.
- Safe access can be achieved under design flood conditions.

Discussion and Next Actions

To provide a robust case, by way of a FRA, to the EA and LPA to support a planning application it will be necessary to undertake the following:

- Obtain a topographical survey of the site, and also accesses to outside flood influence.
- Consult with the EA flood defence engineer and planning liaison officer for the region to determine how much evidence they will require to justify flood storage and runoff attenuation volumes. (Depending on the outcome, it may then be necessary to model the performance of the brook).
- Consult with UU and LA and obtain their flood data for the area and any constraints on development and surface water discharge, including SuDS requirements.
- Model runoff rates and volumes from the site, investigate feasibility of soakaways with the EA and model attenuation volumes required. Investigate ground conditions and undertake infiltration testing if soakaways are found to be feasible.

- Provide flood storage compensation and surface water management proposals.

Attachments:
Fig 1 – Location plan
Fig 2 – EA web-based flood mapping
Fig 3 – EA Groundwater source protection zone mapping
Fig 4 – Locations of EA cross-sections and flood model nodes
EA detailed flood map
EA flood level data
EA cross-section plans

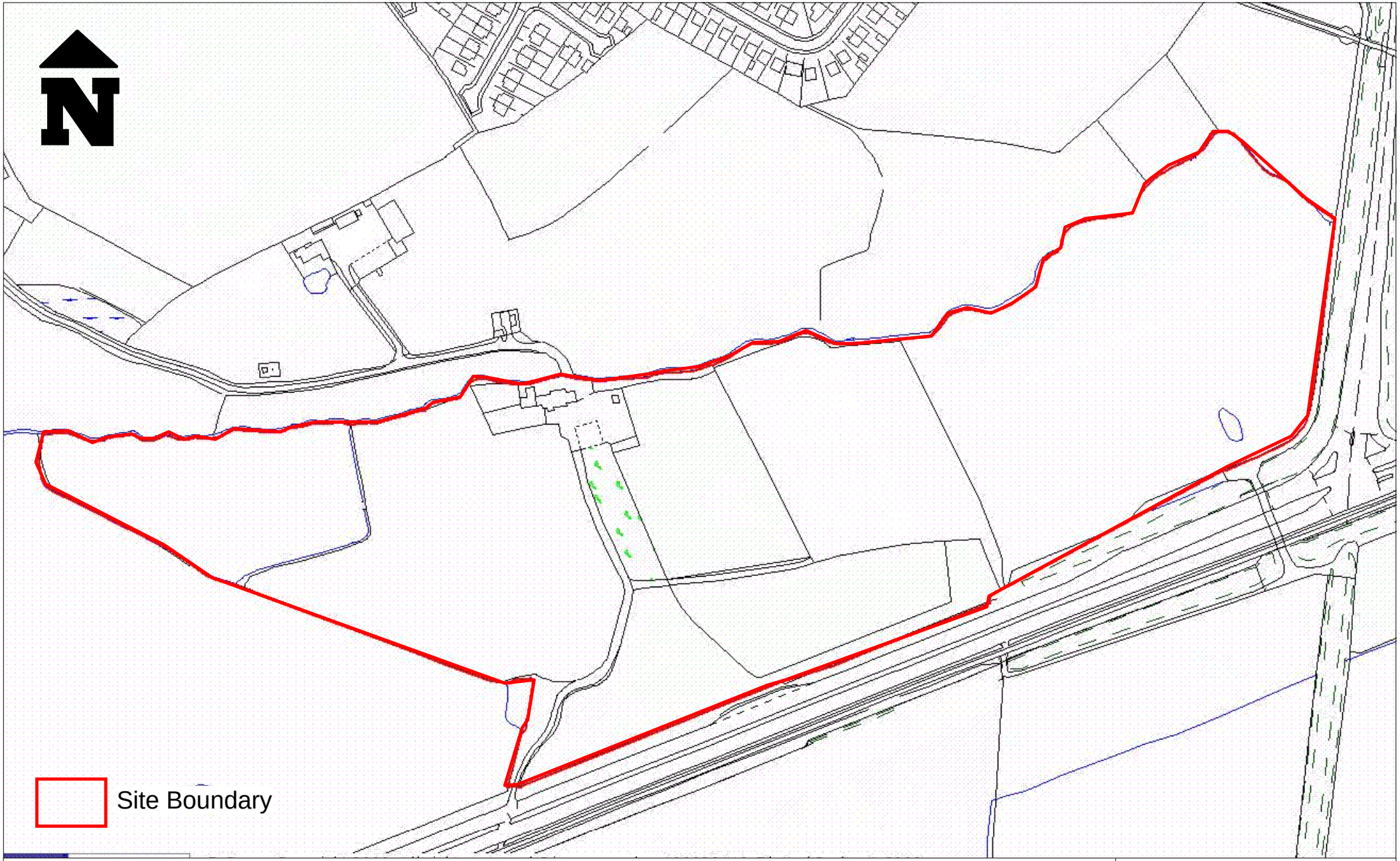
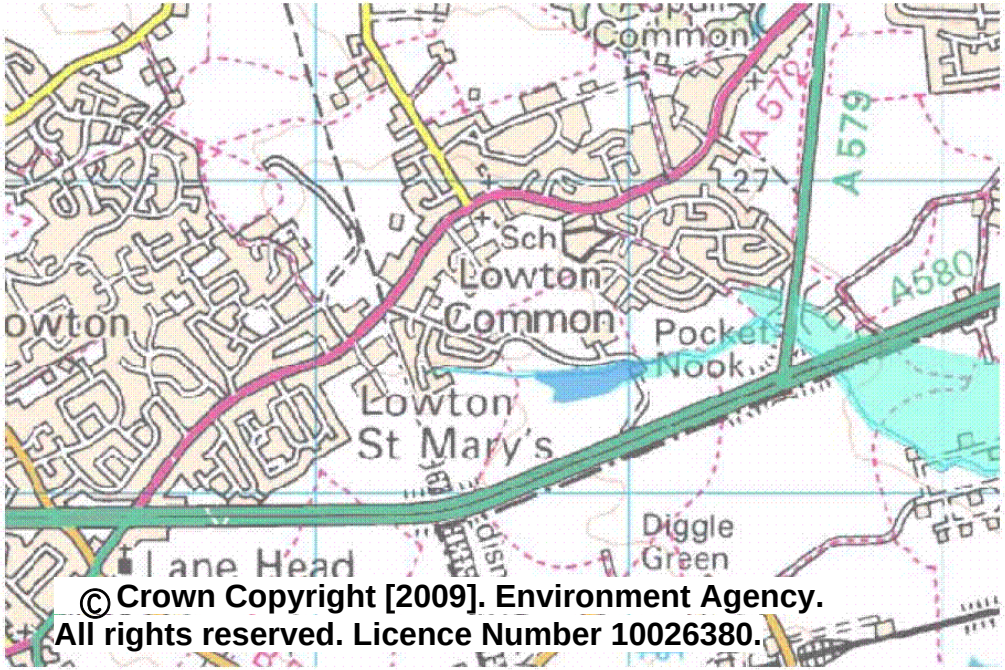


Figure 1: Location Plan, Pocket Nook Farm, Lowton

Drawn: May 2009

LK ASSOCIATES LIMITED



Flooding from rivers or sea without defences

Extent of extreme flood

Flood defences

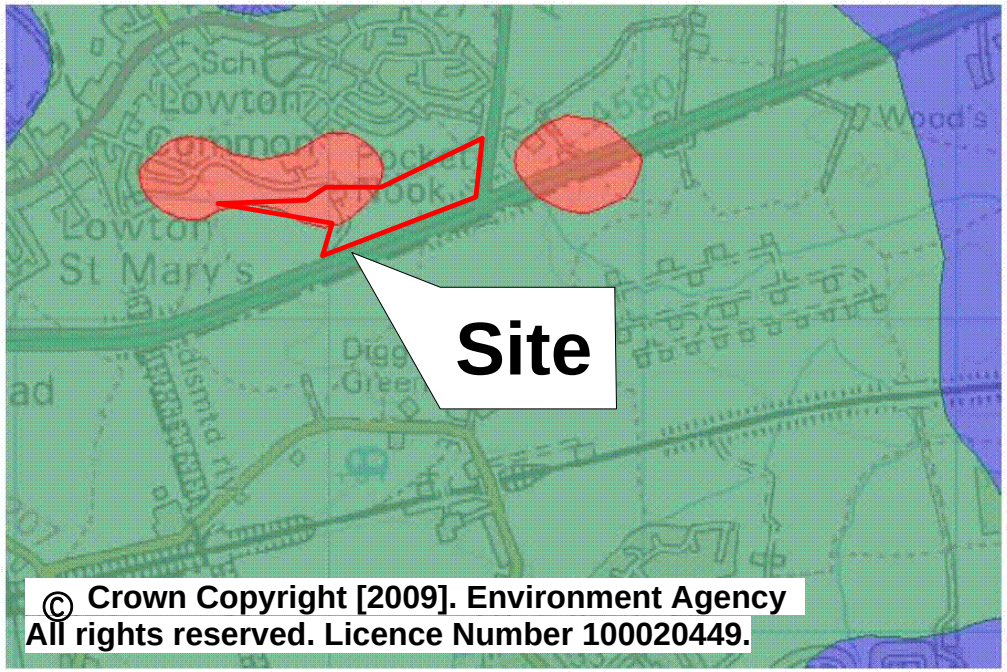
Areas benefiting from flood defences

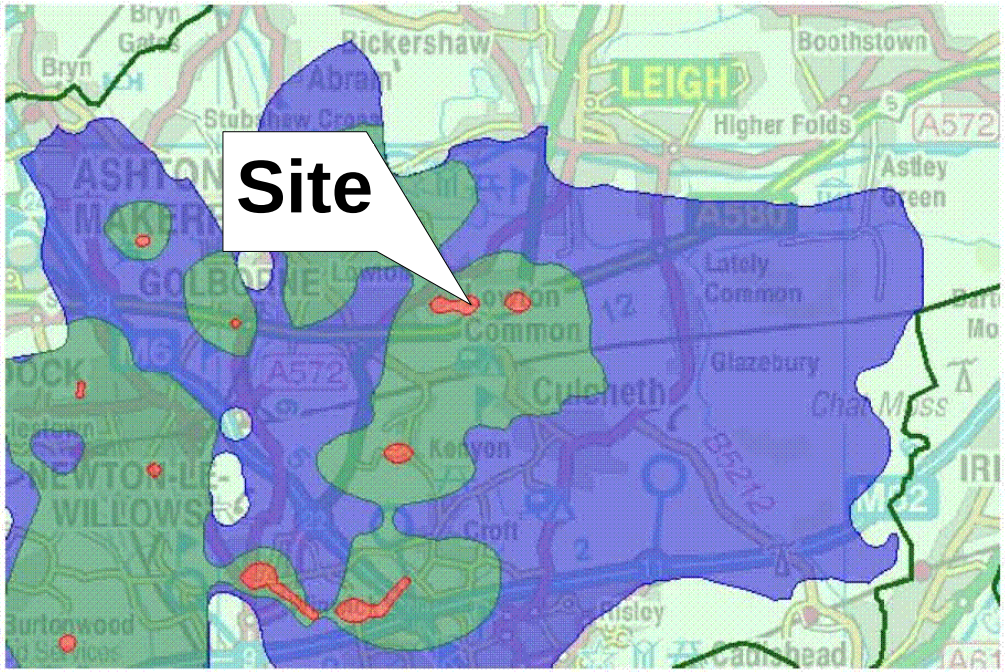
Site Boundary

Environment Agency Flood Zone Map, Pocket Nook, Lowton

Drawn: May 2009

LK ASSOCIATES LIMITED





Inner Zone

Outer Zone

Total Catchment

Special Interest

Site Boundary

Environment Agency Groundwater Source Protection Zone Map, Pocket Nook, Lowton

Drawn: May 2009

LK ASSOCIATES LIMITED

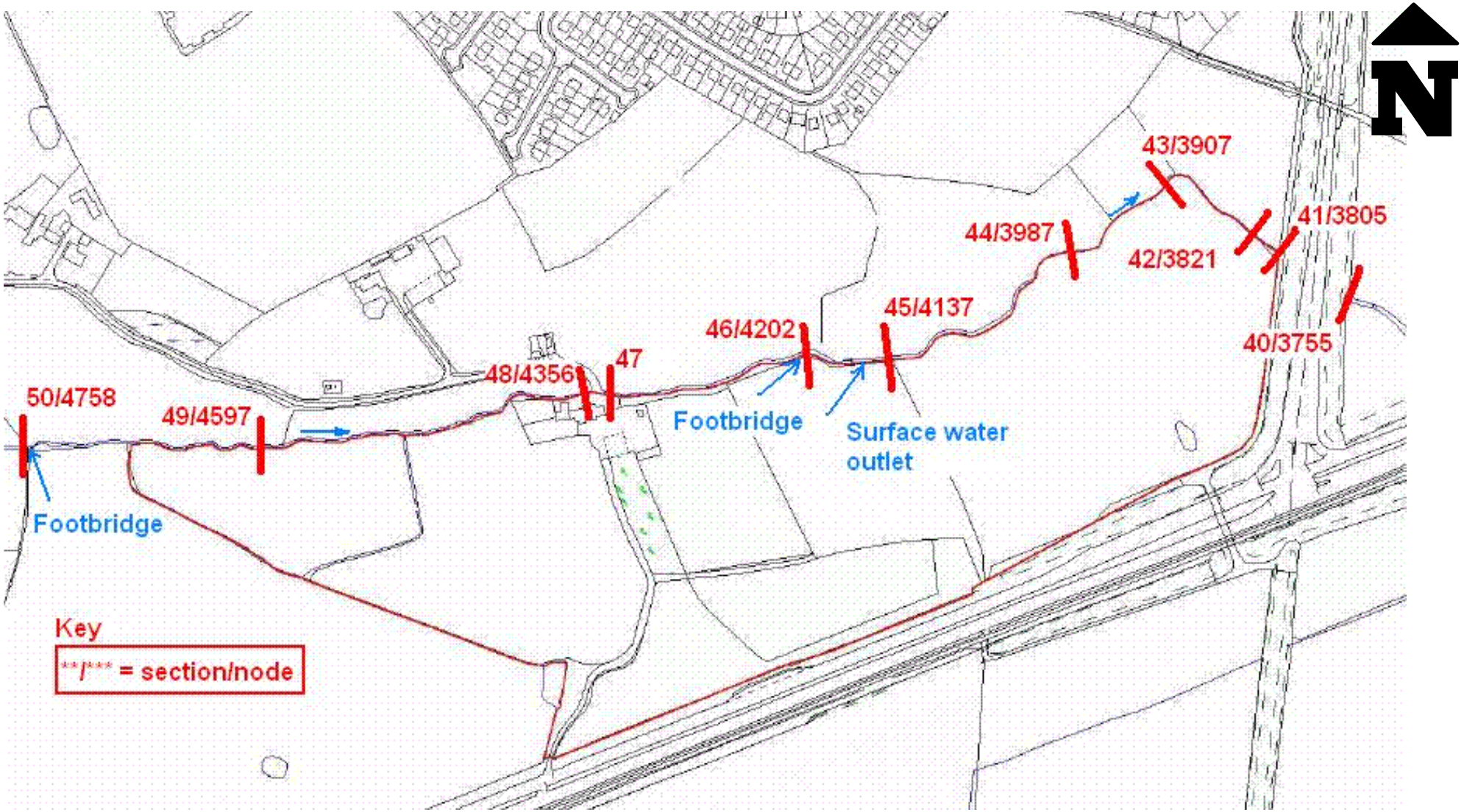
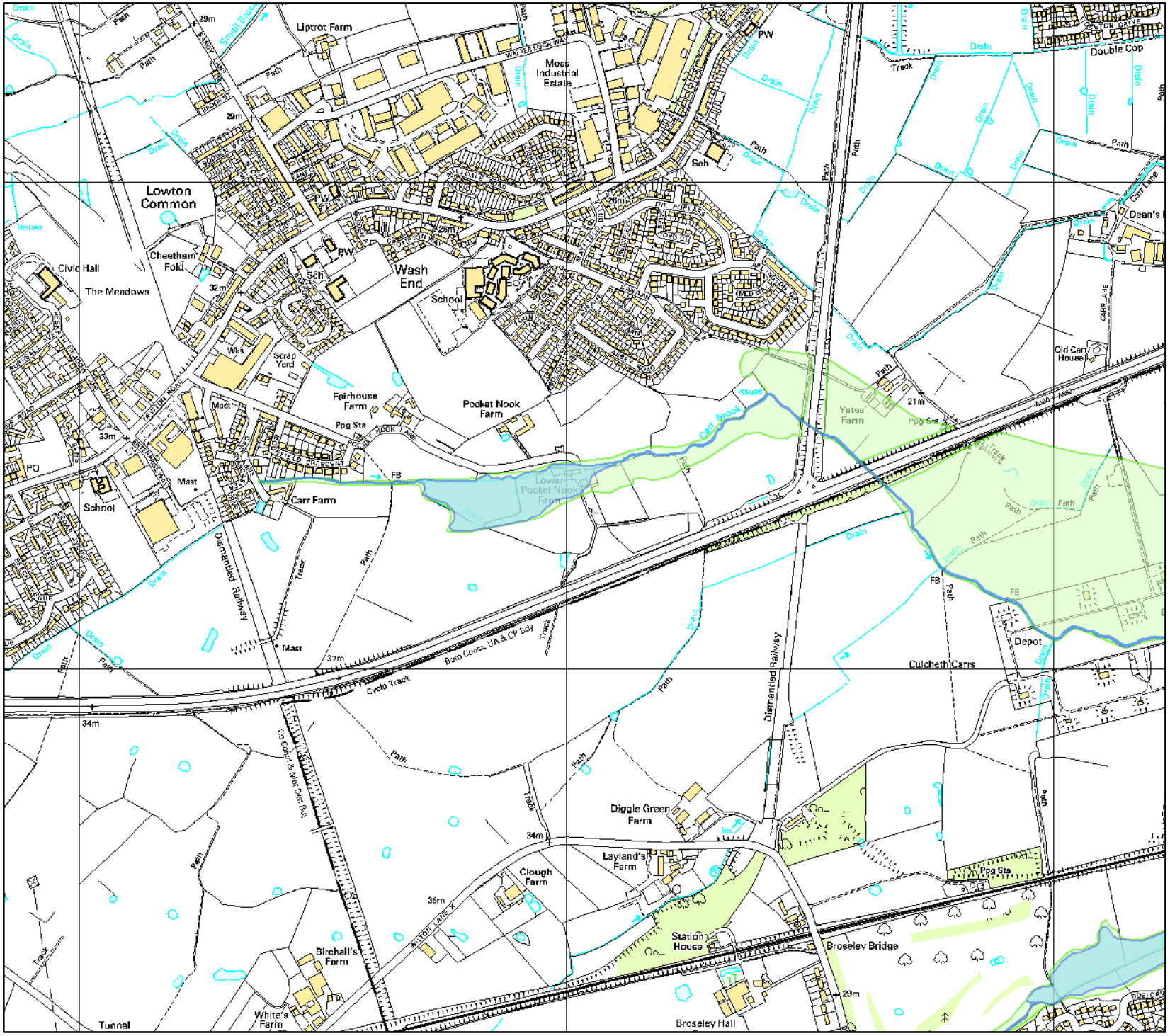


Figure 4: Location of Environmnet Agency Cross Section and Flood Level Nodes, Pocket Nook, Lowton

Drawn: May 2009

LK ASSOCIATES LIMITED



Legend

- Flood Zone 3
- Flood Zone 2

0 0.1 0.2 0.3 0.4

Kilometres

Notes

Environment Agency

North West Region - South Area

Appleton House, 430 Birchwood Boulevard, Birchwood
Warrington, Cheshire, WA3 7WD

Flood Risk Mapping and Data Management

WTNFRM28901

Flood Map

Produced	JK	23/2/09
Checked	LL	23/2/09
Approved	RA	23/2/09

MAP REFRENCE NO.

LAND AT POCKET NOOK, LOWTON, WIGAN

FLOODING ISSUES – CONSTRAINTS AND OPTIONS APPRAISAL

CARR BROOK AT POCKET NOOK - ENVIRONMENT AGENCY FLOOD LEVEL DATA

				1.0% AEP EVENT without defences		1.0% AEP EVENT + CC without defences		0.1% AEP EVENT without defences	
Node	Section Reference	Easting	Northing	Max. Level (m AOD)	Max. Flow (m^3/s)	Max. Level (m AOD)	Max. Flow (m^3/s)	Max. Level (m AOD)	Max. Flow (m^3/s)
CARR01_5026d	52	363368	397383	26.70	3.90	26.80	4.68	27.32	11.70
CARR01_4902	51	363491	397391	26.12	3.90	26.22	4.68	26.68	11.70
CARR01_4758u	50	363638	397381	24.78	3.90	24.83	4.68	25.14	11.70
CARR01_4597	49	363794	397383	24.26	3.90	24.28	4.68	24.39	11.70
CARR01_4356	48	364019	397418	23.64	3.90	23.66	4.68	23.81	11.70
CARR01_4202u	46	364162	397445	22.75	3.90	22.80	4.68	23.08	11.70
CARR01_4137	45	364221	397445	22.66	3.90	22.71	4.68	22.99	11.70
CARR01_3987	44	364339	397513	22.34	3.90	22.40	4.68	22.59	11.70
CARR01_3909	43	364399	397551	21.94	3.90	22.02	4.68	22.29	11.70
CARR01_3821	42	364470	397521	21.25	3.90	21.37	4.68	22.23	11.70
CARR01_3805u	41	364480	397511	21.26	3.90	21.37	4.68	22.05	11.70
CARR01_3755d	40	364529	397481	21.10	3.90	21.20	4.68	21.80	11.70

Refer to Figure 4 for locations

Appendix 7

Preliminary Highway Access Assessment (prepared by Royal Haskoning / Dennis Wilson – 6 May 2009)

Denis Wilson

ROYAL HASKONING

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By Post and Email

Louise Armstrong
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No. 1 Marsden Street
Manchester
M2 1HW

Your reference	:	
Our reference	:	9V1122/AAK/310047
E-mail	:	a.khan@royalhaskoning.co.uk
Date	:	28 April 2009
Enclosure(s)	:	Drawing 9V1122/SK101/A
Subject	:	**Pocket Nook Farm, Lawton, Wigan: Preliminary Highway Assessment**

Dear Louise

I write further to our recent correspondence regarding the above.

We have now completed our preliminary highway assessment, with respect to gaining vehicular site access off the A579 Atherleigh Way, as requested. I set out below our initial findings.

Background

I understand your client is considering putting forward the site for a residential allocation in the emerging Local Development Framework.

In order to assess the site I carried out a site visit early this month. I have also reviewed the updated site ownership plan you have provided us.

Additionally, we purchased a copy of the adopted local highway boundary plan from Wigan Council for our assessment work.

Brief Description of the Site and Local Highway Network

The site is located approximately 1.5km south of Leigh town centre. It is situated at the northwest corner of the signalised junction formed by the A580 East Lancashire Road and the A579 Atherleigh Way. Plan 1 shows the location of the site relative to the adjoining local highway network.

Presently the site is accessed off the A572 Newton Road, via Pocket Nook Lane, which is an adopted highway, up to its eastern junction with Moorfield Crescent, which is a residential street. Beyond this point Pocket Nook Lane is a private road. Pocket Nook Lane also provides access to Lawton Business Park, located at the western end of this road.

A public footpath links the site to Canaan, which is a residential street. Vehicular access to Canaan is gained off the A572 Newton Road, via Mayfield Drive (see Plan 1). It appears that this footpath also acts as a private road, providing access to Yates Farm located on the east side of the A579, via an underpass running under the A579.

The A579 Atherleigh Way forms the eastern boundary of the site, whilst the southern boundary is defined by the A580.

Near to the site both the A579 and A580 are on embankments. The site is around 3.5m below the carriageway level of the A579. The A579 is a classified radial route to Leigh town centre. Both the A579 and A580 are part of Wigan's 'Strategic Route Network (SRN)'.

The A579 is a wide single carriageway road with a 1m hard strip on either side and the road is subject to a 50 mph speed limit. The road has 2 to 3m wide verges, on both sides. The site also benefits from street lighting.

The A580 is also a classified strategic route and is subject to a 60 mph speed limit. It links Manchester with Liverpool. There is a speed camera on the northern edge of the A580, for eastbound traffic, located immediately to the west of the A579/A580 signalised junction.

Both the A580 and A579 are relatively busy routes during peak periods and speeds are generally high.

Potential Site Access Junction

We have designed a potential site access junction off the A579 Atherleigh Way. Plan 2 shows the potential site access junction. The proposed junction layout has been designed in accordance with the national highway design standards, contained in the Design Manual for Roads and Bridges (DMRB).

The layout of the proposed junction falls within the adopted highway and land under the control of your client.

The proposed earthworks associated with the proposed access road are only indicative, given that we do not have topographical survey mapping of the site and the adjoining highway.

We have located the site access junction, so as to avoid widening of the underpass under the A579, which would be costly.

The proposed junction is approximately 100m from the existing A579/A580 signalised junction. We believe this level of spacing should be adequate. However, Wigan Council may resist the proposed junction on the basis that it is too close to the existing A579/A580 signalised junction.

However, there is scope to move the junction further north by around 40m to increase the junction spacing to around 140m, however, this is likely to require costly underpass widening works and it would require some retaining walls instead of the earthworks, which would increase costs even further.

We have designed the access junction on the basis of the speed limit (40mph) of the A579, however, if through a speed survey we can demonstrate that the 85th percentile speeds at this location are lower than the speed limit then we may be able to increase the junction spacing without widening the underpass. Based on my site observations, a speed survey results may not turn out in our favour.

Additionally Wigan Council may also resist the proposals on the basis that A579 is part of the SRN. The adopted Wigan UDP states, in Chapter 10:

'The Council will safeguard, maintain and improve the Strategic Route Network to accommodate main flows of general traffic in the Borough'.

As can be seen from Plan 2 in order to minimise the impact on the through traffic, dedicated left and right turn lanes are proposed on the A579 for accessing the site. Initial indications are that the junction will have sufficient capacity to cater for the proposed residential allocation. However, if required by Wigan Council, we will need to demonstrate, by carrying out junction capacity assessments, that the potential queues from the new junction will not back onto the A580/A579 junction or interfere with the main flows of general traffic. For capacity assessments we will require recent peak hour traffic count data.

It is likely that Wigan Council may prefer access to the site to be gained via Pocket Nook Lane or Canaan, given that they already serve residential developments. However, local residents may object to such proposals and there may be other issues relating to these potential access routes.

Wigan Council will also require access to the site on foot. It appears this could be achieved via the existing formal footpath from Canaan that links to the site. This route will require upgrading significantly to encourage walking. Alternatively, the existing verges on the A579 could be converted to footways from the new junction to the A572 St Helens Road/A579 junction, possibly only on one side. However, this would be a costly option and may not be a convenient route for gaining access to local community facilities, in terms of the distance travelled.

Summary/Conclusions

Our preliminary design, based on the national highway design standards (DMRB), suggests that a new site access junction off the 579 is feasible.

Wigan Council may resist the proposals on the basis that they may interfere with the operation of the A580/A579 junction. There is scope to increase the junction spacing between the new junction and the A580/A579 junction further, if required, but this may involve costly underpass widening highway works.

Wigan Council may also request peak hour junction capacity assessments to demonstrate that the potential queues from the proposed junction do not interfere with the operation of the A580/A579 junction. Initial indications are that the queues at proposed junction will not interfere with the operation of the A580/A579 junction, however, to definitively confirm this junction capacity assessments will be necessary.

Denis Wilson

ROYAL HASKONING

Wigan Council will also require satisfactory access to the site on foot. This may be feasible via the existing public footpath from Canaan to the site, however, the footpath is likely to require upgrading. Alternatively, the existing verges on the A579 could be converted to footways, from the access junction to the A572 St Helens Road/A579 junction, however, this would be a costly option and may not provide a convenient route for gaining access to local facilities.

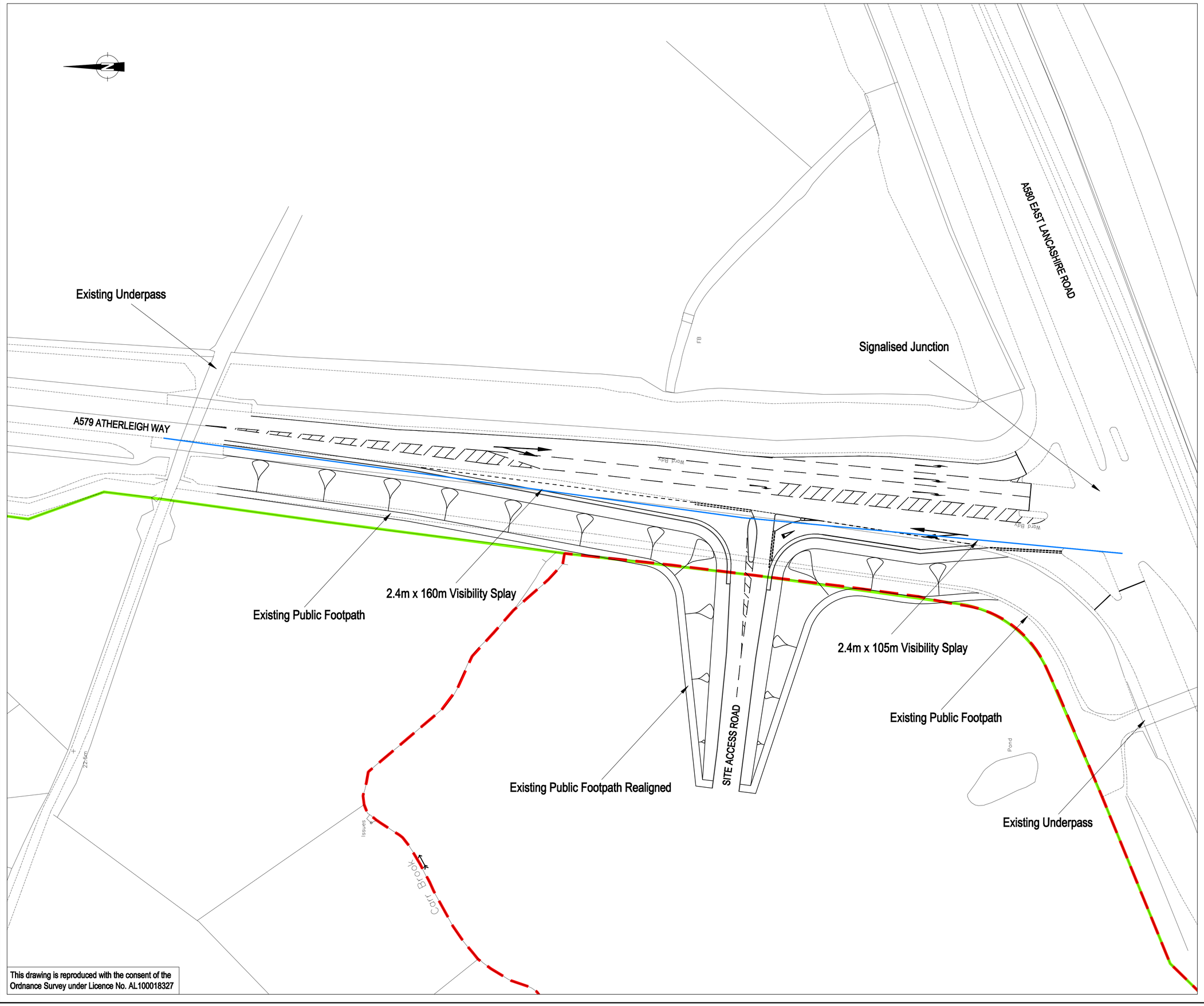
I trust that the above is satisfactory. However, should you require any further information please do not hesitate to call me.

Yours sincerely,

Amjid

Amjid Khan
Director
Denis Wilson Business Group
For Haskoning UK Ltd

DWG No. *****



NOTES

1. Proposed Batters indicative only

Approximate Site Boundary

Adopted Highway Boundary

PLAN 2

Rev	Amendment	Drawn	Check'd	Appr'd	Date
A	FIRST ISSUE	CY	AC	AAK	06-02-09

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Pocket Nook Farm, Lawton
Leigh

Potential Site
Access Junction

Drawn	Checked	Approved
CY	AC	AAK
Date 06-04-2009	Date 06-04-2009	Date 06-04-2009

Scale	Status	Rev
1:500 @ A1	DRAFT	A

Dwg No. 9V1122/SK101

Appendix 8

Ecological Appraisal (prepared by Waterman – 1 April 2009)

Energy, Environment & Design

Pocket Nook Farm, Lowton, Wigan

Ecological Appraisal

27th April 2009

Energy, Environment & Design

Pocket Nook Farm, Lowton, Wigan

Ecological Appraisal

Client Name: Gordon Moon Properties
Reference: E10232-C-1-1-1-HW-REW
Issue: First Issue

Quality Assurance – Approval Status

This document has been Prepared and checked in accordance with Waterman EED's IMS (BS EN ISO 9001: 2000 and BS EN ISO 14001: 2004)

Prepared by: **Hayley Wiswell**
Position: Graduate Ecology Consultant

Checked by: **Toni Wickens**
Position: PA

Approved by**:** **Duncan Murray**
Position: Regional Director

The Genesis Centre, Birchwood Science Park, Birchwood, Warrington, Cheshire, WA3 7BH
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CONTENTS

Plan

Habitat Features
(EED10232/01 April 2009 HW/TB)

SUMMARY

S1 The Site comprises of Pocket Nook Farm and adjoining farmland. It extends to approximately 12 hectares (ha) and consists of various farm buildings, semi-improved grassland, improved grassland, bare ground cultivated for agriculture, hedgerows, trees and ruderal vegetation. There is a stream along the northern Site boundary and a pond is present on-Site.

S2 A Phase 1 Habitat Survey was conducted on the 15th April 2009 in order to highlight any potential ecological constraints to future development.

S3 There are three statutory designated sites within 5km of the Site and two non-statutory designated sites within 2km of the Site. These are unlikely to be impacted upon by development of the Site.

S4 The habitats on-Site are considered to be of negligible ecological value and of ecological value within the context of the Site.

S5 There is potential for the Site to support protected species. The hedgerows and trees on-Site have potential to support breeding birds. There are farm buildings on-Site which have potential to support bat roosts. The pond on-Site has potential to support great crested newts and the stream on the northern Site boundary has some potential to support water voles.

S6 Depending on the scope of any proposed future development, further survey work may be needed to determine the presence of protected species on-Site and should they be found to be present, mitigation measures may be required.

1. INTRODUCTION

1.1 Waterman Energy, Environment and Design Limited (Waterman EED) was commissioned on behalf of Gordon Moon Properties to undertake an Ecological Appraisal of land at Pocket Nook Farm, Lowton, Wigan (hereafter referred to as the 'Site').

1.2 The area of land consists mostly of species poor semi-improved grassland, arable land, hedgerows and scattered trees. A stream lies on the northern site boundary and there is also a pond, areas of rank grassland and patches of ruderal vegetation.

Structure of Report

1.3 The existing conditions on the Site are described and the nature conservation value of features present on the Site is assessed. This is summarised in a nature conservation evaluation of ecological features recorded within the Site. Where appropriate, recommendations are made and measures to incorporate ecological features into the development design are recommended. The following sections of the report provide:

- The method of survey and assessment;
- The results of the field surveys and data gathering exercise;
- Evaluation of the nature conservation value of the ecological features described;
- A description of recommendations if necessary; and
- A conclusion.

2. LEGISLATION, POLICY AND GUIDANCE

2.1 Articles of British wildlife and countryside legislation, planning policy guidance and references to both local and national biodiversity action places are referred to. Their context and applicability is explained as appropriate in the relevant sections of the report.

2.2 The articles of legislation and countryside guidance are:

- The Wildlife and Countryside Act (WCA) 1981 (as amended);
- The Conservation (habitats &c) Regulations 1994 (as amended);
- The Countryside and Rights of Way (CRoW) Act 2000;
- The Natural Environment and Rural Communities Act 2006;
- The Protection of Badgers Act 1992;
- The UK Biodiversity Action Plan (UKBAP); and
- The Greater Manchester BAP (LBAP).

3. METHODOLOGY

Scope of Appraisal

3.1 This appraisal considers the potential for impacts to ecological features within the boundary of the Site and adjacent habitats up to 5km from the site boundary. Habitats within the Site have connections to similar habitats in the immediate vicinity and contribute to the network of similar habitats in the locality. However, due to the high proportion of improved grassland (arable) and species poor semi-improved grassland within the Site they are not considered to offer a resource for wildlife that is significant at anything greater than a local level.

Desk Study

3.2 A data search was undertaken in April 2009, centred at the Site.

3.3 The Greater Manchester Ecology Unit (GMEU) was contacted to obtain biological records of the area. Records were requested of non-statutory designated sites, legally protected species, notable species and BAP species on the Site and within 2km of the Site boundary.

3.4 The South Lancashire Bat Group (SLBG) and County Bird Recorder were contacted in order to obtain records of bats and birds respectively within 2km of the Site boundary.

3.5 Warrington Borough Council was contacted in order to obtain records of non-statutory sites within 2km of the Site which fall into the Warrington Borough.

3.6 The MAGIC (Multi-Agency Geographic Information for the Countryside) website[1] was consulted to identify any sites subject to statutory protection under local, national or European/International nature conservation legislation within 5km of the Site.

3.7 The national and Local BAPs were also consulted to identify those habitats or species for which nature conservation action is being targeted.

3.8 Information supplied by these organisations has, where relevant, been incorporated into the following account with due acknowledgement.

Field Survey

3.9 The Site was surveyed using a technique based upon Phase I survey methodology (JNCC, 2007)[2] and broadly followed the 'Extended Phase I' methodology as set out in the Guidelines for Baseline Ecological Assessment[3]. This method of survey provides information on habitats and assesses the potential for legally protected species and invasive plants to occur in and adjacent to the Site. Any such areas identified can then be examined in more detail if required.

3.10 Habitats present were noted, and with respect to legally protected species, the following features were recorded where they found to be present:

- Signs of potential roosting sites for bats;
- Signs of badger activity including setts, snuffleholes, tracks and latrines;
- Habitats suitable for great crested newts;

[1] MAGIC (Multi-Agency Geographic Information for the Countryside: www.magic.gov.uk
[2] Joint Nature Conservation Committee (2007). *Handbook for Phase I habitat survey - a technique for environmental audit*. JNCC, Peterborough
[3] Institute of Environmental Assessment (Great Britain) (Eds) (1995) Guidelines *for Baseline Ecological Assessment*. Taylor and Francis Publishing

- Suitable habitat along water courses for water vole and white clawed crayfish;
- Habitat suitable for breeding birds; and
- Habitat suitable for reptiles.

3.11 The Common names of plants identified during survey are given and follow the nomenclature of *New Flora of the British Isles 2nd Edition*, Stace (1997)[4].

3.12 The survey was undertaken by Hayley Wiswell of Waterman EED on 15th April 2009. The weather conditions were 8/8th cloud, fine, mild and dry. The temperature during survey was approximately 14ºC. Conditions were considered suitable for the extended Phase I survey.

Limitations

Phase I Habitat Survey

3.13 The ecological surveys have not tried to produce a comprehensive list of plants and animals for the Site as any ecological surveys will be limited by factors, which affect their presence. These factors include time of year, weather conditions, variation in rates of germination and establishment, migration patterns and behaviour.

3.14 Overall, it is considered that the surveys undertaken have been sufficient for a relatively comprehensive picture of the ecology of the Site to be compiled and are of sufficient detail for any potential ecological constraints to be identified and for recommendations for further surveys to be made where necessary.

Evaluation

3.15 As a result of the field surveys and ecological data gathered for the Site and adjacent habitats, the ecological features were evaluated based on with guidance provided by the IEEM[5].

3.16 The guidance provides a framework for the evaluation of features which takes into account the direct biodiversity value of habitats and species, the indirect value of features which help support the ecological integrity of key features, legal protection for both sites and species and evaluation against national and local planning guidance and objectives. It uses a geographic frame of reference for assigning value to features of ecological importance that consists of the following categories given in the left hand column of the table below.

3.17 Examples of the types of feature that are typically assigned to each geographic scale are given in the right hand column.

[4] Stace, C (1997), *New Flora of the British Isles (2nd Ed)*. Cambridge University Press, Cambridge
[5] Institute of Ecology and Environmental Management (2006). *Guidelines for Ecological Impact Assessment in the United Kingdom* (Version 7 July 2006). http://www.ieem.org.uk/ecia/index.html. Institute for Ecology and Environmental Management, Winchester

Geographical Scale at Which Feature is Important	Example of Feature
International	Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites.
National	Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNRs).
Regional	County designated wildlife site supporting a regionally significant area of a UK priority BAP habitat.
County	Non-statutory sites designated at county level. Ancient woodlands, large areas of priority BAP habitat offering a significant wildlife resource at county level. Large population of a legally protected species or species included in the UK or Local BAP or other species considered to be threatened at a national level.
District	Non-statutory sites, designated at district level, Local Nature Reserves (LNR). Moderately sized examples of priority BAP habitats.
Local	Old hedges, woodlands, ponds, significant areas of species grassland or other habitat, small scale examples of priority BAP habitat or areas supporting small populations of protected species, species included in the UK or Local BAP other species considered to be threatened at a national level.
Of value within the context of the Site or Zone of Influence of the scheme or project	Woodland plantations, structure planting, small areas of species rich grassland or other species rich habitat that is not included in the UK or Local BAP.
Negligible	Areas of built development, active mineral extraction, or intensive agricultural land.

Table 1: Examples of Habitat Evaluation

3.18 It should be noted that whilst the evaluation considers the presence of protected species that receive legal protection at various levels (national, international) and non-statutory protection at a local level (through development plans), the simple presence of the species does not necessarily infer value at the level of protection it receives. Therefore in this appraisal, the value of a site for protected species is dealt with on a species by species basis, taking into account the recorded level of activity, the level of protection it receives and the overall value of habitat on that site for that species.

3.19 An explanation of how the value of each ecological feature has been assessed is provided in the Results and Evaluation section.

4. RESULTS AND EVALUATION

Site Context

4.1 The Site is approximately 12 hectares (ha) in area and comprises of Pocket Nook Farm and its associated farmland. It lies south of the town of Lowton in the Metropolitan Borough of Wigan, one of the ten District Councils of Greater Manchester. The Site is bordered by the East Lancashire Road (A580) to the south, and the A579 to the east. North and west of the site lies arable and pastoral farmland, and the residential areas of Lowton beyond.

Designated Sites

Statutory Sites

4.2 There are three statutory designated sites within 5km of the Site and these are all Sites of Special Scientific Interest (SSSI).

4.3 Highfield Moss SSSI is located approximately 2.8km south west of the Site and has been designated for its mire communities which have developed on peat deposits and area now very rare within Greater Manchester and Merseyside. Habitats include unimproved acidic grassland and acidic marshy grassland which provides the North-Western England stronghold for rare marsh gentian (*Gentiana pneumonanthe*).

4.4 Abram Flashes SSSI is located approximately 3.1km north west of the Site and supports the most outstanding assemblage of breeding birds associated with lowland open waters and wet grassland in Greater Manchester and Merseyside. The Flashes were formed through the flooding of land which had subsided through deep mining activities. A wide variety of habitats are present, including open water, swamp, tall herb fen and marshy grassland.

4.5 Astley and Bedford Mosses SSSI is located 4.4km east of the Site, and like Highfield Moss SSSI, it is designated for its mire communities. The site is importance for birds, particularly wintering raptors such as hen harrier (*Circus macrourus*), short-eared owl (*Asio flammeus*) and merlin (*Falco columbarius*).

4.6 The above statutory sites are considered to be of **national ecological value**.

Non-Statutory Sites

4.7 In Greater Manchester, non-statutory designated sites are termed Sites of Biological Importance (SBI). GMEU returned information relating to one non-statutory site within the 2km search area which falls within the Borough of Wigan; Pennington Flash SBI.

4.8 Pennington Flash SBI lies approximately 1.3km north of the Site. This flash is of major ornithological importance for breeding and wintering wildfowl and passage migrants. Habitat types include woodland, neutral grassland and marsh as well as open water habitats. A wide range of other birds breed here, including a variety of warblers, kingfisher (*Alcedo atthis*) and sparrowhawk (*Accipiter nisus*). Water voles (*Arvicola terrestris*) are also known to occur, both inside and outside the SBI.

4.9 Pennington Flash SBI is considered to be of **county ecological value**.

4.10 Warrington Borough Council provided information for one statutory site, Eleven Acre Common, within the 2km search area. In the Borough of Warrington (county Cheshire), non-statutory sites are termed Sites of Importance to Nature Conservation (SINCs).

4.11 Eleven Acre Common SINC is located approximately 1.8km south of the Site. This SINC is approximately 4.6ha and comprises of unimproved neutral grassland. The site is noted for is species diversity and supports a number of uncommon flora species and a variety of butterflies.

4.12 Eleven Acre SINC is considered to be of at least **district ecological value**.

Habitats

Semi-improved Grassland (species poor)

4.13 A large proportion of the Site comprises of species poor semi-improved grassland which is used as grazing for horses. Some fields appear to be more heavily grazed than others, but across the site the sward was short. Species present are typical of this type of habitat and include Perennial rye-grass (*Lolium perenne*), white (Dutch) clover (*Trifolium repens*), common daisy (*Bellis perennis*), dandelion (*Taxaracum* agg.), creeping buttercup (*Ranunculus repens*), red fescue (*Festuca rubra*), and stinging nettle (*Urtica dioca*).

4.14 Also present is cut-leaved cranesbill (*Geranium dissectum*), ragwort (*Senecio jacobaea*), timothy (*Phleum pratense*), meadow buttercup (*Ranunculus acris*), common vetch (*Vicia sativa*) and meadow vetchling (*Lathyrus pratensis*).

4.15 This habitat is species poor and offers a very limited resource for wildlife. The species present within this habitat are very common in the local area and this type of habitat is easily created. As such, the semi-improved grassland on-Site is considered to be of **negligible ecological value**.

Improved Grassland

4.16 East of the farmhouse and farm buildings is a large expanse of improved grassland. Perennial rye-grass was almost entirely dominant here, with occasional dandelions, creeping buttercup and white (Dutch) clover. Part of this grassland adjacent to the stream has been recently ploughed and is bare (see Arable below).

4.17 This habitat offers very little opportunities for wildlife and is very common in the local area. As such the improved grassland is considered to be of **negligible ecological value**.

Hedgerow

4.18 A network of hedgerows is present across the Site, marking various field boundaries. The hedge is almost entirely hawthorn (*Crataegus monogyna*) but there is also some blackthorn (*Prunus spinosa*) and elder (*Sambucus nigra*) present. The majority of the hedges have been allowed to grow tall and bushy, but the hedge along the south-western boundary is heavily pruned. The hedge is broken in places, particularly along the stream, west of the Farmhouse. The ground flora associated with the hedge consists of cleavers (*Gallium aparine*), stinging nettle, garlic mustard (*Sisymbrium officinale*) and cow parsley (*Anthriscus sylvestris*). On western side of farm house along stream were there are more gaps ground flora species include yarrow (*Achillea millefolium*), ragwort, bramble (*Rubus fruticosus* agg.), white dead nettle (*Lamium album*) and broad-leaved dock (*Rumex obtusifolius*).

4.19 The hedge is species poor, consisting of only three woody species. However, the majority of the hedge is not intensively managed and despite being a common feature in the local area, they have potential to provide habitat for breeding birds and also act as a commuting feature for bats. As such they are considered to be of **ecological value within the context of the Site**.

Arable

4.20 Part of a field on the eastern side of the site has been recently ploughed (see T1 on **Plan EED10232/01**), leaving a strip of bare earth. This is likely to be used as arable land for growing crops. There is a large expanse of arable land adjacent to the Site to the west which has already been planted.

4.21 The arable land present on-Site is of very little value to wildlife and is considered to be of **negligible ecological value**.

Stream

4.22 A stream forms the northern boundary of the Site and continues west of the Site towards a residential area, and east of the Site under the A579 and south through open farmland. The stream varies in width along the northern Site boundary from 0.5m to 1.5m wide and from approximately 3-5cm deep to 30cm deep. Scattered trees and hedge partly shade the stream along its length. Lesser celandine (*Ranunculus ficaria*) is dominant along the stream and other associated flora include stinging nettle, garlic mustard, soft rush (*Juncus effusus*), bramble, cleavers, yellow iris (*Iris pseudacorus*), wood rush (*Luzula* sp.), cow parsley. Along bare banks, Himalayan balsam (*Impatiens glandulifera*) is sprouting and is abundant is some areas. Water starwort is occasional to abundant within the stream itself. The stream is colonised in places by greater reedmace (*Typha latifolia*) but remains open along majority of length.

4.23 The stream appears to be unpolluted and has a low level of flow throughout its length along the northern Site boundary.

4.24 It is considered unlikely that the stream would provide suitable conditions for white clawed crayfish or otters. However, the stream does have some potential to support water voles and act as a commuting feature for bats. The potential of the Stream to support protected species is further detailed under the protected species heading of this section.

4.25 The stream has potential to provide an ecological resource for protected species and also provides connectivity with other habitats on adjacent land. It is therefore considered to be of **local ecological value**.

Bare Ground and Ruderal

4.26 Bare ground is present around farm buildings and along driveways. In some areas ruderal habitat is present where the ground is less disturbed. A muckheap in the south western corner and a vehicle storage area south of the farm buildings support species such as garlic mustard, spear thistle (*Cirsium vulgare*), white dead nettle, cow parsley, cleavers and bramble. There is a small patch of ruderal habitat in one of the horse paddocks, where there are some small spoil heaps. Here red dead nettle (*Lamium purpurea*) is present and Himalayan balsam is starting to grow.

4.27 The bare ground and ruderal habitats offer very little opportunities for wildlife and are common in the local area and are easily recreated. As such they are considered to be of **negligible ecological value**.

Trees

4.28 A small broadleaved woodland plantation is present adjacent to the southern Site boundary on the bank of the East Lancashire Road. The trees are immature and comprise of silver birch (*Betula pendula*), oak (*Quercus* sp.), sycamore (*Acer pseudoplantanus*), hawthorn and field maple (*Acer campestre*).

4.29 There are a variety of mature trees present along the stream on the northern Site boundary and consist of English oak (*Quercus robur*), ash (*Fraxinus excelsior*) and crack willow (*Salix fragilis*). There are also individual stands of immature and mature hawthorn, mostly along the stream.

4.30 Some of the mature trees have potential to support bat roosts and also act as commuting and foraging habitat for bats. As such they are considered being of **ecological value within the context of the Site**.

Buildings

4.31 The farmhouse and adjoining stables are of brick construction with slate tile roofs. Part of the stables in open on the southern side and is used for storage and vehicles and other farm equipment. The remaining farm buildings are used for storage and are open fronted buildings

made of corrugated steel. There is also a small wooden shed and a separate stable block which appears to be prefabricated.

4.32 All of the buildings on-Site are considered to be of **negligible ecological value**. The farm house and adjoining stables have potential to support bats which is evaluated separately under the Protected Species heading of this section. Although the likelihood of finding a large bat roost in these buildings is low, there is still potential for them to support common species such as common pipistrelle. The stables adjoining the farm house also have potential to support breeding birds such as barn swallow.

Open Water

4.33 There is one pond present on-Site (see P1 **Plan EED10232/01**) and one adjacent to the south western Site boundary (see P2 **Plan EED 10232/01**).

4.34 P1 is approximately 12-15m wide and 10m long. Growing within the pond is *Potamogeton* sp., floating sweet grass (*Glyceria fluitans*) and soft rush. Around pond edge there is reed canary-grass (*Phalaris arundinacea*), greater reedmace, soft rush and cocksfoot (*Dactylis glomerata*). The landowner claims that the pond does not dry up and remains wet throughout the year.

4.35 P2 is almost dried up and is heavily chocked with vegetation, including bulrush, canary reed grass, willow saplings and soft rush. Little water is visible, although the ground is damp in that area and the pond does still hold some water.

4.36 The on-Site pond (P1) has potential to support great crested newts and amphibians such as common toad which are listed on the UKBAP. As such, P1 is considered to be of **local ecological value**.

4.37 P2 is in a neglected state and likely to dry out in summer months. As such this pond is considered to be of **negligible ecological value**.

Amenity Grassland and Ornamental

4.38 Adjacent to the farm house is a small garden, comprising amenity grassland and some ornamental planting. Several large Leyland cypresses (*Cupressocyparis leylandii*) are present along the boundary of the garden.

4.39 This type of habitat is very common in the local area and is unlikely to provide a significant resource for wildlife, therefore it is considered to be of **negligible ecological value**.

Rank Grassland

4.40 A buffer zone of species poor rank grassland has developed along the edge of the stream and around the edge of the improved grassland to the east where grassland areas have been less intensively managed. Species include willowherbs, nettle, bramble, sorrel (*Rumex acetosa*), cow parsley, broad-leaved dock, reed canary-grass, ribwort plantain (*Plantago lanceolata*), soft rush and perennial rye-grass. There is also rank grassland present adjacent to the Site on the banks of the East Lancashire Road and the A579.

4.41 Rank grassland is very common across land surrounding the Site and within the local area. Although the rank grassland provides a buffer against the stream and habitats on parts of the periphery of the Site, it is unlikely to provide a significant for wildlife and as such it is considered to be of **negligible ecological value**.

Fauna

Bats

4.42 Records of several bat species were returned for the 2km search area by SLBG.

4.43 A total of thirteen records of common pipistrelle (*Pipistrellus pipistrellus*) were returned for the search area, the most recent being from 2007, approximately 1.4km to the south west. Eleven records of noctule (*Nyctalus noctula*) were returned. This species was most recently in 2006 approximately 1.6km to the south west. Soprano pipistrelle (*Pipistrellus pygmaeus*) has been recorded in 2007, approximately 1.5km south west of the site.

4.44 The majority of bat records are for Pennington Flash. Daubenton's bat (*Myotis daubentonii*), common pipistrelle, soprano pipistrelle, noctule and brown long-eared bat (*Plecotus auritus*) have been recorded at Pennington Flash SBI in 2005. Natterer's bat (*Myotis natterii*) was also recorded here in 2003.

4.45 The closest record of a bat to site is that of a Pipistrelle sp. from 2003 located approximately 880m west of the Site.

Badgers

4.46 No badger records were returned by GMEU for the search area. Signs of badgers were not recorded during the survey and the Site itself holds little potential to support badger setts. As such badgers are not considered to be a constraint to development and are not considered further in this appraisal.

Birds

4.47 The country bird recorder returned a total of 41 bird records for the 2km search area.

4.48 There are three barn owl (*Tyto alba*) records from 2004 and 2006 for the A579/A580 Junction which lies adjacent to the site boundary to the south east. There is an on-site record for barn owl, taken in 2006. This is a record of barn owl pellets in a barn owl box at Pocket Nook Farm. Correspondence from the country bird recorder states that this barn owl box was removed in 2007 due to disrepair and the close proximity of the A580 which is the location of many local barn owl casualties. Barn owls have also been recorded at Dean's Farm, approximately 800m east of the Site. Whilst it is possible that barn owl still may use habitats within the Site for feeding, it is highly unlikely that any suitable nest sites now exist within the Site.

4.49 Hobby (*Falco subbuteo*) has been recorded in 2004 at the A579/A580 Junction which lies adjacent to the Site.

4.50 Kestrel (*Falco tinnunculus*) has been recorded in 2006 at Aspull Common, approximately 1.1km to the north of the Site.

4.51 Several farmland birds have been recorded in the local area. Grey partridge (*Perdix perdix*) has been recorded on-Site in 2004, at the A579/A580 Junction and on farmland approximately 1.8km north of the Site in 2005. Tree sparrow has been recorded breeding in 2004 approximately 630m east of the Site. There are also records of yellowhammer (*Emberiza citrinella*) and reed bunting (*Emberiza schoeniclus*) within the 2km search area.

4.52 Three bird records from last year were also returned by the GMEU, these are of skylark (*Alauda arvensis*), grey partridge and yellow hammer, approximately 650m, 1.3km and 840m south west of the Site respectively.

Great Crested Newts

4.53 One record of great crested newt (*Triturus cristatus*) was returned by GMEU. This is a very old record, taken in 1988, approximately 930m north of the Site at Pennington Flash.

Invertebrates

4.54 No invertebrate records were returned for the 2km search area. The Site holds little potential to support protected, rare or notable invertebrate species. As such, invertebrates are not considered to be a constraint to development and are not considered further in this appraisal.

Reptiles

4.55 No records of reptiles were returned for the 2km search area. The rank grassland and ruderal habitats have some potential to support common reptile species but are unlikely to support significant numbers due to their small size and isolation from surrounding suitable habitat.

Water voles

4.56 Seven records of water voles (*Arvicola terrestris*) were returned by GMEU. These are all taken from ditches and streams north of the Site adjacent to Pennington Flash in 1999 and 2000. The closest record is approximately 1.2km to the north east of the Site.

White Clawed Crayfish

4.57 No records of white clawed crayfish (*Austropotamobius pallipes*) were returned for the 2km search area. The stream substrate was silty and did not contain any cobble substrates and few other suitable crayfish refuges features such as tree roots. As such on balance it is considered unlikely that white clawed crayfish would we present in the stream and as such are not considered further in this appraisal.

Other Species

4.58 Two brown hare (*Lepus europaeus*) were recorded incidentally during the survey on semi-improved grassland adjacent to the farm buildings to the east and at the north western corner of the Site. No records of brown hare were returned for the 2km search are but they are believed to be common in the local area and the landowner claims to see them regularly.

Flora

4.59 No records of notable flora were returned for the 2km search area. The Site holds little potential to support rare or notable flora. As such, flora is not considered to be a constraint to development and is not considered further in this appraisal.

5. POTENTIAL CONSTRAINTS

Statutory Designated Sites

5.1 There are three statutory designated sites within 5km of the Site; Abram Flashes SSSI, Astley and Bedford Mosses SSSI and Highfield Moss SSSI.

5.2 It is unlikely that development of the Site would have an adverse impact on any of these designated Sites due to the distance of the sites from the Site boundary and due to barriers such as roads and residential areas. As such, it is not necessary to consider them further in this appraisal.

Non-Statutory Designated Sites

5.3 Development of the Site is unlikely to impact upon Pennington Flash SBI due to barriers such as the A572 and the built up area of Lowton town.

5.4 Development of the Site is also unlikely to impact upon Eleven Acre Common SINC due to significant barriers such as the East Lancashire Road.

Habitats

5.5 The majority of habitats on-Site are considered to be of negligible ecological value and are unlikely to pose a significant constraint to development. Some of the habitats have potential to support protected species and if any future development were to negatively impact upon these habitats, certain measures may be required to avoid significant adverse impacts to any protected species that may be present. This is discussed in further detail under the protected species heading below.

Fauna

Bats

5.6 The farmhouse and adjoining stables have potential to support bat roosts. Some mature trees along the stream are considered to have limited potential to support bat roosts.

5.7 All British bats and their resting places are protected by law under the WCA 1981 (as amended) and the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended).

5.8 In order to avoid the risk of committing offences under UK and European legislation and is accordance with local planning policy, the farmhouse and adjoining stables would require further bat surveys to ascertain if they are used as roost sites by bats. This is discussed further below under the Recommendations section.

5.9 The hedgerows, stream and trees have potential to act commuting and feeding habitat for bats.

5.10 As well as the legal protection afforded to bats, both the NERC Act 2006 and Planning Policy Statement 9 (PPS9)[6] require local authorities to take measures to protect the habitats of protected species from decline. Planning authorities should ensure that these species are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. Therefore if bats are found to be using the Site, appropriate mitigation measures within the development design may be required.

[6] ODPM (2005) *Planning Policy Statement 9: Biodiversity and Geological Conservation*. HMSO, London

Birds

5.11 Loss of trees, hedgerows and any adjacent woodland would be likely to result in loss of nesting habitat for common bird species. Furthermore, if habitat clearance including building demolition was timed to occur when birds are nesting, this could result in damage to or destruction of nests, birds, eggs and dependent young. All breeding wild birds, their nests and eggs are protected by the WCA 1981 (as amended) against intentional disturbance, damage and destruction during the breeding season. The bird breeding season is generally regarded as March to August inclusive, though this is not defined in legislation and birds can nest outside of this period.

5.12 As well as the legal protection afforded to breeding birds, both the NERC Act 2006 and PPS9 require local authorities to take measures to protect the habitats of SoPI and UKBAP species from decline. Planning authorities should ensure that these species are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations.

5.13 Whilst habitat suitable for some UKBAP and SoPI species such as grey partridge yellowhammer and barn owl may be lost, within the context of the surrounding landscape the area to be lost would be small and therefore would not be likely to constitute a significant loss of habitat resource for these species. Hence development proposals would be unlikely to have an adverse impact on populations of these species in the locality. Therefore it should not be necessary to undertake further bird survey work to determine any extent of use of the Site by birds.

Great Crested Newts

5.14 P1 has potential to support great crested newts.

5.15 Great crested newts and their resting places are protected by law under the WCA 1981 (as amended) and the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). As well as the legal protection afforded to great crested newts, both the NERC Act 2006 and the provisions of PPS9 require local planning authorities to take measures to protect the habitats of protected species from decline. Planning authorities should ensure that these species are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations.

5.16 Planning authorities should refuse permission where harm to the species or their habitats would result, unless the need for, and benefits of, the development clearly outweigh that harm. If great crested newts are present there may be both legal and planning policy implications for the development proposals unless loss of the habitat can be avoided or mitigated and the risk of killing or injuring great crested newts reduced to virtually nil.

5.17 Therefore further survey work to determine whether great crested newts are present within the Site is recommended. Further details are provided in the Recommendations section below.

Reptiles

5.18 The habitats present provide very little cover in terms of potential refuges for reptiles and the availability of food resources is likely to be limited due to the intensive nature of agriculture on surrounding land. Therefore on balance it is considered that they are not likely to be present within the Site and development of the Site would not be likely to pose a risk to these Species. Therefore, it is not considered necessary to consider reptiles further within this Appraisal or in any subsequent ecological assessment of the Site.

Water Voles

5.19 The stream along the northern Site boundary has some potential to support water voles.

5.20 Water voles and their resting places receive full protection under the WCA 1981 (as amended).

5.21 Therefore, should water vole be present on-Site, the loss of or significant disturbance to ditches within the Site may constitute an infringement of UK legislation.

5.22 The provisions of both the NERC Act 2006 and PPS9 require planning authorities to ensure that water voles are protected from the adverse effects of development when determining planning applications.

5.23 Further survey work would be required to determine whether or not water voles are present within the Site. Further details are provided in the Recommendations section below.

Other Species

Brown Hare

5.24 The brown hare is a UKBAP Priority Species. It also has a Species Action Plan (SAP) within the LBAP.

5.25 Brown Hares are also a Species of Principle Importance (SoPI). Local planning authorities have a legal obligation or 'biodiversity duty' under Section 40 of the Natural Environment and Rural Communities Act 2006 (NERC Act)[7] to conserve biodiversity by having particular regard to those species and habitats listed within the UKBAP and the NERC Act Section 41 list of SoPIs and Habitats of Principal Importance (HoPIs).

5.26 Given the small size of the Site and the wide availability of other suitable habitat on adjacent farmland it is considered unlikely that any development proposals would have a significant impact on the habitat resource available to brown hares in the locality and hence would be unlikely to have an adverse impact on their population. Therefore it is not considered necessary to consider them further in this Appraisal.

[7] Natural Environment and Rural Communities Act (2006) Section 41: *Species of Principle Importance in England*. HMSO, London

6. RECOMMENDATIONS

6.1 Where possible the development design should seek to retain key habitat features within the Site. These include:

- The stream on the northern Site boundary;
- The on-Site pond (P1);
- The mature trees along the stream; and
- As much of the larger hedgerows as possible in order to retain habitat connectivity within the Site.

6.2 If this is not possible then the landscape design of the development should seek to replace these with similar features within suitable areas of the Site. By the use of landscape planting with native tree species and the creation grassland margins the development should ensure linkage with other features within or adjacent to the Site.

6.3 The retention of the habitats also presents an opportunity to enhance their ecological value through appropriate restoration, enhancement and subsequent management. If designed and implemented correctly, this could lead to the development proposals resulting in an overall gain in the biodiversity value of the Site.

6.4 Any works proposed that may affect the stream would need to proceed in accordance with guidance regarding development and preventing pollution of watercourses as provided by the Environment Agency in the form of PPG5.

Protected Species

Bats

6.5 Prior to the demolition of buildings in preparation for development, it would be necessary to survey the farmhouse and adjoining stables for bats in order to determine whether or not any roosts are present. Such survey work would involve detailed internal and external inspections of the buildings. If evidence of bats is found within the buildings, internal inspections may be followed by evening survey work. This would be taken in accordance with current best practice.

6.6 Mature trees along the stream were also identified to have some limited potential to support bat roosts. It is considered that a further inspection of features identified as potentially suitable such as cavities, cracks and holes should be under taken in order to ascertain if roosts are likely to be present.

6.7 Bat survey work is seasonally constrained and would need to be undertaken between May and August. If evidence of bat a roost is discovered, then a suitable mitigation strategy, in addition to a licence from Natural England. This would include sensitive timing of and undertaking of works and the replacement of roosting opportunities.

6.8 Development proposals should also consider the potential use of other features such as hedgerows, trees and watercourses within the Site as feeding and commuting habitat for bats. Therefore concurrently with emergence surveys on buildings, a bat activity of the Site should also be undertaken. This would involve walking along a transect at night with the aid of an electronic detector to determine the extent of the use of the Site by bats. The optimal survey timing for this type of survey is between April and September. The results would be used to inform habitat provision for bats within the development design.

Birds

6.9 Clearance of habitats and buildings should be timed to occur outside the nesting season. If this is not possible each area of habitat or building to be cleared will need to be searched for nesting birds prior to clearance by a suitably qualified ecologist.

6.10 If a nest is found then clearance of the feature containing the nest and its immediate surroundings will need to be left undisturbed until nesting is complete. This could result in significant delays to work being undertaken. Similarly any Site investigation operations will also need to take account to the presence of nesting birds during the breeding season and avoid damage or destruction of habitats containing nests.

6.11 Wherever possible, the development design should seek to retain features likely to support nesting birds such as trees hedges within the landscape design of the any development proposals.

6.12 Planning authorities should refuse permission where harm to the species or their habitats would result, unless the need for, and benefits of, the development clearly outweigh that harm.

Great Crested Newts

6.13 P1 has potential to support great crested newts. If development proposals affect this water body it would be necessary to determine if any suitable habitat on-Site and adjacent to the Site support populations of great crested newts. A great crested newt presence absence survey is therefore recommended in order to determine if there is a breeding population present within this pond and would need to be undertaken in accordance with the Great Crested Newt Mitigation Guidelines[8]. This would require a minimum of four surveys to be undertaken between Mid March and Mid June in order to ascertain the presence or absence of great crested newts within the pond.

6.14 If the presence of great crested newts were to be confirmed and development proposals included loss or damage to habitats that could support great crested newts, then a scheme of mitigation to avoid the killing or injury of great crested newts during construction activities and to provide replacement for any newt habitat lost under the development foot print would be required. These activities would need to be undertaken under a Natural England development licence.

Water Voles

6.15 The stream on the northern Site boundary has some potential to support water voles. Should any proposed development impact upon the stream or occur within 5m of the bank sides, it is recommended that a survey to determine the presence of water voles is conducted.

6.16 The survey should be undertaken in accordance with the 'Water Vole Conservation Handbook, 2nd Edition'[9] and would need to occur between April and October when water voles become most active and populations levels rise. The survey would involve detailed searches of bank side habitat whereby field signs such as droppings/latrines, feeding stations, burrows and lawns. Footprints, runways in the vegetation and above ground nests would also be searched for. If a water vole population were confirmed in areas affected by development, it would be necessary to design and implement a mitigation scheme to avoid committing offences under the WCA (1981) as amended, under which water voles receive full protection. Such mitigation would be likely to include vegetation clearance and dewatering of section of stream containing water voles prior to habitat clearance in order to encourage their movement into other areas of suitable adjacent habitat. This would be subject to agreement with Natural England and the Environment Agency. It should be noted that such operations are seasonally constrained and can only take place between April and September, as this is the active period for water voles.

[8] English Nature (2001): *Great Crested Newt Mitigation Guidelines*. English Nature, Peterborough
[9] R. Strachan and T. Moorhouse (2006) *Water Vole Conservation Handbook*. Wildlife Conservation Research Unit, University of Oxford

7. CONCLUSION

7.1 The Site is not covered by any statutory or non-statutory nature conservation designations. There are three statutory designated sites within 5km of the Site boundary and two non-statutory designated sites within 2km of the Site. These are unlikely to be impacted upon through development of the Site due to their distance and isolation from the habitats on-Site.

7.2 The habitats within the Site are mainly considered to be of negligible ecological value or of ecological value within the context of the Site. The stream situated on the northern Site boundary and an on-Site pond are considered to be of local ecological value.

7.3 However, some of the habitats present have the potential to support protected species.

7.4 Therefore further surveys for bats, great crested newts and if necessary, water voles are recommended depending on the nature of future development proposals.

7.5 Following further survey work to ascertain the status of protected species on-Site, the development proposals should integrate any protected species requirements into the landscape design. If this can be achieved, together with the incorporation of ecological enhancements, it would ensure that there is a net biodiversity gain. This would ensure that the development accords with national, regional and local planning policy.

Plan

Habitat Features
(EED10232/01 April 2009 HW/TB)

- Site Boundary
- SI — Semi-Improved Grassland (Species poor)
- I — Improved Grassland
- Hedgerow
- A — Arable
- A — Arable - bare earth
- Stream
- Bare Ground
- Ruderal
- Trees
- Buildings
- Open Water
- Amenity Grassland & Ornamental
- Rank Grassland
- Fence
- 1 — Target Note

N

0 100m

Project Details	Pocket Nook Farm
Title	Habitat Features
Scale	As shown (approximate)
Drawing Ref	EED10232/01
Date	April 2009
Checked	HW/TB

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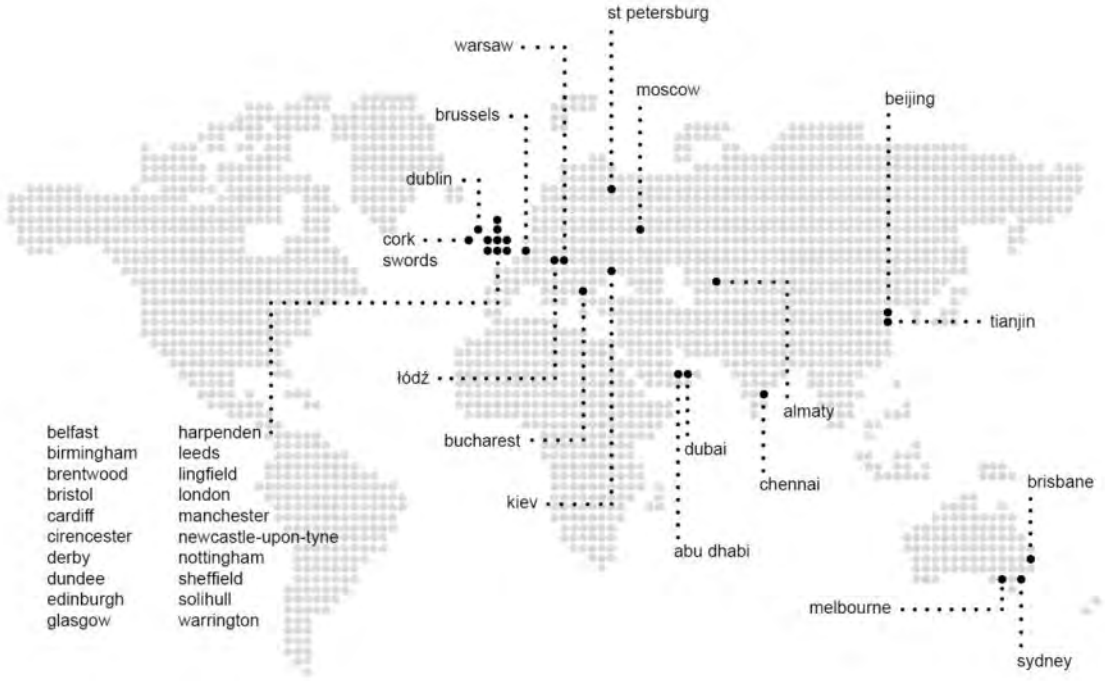

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