Town and Country Planning Act 1990
Section 78 (As Amended)

STATEMENT OF COMMON GROUND

Prepared by:

Woolf Bond Planning LLP
for Bargate Homes and Vivid Homes

and

Havant Borough Council

Land west of Old Manor Farm, Lower Road, Bedhampton

PINS Ref: APP/X1735/W/22/3305704

LPA Ref: APP/21/01071

WBP Ref: 8200

24th April 2023

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Appendix A Drainage Strategy Technical Note (Ref: SS/23/0157/6430)

Appendix B The LLFA's formal response dated 24th March 2023

1.0 INTRODUCTION: MATTERS AGREED

General

1.1. This Statement of Common Ground relates to a Town and Country Planning Act 1990 Section 78 Planning Appeal lodged by Woolf Bond Planning LLP on behalf of Bargate Homes and Vivid Homes against the Council's non-determination of a planning application for up to 43 dwellings (LPA Ref: APP/21/01071).

1.2. Preparation of this document follows discussions between Steven Brown of Woolf Bond Planning LLP, acting on behalf of the Appellant and Havant Borough Council ("HBC").

Addressing the Council's Putative Reasons for Refusal

1.3. The Appeal was lodged against non-determination. As set out in the Council's Statement of Case, had the Appellants not lodged an appeal against non-determination, the Council would have resolved to refuse the application for two reasons. Reason (1) relates to drainage. Reason (2) relates to the lack of a s106 agreement.

1.4. Matters have since progressed. Following discussions between the Appellants, Havant Borough Council and Hampshire County Council as Lead Local Flood Authority ("LLFA"), the Appellant submitted a Drainage Strategy Technical Note (Ref: SS/23/0157/6430). A copy is included at **Appendix A** to this SoCG. This sets out alternative surface water discharge proposals.

1.5. The LLFA's formal response dated 24th March 2023 confirms the alternative drainage strategy is acceptable, thus addressing their previous concerns. A copy of the LLFA's response is included at **Appendix B**.

1.6. It is agreed that drainage matters can be satisfactorily addressed by the imposition of an appropriately worded condition(s), in the form included in the LLFA's response.

1.7. The Appellants and HBC are also discussing the form and content of a legal agreement. On the receipt of a satisfactory, signed and dated legal agreement, this will ensure that if the Appeal is allowed and planning permission is granted, all of the financial contributions and other compliant obligations required to enable the proposed development to go ahead are in place and/or will be delivered at the appropriate times. This would address putative reason (2) to the satisfaction of the Council.

1.8. An email received from PINS dated 31st March 2023 asked the Appellants and HBC to address the matters raised by the Inspector in the pre-hearing update note dated 23rd March 2023. Details are set out in section 6 below.

Matters of Agreement

1.9. Discussions between the Appellants and HBC have resulted in agreement upon the following matters:

a) The development plan policies for the supply of housing are out of date.

b) The Council cannot currently demonstrate a five year supply of deliverable housing land. This shortfall is substantial.

c) Sites for housing beyond identified settlement boundaries need to be granted planning permission in order to contribute towards rectifying the housing land supply deficit.

d) The presumption in favour of sustainable development is engaged.

e) There are no footnote 7 considerations that would operate to disengage the presumption in favour of sustainable development.

f) The Appeal Scheme broadly satisfies the requirements of the Council's Housing Delivery Position Statement (March 2022)

g) The Appeal Site is in a sustainable location, within walking and cycling distance from local services and facilities.

h) There are no flood and/or drainage objections to the Appeal Scheme.

i) The Appeal Site is not within a valued landscape.

j) The proposed density is acceptable given the site's context and constraints.

k) The Appeal Scheme is acceptable in ecological terms.

l) The Appeal Scheme can secure an appropriate mix of dwelling types and tenures.

m) The Appeal Scheme delivers 30% affordable housing.

n) The Appeal Scheme results in less than substantial harm to designated heritage assets. In relation to the level of harm expressed on a spectrum different terminology was used, the appellants describing the harm as at a low to medium level, and the council officer as moderate. On either position, it is agreed that the public benefits outweigh the localised heritage harm, thus satisfying the test at paragraph 202 of the NPPF.

o) The Appeal Scheme is consistent with the economic, environmental and social objectives of the NPPF.

p) The Appellant will provide planning obligations in the form of a Unilateral Undertaking regarding necessary contributions

q) Subject to the satisfactory completion of the Unilateral Undertaking, this will ensure that if the Appeal is allowed and planning permission is granted, all of the financial contributions and other compliant obligations required to enable the proposed development to go ahead are in place and/or will be delivered at the appropriate times.

1.10. The remainder of this SoCG expands upon the agreed matters, with the aim of assisting the Inspector in the determination of the Appeal.

2.0. DESCRIPTION OF THE APPEAL SITE AND SURROUNDING AREA

Context

2.1. The Appeal Site lies outside of the urban area as defined by Policies CDS17 and AL2 of the development plan. These policies seek to restrict development in these locations. Nonetheless, on the withdrawal of the Havant Borough Local Plan from examination, Havant Borough Council adopted the Housing Delivery Position Statement. This recognises that further sites, outside of the settlement boundaries in the development plan, will be needed in order to meet housing need and significantly boost housing supply in the short term.

2.2. The site is located in Bedhampton. The area has a local centre, a number of primary schools and a secondary school within reasonable distance of the Site. Further information regarding the local area and sustainability of the Site is contained within the Transport Assessment submitted in support of the Appeal Scheme which demonstrates the good range of facilities and services available within walking and cycling distances including retail, schools, restaurants, public transport and outdoor recreation.

The Appeal Site

2.3. The Appeal Site extends to approximately 4.07ha and is located to the south of Lower Road, on the south-western side of Bedhampton.

2.4. The Site is identified on the adopted Proposals Map as being located beyond the Settlement Policy Boundary ("SPB") for Bedhampton (Policy AL2), in the Coastal Zone (Policy DM9), and an Important Site for Brent Geese and/or Waders (Policies CS11 and DM23 relevant). However, this position has been updated, with the site reclassified as 'no recorded use'[1], and as such Policies CS11 and DM23 are no longer applicable to the Site in so far as wildlife habitats are concerned.

[1] As such, they are not listed as Adopted Local Plan policies of particular relevance in the Planning Policy consultee response upon the application (12 May 2022).

2.5. The Appeal Site comprises a former agricultural field, which along with the adjacent land, is no longer required for agricultural purposes, and all of which are in the same ownership. The south and western site boundaries are defined by varying depths of hedgerows and some mature trees. The boundaries to the north and east are open. The Site is generally flat, but slopes gently southwards.

2.6. The Site is bounded to the south by a railway cutting and the A27 Havant Bypass beyond, to the west by the A3(M), to the north by an industrial and storage building and the residential enclave at Old Manor Farm. This area is designated as part of the Old Bedhampton Conservation Area. This though is detached from the body of the Conservation Area, which is focussed on the historic village.

2.7. The planning permission granted at appeal for residential development of 50 dwellings on the adjacent site[2] yields a low development density of circa 23dph. The Appellants are in the process of constructing new homes on that Site.

2.8. In allowing the appeal for the adjoining site, the Inspector noted that the site was sustainably located in relation to the existing services within Bedhampton and would provide appropriate access to facilities by a range of sustainable transport modes, including walking, cycling and public transport. Importantly, delivery of the proposed housing would yield significant social, economic and environmental benefits, not least in the important contribution that both market and affordable housing will make towards meeting the backlog of local housing need.

2.9. The findings of the Appeal Inspector are relevant to the consideration of this application and proposals for development on this site, in so far as the site is similarly located adjacent to a detached outlying area of the Old Bedhampton Conservation Area, is currently in the same use as arable agricultural land, and is controlled by the Appellants.

[2] Appeal Ref: APP/1735/W/20/3259067 – Land at Lower Road, Bedhampton – 50 new dwellings together with access, landscaping and open space

3.0 DESCRIPTION OF THE APPEAL SCHEME

Scheme Description

3.1. The Appeal Scheme description is as follows:

> ***"Outline application for up 43 dwellings, associated landscaping, open space and allotments with access from Lower Road."***

3.2. Only the principle of developing the Site for up to 43 dwellings, the proposed community facilities and the means of access are to be determined as part of this outline application.

3.3. Appearance, landscaping, layout and scale are reserved for subsequent determination.

Plans and Particulars

3.4. The proposals are set out on the following plans:

The Scheme

i. Site Boundary (Location) Plan No. 1217/001E
ii. Proposed Access Drawing No. ITB12174-GA-018F[3]

Supporting Plans

iii. Illustrative Masterplan Drawing No. 1217/-V5
iv. Parameter Plan No. 1217/005B

[3] See i-Transport Technical Note – Further Highways Response (23 June 2022) (Document Ref: SJ/BC/RW/ITB12174-018A TN).

3.5. Plans (iii) and (iv) are submitted for illustrative purposes only, with permission sought for the principle of up to 43 dwellings along with the means of access to the Site.

3.6. For the avoidance of doubt, a separate condition could be imposed requiring the reserved matters to be submitted in general conformity with the Illustrative Masterplan (iii).

3.7. A composite list of the appeal plans and particulars is set out below:

The Original Application Particulars

- Covering Letter (29 Sept 2021)
- Planning Application Form and Certificates
- Planning and Affordable Housing Statement (Woolf Bond Planning)
- Statement of Community Involvement (Woolf Bond Planning)
- Havant BC Conformity with Submission Local Plan Checklist (Woolf Bond Planning)
- Design and Access Statement (Mosaic Urban Design)
- Site Plans:
  - Site Boundary (Location) Plan No. 1217/001E
  - Illustrative Masterplan Drawing No. 1217/-V5
  - Parameter Plan No. 1217/005B
  - Proposed Access Drawing No. ITB12174-GA-018 (Appendix N to the TA)
- Ecological Assessment (Aluco Ecology)
  - European Site Avoidance and Mitigation Checklist
  - Nitrate Calculation
- Flood Risk Assessment and Development Drainage Strategy (MJA Consulting)
- Geo-Environmental Desk Study Report (Geo-Environmental Services Limited)
- Archaeological Desk Based Assessment (Terence O'Rourke)
- Heritage Statement (Terence O'Rourke)
- Transport Assessment (i-Transport)
- Residential Travel Plan (i-Transport)
- Landscape and Visual Evidence and Appraisal: 2 volumes (Terra Firma Consultancy Ltd.)
- Noise Impact Assessment (24 Acoustics)

- Arboricultural Impact Assessment and Method Statement (Barrell Tree Consultancy)
    - Tree Constraints Plan No: 21029-1 A
    - Tree Survey Plan No: 21029-1 B
    - Tree Protection Plan No: 21029-2
    - Manual for Managing Trees on Development Sites
- Arboricultural Opportunities and Constraints Assessment (Barrell Tree Consultancy)
- Draft Heads of Terms for Legal Agreement (Wolf Bond Planning)
- CIL form (Woolf Bond Planning)

Additional Documents Submitted Post Registration of the Application:-

Submitted on 4th March 2022

- Covering email from WBP to LPA attaching the following;
- Agricultural Land Classification Report, March 2022, prepared by Reading Agricultural Consultants
- I-Transport Technical Note – Planning Application Highways Response, 1st March 2022 (Doc ref: SJ/BC/ITB12174-015A TN)
- I-Transport Technical Note – Outline Construction Traffic Management Plan, 8th February 2022 (Doc ref: ITB12174-017 TN)
- I-Transport Residential Travel Plan, 8th February 2022 (Doc ref: SJ/BC/RW/ITB12174-013B R)

Submitted on 21st March 2022

- Covering email from WBP to LPA attaching:
- Noise Response, prepared by 24 Acoustics, 21st March 2022

Submitted on 23rd March 2022

- Covering email from WBP to LPA attaching:
- Heritage Response, prepared by Terence O'Rourke, 22nd March 2022

Submitted on 5th April 2022

- Covering email from WBP to LPA attaching:
- Soakage Testing and Installation of Groundwater Monitoring Wells letter report, prepared by Geo-Environmental, 11th January 2022
- Winter GW Monitoring Report, prepared by MJA Consulting, March 2022 (Doc ref: GE20565)
- Response to LLFA comments on drainage, prepared MJA Consulting, 4th April 2022

Submitted on 29th April 2022

- Covering email from WBP to LPA attaching the following;
- Winter Waterfowl Survey Report ("WWSR"), prepared by Aluco Ecology, March 2022
- Information for Habitat Regulations Assessment ("HRA"), prepared by Aluco Ecology, April 2022

Submitted on 7th June 2022

- Covering email from WBP to LPA attaching the following;
- Updated Information for HRA (with revised calculations for the nutrients), prepared by Aluco Ecology, May 2022
- Completed Housing Delivery Position Statement Development Quality Standards Checklist

Submitted on 7th July 2022

- Covering email from WBP to LPA attaching the following;
- I-Transport Technical Note – Further Highways Response, 23rd June 2022 (Doc ref: SJ/BC/RW/ITB12174-018A TN)

Submitted on 8th July 2022

- Covering email from WBP to LPA attaching the following:
- Illustrative Masterplan V5, prepared by Mosaic, 23rd June 2021
- Drainage Strategy Plan No. 6430:001/P3 (MJA Consulting)

- SuDS Management & Maintenance Plan Report, prepared by MJA Consulting, Sept 2021
- Letter Response to the LLFA's comments, prepared by MJA Consulting, 22nd June 2022
- Micro Drainage storm water calculations 30yr
- Micro Drainage storm water calculations 10yr + 40

4.0 PLANNING POLICY

S.38(6) The Development Plan

4.1. Section 38(6) of the Planning and Compulsory Purchase Act 2004 sets out a requirement that planning applications are to be determined in accordance with the Development Plan unless other material considerations indicate otherwise.

4.2. The Development Plan comprises the following:

Havant Borough Local Plan (Core Strategy) ("CS") (March 2011)
Havant Borough Local Plan (Allocations) ("AP") (July 2014)
Hampshire Minerals and Waste Plan (2013)
Emsworth Neighbourhood Plan (2021)

4.3. The Appeal Site is not allocated for development.

4.4. The CS pre-dates the publication of the first iteration of the NPPF, and as such the policies contained therein have varying degrees of consistency with the objectives of the NPPF. Whilst the AP was adopted following the publication of the 2012 NPPF, it is a daughter plan and the housing target it contains is derived from the CS.

4.5. The CS is a strategic level plan for the whole Borough, providing a strategic policy framework to guide development in the period to 2026. The housing land requirement (set out in Policy CS9) for a total of 6,300 dwellings, equating to 315 dwellings per annum, was based on the South East Plan requirement for the Borough.

4.6. The AP identifies and allocates sites for development to deliver the housing requirement set out in the CS.

4.7. The Council was in the process of preparing a new Local Plan. However, that was formally withdrawn in March 2022 following receipt of the Inspectors' Interim Findings.

4.8. As a result of this the Council adopted the Housing Delivery Position Statement ("HDPS") (March 2022). The HDPS sets out how housing proposals not in accordance with the Development Plan will be considered by the Council.

4.9. It is agreed that the Council is not able to demonstrate a five year supply of deliverable housing land (section 5 below refers).

4.10. As set out on the Planning Policy response to the application (dated 12 May 2022) and as set out in the Council's HDPS, the development plan policies for the supply of housing are out of date, thus engaging the presumption in favour of sustainable development at paragraph 11(d) of the NPPF.

4.11. The development plan policies for the supply of housing are out of date for three reasons (either one triggers the tilted balance at paragraph 11(d) of the NPPF):

(i) the spatial application of settlement boundaries (which have been breached in order to meet current housing need);

(ii) the lack of a five year supply of deliverable housing land; and

(iii) the Housing Delivery Test ("HDT") results triggering the presumption (regardless of the five year housing land supply position).

4.12. The presumption in favour of sustainable development (the titled balance) at paragraph 11(d) of the NPPF requires planning applications to be approved unless footnote 7 considerations provide a clear reason for refusing development or any adverse impacts of granting planning permission would significantly and demonstrably outweigh the benefits.

4.13. In the circumstances, limited weight is to be attached to conflict with development plan policies CS17 and AL2 on the basis that it is agreed that the current objectively assessed need for Havant Borough cannot be accommodated within the urban area boundaries.

Local Plan (Core Strategy) (March 2011)

4.14. The Core Strategy was adopted in March 2011 and covers the period 2006 to 2026.

4.15. Policy CS9 Housing sets out a requirement for the provision of a minimum of 6,300 net additional dwellings during the Plan period, equating to an average delivery of 315 dwellings per annum.

4.16. Policy CS17 Concentration and Distribution of Development within the Urban Areas seeks to concentrate new development within the five urban areas of Havant, Leigh Park, Waterlooville, Emsworth and Hayling Island. The urban area boundaries are defined by Policy AL2 of the Allocations Plan and the associated Policies Map.

4.17. The settlement boundaries as set out within the Proposals Map for the Havant Borough was identified to meet the housing needs of Policy CS9 of the Core Strategy.

4.18. The boundaries were drawn at that time to meet a need for 315dpa within the Borough.

4.19. In so far as the CS is more than five years old, and in accordance with the requirements in paragraph 74 and footnote 39 of the NPPF, the housing requirement falls to be determined by the local housing need derived from the application of the standard method.

4.20. Applicable policy considerations are those set out at Section 4 of the Appellants' Appeal Statement (Dec 2022) and Section 5 of the Council's Appeal Statement.

Local Plan (Allocations) (July 2014)

4.21. The Local Plan (Allocations) DPD was adopted in July 2014, with its main aim to allocate land to help deliver from 2013 – 2026 the development requirements for housing and employment set out in the Core Strategy.

4.22. Policy AL1 Presumption in Favour of Sustainable Development echoes Paragraph 11 of the NPPF.

4.23. Policy AL2 identifies the settlement boundaries.

4.24. Although located adjoining but outside the settlement boundary for Bedhampton, it is not within a settlement 'gap'.

4.25. It is agreed that Policies CS17 and AL2 are the 'most important policies' for determining the Appeal, and which are agreed as being out of date due to its lack of consistency with the approach set out at paragraph 219 of the NPPF. It is not consistent with the requirement in the Framework to boost significantly the supply of housing land. As such, the weight given to this policy in the overall planning balance is significantly reduced.

4.26. The Council agree that the lack of a five year housing land supply has rendered the policies relating to housing supply and settlement boundaries out of date.

Summary

4.27. The following is agreed between the parties;

The CS is out of date in relation to the housing requirement set out in Policies CS9 and CS17 (and the associated settlement boundaries).

The AP pre-dates the Government's standard method for calculating housing need and therefore does not identify sufficient sites to accommodate current objectively assessed needs in full

The Appeal Scheme conflicts with the settlement boundaries defined under Policy AL2 relate to the out of date housing requirements in HBCS Policies CS9 and CS17. However, they are out of date because current housing objectively assessed need cannot be accommodated within the urban area boundaries.

The Development Plan identifies a housing requirement but pre-dates the NPPF and the standard method.

The Council cannot demonstrate a five year supply of deliverable housing land.

In order to deliver their housing requirement, houses will need to be built on sites beyond the SPB.

4.28. The identified policy conflicts are outweighed by the need to develop unallocated sites beyond existing settlement boundaries in order to meet housing needs. In the circumstances, the presumption in favour of sustainable development (or tilted' balance) is engaged, meaning planning permission should be granted for the Appeal Scheme as the adverse impacts of doing so (loss of countryside) would not significantly and demonstrably outweigh the benefits when assessed against the policies in the NPPF when taken as a whole.

Material Considerations

General

4.27. The following represent material considerations in the determination of the Appeal Scheme:

1. The NPPF and the approach to the presumption in favour of sustainable development.
2. The heritage balance to be undertaken pursuant to paragraph 202 of the NPPF.
3. The five year housing land supply position.
4. The Council's Housing Delivery Position Statement (March 2022).
5. Appeal decisions, including the appeal for residential development of 50 dwellings on the adjacent site (APP/1735/W/20/3259067)
6. Committee reports.
7. Case law.

4.28. It is also agreed that there is a significant need for affordable housing, which is a material consideration in support of the Appeal Scheme.

4.29. The development would meet the requirements of the Local Plan in respect of Affordable Housing, by providing 30% affordable housing (13 dwellings).

4.30. Subject to necessary requirements being secured within the associated S106 Agreement, it is considered that the required on site affordable housing can be suitably secured.

5.0. FIVE YEAR HOUSING LAND SUPPLY

5.1. As explained in sections 1 and 4 above, the Council is not able to demonstrate a five year supply of deliverable housing land. This triggers the presumption of sustainable development at paragraph 11(d) of the NPPF.

5.2. The Council's position is set out in their Five Year Housing Land Supply Update (FYHLSU) (March 2023).

5.3. In so far as the CS is more than five years old, and in accordance with the requirements in paragraph 74 and footnote 39 of the NPPF, the five year housing requirement is determined by the local housing need figure set out in the Council's FYHLSU.

5.4. The latest 2021 HDT results were published in January 2022 and gave a measurement of 74% for Havant Borough. This measurement indicates that it is appropriate to apply a 20% buffer for the purposes of calculating five-year supply.

5.5. The requirement is based upon a 516dpa Standard Method requirement plus a 20% buffer.

5.6. This equates to a requirement of 2,580 dwellings for the five year period. With a 20% buffer applied, there is a five year requirement of 3,096 dwellings, or an annualised requirement of 619 dwellings. This compares to the annual housing requirement of 315 dwellings per annum in the adopted CS.

5.7. The Council identify a supply of 1,119 dwellings, which results in a shortfall of 1,977 dwellings over the five year period. This represents a supply of only 1.8 years with a 20% buffer applied.

5.8. For the purpose of determining this Appeal, the Appellants are prepared to accept the Councils supply figures.

5.9. The Council's supply position is summarised in Table 1 below.

Table 1: *The Council's Five Year Housing Land Supply Position*

	Council
Requirement	3,096
Supply	1,119
Extent of shortfall	**-1,977**
No. of years supply	**1.8yrs**

5.10. It is agreed that the shortfall is substantial. It is also agreed that the contribution of housing proposed through the Appeal Scheme is a material consideration. of substantial weight in favour of granting planning permission.

6.0 RESPONDING TO THE INSPECTOR'S MAIN ISUSES

General

6.1. An email received from PINS dated 31st March 2023 asked the Appellants and HBC to address the main issues and matters raised by the Inspector in the pre-hearing update note dated 23rd March 2023.

6.2. A joint response is set out below.

Whether the proposed development would be in suitable location when applying the spatial strategy in the development plan

6.3. The site is located within Bedhampton which has a local centre, a number of primary and secondary schools within reasonable walking distance of the site and has good transport links providing regular bus services to Portsmouth, Havant and Southsea. A railway line lies within 1.4km from the site which offers services to Brighton and London.

6.4. The site is considered to be suitably located in the context of the development plan and there is a realistic prospect that the development could be delivered on the site within 5 years.

Main Issue – Whether the proposed development would make provision for adequate surface water drainage

6.5. A Drainage Strategy Technical Note dated 23rd March 2023 produced by MJA Consulting was submitted to the Council on 23rd March 2023. The Technical Note presents three alternative surface water drainage proposals which have been reviewed by the Lead Local Flood Authority. In a response dated 24th March 2023, the LLFA have advised that options 1, 2 and 3 would be deliverable and, subject to conditions, the LLFA are satisfied that an acceptable surface water drainage strategy can be achieved.

Main Issue – The effect of the proposed development on the setting of the Old Bedhampton Conservation Area

6.6. The changes to the character and qualities of the site, and to its contribution as part of the setting of the Old Bedhampton Conservation Area, as a result of the proposed development are predicted to result in harm to character areas CA1 and CA5. The Appeal Scheme results in less than substantial harm to designated heritage assets. In relation to the level of harm expressed on a spectrum different terminology was used, the appellants describing the harm as at a low to medium level, and the council officer as moderate. On either position, it is agreed that the public benefits outweigh the localised heritage harm, thus satisfying the test at paragraph 202 of the NPPF.

Whether the proposal would make adequate provision for affordable housing, public open space, sustainable transport and community development

6.7. A draft Unilateral Undertaking has been submitted which secures provision for 30% affordable dwellings, a contribution of £108,000 towards sustainable transport, a financial contribution of £12,900 towards a Community Worker in line with Decision Making Principle 5 of the Housing Delivery Position Statement, and public open space to include a community garden, allotments and a community garden.

The Effect of the proposed development on the integrity of the Solent European Site (Habitat Regulations Assessment)

6.8. The appeal site is located near to the Chichester and Langstone Harbours (CLH) Special Protection Area (SPA), the CLH Ramsar site and the Solent Maritime SAC. SPAs and SACs are habitats protected as European sites under the Conservation of Habitats and Species Regulations 2017 (the Regulations).

6.9. In addition, the site was previously identified as a Candidate Site and before that a Secondary Support Area in line with the Solent Waders and Brent Geese (SWBG) within the Brent Goose and Wader Strategy (October 2018) (SWBGS). However, its classification has since been updated to 'no recorded use'. This reflects four years of good survey data which has led to the reclassification of the site as 'no recorded use'. Therefore, it is agreed that no direct impacts would need to be assessed or mitigation required for Solent Waders and Brent Geese.

6.10. The Council has conducted a Habitats Regulations Assessment (HRA), including Appropriate Assessment (AA), of the proposed development under Regulation 63 of The Conservation of Habitats and Species Regulations 2017 (as amended) to support the consideration of the scheme by the Council's Planning Committee. Nonetheless, the Council notes that the Secretary of State will be the competent authority in this instance.

6.11. The Council's assessment under Regulation 63(1)(a) found that there was likely to be a significant effect on several Solent European Sites (as defined in the applications HRA) due to both the increase in recreation and the decrease in water quality that would be a result of the proposed development.

6.12. The planning application was then subject to Appropriate Assessment under Regulation 63. This included two packages of avoidance and mitigation packages. The first is a package of measures based on the suggested scale of mitigation in the Solent Recreation Mitigation Strategy. The second is a package of measures based on the Position Statement and Mitigation Plan for Nutrient Neutral Development. The applicant has indicated a willingness to enter into a legal agreement to secure the mitigation packages.

6.13. Both parties agree the avoidance and mitigation packages are sufficient to remove the significant effects on European Sites which would otherwise have been likely to occur. The HRA, including AA conducted by the Council has been subject to consultation with Natural England as the appropriate nature

conservation body under Regulation 63(3). Natural England's response dated 16 February 2023 confirms 'no objection – subject to securing appropriate mitigation' which can be secured via the Unilateral Undertaking.

6.14. The Council is satisfied that the appellant has provided sufficient evidence has been provided to support the assumptions used in the nutrient budget including the site areas and existing land use classification. It is agreed that appropriate measures can be secured through the Unilateral Undertaking to ensure that open space on the appeal site can be managed to ensure there is no additional input of nutrients.

Planning Balance

6.15. The site lies outside the urban area boundary for Havant and the delivery of homes on the site would not accord with the spatial strategy within the development plan, however, limited weight is afforded to the conflict with both HBLPCS policy CS17 and ALP Policy AL2, and the NPPF due to the settlement boundaries being based on outdated levels of housing need.

6.16. The delivery of housing would make a significant contribution in remedying the Council's 5 year housing land supply shortfall which is a benefit of substantial weight. The scheme would provide for 30% affordable homes where the demand for affordable housing remains consistently high within the Borough and which weighs heavily in favour of the proposed development.

6.17. The site lies adjacent to the Bedhampton Conservation Area and the proposed development would result in **'less than substantial harm'** at the moderate level of the spectrum. It is considered that the public benefits of the scheme are of sufficient importance to outweigh the less than substantial harm to the Conservation Area.

6.18. Limited weight is given to the harm to the landscape as this would be localised to a degree and the scheme proposes additional tree and buffer planting to the north and south which would be secured at the reserved matters stage.

6.19. Overall, the conflict with the development plan as a whole is outweighed by other material planning considerations.

7.0 HEADS OF TERMS FOR LEGAL AGREEMENT

7.1. It is agreed between the parties that the Appellant will provide planning obligations, in the form of an undertaking under Section 106 of the Town and Country Planning Act (1990) in favour of Havant Borough Council and Hampshire County Council.

7.2. The legal agreement will ensure the financial contributions and other compliant obligations to enable the proposed development to go ahead are provided in accordance Regulation 122(2) of the Community Infrastructure Levy Regulations and the content at paragraphs 55 and 57 of the NPPF.

7.3. The agreed provisions are:

Affordable Housing 30%
HBC S106 monitoring fee of £4,875 (plus 5% (five per cent of the SRMS Contribution)
HCC monitoring fee of £4,000
Open Space, allotments and associated infrastructure to be provided by the developer and arrangements for maintenance incorporated in the Management Plan.
Solent Recreation Mitigation Strategy contribution in accordance with the Solent Recreation Mitigation Strategy
SUDS including SUDs Bond, Management and Maintenance
Permissive paths
A contribution of £12,900 towards a Community worker
Contribution towards sustainable transport of £108,000
Travel Plan Monitoring fee £15,000
Travel Plan Approval fee £1,500

7.4. The legal agreement will be completed and submitted to the Hearing.

7.5. Havant Borough Council is a CIL Charging Authority and financial contributions will also be secured at the reserved matters stage once the amount of proposed floorspace is fixed. The current CIL rate is £126.78psqm.

8.0 CONDITIONS

8.1. On a without prejudice basis to the outcome of the appeal process, the parties have agreed a set of draft conditions, to be imposed upon the grant of any planning permission.

8.2. The suggested draft conditions are set out below.

1. Time

`Application for approval of reserved matters must be made not later than the expiration of two years beginning with the date of this permission and the development must be begun not later than whichever is the later of the following dates:

(a) The expiration of two years from the date of this permission; or
(b) The expiration of two years from the final approval of the reserved matters, or in the case of approval on different dates, the final approval of the last such matter to be approved.

Reason: To comply with the requirements of Section 92 of the Town and Country Planning Act 1990 as amended by Section 51 of the Planning and Compulsory Purchase Act 2004.

2. REM

The approval of the Local Planning Authority shall be obtained in respect of the following reserved matters before the development first takes place - the appearance; landscaping; layout; and scale.

Reason: The application is granted in outline only under the provisions of Article 5 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 and details of the matters referred to in the condition have not been submitted for consideration.

3. Plans

The development hereby permitted shall be carried out in accordance with the following approved plans and documents:
Plans

Location Plan 1217 001 E
Illustrative Masterplan 1217 V5

Parameter Plan 1217 005 B

Supporting Documents

Ecology
Information for Habitats Regulations Assessment – Aluco Ecology Ltd - May 2022
Addendum to Information for Habitats Regulations Assessment – Aluco Ecology Ltd October 2022
Winter Waterfowl Survey - Aluco Ecology Ltd – March 2022
Nitrogen Budget Calculator – 27 October 2022

Transport
iTransport Technical Note ITB12174 dated 23 June 2022
ITransport Residential Travel Plan dated 8 February 2022
iTransport Outline Construction Traffic Management Plan ITB12174-017 TN dated 8 February 2022
Site Access Arrangements ITB12174-GA-18 Rev F
ITransport Transport Assessment 23 September 2021

Drainage
MJA Consulting – Drainage Strategy Technical Note SS/23/0157/6430 23 March 2023
Flood Risk Assessment September 2021

Other
Planning Statement
Design and Access Statement
Reading Agricultural Consultants - Agricultural Land Classification and Soil Resources
Geo Environmental Desk Study
24 Acoustics - Noise Impact Assessment
Terrence O'Rourke - Heritage Statement
Terrence O'Rourke - Archaeological Desk Based Assessment
Barrell Tree Consultancy - Arboricultural Assessment and Method Statement
Tree Survey Plan Ref: 21029-1 B
Tree Survey Plan 21029-2
Tree Constraints Plan 21029-1 A
Barrell Tree Consultancy - Arboricultural Opportunities and Constraints Assessment
Terra Firma Consultancy Ltd - Landscape and Visual Assessment

Reason: - To ensure provision of a satisfactory development

Pre-commencement

4. **No development (shall take place until details of the measures to be taken to acoustically insulate all habitable rooms of the development against traffic noise together with details of measures to provide ventilation to habitable rooms, have been submitted to and approved in writing by the Local Planning Authority. The agreed details shall be fully implemented, and validation test results submitted to the Planning Authority.**

   Reason: To ensure the residential amenity of the properties is not impacted upon by any external noise levels, especially traffic noise having regard to Policy CS16 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

5. **Prior to the commencement of development (, a site-wide ecological mitigation strategy shall be submitted for approval to the Local Planning Authority. This strategy shall be in accordance with the outline ecological mitigation, compensation and enhancement measures detailed within the Ecological Assessment (Aluco, September 2021) and shall be in accordance with any submitted landscape, drainage and lighting strategies. All ecological mitigation, compensation and enhancement measures, including those for common swift, shall be implemented in accordance with the agreed details and an agreed timetable and shall be maintained for the lifetime of the development in a condition suited to their intended function.**

   Reason: To provide ecological protection and enhancement in accordance with the Conservation Regulations 2017, Wildlife & Countryside Act 1981, NPPF, NERC Act 2006 and Policy CS11 of the Havant Borough Core Strategy March 2011.

6. **No development (shall take place until a site-specific Construction Environmental Management Plan has been submitted to and been approved in writing by the Local Planning Authority. The plan must demonstrate the adoption and use of the best practicable means to reduce the effects of noise, vibration, dust and site lighting. The approved CEMP shall be adhered to throughout the construction period.**

   The CEMP should include, but not be limited to:

   Programme for construction and carrying out of the works
   Procedures for maintaining good public relations including complaint management, public consultation and liaison
   Measures to minimise the noise (including vibration) generated by the construction process to include hours of work, proposed method of piling for foundations, the careful selection of plant and machinery and use of noise mitigation barrier(s)
   Construction traffic routes and their management and control
   Arrangements for deliveries associated with all construction works
   Loading and unloading of plant and materials
   Storage of plant and materials used in constructing the development

Location of temporary site buildings, compounds, construction material, and plant storage areas
Access and egress for plant and machinery
Protection of pedestrian routes during construction
Control measures for dust and other air-borne pollutants
The parking and turning of vehicles of site operatives and visitors
Procedures for emergency deviation of the agreed working hours
Details of any floodlighting, including location, height, type and direction of light sources and intensity of illumination
A scheme for recycling/disposing of waste resulting from the construction works
The erection and maintenance of security hoarding including decorative displays and facilities for public viewing, where appropriate
Wheel washing facilities
Measures to prevent mud being deposited on the highway
Provision for addressing any abnormal wear and tear to the highway

Reason: To protect the amenities of nearby residential premises during the demolition/ construction phase of the development and having regard to PolicyCS16 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

7. Prior to the commencement of the development ()), an assessment of the nature and extent of contamination at the site, whether originating from within or outside the curtilage, shall be submitted to and approved in writing by the Local Planning Authority.

The assessment may comprise separate reports as appropriate, but shall be undertaken by competent persons and unless specifically excluded in writing by the Local Planning Authority, shall include;

1) An intrusive site investigation based on the proposals outlined within the Geo-Environmental Services Ltd. Desk Study Report (Ref: GE19772-DSR-MAR21) to provide sufficient data and information to adequately identify & characterise any physical contamination on or affecting the site, and to inform an appropriate assessment of the risks to all identified receptors.

2) The results of an appropriate risk assessment based upon (1), and where unacceptable risks are identified, a Remediation Strategy that includes;

appropriately considered remedial objectives,
an appraisal of remedial &/or risk mitigation options, having due regard to sustainability, and;

clearly defined proposals for mitigation of the identified risks.

3) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out any Remediation Strategy required under (2) are complete, identifying any requirements for longer-term monitoring of pollutant linkages, maintenance of engineered mitigation measures, and arrangements for contingency action.

All elements shall be adhered to unless agreed in writing by the Local Planning Authority.

Reason: to ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels of contamination, having regard to policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 183-185 of the National Planning Policy Framework 2021"

8. The development hereby permitted shall not be commenced until an Archaeological Written Scheme of Investigation has been submitted to and approved in writing by the local planning authority. The scheme shall include:

a) the programme and methodology of site investigation and recording
b) the programme for post investigation assessment;
c) the provision to be made for analysis of the site investigation and recording;
d) the provision to be made for publication and dissemination of the analysis and records of the site investigation
e) the provision to be made for archive deposition of the analysis and records of the site investigation
f) the nomination of a competent person or persons/organization to undertake the works set out within the Written Scheme of Investigation.

No development shall take place other than in accordance with the Written Scheme of Investigation approved under this condition.

Reason: To assess the extent, nature and date of any archaeological deposits that might be present and the impact of the development upon these heritage assets having due regard to Policy CS11 of the Havant Borough Local Plan (Core Strategy) 2011, Policy DM20 of the Havant Borough Local Plan (Allocations) 2014 and the National Planning Policy Framework.

9. Prior to commencement of the development the approved tree protective measures, including fencing as shown on the approved Barrell's Arboricultural Assessment & Method Statement dated 13/04/21 and the Tree Protection Plans shall be installed and maintained throughout the duration

of the construction period. Within the fenced area(s), there shall be no excavations, storage of materials or machinery, parking of vehicles or fires. The development shall be carried out strictly in accordance with the submitted details unless otherwise agreed in writing by the Local Planning Authority.

Reason: To safeguard the continued health and presence of such existing vegetation and trees and to protect the amenities of the locality and having due regard to policies CS11 and CS16 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

10. **Notwithstanding any description of materials in the application no construction works () shall take place until samples and a full specification of the materials to be used externally on the buildings have been submitted to and approved in writing by the Local Planning Authority. Such details shall include the type, colour and texture of the materials.**

    Reason: To ensure the appearance of the development is satisfactory and having due regard to Policies CS11 and CS16 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

11. **No development shall take place until details of existing and finished floor levels have been submitted to and approved in writing by the Local Planning Authority. The development shall be undertaken in accordance with the approved details.**

    Reason: In the interests of the character and amenities of the area having due regard to Policy CS16 of the Havant Borough Local Plan 2011 and the National Planning Policy Framework.

12. **No development shall begin until a detailed surface water drainage scheme for the site, based on the principles within the Drainage Strategy Technical Note options 1 to 3, ref: SS/23/0157/6430, has been submitted and approved in writing by the Local Planning Authority. The submitted details should include:**

    a) **A technical summary highlighting any changes to the design from that within the approved documentation and confirmation of discharge option.**
    b) **Approvals in principle in relation to land access or other approvals required to implement the discharge option.**
    c) **Detailed drainage plans to include type, layout and dimensions of drainage features including references to link to the drainage calculations.**
    d) **Detailed drainage calculations to demonstrate existing runoff rates are not exceeded and there is sufficient attenuation for storm events up to and including 1:100 + climate change.**
    e) **Evidence that urban creep has been included within the calculations.**

f) Confirmation that sufficient water quality measures have been included to satisfy the methodology in the Ciria SuDS Manual C753.
g) Exceedance plans demonstrating the flow paths and areas of ponding in the event of blockages or storms exceeding design criteria.

Reason: To reduce the risk of flooding to the proposed development and future occupants in accordance with Policy CS15 Flood and Coastal Erosion Risk of the Havant Borough Local Plan (Core Strategy) 2011.

Pre-occupancy

13. Prior to first occupation of the dwellings hereby approved, the site access as shown in drawing number ITB12174-GA-018 Rev F shall be implemented in accordance with the approved details and shall thereafter be retained.

Reason: In the interest of highway safety and to provide safe and suitable access into the proposed development having regard to Policy DM11 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

14. The development hereby permitted shall not be occupied until:
(a) A water efficiency calculation in accordance with the Government's National Calculation Methodology for assessing water efficiency in new dwellings has been undertaken which demonstrates that no more than 110 litres of water per person per day shall be consumed within the development, and this calculation has been submitted to, and approved in writing by, the Local Planning Authority; and
(b) All measures necessary to meet the approved water efficiency calculation have been installed.

Reason: There is existing evidence of high levels of nitrogen and phosphorus in the water environment with evidence of eutrophication at some European designated nature conservation sites in the Solent catchment. The PUSH Integrated Water Management Strategy has identified that there is uncertainty as to whether new housing development can be accommodated without having a detrimental impact on the designated sites within the Solent. Further detail regarding this can be found in the appropriate assessment that was carried out regarding this planning application. In compliance with Regulation 63 of the Conservation of Habitats and Species Regulations 2017, the local planning authority has a duty to ensure that sufficient mitigation is provided against any impacts which might arise upon the designated sites. In coming to this decision, the Council has also had regard to Policy CS11 of the Havant Borough Local Plan (Core Strategy) 2011.

15. **Prior to first occupation of the development, any verification report required in accordance with condition 8 shall be submitted to and approved in writing by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan, and must demonstrate that site remediation criteria have been met. Where longer-term monitoring of pollutant linkages is identified as being necessary, the report shall clearly set out plans for monitoring, provision for maintenance, relevant triggers and contingency actions (a "long-term monitoring and maintenance plan"). The long-term monitoring and maintenance plan shall thereafter be implemented in accordance with the approved details.**

    Reason: to ensure that the development is not put at unacceptable risk from, or adversely affected by, unacceptable levels of contamination, having regard to policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 183-185 of the National Planning Policy Framework 2021"

16. **Prior to the first occupation of the dwellings hereby approved, full details of the Electrical Vehicle Charging points shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.**

    Reason: To ensure the appearance of the development is satisfactory and having due regard to policies CS11 and CS16 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

17. **No part of the development shall be first occupied until details of the means of enclosure including boundary walls, have been submitted to and approved in writing by the Local Planning Authority and the approved structures have been erected in accordance with the approved details. The structures shall thereafter be retained.**

    Reason: To safeguard the amenities of the locality and future occupiers of the development having due regard to policy CS16 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

18. **Prior to the first occupation of the dwellings, details for the long term maintenance arrangements for the surface water drainage system shall be submitted to and approved in writing by the Local Planning Authority. The submitted details shall include maintenance schedules for each drainage feature type and ownership**

    Reason: To reduce the risk of flooding to the proposed development and future occupants in accordance with Policy CS15 Flood and Coastal Erosion Risk of the Havant Borough Local Plan (Core Strategy) 2011.

Post occupancy

19. Any subsequent reserved matters applications shall include details of the measures to protect pedestrians from the swale adjoining the footpath to the north of the site access road as shown in drawing number ITB12174-GA-018 Rev F.

Reason: In the interest of pedestrian and highway safety and having regard to Policy DM11 of the Havant Borough Local Plan (Core Strategy) 2011 and the National Planning Policy Framework.

20. No housing shall exceed two storey in height across the entire site, unless otherwise agreed in writing by the Local Planning Authority.

Reason: To ensure the residential amenity of housing will not be impacted upon by any external noise levels, having regard to Policy CS16 of the Havant Borough Local Plan (Core Strategy) 2011, Policy DM18 of the Havant Borough Local (Allocations) 2014 and the National Planning Policy Framework.

21. At all times following occupation of the development hereby approved, all measures for water usage within the submitted nutrient budget shall be maintained in the development in perpetuity.

Reason: There is existing evidence of high levels of nitrogen and phosphorus in the water environment with evidence of eutrophication at some European designated nature conservation sites in the Solent catchment. The PUSH Integrated Water Management Strategy has identified that there is uncertainty as to whether new housing development can be accommodated without having a detrimental impact on the designated sites within the Solent. Further detail regarding this can be found in the appropriate assessment that was carried out regarding this planning application. In compliance with Regulation 63 of the Conservation of Habitats and Species Regulations 2017, the local planning authority has a duty to ensure that sufficient mitigation is provided against any impacts which might arise upon the designated sites. In coming to this decision, the Council has also had regard to Policy CS11 of the Havant Borough Local Plan (Core Strategy) 2011.

9.0 SIGNED AGREEMENT

9.1. This document is accepted as the agreed Statement of Common Ground for the Appeal being considered under PINS Ref: APP/X1735/W/22/3305704.

9.2. It has been duly signed by representatives of the Appellant (Bargate Homes and Vivid Homes) and Havant Borough Council.

Signed: Steven Brown…… on behalf of Bargate Homes and Vivid Homes.

Steven Brown BSc Hons DipTP MRTPI	24th April 2023
NAME	DATE

Signed…… *L Richardson.*…….. on behalf of Havant Borough Council

Leanne Richardson……	24th April 2023……..
NAME	DATE

****

APPENDIX A

Land West of Old Manor Farm, South of Lower Road, Bedhampton

Drainage Strategy Technical Note

Planning App: APP/21/01071
MJA Reference: SS/23/0157/6430
23rd March 2023

Introduction

1.1 MJA Consulting was appointed to prepare a drainage strategy for the disposal of surface water from the proposed development, incorporating the principles of Sustainable Drainage Systems (SuDS) and in accordance with Environment Agency guidance, The National Planning Policy Framework (NPPF) and through liaison with Hampshire County Council.

1.2 MJA Consulting previously prepared a drainage strategy for the development directly east of the site, under application APP/20/01031 (Land south of Lower Road, Havant) also known as Phase 1. The drainage strategy was approved by the Environment Agency (EA), Lead Local Flood Authority (LLFA) and Local Planning Authority (LPA). Due to the similarities between the two sites, namely in terms of topography and geology, it was proposed to mimic the drainage strategy for this site. However, after the LLFA raised concerns about the suitability of a strategy that utilised deep borehole soakaways to discharge the surface water, we now propose an alternative method for discharging runoff by following the drainage hierarchy.

Surface Water Strategy and SuDS Assessment

2.1 On Phase 2 (Land west of Old Manor Farm) it is proposed to use a combination of roadside swales, permeable paving, an attenuation basin, and a proprietary device to ensure sufficient water pollution mitigation to the receiving waterbody. A brief outline of how the proposed impermeable surfaces will drain as well as a description of the drainage features is listed below.

Roads

2.2 The roads will be a combination of impermeable macadam and impermeable block paving. The roads will drain either via flush kerbs and stone spillways into roadside swales or by gullies directly into the swales or pipe network.

Roadside Swales

2.3 The roadside swales would vary in depth from 0.3 m to 0.5 m and would be 2.5-3.0 m wide. The primary function of the swales is to provide shallow infiltration for the road run off and primary treatment for any hydrocarbons washed off from the carriageway. A vertical gravel trench will be provided in the base of the swale for conveyance of exceedance flows to perforated pipework laid in the base of the trench. The perforated pipework will either infiltrate the runoff to ground or convey the runoff to the next swale and so on until ultimately it reaches the attenuation basin. The pipework within the swales has been sized to ignore the effects of any infiltration.

Shared surface car parking areas

2.4 These areas drain via permeable block paving through to a permeable subbase. Hydrocarbon removal from run off takes place within the stone bedding layer of the block paving and the subbase itself. Run off that cannot infiltrate to ground is collected via permavoid collectors and directed towards the pipework located at the base of the sub-base/swales. This runoff ultimately makes its way to the attenuation basin.

Houses

2.5 The houses drain via gravity to either the permeable subbase of the shared surface car parking areas via permavoid distributors or directly into the pipework located within the base of the swales. This runoff ultimately makes its way to the attenuation basin.

Attenuation basin

2.6 The attenuation basin has been sized to ignore any potential infiltration that may have taken place upstream via the roadside swales or perforated pipework, as well as any infiltration within the unlined basin itself. All infiltration within the design calculation parameters has been set to zero. The basin is sized to attenuate the runoff from the development for all storm events up to, and including, the 1:100 year + 40% climate change event with an allowance for a minimum 300mm freeboard over and above this design level. The required volume to achieve this is 848m^3. Discharge from the basin is via a headwall and pipework located to the south-west side.

Hydrobrake control chamber

2.7 Flow into the treatment features and pump station will be regulated via a Hydrobrake situated within the flow control chamber. The flows will be limited to 3.3 l/s for all storm events up to, and including, the 1:100 year + 40%. This matches the greenfield runoff rate for the site which was calculated using the total proposed impermeable surface area. Please see appendices for calculations.

Up flow filter

2.8 Additional pollution removal will be provided by an 'Up Flow Filter' by Hydro International. This provides a 5-stage treatment train. This combines multiple sequential treatment processes to deliver sedimentation, screening and filtration all in one unit to remove a wide variety of pollutants including:

Very Fine Particles:
Greater than 80% removal of fine sand and silt particles to a mass-median particle size of 22 µm
Heavy Metals:
Greater than 70% removal of metals commonly found in surface water runoff.
Gross Pollutants:
Inclusion of the angled screen and protected bypass syphon effectively removes gross pollutants, including litter and leaf debris.
Nutrients:
Greater than 70% removal of phosphorus and other nutrients.
Liquid and Sediment Bound Hydrocarbons:
Sand filter removes various forms of hydrocarbons, including polycyclic aromatic hydrocarbons (PAHs).

2.9 These filter media target fine sediments and metals, as well as sediment bound pollutants, including polycyclic aromatic hydrocarbons (PAHs) – which have been identified by the EA as a significant pollutant of concern. PAH removal is strongly related to sediment removal, as typically 89% of PAHs are associated with sediments in runoff. Based on the Up-Flo™ filter removing 80% of sediments, it follows that the Up-Flo Filter will remove around 70% of PAHs.

2.10 As far as liquid or free-floating hydrocarbons are concerned, the standard Up-Flo configuration incorporates a hooded bypass syphon with integrated floatables baffle. This helps to trap light liquids and other floatables within the chamber. To further protect the aquifer the normal internal by-pass facility wouldn't be installed to remove the possibility of any residual free-floating hydrocarbons not already removed by the treatment train from reaching the aquifer.

Surface Water Runoff Outfall Options

3.1 There are several options for the next stage in the drainage strategy, downstream of the basin. These are listed below in order of preference which is based on the drainage hierarchy and then the constraints on each. The drainage outfall hierarchy set out in the CIRIA SuDS Manual C753 and Building Regulations is as follows:

Infiltration
Discharge to surface waters
Discharge to surface water sewers
Discharge to highway drain
Discharge to foul sewer

3.2 Following the drainage hierarchy, infiltration would be the first method of disposal for the runoff. However, infiltration tests proved insufficient to utilise soakaway features at shallow depths. Based on the information available, the LLFA considers that a watercourse outfall would be more reliable than utilising deep boreholes onsite. There is a watercourse that lies approximately 100m east of the Phase 1 development site. This ditch runs north to south and is a 'main river' EA classification. There are three options to achieve this watercourse outfall, all of which require the use of a surface water pump station to achieve discharge. All three options would require the rising main to be routed through Phase 1. This route can be constructed under circa 485m of soft ground to minimise disruption to the Phase 1 construction. See drainage strategy drawing in appendix A.

Drainage Strategy Outfall Option 1

3.3 The preferred route of a rising main to access the watercourse would be through the 3rd party parcel of land between Phase 1 and the watercourse. The landowner of this parcel has already entered into an Option with the Appellant for Phase 2 land. This is the shortest route to the watercourse and requires approximately 100m of rising main under soft ground. A headwall into the watercourse can be constructed as per the requirements of a flood risk exemption licence under the EA's environmental permitting rules.

Drainage Strategy Outfall Option 2

3.4 If the first option is not feasible then the rising main could connect to the DN225 Southern Water surface water sewer along Lower Road, north of both phases. See appendix B for sewer records. This would still require a rising main to be placed through phase 1. A length of the Southern Water sewer lies within the site boundary and developer's land ownership which could be a point of connection. This option would require a Section 106 agreement with Southern Water and a pre-development enquiry to confirm capacity.

Drainage Strategy Outfall Option 3

3.5 This option would require circa 200m of rising main to be laid along Lower Road before discharging to the watercourse south of the culvert beneath Lower Road. This culvert connects the north and south of Lower Road. This option would also require an adoptable pump station and necessary agreements with Highways. A headwall into the watercourse can be constructed as per the requirements of a flood risk exemption licence under the EA's environmental permitting rules.

Drainage Strategy Outfall Option 4

3.6 If all the previous options are not feasible, which is unlikely, then option 4 would be to reassess the potential for deep boreholes onsite. The depth of groundwater was found to be circa 2.71 m BGL. This is similar to the groundwater level found on the adjacent site (Land to the south of Lower Road). On that site, the Environment Agency was consulted and ultimately approved a design of deep borehole soakaways into the saturated chalk. This decision was based on the location not being within a Source Protection Zone and have a multistage treatment system and emergency penstock valve prior to the boreholes.

3.7 The depth of the boreholes would be based on the permeability testing undertaken within the chalk strata at a depth of 16.00m (Report: GE20814 WP02 220518). Falling head testing within the borehole gave an infiltration rate of $1.48x10^{-6}$ m/s. The discharge from the attenuation basin would have to be set at a maximum of 0.7 l/sec discharge for all storm events. Based on the permeability to achieve the 0.7 l/sec in the boreholes there would need to be a minimum of No.8 16m deep within the chalk strata. All boreholes will be 10 m apart. The required attenuation for the borehole strategy would be 1188m3. If required, this option would be subject to detailed discussions with the LLFA, based on the information available at the time.

Conclusion

4.1 A suitable drainage strategy onsite has been proposed, utilising a variety of SuDS features to mitigate flood risk and water pollution. The preferred outfall option would be to discharge to the watercourse via a rising main that runs through the land east of Phase 1. Discharge to the watercourse would be at greenfield rate of 3.3 l/s for all storm events up to, and including, the critical 1 in 100 year +40% event. The required attenuation volume to achieve this is $848m^3$. See drainage strategy drawing in appendix A.

4.2 The matter of outfall options, following the drainage hierarchy as laid out within this report, can be addressed by means of imposing an appropriately worded condition(s), requiring full details to be submitted for approval as part of a reserved matters application.

Appendices

Appendix A – Drainage Strategy
Appendix B – Southern Water Sewer Records
Appendix C – Greenfield Runoff Calculations
Appendix D – Surface Water Network Calculations

Appendix A – Drainage Strategy

Appendix B – Southern Water Sewer Records

SEWER RECORDS PAGE 1 OF 2

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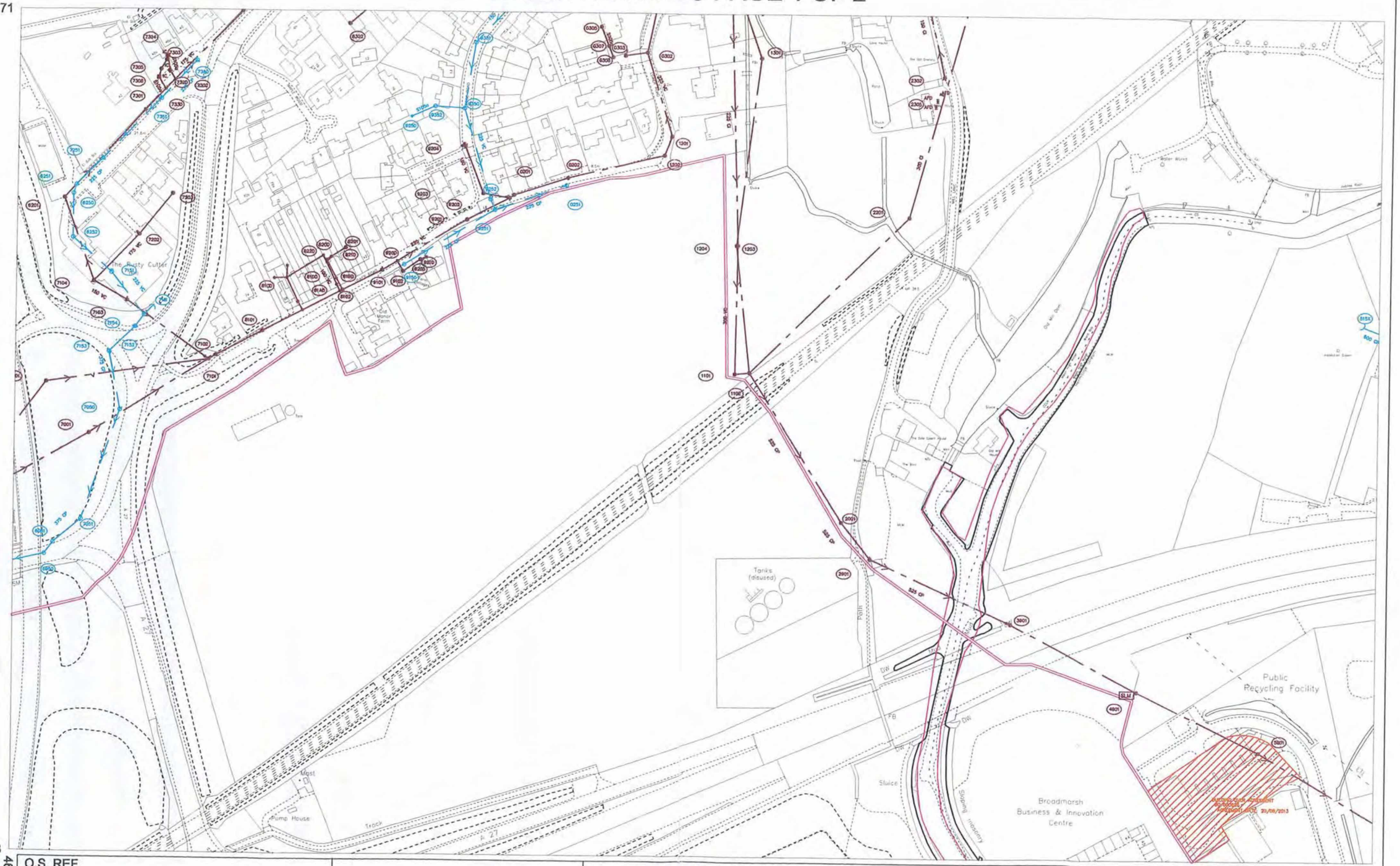

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O.S. REF. SU7006SW	Drawn by: mondaln	The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determnined on site. WARNING: BAC pipes are constructed of Bonded Asbestos Cement WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement
	Scale: 1:2500	
Title: Land at Manor Farm Lower Road	Date: 23/06/2015	Based upon Ordnance Survey Digital Data with the permission of the controller of H.M.S.O. Crown Copyright Reserved Licence No. WU 298530.

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Southern Water

SEWER RECORDS PAGE 2 OF 2

Node	Cover	Invert	Size	Material	Shape	
0201X	9.3	6.73	225	VC	CIRC	
0202X	8.89		UNK	UNK	CIRC	
0251X	8.8	8.29	150	CI	CIRC	
0302X	8.37	6.16	225	VC	CIRC	
0303X			UNK	UNK	UNK	
0305X			UNK	UNK	CIRC	
0307X			UNK	UNK	CIRC	
1101X	6.99	3.87	300	VC	CIRC	
1102X	6.86	3.08	525	CP	CIRC	
1201X	8.25	6.28	225	VC	CIRC	
1202X	8.14		UNK	UNK	CIRC	
1203X	7.28	4.05	300	VC	CIRC	
1204X	6.84		UNK	UNK	CIRC	
1301X	6.66		UNK	UNK	CIRC	
2001X	4.7	2.63	525	CP	CIRC	
2201X	4.28		UNK	UNK	CIRC	
2302X	7.06	6.54	150	CI	CIRC	
2901X	3.65	2.48	525	CP	CIRC	
3901X	3.25		OTHER	CP	CIRC	
4901X	2.84		UNK	UNK	CIRC	
5801X	3.01	0.11	OTHER	CP	CIRC	
6051X	10.09	7.8	375	CP	CIRC	
6101X	18.76	7.93	300	CP	CIRC	
6201X	20.65		175	VC	CIRC	
6250X	20.69	19.83	225	VC	CIRC	
6251X	20.78	19.86	225	CP	CIRC	
6252X	19.34	18.1	225	VC	CIRC	
7950X	10.05		UNK	UNK	UNK	
7001X	14.16	7.84	225	VC	CIRC	
7050X	12.62	9.73	375	CP	CIRC	
7051X	10.52	8.88	375	CP	CIRC	
7101X	12.76	7.55	225	VC	CIRC	
7102X	12.99	7.51	225	VC	CIRC	
7103X	14.66	11.26	150	VC	CIRC	
7104X	16.7	14.14	150	VC	CIRC	*
7104Y	16.7		UNK	UNK	CIRC	*
7151X	16.53	15.05	225	VC	CIRC	
7152X	13.08	11.13	225	VC	CIRC	
7153X	13.23	10.63	375	CP	CIRC	
7154X	13.12	11.58	225	VC	CIRC	
7155X	11.16		225	VC	CIRC	
7202X	16.59	14.87	175	VC	CIRC	
7203X			UNK	UNK	CIRC	
7251X	21.57	20.75	225	CP	CIRC	
7301X	22.4	21.21	175	VC	CIRC	
7302X			UNK	UNK	CIRC	
7303X			UNK	UNK	CIRC	*
7303Y			UNK	UNK	CIRC	*
7304X			UNK	UNK	CIRC	
7305X			UNK	UNK	CIRC	
7306X			UNK	UNK	CIRC	
732DX			175	VC	CIRC	
733DX			175	VC	CIRC	
7350X	23.11	21.89	225	CP	CIRC	
7351X	22.19	21.35	225	CP	CIRC	
8101X	10.86		225	VC	CIRC	
8102X			225	VC	CIRC	
810DX			UNK	UNK	CIRC	
811DX			UNK	UNK	CIRC	
812DX			UNK	UNK	CIRC	
813DY			225	VC	CIRC	*
813DX			UNK	UNK	CIRC	*
814DX			225	VC	CIRC	
81ADX	10.32	8.85	100	VC	CIRC	
81BDX	10.35		100	VC	CIRC	
81CDX	11.035		UNK	UNK	CIRC	
81DDX	10.67	9.37	100	VC	CIRC	*
81DDY	10.67		UNK	UNK	CIRC	*
8201X	10.92	10.43	100	VC	CIRC	
820DX	10.62	9.36	100	VC	CIRC	
821DX	10.81	9.68	100	VC	CIRC	
822DX	10.91	10.91	UNK	VC	CIRC	
8302X	18.89		UNK	UNK	CIRC	
9101X	9.19	7.13	225	VC	CIRC	
9102X			UNK	UNK	CIRC	
9150X	9.06	8.45	225	CP	CIRC	
9201X	9.22	6.95	225	VC	CIRC	
9202X	9.81	8.07	150	VC	CIRC	
9203X	9.22	6.79	225	VC	CIRC	
9204X	11.56	8.76	150	VC	CIRC	
9205X			UNK	UNK	CIRC	
920DX			225	VC	CIRC	
921DX			UNK	UNK	CIRC	
9251X	9.37	8.86	225	CP	CIRC	
9252X	9.57	8.86	225	VC	CIRC	
925DX			UNK	UNK	CIRC	
9350X	12.67	11.36	225	VC	CIRC	
9351X	14.01	12.08	150	VC	CIRC	
9352X			UNK	UNK	CIRC	

LINE STYLES / COLOURS

Brown — Foul
Foul Syphon Sewer
Foul Vacuum Main
Foul Rising Main
Red — Combined
Combined Syphon Sewer
Combined Rising Main
Lateral Drain
Orange — Building Over Agreement Area
Dark Blue — Treated Effluent
Purple — Sludge
Sewer Catchment
Section 104 Area
Light Blue — Surface Water
Surface Water Rising Main
Yellow — Private
Green — Access Shaft
Decommissioned

MATERIALS

AK Alkathene
BAC Bonded Asbestos Cement
BRC Brick (Common)
BRE Brick (Engineering)
CC Concrete Box Culvert
CI Cast Iron
CO Concrete (In-Situ)
CP Concrete (Pre-Cast)
CSB Concrete Segments (bolted)
CSU Concrete Segments (unbolted)
DI Ductile Iron
GRC Glass Reinforced Concrete
GRP Glass Reinforced Plastic
MAC Masonry In regular Courses
MAR Masonry In random Courses
PE Polyethylene
PF Pitch Fibre
PP Polypropylene
PVC Polyvinyl Chloride
RPM Reinforced Plastic Matrix
SI Spun Iron
ST Steel
VC Vitrified Clay
XXX Other
ZZZ Unknown

LEGEND - SEWERS

Manhole (SW)
Manhole (F&C)
Lamp hole (SW)
Lamp hole (F&C)
Pumping Station (SW)
Pumping Station (F&C)
Side entry manhole (SW)
Side entry Manhole (F&C)
Blind shaft (SW)
Blind shaft (F&C)
Ejector station (SW)
Ejector station (F&C)
Watertight door (SW)
Watertight door (F&C)
Flushing ch. Mh-a (SW)
Flushing ch. Mh-a (F&C)
Flushing ch. No-s (SW)
Flushing ch. No-s (F&C)
Demarcation Chamber
Washout (SW)
Washout (F&C)
Rodding Eye (SW)
Rodding Eye (F&C)
Gauging point (SW)
Gauging point (F&C)
Intercept chamber (SW)
Intercept chamber (F&C)
Storm Tank (SW)
Storm Tank (F&C)
Vortex chamber (SW)
Vortex chamber (F&C)
Label ellipse
Dummy/824 manhole
Outfall
Penstock chamber
Damboards
Storm Overflow
Backdrop manhole
Other (x)
Other
Change in sewer (x)
Change in sewer
Reflux valve
Flap valve
Cascade
Anode
Valve
Closed Valve
Air Valve
Hatch box (SW)
Hatch box (F&C)
Direction arrow
Emptying valve
Catchpit
Soakaway
Inlet
Balancing Pond
Wastewater treatment works
Marine treatment works
Outfall headworks
Vent
Vent column
Tidal storage tank
Blank end
Head of Public Sewer
Micro Pumping Station

SHAPES (S)

A Arched
B Barrel
C Circular
E Egg
H Horseshoe
R Rectangular
S Square
T Trapezoidal
U U Shape
X Other

NODE REFERENCING SYSTEM

1st digit: hundred metre easting identifier
2nd digit: hundred metre northing identifier
sewer type identifier
3rd digit: 0-4 = Foul/Combined
5-9 = Surface Water
4th digit: next sequential node

Drawn by:	mondaln
Title:	Land at Manor Farm Lower Road
Date:	23/06/2015

Southern Water

Appendix C – Greenfield Runoff Calculations

ICP SUDS Mean Annual Flood

Input

Return Period (years)	100	Soil	0.400
Area (ha)	0.920	Urban	0.000
SAAR (mm)	729	Region Number	Region 7

Results l/s

QBAR Rural	3.3
QBAR Urban	3.3
Q100 years	10.5
Q1 year	2.8
Q30 years	7.4
Q100 years	10.5

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Greenfield Runoff Volume

FSR Data

Return Period (years)	100
Storm Duration (mins)	360
Region	England and Wales
M5-60 (mm)	19.500
Ratio R	0.349
Areal Reduction Factor	1.00
Area (ha)	0.920
SAAR (mm)	789
CWI	116.484
Urban	0.000
SPR	47.000

Results

Percentage Runoff (%)	49.10
Greenfield Runoff Volume (m^3)	291.412

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Appendix D – Surface Water Network Calculations

STORM SEWER DESIGN by the Modified Rational Method

Design Criteria for Storm

Pipe Sizes STANDARD Manhole Sizes STANDARD

FSR Rainfall Model - England and Wales

Return Period (years)	5	PIMP (%)	100
M5-60 (mm)	19.600	Add Flow / Climate Change (%)	0
Ratio R	0.335	Minimum Backdrop Height (m)	0.200
Maximum Rainfall (mm/hr)	550	Maximum Backdrop Height (m)	1.500
Maximum Time of Concentration (mins)	30	Min Design Depth for Optimisation (m)	1.200
Foul Sewage (l/s/ha)	0.000	Min Vel for Auto Design only (m/s)	1.00
Volumetric Runoff Coeff.	0.750	Min Slope for Optimisation (1:X)	500

Designed with Level Soffits

Time Area Diagram for Storm

Time (mins)	Area (ha)	Time (mins)	Area (ha)
0-4	0.576	4-8	0.202

Total Area Contributing (ha) = 0.778

Total Pipe Volume (m³) = 165.714

Network Design Table for Storm

« - Indicates pipe capacity < flow

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.000	14.241	0.047	303.0	0.040	5.00	0.0	0.600	[]	1	Pipe/Conduit	
S1.001	56.632	1.596	35.5	0.038	0.00	0.0	0.600	o	225	Pipe/Conduit	
S2.000	27.882	0.093	299.8	0.025	5.00	0.0	0.600	[]	1	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.000	80.37	5.14	7.200	0.040	0.0	0.0	0.0	1.71	1178.9	8.7
S1.001	77.80	5.57	7.153	0.078	0.0	0.0	0.0	2.20	87.6	16.4
S2.000	79.56	5.27	5.650	0.025	0.0	0.0	0.0	1.72	1185.2	5.4

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Network Design Table for Storm

PN	Length (m)	Fall (m)	Slope (1:X)	I.Area (ha)	T.E. (mins)	Base Flow (l/s)	k (mm)	HYD SECT	DIA (mm)	Section Type	Auto Design
S1.002	59.522	0.993	59.9	0.050	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.003	20.634	0.138	149.5	0.096	0.00	0.0	0.600	o	300	Pipe/Conduit	
S1.004	11.358	0.057	199.3	0.048	0.00	0.0	0.600	[]	1	Pipe/Conduit	
S1.005	12.050	0.603	20.0	0.039	0.00	0.0	0.600	o	300	Pipe/Conduit	
S3.000	28.782	0.272	105.8	0.040	5.00	0.0	0.600	[]	1	Pipe/Conduit	
S4.000	18.172	0.061	297.9	0.024	5.00	0.0	0.600	[]	1	Pipe/Conduit	
S4.001	12.358	0.211	58.6	0.054	0.00	0.0	0.600	o	225	Pipe/Conduit	
S3.001	16.264	0.155	104.9	0.057	0.00	0.0	0.600	o	225	Pipe/Conduit	
S3.002	33.226	0.403	82.4	0.048	0.00	0.0	0.600	[]	1	Pipe/Conduit	
S3.003	14.761	0.098	150.6	0.088	0.00	0.0	0.600	o	300	Pipe/Conduit	
S3.004	68.458	1.170	58.5	0.060	0.00	0.0	0.600	[]	1	Pipe/Conduit	
S3.005	17.545	0.426	41.2	0.071	0.00	0.0	0.600	[]	1	Pipe/Conduit	
S1.006	12.142	0.024	505.9	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	
S1.007	9.329	0.154	60.6	0.000	0.00	0.0	0.600	o	450	Pipe/Conduit	

Network Results Table

PN	Rain (mm/hr)	T.C. (mins)	US/IL (m)	Σ I.Area (ha)	Σ Base Flow (l/s)	Foul (l/s)	Add Flow (l/s)	Vel (m/s)	Cap (l/s)	Flow (l/s)
S1.002	75.10	6.05	5.557	0.153	0.0	0.0	0.0	2.03	143.8	31.1
S1.003	73.71	6.32	4.564	0.249	0.0	0.0	0.0	1.28	90.7	49.7
S1.004	73.25	6.41	4.426	0.297	0.0	0.0	0.0	2.11	1455.8	58.9
S1.005	72.97	6.47	4.369	0.336	0.0	0.0	0.0	3.53	249.7	66.4
S3.000	80.21	5.17	6.000	0.040	0.0	0.0	0.0	2.90	2001.0	8.7
S4.000	80.14	5.18	6.000	0.024	0.0	0.0	0.0	1.73	1189.0	5.2
S4.001	79.40	5.30	5.939	0.078	0.0	0.0	0.0	1.71	68.1	16.8
S3.001	78.14	5.51	5.728	0.175	0.0	0.0	0.0	1.28	50.7	37.0
S3.002	77.17	5.68	5.573	0.223	0.0	0.0	0.0	3.29	2268.2	46.6
S3.003	76.10	5.87	5.170	0.311	0.0	0.0	0.0	1.28	90.4	64.1
S3.004	74.54	6.16	5.072	0.371	0.0	0.0	0.0	3.91	2694.1	74.9
S3.005	74.21	6.22	3.902	0.442	0.0	0.0	0.0	4.66	3212.9	88.8
S1.006	71.87	6.69	3.476	0.778	0.0	0.0	0.0	0.90	142.7«	151.4
S1.007	71.59	6.75	3.452	0.778	0.0	0.0	0.0	2.62	416.0	151.4

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PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	[]	1	S1	8.000	7.200	0.200	Open Manhole	3000
S1.001	o	225	S2	8.000	7.153	0.622	Open Manhole	3000
S2.000	[]	1	S3	6.250	5.650	0.000	Open Manhole	3000
S1.002	o	300	S4	6.250	5.557	0.393	Open Manhole	3000
S1.003	o	300	S5	5.250	4.564	0.386	Open Manhole	1200
S1.004	[]	1	S6	5.100	4.426	0.074	Open Manhole	3000
S1.005	o	300	S7	5.100	4.369	0.431	Open Manhole	3000
S3.000	[]	1	S8	6.750	6.000	0.150	Open Manhole	3000
S4.000	[]	1	S9	6.750	6.000	0.150	Open Manhole	3000
S4.001	o	225	S10	6.550	5.939	0.386	Open Manhole	3000
S3.001	o	225	S11	6.550	5.728	0.597	Open Manhole	3000
S3.002	[]	1	S12	6.250	5.573	0.077	Open Manhole	3000
S3.003	o	300	S13	6.000	5.170	0.530	Open Manhole	3000
S3.004	[]	1	S14	5.750	5.072	0.078	Open Manhole	3000
S3.005	[]	1	S15	5.600	3.902	1.098	Open Manhole	3000

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.000	14.241	303.0	S2	8.000	7.153	0.247	Open Manhole	3000
S1.001	56.632	35.5	S4	6.250	5.557	0.468	Open Manhole	3000
S2.000	27.882	299.8	S4	6.250	5.557	0.093	Open Manhole	3000
S1.002	59.522	59.9	S5	5.250	4.564	0.386	Open Manhole	1200
S1.003	20.634	149.5	S6	5.100	4.426	0.374	Open Manhole	3000
S1.004	11.358	199.3	S7	5.100	4.369	0.131	Open Manhole	3000
S1.005	12.050	20.0	S16	5.000	3.766	0.934	Open Manhole	3000
S3.000	28.782	105.8	S11	6.550	5.728	0.222	Open Manhole	3000
S4.000	18.172	297.9	S10	6.550	5.939	0.011	Open Manhole	3000
S4.001	12.358	58.6	S11	6.550	5.728	0.597	Open Manhole	3000
S3.001	16.264	104.9	S12	6.250	5.573	0.452	Open Manhole	3000
S3.002	33.226	82.4	S13	6.000	5.170	0.230	Open Manhole	3000
S3.003	14.761	150.6	S14	5.750	5.072	0.378	Open Manhole	3000
S3.004	68.458	58.5	S15	5.600	3.902	1.098	Open Manhole	3000
S3.005	17.545	41.2	S16	5.000	3.476	0.924	Open Manhole	3000

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PIPELINE SCHEDULES for Storm

Upstream Manhole

PN	Hyd Sect	Diam (mm)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.006	o	450	S16	5.000	3.476	1.074	Open Manhole	3000
S1.007	o	450	S17	5.000	3.452	1.098	Open Manhole	1350

Downstream Manhole

PN	Length (m)	Slope (1:X)	MH Name	C.Level (m)	I.Level (m)	D.Depth (m)	MH Connection	MH DIAM., L*W (mm)
S1.006	12.142	505.9	S17	5.000	3.452	1.098	Open Manhole	1350
S1.007	9.329	60.6	SOutfall	4.800	3.298	1.052	Open Manhole	0

Free Flowing Outfall Details for Storm

Outfall Pipe Number	Outfall Name	C. Level (m)	I. Level (m)	Min I. Level (m)	D,L (mm)	W (mm)
S1.007	SOutfall	4.800	3.298	0.000	0	0

Simulation Criteria for Storm

Volumetric Runoff Coeff	0.750	Additional Flow - % of Total Flow	0.000
Areal Reduction Factor	1.000	MADD Factor * 10m³/ha Storage	2.000
Hot Start (mins)	0	Inlet Coeffiecient	0.800
Hot Start Level (mm)	0	Flow per Person per Day (l/per/day)	0.000
Manhole Headloss Coeff (Global)	0.500	Run Time (mins)	60
Foul Sewage per hectare (l/s)	0.000	Output Interval (mins)	1

Number of Input Hydrographs	0	Number of Storage Structures	8
Number of Online Controls	1	Number of Time/Area Diagrams	2
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Profile Type	Summer
Return Period (years)	5	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	19.600	Storm Duration (mins)	30
Ratio R	0.335		

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Online Controls for Storm

Depth/Flow Relationship Manhole: S17, DS/PN: S1.007, Volume (m³): 3.8

Invert Level (m) 3.452

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	3.3000	0.800	3.3000	1.500	3.3000	2.200	3.3000
0.200	3.3000	0.900	3.3000	1.600	3.3000	2.300	3.3000
0.300	3.3000	1.000	3.3000	1.700	3.3000	2.400	3.3000
0.400	3.3000	1.100	3.3000	1.800	3.3000	2.500	3.3000
0.500	3.3000	1.200	3.3000	1.900	3.3000		
0.600	3.3000	1.300	3.3000	2.000	3.3000		
0.700	3.3000	1.400	3.3000	2.100	3.3000		

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Storage Structures for Storm

Swale Manhole: S1, DS/PN: S1.000

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier

Infiltration Coefficient Base (m/hr)	0.00000	Length (m)	12.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	300.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	7.200	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.6	Include Swale Volume	Yes

Swale Manhole: S3, DS/PN: S2.000

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier

Infiltration Coefficient Base (m/hr)	0.00000	Length (m)	20.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	300.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	5.650	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.6	Include Swale Volume	Yes

Swale Manhole: S6, DS/PN: S1.004

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier

Infiltration Coefficient Base (m/hr)	0.00000	Length (m)	16.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	200.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	4.426	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.6	Include Swale Volume	Yes

Swale Manhole: S8, DS/PN: S3.000

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier

Infiltration Coefficient Base (m/hr)	0.00000	Length (m)	29.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	110.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	6.000	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.6	Include Swale Volume	Yes

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Swale Manhole: S9, DS/PN: S4.000

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier

Infiltration Coefficient Base (m/hr)	0.00000	Length (m)	19.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	300.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	6.000	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.6	Include Swale Volume	Yes

Swale Manhole: S12, DS/PN: S3.002

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier

Infiltration Coefficient Base (m/hr)	0.00000	Length (m)	35.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	100.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	5.573	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.6	Include Swale Volume	Yes

Swale Manhole: S14, DS/PN: S3.004

Warning:- Volume should always be included unless the upstream pipe is being used for storage and/or as a carrier

Infiltration Coefficient Base (m/hr)	0.00000	Length (m)	90.0
Infiltration Coefficient Side (m/hr)	0.00000	Side Slope (1:X)	3.0
Safety Factor	2.0	Slope (1:X)	60.0
Porosity	1.00	Cap Volume Depth (m)	0.000
Invert Level (m)	5.072	Cap Infiltration Depth (m)	0.000
Base Width (m)	0.6	Include Swale Volume	Yes

Tank or Pond Manhole: S16, DS/PN: S1.006

Invert Level (m) 3.476

Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	330.0	0.400	447.0	0.800	576.0	1.200	714.0
0.100	357.0	0.500	479.0	0.900	610.0	1.300	750.0
0.200	386.0	0.600	511.0	1.000	645.0	1.400	787.0
0.300	417.0	0.700	543.0	1.100	680.0	1.500	824.0

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs	0	Number of Storage Structures	8
Number of Online Controls	1	Number of Time/Area Diagrams	2
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.330
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	19.700	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	OFF
Inertia Status	OFF

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.000	S1	15 Winter	1	+0%				
S1.001	S2	15 Winter	1	+0%				
S2.000	S3	15 Winter	1	+0%				
S1.002	S4	15 Winter	1	+0%				
S1.003	S5	15 Winter	1	+0%	100/15 Summer			
S1.004	S6	15 Winter	1	+0%				
S1.005	S7	15 Winter	1	+0%				
S3.000	S8	15 Winter	1	+0%				
S4.000	S9	15 Winter	1	+0%				
S4.001	S10	15 Winter	1	+0%				
S3.001	S11	15 Winter	1	+0%	100/15 Summer			
S3.002	S12	15 Winter	1	+0%				
S3.003	S13	15 Winter	1	+0%	100/15 Summer			
S3.004	S14	15 Winter	1	+0%				
S3.005	S15	15 Winter	1	+0%	100/360 Winter			
S1.006	S16	480 Winter	1	+0%	30/120 Summer			

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S1.000	S1	7.215	-0.585	0.000	0.01		4	5.0	OK	
S1.001	S2	7.202	-0.176	0.000	0.10			8.8	OK	
S2.000	S3	5.658	-0.592	0.000	0.00		3	3.1	OK	
S1.002	S4	5.627	-0.230	0.000	0.12			16.6	OK	
S1.003	S5	4.669	-0.195	0.000	0.27			21.2	OK	
S1.004	S6	4.468	-0.558	0.000	0.03		7	25.3	OK	
S1.005	S7	4.445	-0.224	0.000	0.15			28.6	OK	
S3.000	S8	6.004	-0.596	0.000	0.00		4	5.2	OK	
S4.000	S9	6.009	-0.591	0.000	0.00		4	3.0	OK	
S4.001	S10	5.996	-0.168	0.000	0.15			8.5	OK	
S3.001	S11	5.830	-0.123	0.000	0.42			19.0	OK	
S3.002	S12	5.591	-0.582	0.000	0.02		5	23.8	OK	
S3.003	S13	5.296	-0.174	0.000	0.37			27.9	OK	
S3.004	S14	5.092	-0.580	0.000	0.01		6	33.2	OK	
S3.005	S15	3.924	-0.578	0.000	0.02			39.3	OK	
S1.006	S16	3.752	-0.174	0.000	0.07			6.0	OK	

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1 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.007	S17	480 Winter	1	+0%	30/60 Winter	100/120 Winter		

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status	Level Exceeded
S1.007	S17	3.753	-0.149	0.000	0.01			3.3	OK	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs	0	Number of Storage Structures	8
Number of Online Controls	1	Number of Time/Area Diagrams	2
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model	FSR	Ratio R	0.330
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	19.700	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	OFF
Inertia Status	OFF

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.000	S1	15 Winter	30	+0%				
S1.001	S2	15 Winter	30	+0%				
S2.000	S3	15 Winter	30	+0%				
S1.002	S4	15 Winter	30	+0%				
S1.003	S5	15 Winter	30	+0%	100/15 Summer			
S1.004	S6	15 Winter	30	+0%				
S1.005	S7	15 Winter	30	+0%				
S3.000	S8	15 Winter	30	+0%				
S4.000	S9	15 Winter	30	+0%				
S4.001	S10	15 Winter	30	+0%				
S3.001	S11	15 Winter	30	+0%	100/15 Summer			
S3.002	S12	15 Winter	30	+0%				
S3.003	S13	15 Winter	30	+0%	100/15 Summer			
S3.004	S14	15 Winter	30	+0%				
S3.005	S15	600 Winter	30	+0%	100/360 Winter			
S1.006	S16	600 Winter	30	+0%	30/120 Summer			

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	7.244	-0.556	0.000	0.02		5	12.4	OK
S1.001	S2	7.235	-0.143	0.000	0.28			23.8	OK
S2.000	S3	5.684	-0.566	0.000	0.01		4	7.2	OK
S1.002	S4	5.675	-0.182	0.000	0.32			43.8	OK
S1.003	S5	4.748	-0.116	0.000	0.69			54.7	OK
S1.004	S6	4.518	-0.508	0.000	0.08		7	65.4	OK
S1.005	S7	4.498	-0.171	0.000	0.38			74.4	OK
S3.000	S8	6.012	-0.588	0.000	0.01		3	12.5	OK
S4.000	S9	6.043	-0.557	0.000	0.01		4	7.9	OK
S4.001	S10	6.039	-0.125	0.000	0.40			23.6	OK
S3.001	S11	5.940	-0.013	0.000	1.00			45.0	OK
S3.002	S12	5.618	-0.555	0.000	0.04		6	59.6	OK
S3.003	S13	5.391	-0.079	0.000	0.90			67.9	OK
S3.004	S14	5.123	-0.549	0.000	0.04		7	81.9	OK
S3.005	S15	4.114	-0.388	0.000	0.01			15.4	OK
S1.006	S16	4.114	0.188	0.000	0.30			24.1	SURCHARGED

PN	US/MH Name	Level Exceeded
S1.000	S1	
S1.001	S2	
S2.000	S3	
S1.002	S4	
S1.003	S5	
S1.004	S6	
S1.005	S7	
S3.000	S8	
S4.000	S9	
S4.001	S10	
S3.001	S11	
S3.002	S12	
S3.003	S13	
S3.004	S14	
S3.005	S15	
S1.006	S16	

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30 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.007	S17	2160 Summer	30	+0%	30/60 Winter	100/120 Winter		

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.007	S17	4.388	0.486	0.000	0.01			3.3	SURCHARGED

PN	US/MH Name	Level Exceeded
S1.007	S17	

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

Simulation Criteria

Areal Reduction Factor	1.000	Additional Flow - % of Total Flow	0.000
Hot Start (mins)	0	MADD Factor * 10m³/ha Storage	2.000
Hot Start Level (mm)	0	Inlet Coeffiecient	0.800
Manhole Headloss Coeff (Global)	0.500	Flow per Person per Day (l/per/day)	0.000
Foul Sewage per hectare (l/s)	0.000		

Number of Input Hydrographs	0	Number of Storage Structures	8
Number of Online Controls	1	Number of Time/Area Diagrams	2
Number of Offline Controls	0	Number of Real Time Controls	0

Synthetic Rainfall Details

Rainfall Model		FSR	Ratio R 0.330
Region	England and Wales	Cv (Summer)	0.750
M5-60 (mm)	19.700	Cv (Winter)	0.840

Margin for Flood Risk Warning (mm)	300.0
Analysis Timestep	2.5 Second Increment (Extended)
DTS Status	ON
DVD Status	OFF
Inertia Status	OFF

Profile(s)	Summer and Winter
Duration(s) (mins)	15, 30, 60, 120, 180, 240, 360, 480, 600, 720, 960, 1440, 2160, 2880, 4320, 5760, 7200, 8640, 10080
Return Period(s) (years)	1, 30, 100
Climate Change (%)	0, 0, 40

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.000	S1	15 Winter	100	+40%				
S1.001	S2	15 Winter	100	+40%				
S2.000	S3	15 Winter	100	+40%				
S1.002	S4	15 Winter	100	+40%				
S1.003	S5	15 Winter	100	+40%	100/15 Summer			
S1.004	S6	960 Winter	100	+40%				
S1.005	S7	960 Winter	100	+40%				
S3.000	S8	15 Winter	100	+40%				
S4.000	S9	15 Winter	100	+40%				
S4.001	S10	15 Winter	100	+40%				
S3.001	S11	15 Winter	100	+40%	100/15 Summer			
S3.002	S12	15 Winter	100	+40%				
S3.003	S13	30 Winter	100	+40%	100/15 Summer			
S3.004	S14	15 Winter	100	+40%				
S3.005	S15	960 Winter	100	+40%	100/360 Winter			
S1.006	S16	960 Winter	100	+40%	30/120 Summer			

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.000	S1	7.276	-0.524	0.000	0.03		5	22.4	OK
S1.001	S2	7.268	-0.110	0.000	0.51			43.1	OK
S2.000	S3	5.725	-0.525	0.000	0.01		4	13.1	OK
S1.002	S4	5.721	-0.136	0.000	0.57			77.9	OK
S1.003	S5	4.918	0.054	0.000	1.22			96.7	SURCHARGED
S1.004	S6	4.588	-0.438	0.000	0.02		239	13.0	OK
S1.005	S7	4.588	-0.081	0.000	0.08			14.7	OK
S3.000	S8	6.079	-0.521	0.000	0.01		4	18.9	OK
S4.000	S9	6.119	-0.481	0.000	0.02		5	11.9	OK
S4.001	S10	6.119	-0.045	0.000	0.55			32.1	OK
S3.001	S11	6.077	0.124	0.000	1.36			61.3	SURCHARGED
S3.002	S12	5.636	-0.537	0.000	0.05		9	85.0	OK
S3.003	S13	5.521	0.051	0.000	1.29			97.8	SURCHARGED
S3.004	S14	5.139	-0.533	0.000	0.05		11	117.1	OK
S3.005	S15	4.587	0.085	0.000	0.01			18.1	SURCHARGED
S1.006	S16	4.588	0.662	0.000	0.13			10.0	SURCHARGED

PN	US/MH Name	Level Exceeded
S1.000	S1	
S1.001	S2	
S2.000	S3	
S1.002	S4	
S1.003	S5	
S1.004	S6	
S1.005	S7	
S3.000	S8	
S4.000	S9	
S4.001	S10	
S3.001	S11	
S3.002	S12	
S3.003	S13	
S3.004	S14	
S3.005	S15	
S1.006	S16	

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100 year Return Period Summary of Critical Results by Maximum Level (Rank 1) for Storm

PN	US/MH Name	Storm	Return Period	Climate Change	First (X) Surcharge	First (Y) Flood	First (Z) Overflow	Overflow Act.
S1.007	S17	960 Winter	100	+40%	30/60 Winter	100/120 Winter		

PN	US/MH Name	Water Level (m)	Surcharged Depth (m)	Flooded Volume (m³)	Flow / Cap.	Overflow (l/s)	Half Drain Time (mins)	Pipe Flow (l/s)	Status
S1.007	S17	4.809	0.907	0.000	0.01			3.3	FLOOD RISK

PN	US/MH Name	Level Exceeded
S1.007	S17	

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APPENDIX B

Hampshire County Council

Universal Services
The Castle
Winchester, Hampshire SO23 8UD

Tel: 0300 555 1375
Fax 01962 847055
www.hants.gov.uk

Enquiries	Sarah Reghif	*My referen*	SWM/2021/0660
Direct Li	0370 779 7497	*Your referen*	APP/21/01071
Dat	24 March 2023	*Emai*	SWM.consulte @hants.gov.uk

Dear Sir/Madam,

Outline planning application for up to 43 dwellings, with access from Lower Road and associated landscaping, open space and allotments, and all other matters reserved.
at Land south of, Lower Road, and west of Old Manor Farm, Havant(Application No. APP/21/01071

Hampshire County Council as Lead Local Flood Authority has provided comments in relation to the above application in our role as statutory consultee on surface water drainage for major developments.

This response does not reflect the position of Hampshire County Council as the Highway Authority. If there is a potential for the drainage features to be offered for adoption, this will need to be discussed separately with Highways development planning as they might not be considered acceptable by the Highway Authority.

In order to assist applicants in providing the correct information to their Local Planning Authority for planning permission, Hampshire County Council has set out the information it requires to provide a substantive response at https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/planning

The County Council has reviewed the following documents relating to the above application:

Drainage Strategy Technical Note ref: SS/23/0157/6430

The technical note has been provided to set out alternative surface water discharge proposals for Lower Road given the concerns raised regarding deep bore soakaways. The key change is to discharge to the watercourse to

Director o Universa Service
Patrick Blogg

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the east of the site at greenfield runoff rates of 3.3l/s which discharges into estuarial waters less than 350m to the south.

Three alternative options have been set out to for connection to the watercourse utilising different connection points and routes. Either of these three options would be considered acceptable from the LLFA perspective.

A fourth option is included to revert to the previously submitted options for deep bore soakaways. This remains an unacceptable option from the LLFA perspective and although it is referenced that the Environment Agency approved a similar design on the adjacent site, they have confirmed to us that this is only in relation to acceptability of contamination and not approval of the drainage functionality. The Environment Agency have expressed their concern to us in relation to the effectiveness of deep bore soakaways in this situation.

Based on the information submitted, we believe that one of the 3 options set out will be deliverable and, on that basis, would accept a condition to allow detailed information to be submitted as part of a reserved matters or discharge of condition application.

1. No development shall begin until a detailed surface water drainage scheme for the site, based on the principles within the Drainage Strategy Technical Note options 1 to 3, ref: SS/23/0157/6430, has been submitted and approved in writing by the Local Planning Authority. The submitted details should include:

a. A technical summary highlighting any changes to the design from that within the approved documentation and confirmation of discharge option.
b. Approvals in principle in relation to land access or other approvals required to implement the discharge option.
c. Detailed drainage plans to include type, layout and dimensions of drainage features including references to link to the drainage calculations.
d. Detailed drainage calculations to demonstrate existing runoff rates are not exceeded and there is sufficient attenuation for storm events up to and including 1:100 + climate change.
e. Evidence that urban creep has been included within the calculations.
f. Confirmation that sufficient water quality measures have been included to satisfy the methodology in the Ciria SuDS Manual C753.
g. Exceedance plans demonstrating the flow paths and areas of ponding in the event of blockages or storms exceeding design criteria.

2. Details for the long term maintenance arrangements for the surface water drainage system shall be submitted to and approved in writing by the Local Planning Authority prior to the first occupation of any of the dwellings. The submitted details shall include maintenance schedules for each drainage feature type and ownership

As a statutory consultee, the County Council has a duty to respond to consultations within **21 days**. The 21 day period will not begin until we have received sufficient information to enable us to provide a meaningful response.

Please ensure all data is sent to us via the relevant Local Planning Authority.

If you require additional guidance on providing the correct information, we recommend you use our **Surface Water Management Pre-application service** which will enable discussions with the reviewing engineer and scope out works that would address the points raised. For full details, please visit: https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/planning and click on pre-application advice request form.

This response has been provided using the best knowledge and information submitted by the applicant as part of the planning application at the time of responding and is reliant on the accuracy of that information.

Yours faithfully,

Flood and Water Management Team
Economy, Transport & Environment Department,
Hampshire County Council, 1st Floor, EII Court West,
The Castle, Winchester, Hampshire SO23 8UD
Web:
https://www.hants.gov.uk/landplanningandenvironment/environment/flooding

General guidance for the application

It is important to ensure that the long-term maintenance and responsibility for Sustainable Drainage Systems is agreed between the Local Planning Authority and the applicant before planning permission is granted. This should involve discussions with those adopting and/or maintaining the proposed systems, which could include the Highway Authority, Planning Authority, Parish Councils, Water Companies and private management companies.

For SuDS systems to be adopted by Hampshire Highways it is recommended that you visit the website at: https://www.hants.gov.uk/transport/developers/constructionstandards for guidance on which drainage features would be suitable for adoption.

Where the proposals are connecting to an existing drainage system it is likely that the authorities responsible for maintaining those systems will have their

own design requirements. These requirements will need to be reviewed and agreed as part of any surface water drainage scheme.

Works in relation to ordinary watercourses

PLEASE NOTE: If the proposals include works to an ordinary watercourse, under the Land Drainage Act 1991, as amended by the Flood and Water Management Act 2010, prior consent from the Lead Local Flood Authority is required. ***This consent is required as a separate permission to planning.***

Information on ordinary watercourse consenting can be found at the following link
https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/changewatercourse

It is strongly recommended that this information is reviewed before Land Drainage consent application is made.

For guidance on providing the correct information, we recommend you use our ***Ordinary Watercourse Consents Pre-application service*** *and help avoid delays occurring at the formal application stage. A Pre-application service for Ordinary Watercourse Consents is available, allowing consents to go through in a smoother, often more timely manner. For full information please visit:*
https://www.hants.gov.uk/landplanningandenvironment/environment/flooding/changewatercourse