

P/17/01110

**Tatenhill, Branston, Burton on Trent  
Flood Risk Addendum Report**

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Document Revisions

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## **1 INTRODUCTION**

### **1.1 General**

- 1.1.1 Residential and Commercial Engineering (RACE) were requested to undertake a Flood Risk Addendum Report to support the reserved matters planning application for the proposed development off Tatenhill Lane, Branston, Burton on Trent. (A copy of the Planning Conditions is attached as Appendix A).
- 1.1.2 The Preliminary Drainage & Levels Strategy Plan (As can be seen within Appendix B) for this site follows the principles & strategy set out in the Approved Flood Risk Assessment prepared by Shepard Gilmour – dated April 2013, together with reflecting the updated information available as discussed within the body of this addendum report.
- 1.1.3 This addendum report is written to cover the latest Environment Agency (EA) information available, and reflects the final engineering strategy to be applied to the proposed site. This is to ensure that the approved Runoff Rates, SUDS strategy and conditions reflect all constraints for the development site accordingly, in in-line with good practice guidelines and governing body regulations.

## **2 SITE DESCRIPTION**

### **2.1 Existing**

- 2.1.1 The site is located on land to the South of Tatenhill Lane, Branston, Burton on Trent, and is centred on Grid Reference SK 21744 21157.
- 2.1.2 The site, accessed off Tatenhill Lane is of an area of approximately 2.64 hectares.
- 2.1.3 Branston Water Park is located adjacent to the Southern Boundary of the site.
- 2.1.4 The site is currently undeveloped and is therefore considered a greenfield.

### **2.2 Proposed**

- 2.2.1 The proposed development consists of 55 dwellings, consisting of detached & semi-detached houses, along with associated parking, garden areas and public amenity features. The site is serviced by traditional estate roads.
- 2.2.2 As noted above the site has been identified as a 2.6446 Ha greenfield site.

### **3 FLOOD RISK ASSESSMENT**

- 3.1.1 This Strategy Statement makes reference to the Approved Flood Risk Assessment (FRA), dated April 2013, prepared by Shepherd Gilmour Infrastructure Ltd.
- 3.1.2 The FRA presented the following conclusions.
- 3.1.2.1 The River Trent was perceived as presenting the primary risk to the site, which consequently located the proposed site within Flood Zone 2.
- 3.1.2.2 The 1 in 100 year + CC flood levels from the River Trent were 48.22m AOD.
- 3.1.2.3 Finished Floor Levels were set to 600mm above the 48.22m AOD flood level.
- 3.1.2.4 SUDS would be introduced into the final drainage design for the proposed site.
- 3.1.3 Therefore based upon the above the following recommendations were made.
- 3.1.3.1 A detailed site drainage plan should be prepared & agreed with the local authority before development commences.
- 3.1.3.2 Runoff from the site post development should be restricted to existing Greenfield runoff rates.
- 3.1.3.3 The finished floor level for the proposed development should be set at a minimum level of 48.82m AOD.
- 3.1.3.4 Site occupants must sign up to the Environment Agency flood warning service, and should be provided with information regarding the risk of flooding to the site (including a flood response and evacuation plan).
- 3.1.3.5 No Sleeping accommodation should be provided on the ground floor of the dwellings.
- 3.2.1 It is noted however that since the above FRA was produced and approved, the EA have remodelled many of their flood mapping data, and updated the records accordingly. Therefore as way of update for the addendum report, RACE have therefore contacted the EA and confirmed the following information (See Appendix C for a copy of the correspondence).
- 3.2.1.1 The proposed development site is now located in an area categorised as Flood Zone 1 (low risk).
- 3.2.1.2 The EA have no records of historical flood events for the proposed development site.
- 3.3.1 Therefore, based upon the latest correspondence received from the EA, the following recommendations are made in way of update to the original approved FRA.

- 3.3.1.1 As noted within point 3.1.3.1 the detailed site drainage plan comment remains valid and the detailed site drainage plan should be prepared & agreed with the local authority before development commences.
- 3.3.1.2 As noted within 3.1.3.2 the runoff from the site post development should be restricted to existing Greenfield runoff rates.
- 3.3.1.3 As noted within 3.1.3.3, the minimum floor level should no longer apply as the existing site area has been re-categorised as being situated within a Flood Zone 1 area (Low risk). However, for good practice, minimum floor levels should reflect the lowest existing ground levels across the existing site as a minimum, given the localised surface water overland flow paths, to safeguard future properties.
- 3.3.1.4 With regards to point 3.1.3.4, as the site is now categorised by the EA as Flood Zone 1 (low risk), the previous requirement of signing up to an early flood warning service, is no longer a requirement.
- 3.3.1.5 With regards to point 3.1.3.5, as the site is now categorised by the EA as Flood Zone 1 (low risk), the previous requirement of no sleeping accommodation should be provided on the ground floor of the dwellings, is no longer a requirement.
- 3.4.1 Therefore, based upon the updated correspondence and supporting information supplied, this addendum report should be used to inform the detailed engineering designs accordingly (as per items contained within section 3.3.1) and all previous recommendations (as section 3.1.3) should now be classed as superseded.

## **4 DEVELOPMENT OF PRELIMINARY ENGINEERING DESIGN**

### **4.1 Building Floor Levels**

- 4.1.1 Minimum floor levels are to be set above the lowest existing ground levels found across the site & above, as the site is situated within Flood Zone 1.

### **4.2 Flood Plain Storage**

- 4.2.1 The developed site is now located in Flood Zone 1; therefore, no floodplain compensation storage will be required.

### 4.3 Surface Water Drainage Proposals

- 4.3.1 As per the approved FRA, maximum discharge from site is to be limited to existing GFR (for the benefit of the Preliminary Drainage & Levels Strategy Plan, this has been set to the Severn Trent Water standard of 5 l/s/ha therefore 13.2 l/s, therefore effectively indicating a worst case scenario to prove the proposals can effectively accommodate all drainage requirements within the proposed layout). However, based upon the Qbar calculations (see Appendix D) this should be increased to 23.37 l/s (for storm events up to and including the 1 in 30 year storm events) and 30.03 l/s (for storm events up to and including the 1 in 100 year + Climate Change storm events) within the detailed engineering designs. The purpose of the use of the initial “worst case” flow rate, is to prove how the proposed drainage strategy can fit into the proposed scheme based upon worst case scenarios, to ensure a viable scheme is presented for reserved matters planning approval.
- 4.3.2 As noted within 4.3.1, the previous approved FRA estimated Greenfield runoff rates. Therefore, this addendum should be used by the detailed drainage designer, to ensure the flows do not exceed Qbar rates specified in 4.3.1.
- 4.3.3 Also as discussed within the approved Flood Risk Assessment the detailed drainage design is to be submitted and approved by the Local Authority, prior to the commencement of works onsite. However, the approved FRA stipulates various SUDS trains to complete the final drainage design. It is however, noted that issues with the prescribed SUDS trains may be encountered, (such as floatation &/or space issues due to tree root protection zones etc, with installation of rainwater harvesting units for example). Therefore, this addendum report recognises this potential concern and provides below a table which should be utilised by the detailed drainage designer to ensure a minimum of two SUDS treatment trains are introduced into the detailed drainage design as follows –

|                                | Quick Rank View | Hydrological | Land Use  | Site Features | Total     | Community and Environment | Economics and Maintenance |
|--------------------------------|-----------------|--------------|-----------|---------------|-----------|---------------------------|---------------------------|
| Infiltration Trench / Soakaway | (1, 10, 9)      | 21 (2nd)     | 30 (2nd)  | 20 (1st)      | 71 (1st)  | 15 (10th)                 | 13 (9th)                  |
| Pervious Pavements             | (2, 6, 6)       | 23 (1st)     | 27 (3rd)  | 20 (1st)      | 70 (2nd)  | 16 (6th)                  | 14 (6th)                  |
| Infiltration Basin             | (3, 13, 9)      | 21 (2nd)     | 25 (9th)  | 20 (1st)      | 66 (3rd)  | 12 (13th)                 | 13 (9th)                  |
| Detain / Offset Storage        | (3, 5, 8)       | 13 (11th)    | 33 (1st)  | 20 (1st)      | 66 (3rd)  | 17 (5th)                  | 14 (6th)                  |
| Grassed Swales                 | (5, 6, 8)       | 18 (4th)     | 26 (8th)  | 20 (1st)      | 64 (5th)  | 18 (6th)                  | 14 (6th)                  |
| Bioretention Area              | (6, 2, 12)      | 16 (7th)     | 27 (3rd)  | 20 (1st)      | 63 (6th)  | 19 (2nd)                  | 11 (12th)                 |
| Filter Drains                  | (7, 10, 11)     | 15 (9th)     | 25 (9th)  | 20 (1st)      | 60 (7th)  | 15 (10th)                 | 12 (11th)                 |
| Wet Ponds                      | (8, 2, 1)       | 17 (6th)     | 27 (3rd)  | 12 (11th)     | 56 (8th)  | 19 (2nd)                  | 17 (1st)                  |
| Filtration Techniques          | (9, 6, 13)      | 11 (12th)    | 24 (11th) | 20 (1st)      | 55 (9th)  | 16 (6th)                  | 9 (13th)                  |
| Grassed Filter Strip           | (10, 4, 2)      | 11 (12th)    | 23 (12th) | 20 (1st)      | 54 (10th) | 18 (4th)                  | 16 (2nd)                  |
| Dry Detention                  | (10, 12, 2)     | 15 (9th)     | 27 (3rd)  | 12 (11th)     | 54 (10th) | 13 (12th)                 | 16 (2nd)                  |
| Stormwater Wetlands            | (12, 1, 5)      | 16 (7th)     | 27 (3rd)  | 10 (13th)     | 53 (12th) | 20 (1st)                  | 15 (5th)                  |
| Green Roofs                    | (12, 6, 2)      | 18 (4th)     | 15 (13th) | 20 (1st)      | 53 (12th) | 16 (6th)                  | 16 (2nd)                  |

This table is formulated against the proposed site, while giving specific consideration to the weighting for each potential SUDS trains that can be employed for use for the proposed site, through the use of microdrainage. It highlights and lists with specific regards to order of weighing each potential SUDS element to select within the detailed designs. An example of how these can be effectively introduced within the proposed scheme, can be seen within the Preliminary Drainage & Levels Strategy Plan (As seen within Appendix B).

## **5 CONCLUSIONS**

- 5.1.1 As the proposed residential proposals lies outside any existing flood area (Zone 2 or 3), the site is not constrained
- 5.1.2 Qbar greenfield runoff rates are specified and are to be complied with, when undertaking the detailed engineering design works.
- 5.1.3 Minimum floor levels are to be set to a minimum of the lowest existing ground levels across the proposed site.
- 5.1.4 A minimum of two SUDS treatment trains are to be introduced within the detailed engineering design.
- 5.1.5 The final detailed engineering design is to be submitted to and approved by the Local Authority, in line with the recommendations made within this FRA addendum report, prior to works commencing onsite.



## **6 APPENDIX A**

### **OUTLINE PLANNING CONDITIONS**



**TOWN AND COUNTRY PLANNING ACT 1990  
OUTLINE PERMISSION FOR DEVELOPMENT**

**This development is subject to an agreement under Section 106  
of the Town and Country Planning Act 1990**

Date valid application received: 11/10/2013

Application No: P/2013/01160

Name and address of Agent

Name and address of Applicant

Martin Planning Ltd  
Lake View  
Lakeside  
Cheadle  
SK8 3GW

Central & Country Developments Ltd  
16 Heritage Park  
Hayes Way  
Cannock  
Staffordshire  
WS11 7LT

**EAST STAFFORDSHIRE BOROUGH COUNCIL** in pursuance of powers under the above mentioned Act hereby **PERMITS**:

**Outline application for the erection of up to 55 dwellings, including the demolition of 78 and 80 Tatenhill Lane to facilitate the creation of a new access including details of access and site layout with all other matters reserved (amended plan received 21/11/2013)  
Land off Tatenhill Lane, Tatenhill Lane, Branston, Staffordshire**

in accordance with the submitted documents and plans and subject to the conditions(s) specified hereunder:

- 1 Application for approval of the reserved matters shall be made to the Local Planning Authority before the expiration of three years from the date of this permission.

Reason: To conform with Section 92 (2) of the Town and Country Planning Act 1990.

- 2 No development shall take place until plans and particulars of the scale and appearance of the buildings to be erected and the landscaping (which shall promote BAP Species) of the site (hereinafter called "the reserved matters") have been submitted to and approved in writing by the Local Planning Authority, and the development shall be carried out in accordance with those details that have been approved in writing by the Local Planning Authority.

Reason: The application is in outline only and the Local Planning Authority wishes to ensure that these details which have not yet been submitted are appropriate for the locality.

- 3 The development hereby permitted shall be begun before the expiration of two years from the date of the approval of the last reserved matters to be approved.

Reason: To conform with Section 92(2) of the Town and Country Planning Act 1990 as amended by section 51 of the Planning and Compulsory Purchase Act 2004.

- 4 The development hereby permitted shall be carried out in accordance with the following approved

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plans subject to compliance with other conditions of this permission:

Drawing No.s:

BA445 001 1:1250 Location Plan dated as received on 30/09/2013  
BA445 003 Revision H 1:500 Proposed Site Plan dated as received on 02/12/2013  
BA445 021 1:500 Ecological Masterplan dated as received on 02/12/2013  
NTT/415/001 Revision P6 1:500 Proposed Site Access dated as received on 30/09/2013  
BA445 - Design and Access Statement dated as received on 30/09/2013

**Reason:** For the avoidance of doubt to ensure the development will not adversely affect the appearance of the locality or the adjacent Trent and Mersey Conservation Area, the amenities of neighbouring properties, or the safe and efficient use of the adjoining highways, flood risk, or protected species or their habitats, in accordance with East Staffordshire Local Plan Saved Policies BE1, H6 and T1, the National Planning Policy Framework (particularly Paragraph 17 and Sections 6, 7, 10 and 12), and the East Staffordshire Design Guide.

- 5 No development shall take place until a legal agreement under Section 106 of the Town and Country Planning Act 1990 (substantially in accordance with the form annexed to this consent) has been entered into binding all owners (and their mortgagees, if any) who have an interest in the site at the time of the agreement unless otherwise agreed in writing by the Local Planning Authority.

**Reason:** To ensure the development is carried out in accordance with the variety of mitigation measures and development agreements which form an integral part of the development of the site in accordance with the East Staffordshire Local Plan Saved Policy IMR2, and the National Planning Policy Framework.

- 6 No development shall take place until further details of the proposed shuttle working at Branston Bridge (as indicatively shown on plan NTT/415/002 Revision P3) have been submitted to and approved in writing by the Local Planning Authority. The off-site highway works so approved shall be completed prior to the first occupation of any of the dwellings.

**Reason:** As recommended by the Highway Authority in the interests of highway safety, in accordance with East Staffordshire Local Plan Saved Policy T1.

- 7 No development shall take place until samples and details of all materials to be used externally have been submitted to and approved in writing by the Local Planning Authority and the development shall only be carried out using the agreed materials.

**Reason:** To safeguard the character and appearance of the buildings and the adjacent Trent and Mersey Conservation Area in accordance with East Staffordshire Local Plan Saved Policies BE1 and H6, the East Staffordshire Design Guide and the National Planning Policy Framework (particularly Sections 7 and 12 and Paragraph 17).

- 8 No development shall take place, and no site works related to the development hereby approved shall be carried out, until details of all slab levels and any regrading proposed to the site have been submitted to and approved in writing by the Local Planning Authority and the development shall only be carried out in accordance with the approved details.

**Reason:** To ensure that the development does not adversely affect the amenities of adjoining properties and the character or appearance of the adjacent Trent and Mersey Conservation Area in accordance with East Staffordshire Local Plan Saved Policies BE1 and H6, the East

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Staffordshire Design Guide and the National Planning Policy Framework (particularly Sections 7 and 12 and Paragraph 17).

- 9 No development shall take place until a scheme for the sustainable disposal of foul and surface waters has been submitted to and approved in writing by the Local Planning Authority. There shall be wetland habitat features within the scheme unless otherwise agreed in writing by the Local Planning Authority. The development shall only be carried out in accordance with the approved details. The development shall be completed in accordance with the approved details prior to its first occupation.

Reason: To ensure adequate drainage facilities are provided to serve the development to reduce the risk of creating or exacerbating a flooding problem, to minimise the risk of pollution and to enhance wildlife habitats as recommended by Severn Trent Water Limited, the Environment Agency and the Staffordshire Wildlife Trust, in accordance with the National Planning Policy Framework (particularly Sections 10 and 11).

- 10 No development shall take place until a scheme for the protection of trees and hedges to be retained during the course of development has been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure the retention of existing landscaping features and retain their ecological value in accordance with East Staffordshire Local Plan Saved Policy BE1, the East Staffordshire Design Guide and the National Planning Policy Framework (particularly Sections 7 and 11).

- 11 No development shall take place until details of noise attenuation measures have been submitted to and approved in writing by the Local Planning Authority. The approved measures shall be implemented prior to the first occupation of the dwellings to which they relate and thereafter retained for the life of the development.

Reason: To safeguard the amenities of future occupiers of the dwellings in accordance with East Staffordshire Local Plan Saved Policy BE1 and the National Planning Policy Framework (particularly Section 11 and Paragraph 17).

- 12 No development shall take place until details of illumination levels associated with all street lighting to be used on site have been submitted to and approved in writing by the Local Planning Authority. The development shall only be carried out in accordance with the approved details.

Reason: To safeguard the amenities of occupiers of nearby dwellings, users of the adjoining canal, protected animal species and the character and appearance of the adjacent Trent and Mersey Conservation Area and rural surroundings in accordance with East Staffordshire Local Plan Saved Policy BE1, the East Staffordshire Design Guide and the National Planning Policy Framework (particularly Paragraph 17 and Sections 7 and 11).

- 13 No development shall take place until details of the parking and turning areas for each dwelling have been submitted to and approved in writing by the Local Planning Authority. These areas shall be provided in a porous bound material in accordance with details which shall first have been submitted to and approved by the Local Planning Authority and thereafter shall be made available at all times for their designated purposes.

Reason: As recommended by the Highway Authority in the interests of highway safety, and to ensure porous materials are used where appropriate to reduce the risk of flooding in accordance with East Staffordshire Local Plan Saved Policy T1 and the National Planning Policy Framework

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(particularly Section 10).

- 14 No development shall take place until details of all road construction, street lighting and drainage including longitudinal sections and means of draining roads to an acceptable outfall have been submitted to and approved in writing by the Local Planning Authority. Thereafter the roads shall only be constructed in accordance with the approved details.

Reason: As recommended by the Highway Authority in the interests of highway safety and in accordance with East Staffordshire Local Plan Saved Policy T1.

- 15 No development shall take place until a Construction Management Plan including details of routing of construction vehicles, parking facilities for vehicles of site personnel, operatives and visitors, arrangements for loading, storage and unloading of plant and materials, wheel washing facilities, measures to remove any mud or deleterious material deposited on the highway, and a timetable for implementation shall be submitted to and approved in writing by the Local Planning Authority. The development shall thereafter only be carried out completed in accordance with the approved details.

Reason: In the interests of highway safety, and the amenities of the occupiers of neighbouring properties in accordance with East Staffordshire Local Plan Saved Policies BE1 and T1, and the National Planning Policy Framework (particularly Paragraph 17).

- 16 No development shall take place until a written scheme of investigation securing the implementation of a programme of archaeological work has been submitted to and approved in writing by the Local Planning Authority. The programme of work shall be implemented in accordance with the approved details.

Reason: To ensure that no development takes place which may adversely affect any items of archaeological interest without adequate prior investigation in accordance with the National Planning Policy Framework (particularly Section 12).

- 17 No development shall take place until a breeding bird survey for the site has been undertaken. Any recommendations or remediation requirements of the survey shall be implemented and retained in accordance with the approved details.

Reason: In order to safeguard protected species and their habitats in accordance with the National Planning Policy Framework (particularly Section 11).

- 18 No development shall take place until a long-term management plan for habitats within the site has been submitted to and approved in writing by the Local Planning Authority. The habitats shall thereafter be managed in accordance with the approved plan.

Reason: In order to safeguard protected species and their habitats in accordance with the National Planning Policy Framework (particularly Section 11).

- 19 Notwithstanding the submitted information all 4 and 5 bedroom dwellings shall be provided with a minimum of 3 off street car parking spaces, in accordance with details, which shall have first been submitted to and approved in writing by the Local Planning Authority, .

Reason: As recommended by the Highway Authority in the interests of highway safety and in accordance with East Staffordshire Local Plan Saved Policy T1.

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- 20 Notwithstanding the submitted information no development shall take place until details of a pedestrian route to the eastern boundary of site has been submitted to and approved in writing by the Local Planning Authority. the route so approved shall be provided prior to the first occupation of any of the dwellings.

Reason: In order to promote sustainable movement from future residents in accordance with the National Planning Policy Framework (particularly Section 4).

- 21 If during the course of development, contamination not previously identified is found to be present on the site, then no further development (unless otherwise first agreed in writing with the Local Planning Authority) shall be carried out until a method statement detailing how and when the contamination is to be dealt with has been submitted to and approved in writing by the Local Planning Authority. The contamination shall then be dealt with in accordance with the approved details.

Reason: In order to safeguard human health and the water environment and identify potential contamination on-site and the potential for off-site migration in accordance with Paragraphs 120 and 121 of the National Planning Policy Framework.

- 22 Prior to the first occupation of the dwellings hereby granted permission each property shall be provided with 3 wheeled bins.

Reason: In order to support the Council's Waste collection operation and in accordance with the East Staffordshire Waste Storage and Collection Guidance for New Developments.

- 23 Prior to the first occupation of the dwellings hereby granted permission the access shown on the approved plan shall be provided in a bound material in accordance with details which shall first have been submitted to and approved in writing by the Local Planning Authority.

Reason: As recommended by the Highway Authority in the interests of highway safety, and to ensure porous materials are used where appropriate to reduce the risk of flooding in accordance with East Staffordshire Local Plan Saved Policy T1 and the National Planning Policy Framework (particularly Section 10).

- 24 Any scheme of walling and fencing approved as part of the landscaping scheme required as a reserved matter shall be completed prior to the development first being brought into use.

Reason: To safeguard the visual amenities of the area and the amenities of occupiers of adjoining properties in accordance with East Staffordshire Local Plan Saved Policies BE1 and H6, and the National Planning Policy Framework (particularly Section 7 and Paragraph 17).

- 25 All planting, seeding or turfing comprised in the approved details of landscaping shall be carried out in the first planting and seeding season following the first occupation of the building(s) or the completion of the development, whichever is the sooner; and any trees or plants which within a period of 5 years from the completion of the development die, are removed, or become seriously damaged or diseased shall be replaced in the next planting season with others of similar size and species unless the Local Planning Authority gives written consent to any variation.

Reason: To ensure that an approved landscaping scheme is implemented in a speedy and diligent way and that initial plant losses are overcome in the interests of the visual amenities of the locality and occupiers of adjacent buildings and in accordance with East Staffordshire Local Plan Saved Policy BE1, the East Staffordshire Design Guide and the National Planning Policy Framework

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(particularly Section 7).

- 26 The development hereby approved shall be carried out in accordance with the approved Flood Risk Assessment dated January 2011 reference C805/SBS/EAJ/jt/U0005 version v1.1 undertaken by Shepherd Gilmour, unless otherwise agreed in writing by the Local Planning Authority.

Reason: To reduce the risk of flooding as recommended by the Environment Agency in accordance

- 27 Notwithstanding the provisions of Classes A, B, C, D and E of Part 1 of the Town and Country Planning (General Permitted Development) (Amendment) (No.2) (England) Order 2008, or any Order revoking and re-enacting that Order, the dwellings hereby permitted shall not be altered or extended and no buildings or structures shall be erected within the curtilage of the new dwellings unless planning permission has first been granted by the Local Planning Authority.

Reason: To safeguard the character and appearance of the buildings and the adjacent Trent and Mersey Canal Conservation Area in accordance with East Staffordshire Local Plan Saved Policies BE1 and H6, the East Staffordshire Design Guide and the National Planning Policy Framework (particularly Sections 7 and 12, and Paragraph 17).

#### **Informative(s)**

- 1 Prior to the submission and during the course of consideration of this proposal the Local Planning Authority has negotiated with the applicant to ensure the development complies with relevant development plan policies and material planning considerations including the National Planning Policy Framework. It is therefore considered that the Local Planning Authority has worked proactively with the applicant to secure a development that improves the economic, social and environmental conditions of the area in accordance with the requirements of Paragraphs 186 and 187 of the National Planning Policy Framework.

- 2 The conditions identified below require details to be approved before commencement of the development.

Condition No(s) 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17 and 18.

This means that a lawful commencement of the approved development cannot be made until the particular requirements of these conditions have been met.

As from 6th April 2008 requests for confirmation of compliance with planning conditions requires a payment of a fee to the Local Planning Authority. The fee chargeable by the authority is £97 per request. The fee must be paid when the request is made. Any number of conditions can be included for each request.

Payment can be made by cheque or card only. If you wish to pay by credit or debit card (1.6% administration charge for credit cards) please telephone 01283 508606.

Although we will endeavour to discharge all conditions within 21 days of receipt of your written request, legislation allows the Local Planning Authority a period of 8 weeks, and therefore this timescale should be borne in mind when programming development.

- 3 The applicant is advised that the construction times should be restricted to the following hours in the interest of the amenity of neighbouring residents:

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Monday to Friday: 0730 to 1800  
Saturday: 0800 to 1400  
Sundays and Bank Holidays: No working

- 4 The applicant is advised that adequate provision should be made to prevent dust from affecting neighbouring properties.
- 5 The applicant is advised to ensure that appropriate measures are taken to protect worker safety, such as PPE and hygiene practices. All work shall be carried out with regard to the relevant Health and Safety legislation.
- 6 The applicant is advised to note and act upon as necessary the comments of the Police Architectural Liaison Officer as set out in the attached letter dated 4th November 2010. In so doing the applicant is advised that the terms of the planning permission override any recommendations of the Police Architectural Liaison Officer where conflict arises.
- 7 The applicant is advised to note and act upon as necessary the design principles of The National Forest as set out in the attached leaflet.
- 8 The applicant is advised to note and act upon as necessary the comments of the Canal and River Trust as set out in the attached letter dated 8th November 2013.
- 9 The applicant is advised to note and act upon as necessary the comments of the Highways Authority as set out in the attached letter dated 30th October 2013.
- 10 The applicant is advised that the internal dimensions of any single garages at reserved matters stage should be a minimum of 6m x 3m.
- 11 The applicant is advised that there may be a potential risk from landfill gas and leachate migration. It is the developer's responsibility to ensure that the site is free from landfill gas. Consideration should also be given to protection measures within the building construction to prevent ground gas ingress.
- 12 The applicant is advised that the construction management plan required by condition 14 should not allow for any traffic to pass through Tatenhill.
- 13 The applicant is advised that in complying with Condition 6 above, details of the proposed materials should be submitted in writing to the Local Planning Authority, with any correspondence including notification of the date on which samples will be made available on-site.
- 14 The applicant is advised that in complying with Condition 12 above materials with a high degree of porosity would be the most likely to be acceptable as they will reduce the amount of surface water run-off.

This consent is given in pursuance of the relevant Planning Legislation and does not entitle you to do anything for which the consent of some other landowner, person, public authority, or department of the Council is required.

Page 7 of 8

Philip Somerfield B.A., Dip T.P., D.M.S., M.R.T.P.I.  
Head of Regulatory Services  
P.O. Box 8045, Burton upon Trent, Staffordshire DE14 9JG  
[www.eaststaffsbc.gov.uk](http://www.eaststaffsbc.gov.uk)

Helping Conservation – Printed on recycled paper

Decision Notice Com – OU Approval Conditions



Dated

10<sup>th</sup> April 2014

Signed



Page 8 of 8

Philip Somerfield B.A. Dip T.P., D.M.S. M.R.T.P.I  
Head of Regulatory Services  
P.O. Box 8045, Burton upon Trent, Staffordshire DE14 9JG  
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Decision Notice Com - OU Approve Conditions

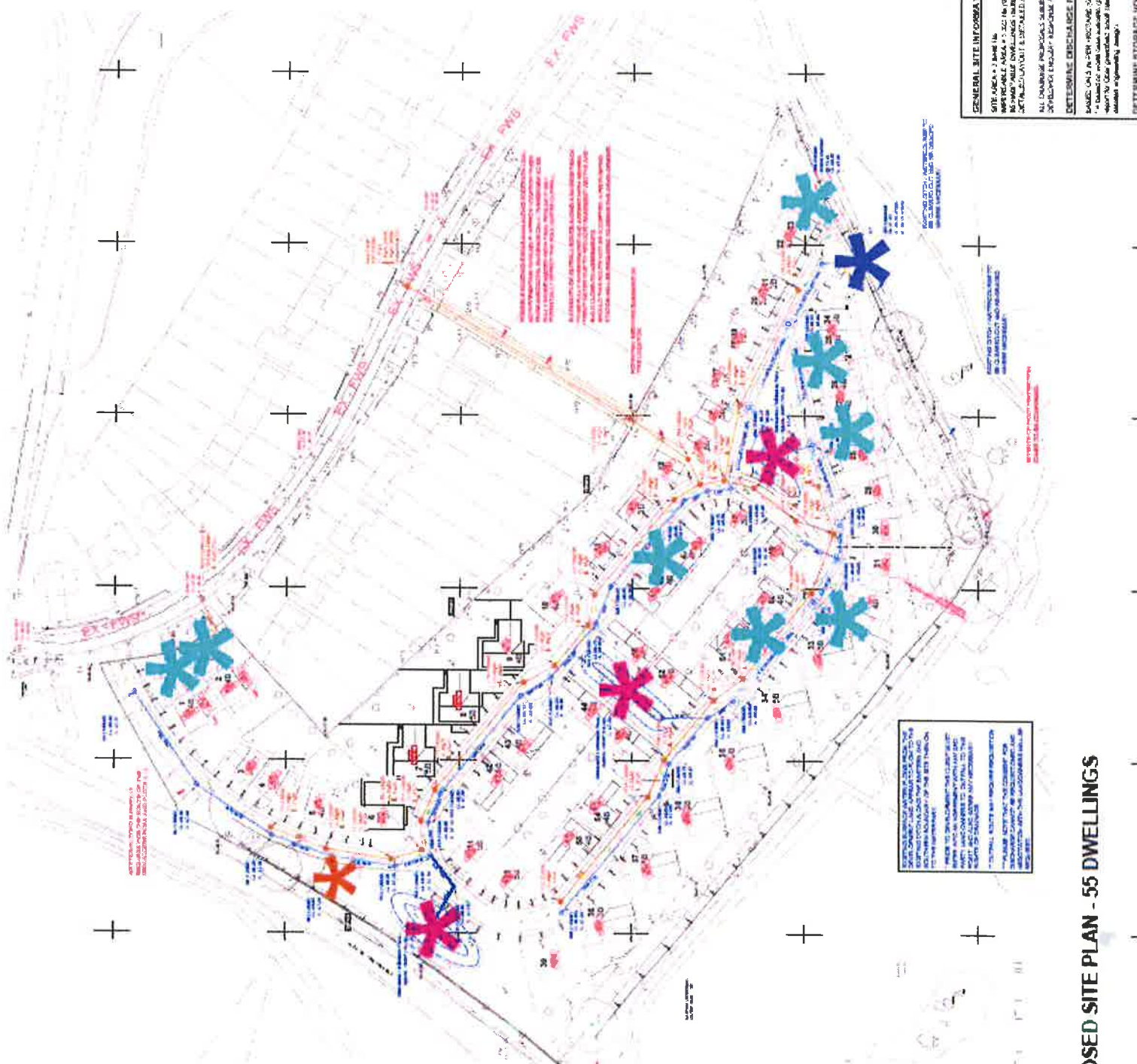
## **7 APPENDIX B**

### **PRELIMINARY DRAINAGE & LEVELS STRATEGY PLAN - P\_ENG\_100 Rev #**

CONNECTING TO A SWALE (IF ACHIEVABLE) TO PROVIDE FILTER SYSTEM.

- \* POTENTIAL ATTENUATION / INFILTRATION PONDS
- \* POTENTIAL PERVIOUS DRIVEWAY AREAS (FOR NON-ADOPTED AREAS ONLY WHERE SPECIFIED).
- \* POTENTIAL PUMP STATION LOCATION (SUBJECT TO DETAILED DESIGNS & APPROVED LAYOUT).

**DESIGN NOTE:**  
 BASED UPON THE ABOVE PROPOSALS THERE WOULD BE 3 SUDS TECHNIQUES INTRODUCED INTO THE PROPOSED SCHEME. IT SHOULD BE NOTED THAT THE SUDS TREATMENT TRAINS WITHIN THE DETAILED ENGINEERING LAYOUT SHOULD FOLLOW THE FRA APPENDUM REPORT ACCORDINGLY.



**PRELIMINARY**  
 THIS DRAWING ILLUSTRATES A SKETCH PROPOSAL ONLY AND AS SUCH IS SUBJECT TO DETAILED DRAINAGE & ENGINEERING DESIGN WORKS.

**NOTE:**  
 THE PROPOSED DRAINAGE SYSTEMS ARE SUBJECT TO THE RESULTS OF THE DETAILED DRAINAGE & ENGINEERING DESIGN WORKS. THE DRAWING IS SUBJECT TO THE RESULTS OF THE DETAILED DRAINAGE & ENGINEERING DESIGN WORKS.

THE DRAINAGE SYSTEMS SHOWN ON THIS DRAWING ARE SUBJECT TO THE RESULTS OF THE DETAILED DRAINAGE & ENGINEERING DESIGN WORKS. THE DRAWING IS SUBJECT TO THE RESULTS OF THE DETAILED DRAINAGE & ENGINEERING DESIGN WORKS.

**GENERAL SITE INFORMATION**  
 SITE AREA = 7.000 Ha  
 APPROXIMATE AREA = 0.200 Ha  
 ALL DRAINAGE PROPOSALS SUBJECT TO RECEIPT OF A DETAILED DRAINAGE & ENGINEERING DESIGN REPORT.  
 DRAINAGE DISCHARGE FROM SITE  
 DRAINAGE DISCHARGE FROM SITE TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.  
 DRAINAGE DISCHARGE FROM SITE TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.

**SOIL DISCHARGE FROM SITE**  
 TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.  
 TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.  
 TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.  
 TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.

- GENERAL NOTES**
1. TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.
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  6. TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.
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  8. TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.
  9. TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.
  10. TO BE MADE TO THE EXISTING DRAINAGE SYSTEM.

## **8 APPENDIX C**

### **ENVIRONMENT AGENCY CORRESPONDANCE**



Phil Tiley  
Residential & Commercial Engineering  
Ltd  
Unit 17 Lakeside Business Park  
Walkmill Lane  
Cannock

Our Ref: 32967

Your Ref:

Date: 5 January 2017

e-mail: [philtiley@rac-e.co.uk](mailto:philtiley@rac-e.co.uk)

Dear Phil Tiley

**Provision of: Product 4 - FRA - Proposed Residential Development, Land off Tatenhill Lane, Braston, Burton on Trent, DE14 3EZ.**

Thank you for your request of 20 December 2016 to use Environment Agency data.

#### **FLOOD RISK**

The above site is **not within the current 'Extreme Flood Outline'**. According to the Flood Map, which provides a general estimate of the likelihood of flooding across England & Wales, the site is shown to have less than 0.1% (1 in 1000) chance of flooding in any year from rivers.

#### **Historical Flooding**

Following examination of our records of historical flooding (see explanation below) we have no record of flooding in the area. This does not mean that the site has never flooded.

You may also wish to contact your local authority or internal drainage board, to see if they have other relevant local flood information.

Our records of historical flooding show the extents of known flooding from rivers, the sea, and groundwater. It cannot show all the flooding that may ever have occurred – we can only show flooding where we have adequate records. As more data on historical flooding comes to light, and as flood incidents occur, then we will record this where we have adequate information to do so.

#### **Surface Water Flood Map**

Managing the risk of flooding from surface water is the responsibility of Lead Local Flood Authorities. The 'risk of flooding from surface water' map has been produced by

Environment Agency, West Midlands area, Sentinel House, 9 Wellington Crescent, Fradley Park, Lichfield, Staffs. WS13 8RR.  
Customer services line: 03708 506 506  
E-mail: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)  
[www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)

the Environment Agency on behalf of government, using information and input from Lead Local Flood Authorities.

It is not possible to say for certain what the flood risk is but we use the best information available to provide an indication so that people can make informed choices about living with or managing the risks. The information we supply does not provide an indicator of flood risk at an individual site level. Further information can be found on the Agency's website,

<http://watermaps.environment-agency.gov.uk/wiyby/wiyby.aspx?topic=ufmfsw#x=357683&y=355134&scale=2>

### **Reservoir Flood Maps**

Dam breach flooding happens when a dam impounding a reservoir breaches, causing water stored in the reservoir to be released through the breach and flooding areas downstream of the dam. The dam breach scenario simulated on the maps is a 'credible worst case' scenario. However there are other potential dam failure scenarios which could also happen. The maps do not in any way reflect the structural integrity of the dam or the chance of it failing, hence should not be used to assess likelihood or probability.

Further information can be found on the Environment Agency's webpage:

<http://watermaps.environment-agency.gov.uk/wiyby/wiyby.aspx?lang=e&topic=reservoir&layer=default&scale=2&x=357683&y=355134#x=357683&y=355134&scale=2>

For further information about local emergency plans for these reservoirs you should contact Staffordshire County Council, the Local Lead Flood Authority.

### **Flood Warning Area**

The site does not lie within a flood warning area.

### Supporting Information

Please find attached a copy of the Flood Map for Planning (Rivers and Sea) for the area relating to your address.

Further details about the Environment Agency information supplied can be found on the GOV.UK website:

<https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather>

If you have requested this information to help inform a development proposal, then you should note the information on GOV.UK on the use of Environment Agency Information for Flood Risk Assessments

<https://www.gov.uk/planning-applications-assessing-flood-risk>  
<https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>

Environment Agency, West Midlands area, Sentinel House, 9 Wellington Crescent, Fradley Park, Lichfield, Staffs. WS13 8RR.  
Customer services line: 03708 508 508  
E-mail: [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)  
[www.gov.uk/environment-agency](http://www.gov.uk/environment-agency)

This information is provided subject to the enclosed Open Government Licence or Special Licence, which you should read.

I hope that we have correctly interpreted your request. Please see the attached Open Government Licence (OGL) for details of permitted use.

We respond to requests for recorded information that we hold under the Freedom of Information Act 2000 (FOIA) and the associated Environmental Information Regulations 2004 (EIR).

If you are not satisfied with our response to your request for information you can contact us within 2 calendar months to ask for our decision to be reviewed.

If you have any queries or would like to discuss the content of this letter further please call us on 08708 506506.

Yours sincerely

Rachel Hamer  
Customers & Engagement Officer

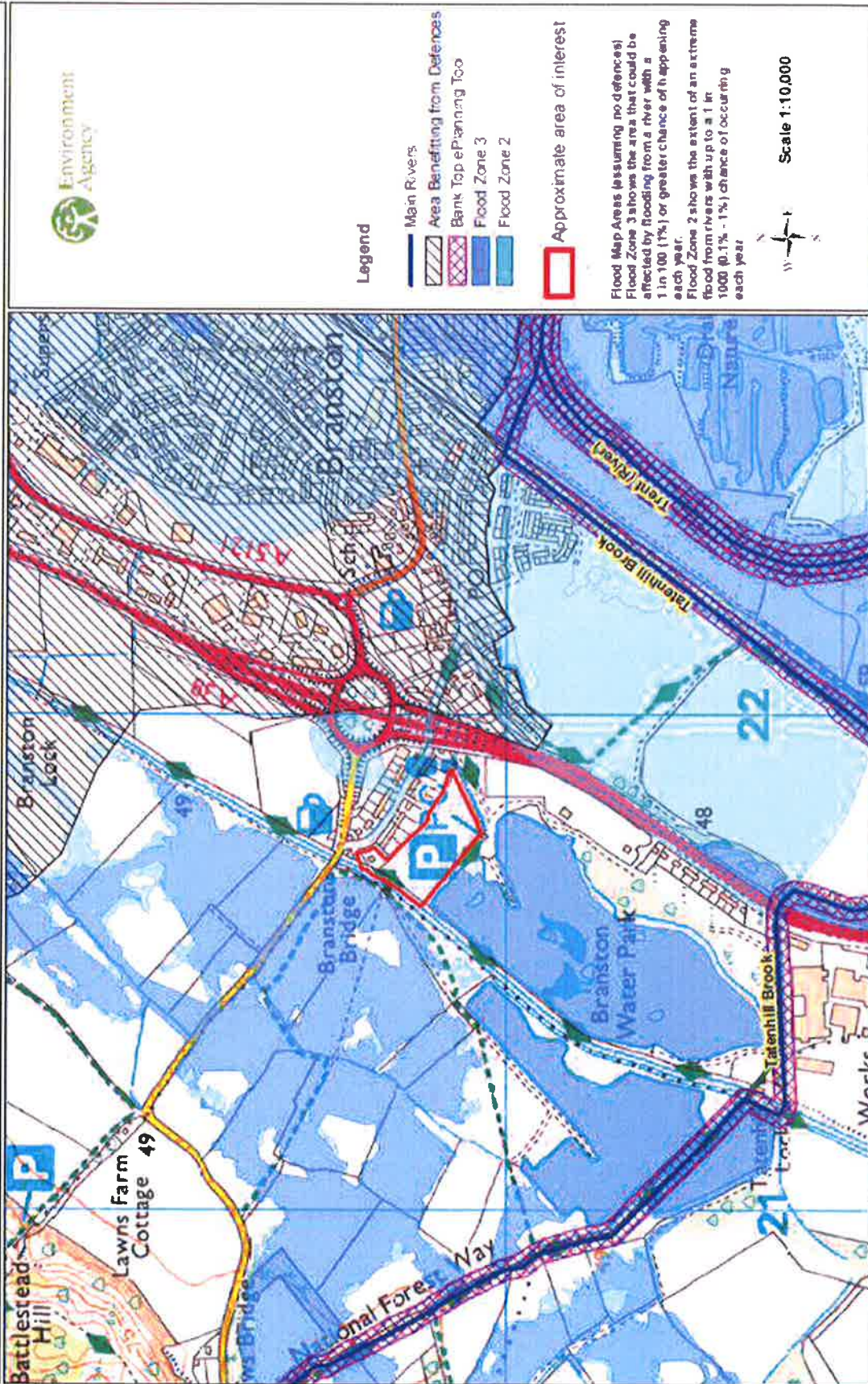
For further information please contact the Customers & Engagement Team

**Tel: 02030251678 or 02030251665**

**Team Tel: 02084747856**

**NOTE:** Change of e-mail to: [Enquiries\\_WestMids@environment-agency.gov.uk](mailto:Enquiries_WestMids@environment-agency.gov.uk)

Flood Map for Planning SK 21729 21134 Ref: 32967 Prepared 4 January 2017





## 9 APPENDIX D

### GREENFIELD RUNOFF CALCULATIONS FOR QBAR



## Greenfield runoff estimation for sites

Site name: Tatenhill Lane  
 Site location: Braston

Site coordinates  
 Latitude: 52.78756° N  
 Longitude: 1.67991° W

This is an estimation of the greenfield runoff rate limits that are needed to meet normal best practice criteria in line with Environment Agency guidance "Preliminary rainfall runoff management for developments", WS-074/A/TR 01 rev. E (2012) and the CIRIA GUIDS Manual (2007). It is not to be used for detailed design of drainage systems. It is recommended that every drainage scheme uses hydraulic modelling software to finalise volume requirements and design details before drawings are produced.

Reference: goqu3o@myd3u / 2.64  
 Date: 27 Feb 2017

### Site characteristics

|                               |      |    |
|-------------------------------|------|----|
| Total site area               | 2.64 | ha |
| Significant public open space | 0    | ha |
| Area positively drained       | 2.64 | ha |

### Methodology

|                          |                             |
|--------------------------|-----------------------------|
| Greenfield runoff method | IH124                       |
| Qbar estimation method   | Calculate from SPR and SAAR |
| SPR estimation method    | Calculate from SOIL type    |
| SOIL type                | 4                           |
| HOST class               | N/A                         |
| SPR                      | 0.47                        |

### Hydrological characteristics

|                               | Default | Edited |    |
|-------------------------------|---------|--------|----|
| SAAR                          | 649     | 649    | mm |
| M5-60 Rainfall Depth          | 20      | 20     | mm |
| 'r' Ratio M5-60/M5-2 day      | 0.4     | 0.4    |    |
| FEH/FSR conversion factor     | 0.04    | 0.04   |    |
| Hydrological region           | 4       | 4      |    |
| Growth curve factor: 1 year   | 0.83    | 0.83   |    |
| Growth curve factor: 10 year  | 1.49    | 1.49   |    |
| Growth curve factor: 30 year  | 2       | 2      |    |
| Growth curve factor: 100 year | 2.57    | 2.57   |    |

### Greenfield runoff rates

|                | Default | Edited |     |
|----------------|---------|--------|-----|
| Qbar           | 11.69   | 11.69  | l/s |
| 1 in 1 year    | 9.70    | 9.70   | l/s |
| 1 in 30 years  | 23.37   | 23.37  | l/s |
| 1 in 100 years | 30.03   | 30.03  | l/s |

Please note that a minimum flow of 5 l/s applies to any site

HR Wallingford Ltd, the Environment Agency and any local authority are not liable for the performance of a drainage scheme which is based upon the output of this report.