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Strategic Planning Board

Agenda

Date:	**Wednesday 18th August 2021**
Time:	**10.00 am**
Venue:	**The Ballroom, Sandbach Town Hall, High Street, Sandbach, CW11 1AX**

PLEASE NOTE – This meeting is open to the public and anyone attending this meeting will need to wear a face covering upon entering and leaving the venue. This may only be removed when seated.

The importance of undertaking a lateral flow test in advance of attending any committee meeting. Lateral Flow Testing: Towards the end of May, test kits were sent to all Members; the purpose being to ensure that Members had a ready supply of kits to facilitate self-testing prior to formal face to face meetings. Anyone attending is asked to undertake a lateral flow test on the day of any meeting before embarking upon the journey to the venue. Please note that it can take up to 30 minutes for the true result to show on a lateral flow test. If your test shows a positive result, then you must not attend the meeting, and must follow the advice which can be found here: https://www.cheshireeast.gov.uk/council_and_democracy/council_information/coronavirus/testing-for-covid-19.aspx

Members of the public are requested to check the Council's website the week the Strategic Planning Board meeting is due to take place as Officers produce updates for some or all of the applications prior to the commencement of the meeting and after the agenda has been published.

The agenda is divided into 2 parts. Part 1 is taken in the presence of the public and press. Part 2 items will be considered in the absence of the public and press for the reasons indicated on the agenda and at the top of each report.

It should be noted that Part 1 items of Cheshire East Council decision meetings are live audio recorded and the recordings are uploaded to the Council's website.

Please Contact: Sarah Baxter on 01270 686462
E-Mail: sarah.baxter@cheshireeast.gov.uk
Speakingatplanning@cheshireeast.gov.uk to arrange to speak at the meeting

PART 1 – MATTERS TO BE CONSIDERED WITH THE PUBLIC AND PRESS PRESENT

1. **Apologies for Absence**

   To receive any apologies for absence.

2. **Declarations of Interest/Pre Determination**

   To provide an opportunity for Members and Officers to declare any disclosable pecuniary and non-pecuniary interests and for Members to declare if they have a pre-determination in respect of any item on the agenda.

3. **Minutes of the Previous Meeting** (Pages 5 - 10)

   To approve the minutes of the previous meeting held on 14 July 2021 as a correct record.

4. **Public Speaking**

   A total period of 5 minutes is allocated for each of the planning applications for the following:

   - Ward Councillors who are not members of the Strategic Planning Board
   - The relevant Town/Parish Council

   A period of 3 minutes is allocated for each of the planning applications for the following individuals/groups:

   - Members who are not members of the Strategic Planning Board and are not the Ward Member
   - Objectors
   - Supporters
   - Applicants

5. **20/1080W MANSFIELD HOUSE, WITHYFOLD DRIVE, MACCLESFIELD, CHESHIRE, SK10 2BD: Change of use of site from vehicle recovery depot to waste recycling centre, installation of weighbridge, removal of existing temporary building and erection of two new canopy buildings for the receipt and storage of non-hazardous wastes (temporary for 3 years)** (Pages 11 - 48)

   To consider the above application.

6. **21/1575C BRITISH SALT LTD, CLEDFORD LANE, MIDDLEWICH, CW10 0JP: Construction of new salt manufacturing facility comprising: the removal of tanks and associated equipment; the construction of new tanks and associated equipment; external alterations to existing Evaporation Building; erection of pipe bridge; construction of new Drying / Packing Building; and associated ancillary development.** (Pages 49 - 70)

   To consider the above application.

7. **20/3762N LAND OFF SYDNEY ROAD, CREWE: Residential development for 151 new build dwellings & associated works** (Pages 71 - 116)

   To consider the above application.

8. **18/4921C Land Off, LONDON ROAD, HOLMES CHAPEL: Residential development of 25 no. dwellings (and a change in tenure of plots 120, 121 and 304 of permission 19/3855C to affordable rent) - (revised application)** (Pages 117 - 136)

   To consider the above application.

9. **21/1205C Former CLEDFORD HALL FARM, CLEDFORD LANE, MIDDLEWICH: Erection of 10 gypsy and traveller transit pitches and associated amenity block** (Pages 137 - 156)

   To consider the above application.

10. **Draft Sustainable Urban Drainage Systems Supplementary Planning Document** (Pages 157 - 276)

    To consider the Draft Sustainable Urban Drainage Systems Supplementary Planning Document.

Membership: Councillors A Critchley, B Burkhill, S Edgar, S Gardiner (Vice-Chair), P Groves, S Hogben, M Hunter (Chair), B Murphy, J Nicholas, B Puddicombe, P Redstone and J Weatherill

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CHESHIRE EAST COUNCIL

Minutes of a meeting of the **Strategic Planning Board**
held on Wednesday, 14th July, 2021 at Glasshouse, Alderley Park, Congleton Road, Nether Alderley, Macclesfield, SK10 4TF

PRESENT

Councillor M Hunter (Chair)
Councillor S Gardiner (Vice-Chair)

Councillors B Burkhill, S Edgar, P Groves, S Hogben, A Harewood (Substitute), B Murphy, J Nicholas, P Redstone and J Weatherill

OFFICERS IN ATTENDANCE

Adrian Crowther (Major Applications Team Leader), Nicky Folan, (Planning Solicitor), Paul Hurdus (Highways Development Manager), Robert Law (Planning Team Leader), David Malcolm (Head of Planning) and Philippa Radia (Senior Planning Officer)

14 **APOLOGIES FOR ABSENCE**

Apologies for absence were received from Councillors A Critchley and B Puddicombe.

15 **DECLARATIONS OF INTEREST/PRE DETERMINATION**

In the interest of openness in respect application 20/3210M, Councillor S Hogben declared that he was a non-Executive Director of ANSA who had been consulted on the application, however he had not discussed the application or made any comments on it.

In the interest of openness in respect of application 20/3210M, Councillor J Nicholas declared that he was a member of the Cheshire Brine Subsidence Compensation Board who had been consulted on the application, however he not discussed the application or made any comments on it.

In the interest of openness in respect of the report relating to applications 19/1068M and 19/1069M, Councillor A Harewood declared that she was a Member of Macclesfield Town Council, however she had not discussed the application.

In the interest of openness in respect of applications 20/4695W and 20/3210M, Councillor S Edgar declared that he was a member of the Public Rights of Way Committee who had been consulted on the applications, however he not discussed the applications or made any comments on either of them.

In the interest of openness in respect of application 20/4695W, Councillor S Edgar declared that he was a member of the Cheshire Brine Subsidence Compensation Board who had been consulted on the application, however he not discussed the application or made any comments on it.

In the interest of openness in relation to application 20/3210M, Councillor S Gardiner declared that he worked with Torus Housing Association as part of his professional role, however the part of the Housing Association he worked with had not been involved in the application and as a result he had not discussed the application with them.

In the interest of openness in relation to the report relating to applications 19/1068M and 19/1069M, Councillor S Gardiner declared that he knew Jon Suckley who was the agent for the applicant speaking on the application.

In the interest of openness in respect of application 20/3210N, Councillor M Hunter declared that he was a non-Executive Director of ANSA who had been consulted on the application, however he had not discussed the application or made any comments on it.

It was noted that all Members had received correspondence in respect of the report relating to applications 19/1068M and 19/1069M.

16 **MINUTES OF THE PREVIOUS MEETING**

RESOLVED

That the minutes of the meeting held on 16 June 2021 be approved as a correct record and signed by the Chair.

17 **PUBLIC SPEAKING**

RESOLVED

That the public speaking procedure be noted.

18 **20/4695W-LAND IMPROVEMENTS AND LEVELS CHANGES INCLUDING IMPORTATION OF SOIL AND INERT MATERIAL TO REGRADE AREAS OF LAND TO IMPROVE DRAINAGE FOR EQUESTRIAN USE, HUNTERS MOON, SWINEYARD LANE, HIGH LEGH FOR MR JOSEPH GILLESPIE**

Consideration was given to the above application.

RESOLVED

That for the reasons set out in the report the application be approved subject to the following conditions:-

1. Time limit
2. Approved plans
3. The mitigation recommended in the acoustic report shall be implemented in full prior to each phase of the proposed development
4. Provision of a site specific dust management plan
5. (a) Any soil or soil forming materials to be brought to site shall be tested for contamination and suitability for use prior to importation to site.
   (b) Prior to first use, evidence and verification information (for example, laboratory certificates) shall be submitted to, and approved in writing by, the LPA.
6. If, during the course of development, contamination not previously identified is found to be present, no further works shall be undertaken in the affected area and the contamination shall be reported to the Local Planning Authority as soon as reasonably practicable (but within a maximum of 5 days from the find). Prior to further works being carried out in the identified area, a further assessment shall be made and appropriate remediation implemented in accordance with a scheme also agreed in writing by the Local Planning Authority.
7. Tree retention
8. Tree protection
9. Arboricultural method statement
10. Service/drainage layout (trees)
11. The existing hedges which are shown as being retained on the approved plans shall not be cut down, grubbed out or otherwise removed without the written consent of the Local Planning Authority. Any hedges removed without such consent or which die or become severely damaged shall be replaced with hedging plants of such size and species as may be agreed with the Local Planning Authority. Any hedges dying or becoming seriously diseased within five years of the completion of the development shall be replaced with hedging plants of such size and species as may be agreed with the Local Planning Authority.
12. Following commencement importation shall cease after 6 months
13. Development to be carried out in accordance with the Flood Risk Assessment
14. Submission of an overall detailed strategy/design to limit surface water run-off
15. Provision of a groundwater monitoring scheme
16. The hours of deliveries at the site shall be restricted to the following:
    07:30 to 18:00 hours Monday to Friday
    07:30 to 14:00 hours Saturday
    No working on Sundays or public holidays
17. Implementation of amphibian mitigation measures

18. Safeguarding of nesting birds
19. Submission of a habitat creation and ecological monitoring method statement and 30 year management plan
20. The acoustic bunds shall be removed within 2 months of completion of the development

In order to give proper effect to the Board's intentions and without changing the substance of the decision, authority is delegated to the Head of Planning, in consultation with the Chair (or in their absence the Vice Chair) of the Strategic Planning Board, to correct any technical slip or omission in the wording of the resolution, between approval of the minutes and issue of the decision notice.

(The meeting was adjourned for a short break).

19 **20/3210N-RESERVED MATTERS APPROVAL SOUGHT FOR ACCESS, APPEARANCE, LANDSCAPING, LAYOUT AND SCALE. FOLLOWING OUTLINE PERMISSION FOR THE CONSTRUCTION OF UP TO 400 DWELLINGS WITH GARAGING; PARKING; PUBLIC OPEN SPACE; LANDSCAPING; NEW VEHICLE AND PEDESTRIAN ACCESSES; HIGHWAY WORKS, FOUL AND SURFACE WATER DRAINAGE INFRASTRUCTURE AND ALL ANCILLARY WORKS, LAND AT, FLOWERS LANE, LEIGHTON, CREWE FOR M NEVITT, MULBURY HOMES LTD AND TORUS62 DEVELOPMENT**

Consideration was given to the above application.

(Chris Whitfield, the applicant attended the meeting and spoke in respect of the application. In addition a statement was read out by the Democratic Services Officer on behalf of Councillor B Evans, the Ward Councillor).

RESOLVED

That the application be delegated to the Head of Planning to approve subject to the receipt of comments from the Ecologist Officer in relation to bat/bird boxes and subject to the following conditions:-

1. Approved plans
2. Tree retention
3. Tree Protection
4. Arboricultural method statement
5. Levels survey – Trees
6. Services drainage layout – Trees
7. 25 year habitat management plan
8. Bird nesting season
9. Confirmation the development has been entered into Natural England's District Licensing Scheme for Great Crested Newts
10. Adherence to the Ecological Impact Assessment recommendations
11. Drainage management/maintenance

12. Public Rights of Way scheme of management, to include details of surfaces and signage
13. Details of play areas to be agreed, including the MUGA & Green gym
14. Details of the allotments to be agreed
15. Provision of working detail for Tudor boarding
16. Notwithstanding details submitted, final working detail of SuDS basins and landscaping to be submitted (as there is uncertainty between landscape and planning layouts re: whether some basins are dry or wet)
17. Landscape maintenance of 10 years for landscaping on plot (to secure its establishment)
18. Notwithstanding the information submitted, final hard surface materials plan to be agreed (due to discrepancy between materials plan and planning layout)
19. Final highway design to include suitable pedestrian crossing points across the avenue to accommodate the PROW and working details of all crossing points to be provided. Pavement to be included within the street design in the areas identified by Highways
20. A plan or highways note assessing the impact of landscaping on access and junction visibilities should be submitted and approved.
21. Bus stop provision to be made in the site
22. Comments of Cheshire Brine to be highlighted

In the event of any changes being needed to the wording of the Committee's decision (such as to delete, vary or add conditions/informatives/planning obligations or reasons for approval/refusal) prior to the decision being issued, the Planning and Place Shaping Manager has delegated authority to do so in consultation with the Chairman of the Strategic Planning Board, provided that the changes do not exceed the substantive nature of the Board's decision.

(The meeting was adjourned for a short break).

20 **UPDATE FOLLOWING THE RESOLUTION TO APPROVE PLANNING APPLICATION 19/1068M AND LISTED BUILDING CONSENT 19/1069M - THE DEMOLITION OF EXISTING BUILDINGS AND THE RESIDENTIAL REDEVELOPMENT OF THE KING'S SCHOOL CUMBERLAND STREET SITE TO PROVIDE A MIXTURE OF CONVERSION AND NEW BUILD DWELLINGS AND 'LATER LIVING' APARTMENTS, WITH ASSOCIATED ACCESS, CAR PARKING, OPEN SPACE, LANDSCAPING AND INFRASTRUCTURE.**

Consideration was given to the above report.

(Councillor David Edwardes, the Ward Councillor, Councillor Susie Akers-Smith, a visiting Councillor and Town Councillor Mike Hutchison, representing Macclesfield Town Council attended the meeting and spoke in respect of the item).

RESOLVED

That the receipt and content of the comments made by the Twentieth Century Society be noted but officers proceed with the Board's resolutions made at the meeting of the Strategic Planning Board on 21 April 2021.

The meeting commenced at 10.00 am and concluded at 1.00 pm

Councillor M Hunter (Chair)

Application No: 20/1080W

Location: MANSFIELD HOUSE, WITHYFOLD DRIVE, MACCLESFIELD, CHESHIRE, SK10 2BD

Proposal: Change of use of site from vehicle recovery depot to waste recycling centre, installation of weighbridge, removal of existing temporary building and erection of two new canopy buildings for the receipt and storage of non-hazardous wastes (temporary for 3 years)

Applicant: Mr Joe Henshaw, 1st Choice Waste & Metals Ltd

Expiry Date: 09-Jun-2020

SUMMARY

The principle of a waste management facility on this site is considered acceptable by virtue of the allocation of this site in the Cheshire Replacement Waste Local Plan. The proposal is also located on the edge of an industrial estate on previously developed land and utilises existing buildings which accords with the locational criteria identified in the NPPW. The proposal would support sustainable waste management in line with the CELPS policy SE11, CRWLP and NPPW in that it would relocate an existing waste management facility, enable waste from Macclesfield and the surrounding local area to be sorted and separated out for onward recycling or re-use in accordance with the waste hierarchy and proximity principle.

The impact of the proposal in relation to landscape, visual impact and design, flood risk and drainage, water quality, land contamination, land stability, utilities, vehicle emissions, litter, pests, forestry, and ecology is considered acceptable subject to a range of controls being imposed by planning condition and implementation of good site management practices.

The suite of planning conditions and controls under the Environmental Permit would ensure any dust, mud and odour impacts are minimised to an acceptable level and do not generate pollution beyond the site boundary which would satisfy CELPS policy SE12, CRWLP policies 24 and 26, MBLP policy DC3

A number of alternative vehicular access options have been investigated and discounted. The existing access has been demonstrated to operate safely, and the site could be lawfully operated as a vehicle recovery depot, with no restrictions in relation to the number or type of HGVs permitted to use Withyfold Drive and other local residential roads. The amendments to the proposal now being sought would reduce the number of HGVs which would lessen the overall impact of the development, and the proposed routing arrangements would result in HGVs in-part utilising roads that are more suited for, and are already used by, commercial vehicles.

When compared to the previous occupier, there would be a potential net reduction in vehicle movements, and the development would also be temporary for 3 years which would provide an opportunity to monitor the actual vehicle impacts on the highway network. It is therefore considered to be difficult to sustain a refusal on highway grounds as the proposal would not conflict with CRWLP policy 28, and the approach of the NPPF and NPPW
In respect to impacts on amenity whilst there is still a degree of uncertainty over the previous level of HGV movements, weight is given to the fact that the number of HGV movements have now been reduced, the HGVs would be routed away from the most sensitive receptors and towards areas that are more likely to experience commercial/industrial traffic, and the applicant is seeking a temporary 3 year permission, after which they would need to seek a further permission to continue that use.

It is considered that all of these factors combined with the fallback position of the site with no restrictions on vehicle numbers or routing, would make a defence on amenity grounds at a planning appeal unlikely to be successful.

On balance it is considered that, whilst there could be some harm to amenity associated with the movement of HGVs on residential roads, these impacts are not sufficient on their own to warrant refusal of the application and are outweighed by the significant strategic and economic benefits presented by the proposal.

As such the proposal is considered to accord with policies of the Cheshire East Local Plan Strategy 2017 and the saved policies of the Cheshire Replacement Waste Local Plan and the Macclesfield Borough Local Plan, along with the approach of the NPPF and NPPW.

RECOMMENDATION
Approve subject to conditions

UPDATE
The application was considered at the SPB meeting on 16 June 2021, where it was resolved that the application be deferred for the following reasons:-

1. Clarification on the surrounding land use and associated HGV vehicle movements onto Withyfold Drive;

2. Confirmation, consultation and consideration of the applicant's amended proposal to reduce the number of vehicle movements;

3.Consideration of traffic management plan options

A full copy of the officers report to SPB on 16th June 2021 is included in the at the end of this report. The reasons for deferral are addressed as follows.

Surrounding land uses

At the Strategic Planning Board meeting, members requested further details of the surrounding land uses to the application site and the associated HGV movements on Withyfold Drive.

Permission was granted in June 2019 for the construction of one office unit (B1 use) and eight warehouse units (B8 use) on land directly adjacent to the eastern boundary beyond the Gas Works site. The permission approved 15 car parking spaces and 5 HGV parking spaces which could access the site between the hours of 0730 to 1800 Monday to Friday and 0800 to 1300 hours Saturdays. It is assumed that the number of HGV vehicle movements would be 10 per day. It is noted however that, whilst the permission contains restrictions on the hours of operation at the site, there are no restrictions on the number of vehicle movements permitted to enter of leave the site.

Further east is an auction sales room with associated offices and storage. This site has permission for 12 sales events a year (approximately 1 per month) and 12 viewing days. The applicant identified that a maximum of 30 people would be present on viewing days and 50 people at sale days, and deliveries of stock to the site would be by a 3.5 tonne van. The permission contains no restrictions on the number of permitted vehicle movements but restricts the hours of opening to 0800 to 1930 Mondays, 0800 to 1800 Tuesday to Fridays and 0800 to 1230 on Saturdays. On viewing days the permitted hours of opening are 1200 to 2000.

Highway Considerations

At the Strategic Planning Board meeting, the applicant proposed to reduce the number of vehicle movements generated by the development from 70 HGV movements (35 in, 35 out) per day down to 50 HGV movements per day (25 in, 25 out). This represents a reduction of 20 HGV movements (10 in, 10 out) per day. The other movements associated with employee and light commercial vehicles would remain as per the original proposal therefore in total, the amended proposals would generate 102 movements per day (61 in, 61 out). During weekends the number of trips would be significantly lower as operations mainly involve processing of material on site with lower deliveries.

The applicant has also provided a plan which details the proposed vehicle routing arrangements for the site. This identifies that HGVs would access and egress the site via Withyfold Drive and would be instructed to turn left (to the east) along Nicholson Avenue before turning left (to the north) onto Queens Avenue and onto Hulley Road to reach the A523 Silk Road. Vehicles would be instructed not to utilise any roads to the south of Nicholson Avenue including Garden Street, Black Lane, Steeple Street and Queens Avenue south of Nicholson Avenue.

These routing arrangements would avoid the terraced streets to the south where there are frequent obstructions caused by on-street parking and would instead route traffic towards Queens Avenue where, at its northern extent, the nature of traffic is more industrial in nature.

In order to manage and enforce the vehicle routing arrangements, the applicant identifies that over 95% of the HGVs would be owned and under the control of the applicant. All drivers would be provided with induction training on HGV routing and a copy of the routing plan would be kept in the cab of all applicant's HGVs. The HGVs are fitted with GPS tracking transponder and

associated software whereby routes can be restricted. The applicant states that HGV routes would be monitored and audited regularly, and drivers under the applicant's control would be subject to a 3 strike policy with termination of employment for those breaching the rules. For any third party HGVs accessing the site, the operating companies would be issued with a copy of the HGV routing plan and advised of company policy, and the applicant would adopt the same three strike approach with those breaching that policy being refused entry.

The proposed reduction in vehicle movements and suggested vehicle routing arrangements would not impact the overall conclusions drawn on highway considerations originally reported to Strategic Planning Board; namely that:

1) The access has been shown to operate safely with no records of accidents on Withyfold Drive or within 50m of the Nicholson Avenue/Garden Street junction over the last 5 years;

1) The site could be lawfully operated as a vehicle recovery depot and there are no restrictions on that permission in relation to the number or type of HGVs permitted to use Withyfold Drive and other local residential roads;

2) Equally in relation to the surrounding commercial/industrial uses which also utilise Withyfold Drive as an access, it was not considered necessary to impose a planning condition restriction on the number of vehicle movements generated by those uses, albeit those uses would likely result in a smaller number of vehicle movements than is proposed by this application;

3) Based on an independent assessment of the potential vehicle movements that could be generated by the use of the site as a vehicle recovery depot, the Strategic Infrastructure Manager accepts that this proposal could potentially result in a net reduction in traffic generation compared to that generated by the previous occupier.

4) This would be a time limited proposal for a maximum of three years and which would also allow a trial period during which time the actual highway impacts of the proposal could be assessed, with an opportunity to review the situation should the operator decide to seek a further permission

Additionally the Strategic Infrastructure Manager advises that the amendments now being sought would provide some additional benefit and would reduce the overall impact of the development, and they note that the HGVs would in-part utilise roads that are more suited for, and are already used by, commercial vehicles.

It is generally accepted that the routing of vehicles is difficult to enforce and monitor, and the officer highlights that the Highway Authority has no powers to enforce the use of this route by HGVs as these roads are public highways. These points are noted however in this instance the fact that over 95% of the vehicles would be owned and under the control of the applicant would go some way to ensuring compliance. The routing arrangements could be secured by planning condition.

The NPPF makes it clear that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe; likewise CRWLP policy 28 requires new

development to ensure the level and type of traffic generated does not exceed the capacity of the local road network, and does not have an unacceptable impact on amenity or road safety, and access arrangements should be adequate for the nature, volume and movement of traffic generated by the proposal.

The updated views of the Strategic Infrastructure Manager would add further support to the original conclusion drawn that, on the basis of all these factors, it would be difficult to sustain a refusal on highway grounds. Given the above, and subject to the imposition of conditions in respect of controlling the number of vehicle movements and implementation of the vehicle routing arrangements, it is considered that the proposal would not conflict with CRWLP policy 28, and the approach of the NPPF and NPPW.

Amenity impacts

The proposed reduction in vehicle numbers and routing arrangements would have no bearing on the conclusions drawn on the noise assessment, which was that:

- noise levels from a skip vehicle would be between 2 and 7 decibels lower than the typical road recovery vehicle used by the previous occupier.
- In respect of passing HGVs, predicted noise levels at the façade of the closest residential dwelling (based over an hourly period) would be 41 decibels which is well within the measured background noise level at this location (50-51 decibels) and would also not exceed the recommended level in technical guidance for outdoor living;
- predicted noise levels in rear gardens would be even lower (due to screening provided by the property) and would also be well within relevant guidance;
- Internal noise levels would be 26 decibels which is below the recommended threshold of 30 decibels for bedrooms and 35 decibels for living rooms and this also takes account of any open windows.
- Predicted noise levels in the front gardens of properties on roads used to access the site are 47.6 decibels, which is below the existing measured background level and within the 50 decibels threshold for external amenity areas identified in relevant guidelines.
- The acoustic assessment is based on a worst-case scenario of vehicles travelling in a low gear at slow speed and even when applying a longer timescale to pass properties, the predicted noise levels from vehicles remain within relevant guidelines and below the closest background sound level measured within the area.

As noted in the original report to Strategic Planning Board, planning policy not only requires new development to ensure potential adverse noise impacts are mitigated and reduced to a minimum, but also requires a wider consideration of whether a good standard of amenity is achieved. The subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected, there are other influencing factors to consider and, in reviewing the original proposal, the Environmental Health Officer was concerned that despite the conclusions of the noise assessment and proposed noise management plan, the noise from manoeuvring vehicles could still impact residential amenity in terms of opening windows and enjoying garden space, particularly for terraced properties which abut the pavement.

In drawing a conclusion on the original proposal, the results of the noise assessment, the views of Strategic Infrastructure Manager and the potential fallback position on HGV movements were

all given due weight, along with the views of the Environmental Health officer and views of local residents. It was acknowledged however that there remained some uncertainty over the actual number of HGV movements that was previously generated and whether that level of traffic would be generated in future should that land use come back into operation. As such, a planning judgement was made that the potentially significant impact on the amenity and living conditions of nearby residents was sufficient to warrant refusal of the application.

The amendments now proposed would reduce the number of HGVs passing residential properties and would also avoid vehicles routing along terraced streets as they would instead travel north towards Hulley Road where towards the northern end of the route, the traffic is more industrial in nature and the residential properties are situated on only one side of the road and are in part set back further from the road.

Despite this, the Environmental Health officer remains concerned that there could still be potential amenity impacts for those residents on the identified vehicular routes, particularly when using outdoor space or opening windows, and the HGV movements could equate to several per hour which would be on predominantly residential roads which are narrow with potentially some on-street parking. They do however accept that the amendments would present an improvement in terms of offering protection from HGV/commercial vehicular noise to residents on terraced streets, and acknowledge that this is a public highway which is open to any traffic, and the site could be operated by other commercial companies who could similarly generate a number of commercial or HGV vehicle movements per day, as could other nearby commercial sites.

The Environmental Health officer previously advised that, as the control of noise from traffic on the highway is not within the remit of noise nuisance legislation available to Environmental Health, the matter could not be upheld at a planning appeal and no objections were raised. This remains the case following the proposed amendments.

The fact that HGVs have no option but to drive past some residential properties to reach the main road network will always mean there is potential for some degree of impact on amenity which cannot be completely mitigated. It is considered that the applicant has reduced the vehicle numbers to the absolute minimum that would still enable a viable operation. The key consideration is therefore whether the scale of impact on amenity presented by this amended proposal is sufficient on its own to warrant refusal of the application given all other factors and the benefits presented from the proposal in terms of sustainable waste management and economic development.

It was previously highlighted in the original report to Strategic Planning Board that this is a very finely balanced case to consider and this remains the case even following the proposed amendments.

Whilst the uncertainty over the previous level of HGV movements still exists, weight is given to the fact that the number of HGV movements have now been reduced, the HGVs would be routed away from the most sensitive receptors and towards areas that are more likely to experience commercial/industrial traffic, and the applicant is seeking a temporary 3 year permission, after which they would need to seek a further permission to continue that use.

It is considered that all of these factors combined with the fallback position of the site with no restrictions on vehicle numbers or routing, the lack of objection from the Environmental Health Officer, lack of quantifiable evidence to support their concerns, the conclusions of the noise assessment and Strategic Infrastructure Manager, along with the fact that this proposal could potentially result in less HGV numbers than the previous use, and other commercial uses on Withyfold Drive could operate with no HGV restrictions, would make a defence on amenity grounds at a planning appeal unlikely to be successful.

Conclusion

On balance it is considered that, whilst there could be some harm to amenity associated with the movement of HGVs on residential roads, these impacts are not sufficient on their own to warrant refusal of the application and are outweighed by the significant strategic and economic benefits presented by the proposal. This includes supporting the local economy and the retention of 40 local jobs. The proposal also presents a number of benefits in sustainable waste management in terms of providing a facility which manages several waste streams generated by households, commercial and construction sources, enabling the wastes to be separated out for onward recycling or reuse which would assist with overall reductions in residual waste, and would maximise the amount of waste managed in the most sustainable manner possible in accordance with the waste hierarchy. This would help to achieve national recycling targets and comply with national and European legislation. The facility would also contribute to a network of waste management facilities which meet the overall waste needs capacity in the borough, and would enable the facility to continue to serve its existing customer base, providing a waste collection service to the residents of Macclesfield and their surrounding 16 kilometre catchment area which would accord with the proximity principle in terms of allowing waste to be managed as close to its source as possible. As such the proposal would accord with the approach of the NPPW, CRWLP and CELPS policy SE11.

The proposal is also considered to be broadly compatible with the MBLP employment allocation E4 and is located on the edge of an industrial estate on previously developed land and utilises existing buildings which accords with the locational criteria identified in the NPPW. The impact of the proposal in relation to landscape, visual impact and design, flood risk and drainage, water quality, land contamination, land stability, utilities, vehicle emissions, litter, pests, forestry, and ecology is considered acceptable subject to a range of controls being imposed by planning condition and implementation of good site management practices. The suite of planning conditions and controls under the Environmental Permit would also ensure any dust, mud and odour impacts are minimised to an acceptable level and do not generate pollution beyond the site boundary.

As such the proposal is considered to accord with policies of the Cheshire East Local Plan Strategy 2017 and the saved policies of the Cheshire Replacement Waste Local Plan and the Macclesfield Borough Local Plan, along with the approach of the NPPF and NPPW.

Recommendation: Approve subject to conditions

1. Standard conditions
1. Three year temporary permission
2. Limit on vehicle numbers
3. Record of vehicle numbers
4. Hours of operation

5. Implementation of vehicle routing plan
6. Submission of updated noise management plan, implementation of mitigation in noise management plan and maintenance of noise mitigation through the operation of the development
7. Use of white noise reverse alarms and chain socks
8. Implementation of schemes to control odour, dust, litter, pests/birds, mud and debris
9. Protection for nesting birds
10. Ecological enhancement strategy
11. Detailed strategy/design for surface water runoff, associated management/maintenance and management of overland flow routes
12. Remediation strategy and verification report
13. Measures to deal with unexpected contamination
14. Scheme for disposal of foul and surface water
15. Staff sustainable travel information pack
16. Electric vehicle charging points
17. Submission of revised site layout plan taking account of cadent gas easement requirement
18. Landscaping proposals
19. Tree protection measures

ORIGINAL OFFICER REPORT TO STRATEGIC PLANNING BOARD 16 JUNE 2021

SUMMARY

The principle of a waste management facility on this site is considered acceptable by virtue of the allocation of this site in the Cheshire Replacement Waste Local Plan. The proposal is also located on the edge of an industrial estate on previously developed land and utilises existing buildings which accords with the locational criteria identified in the NPPW. The proposal would support sustainable waste management in line with the CELPS policy SE11, CRWLP and NPPW in that it would relocate an existing waste management facility, enable waste from Macclesfield and the surrounding local area to be sorted and separated out for onward recycling or re-use in accordance with the waste hierarchy and proximity principle.

The impact of the proposal in relation to landscape, visual impact and design, flood risk and drainage, water quality, land contamination, land stability, utilities, vehicle emissions, litter, pests, forestry, and ecology is considered acceptable subject to a range of controls being imposed by planning condition and implementation of good site management practices.

The suite of planning conditions and controls under the Environmental Permit would ensure any dust, mud and odour impacts are minimised to an acceptable level and do not generate pollution beyond the site boundary which would satisfy CELPS policy SE12, CRWLP policies 24 and 26, MBLP policy DC3

A number of alternative vehicular access options have been investigated and discounted. The existing access has been demonstrated to operate safely, and the site could be lawfully operated as a vehicle recovery depot, with no restrictions in relation to the number or type of HGVs permitted to use

Withyfold Drive and other local residential roads. When compared to the previous occupier, there would be a potential small net reduction in vehicle movements, and the development would also be temporary for 3 years which would provide an opportunity to monitor the actual vehicle impacts on the highway network. It is therefore considered to be difficult to sustain a refusal on highway grounds as the proposal would not conflict with CRWLP policy 28, and the approach of the NPPF and NPPW.

The noise assessment has identified that the predicted noise levels at the façade of the closest residential properties, in garden spaces and internally would all remain within relevant thresholds in technical guidance. Likewise, predicted noise levels from a HGV manoeuvring around parked cars would also remain within recommended thresholds. Despite these conclusions, the Environmental Health Officer remains concerned that the vehicles could detrimentally impact the amenity of residents and the impacts could be more significant for those living in terraced properties that abut the pavement, however no objections are raised on the basis that noise from vehicles on the highway is not within the remit of noise nuisance legislation available to Environmental Health.

Planning policy however requires consideration of impacts which are broader than statutory noise nuisance and requires a good standard of amenity to be achieved. In assessing the impacts on noise, several factors have been considered. This includes the fallback position of the lawful use of the site which permits unlimited vehicle movements, the conclusions of the Strategic Infrastructure Manager that the proposed level of traffic may potentially be slightly less than was previously generated by the former occupier, and the conclusions of the noise assessment.

This is a very finely balanced case and the lack of objection from the Environmental Health Officer and lack of quantifiable evidence to support their expressed concerns would make this a difficult argument to defend at a planning appeal. Overall however, the requirements of planning policy in terms of securing a good standard of amenity and the outstanding concerns of the Environmental Health Officer are given significant weight in the assessment of this application and it is considered that the HGV traffic along residential roads serving the site could adversely impact on the standard of amenity that is experienced by local residents. Despite the many benefits the application presents in sustainable waste management and in supporting the local economy, this is not considered to outweigh the disbenefits presented by the proposal in terms of detrimental impact on residential amenity. As such it is considered that the development should be refused.

Recommendation
Refusal

DESCRIPTION OF SITE AND CONTEXT

The application site is a rectangular parcel of land which includes access along Withyfold Drive to the south east and Snape Road to the north. The site currently houses a small number of buildings along with areas of hardstanding which incorporate storage bays along the north

western site boundary. The site is positioned at elevation relative to the land immediately to the south and is constrained by an underground pipeline and overhead electricity cables.

The site is located at the southern end of a commercial/industrial area which is situated approximately 800m north of Macclesfield Town Centre. To the north lies a mixture of commercial and industrial uses along with a National Grid substation which bounds the north east site boundary. To the east is a gas distribution depot along with other commercial/industrial units beyond which is a residential area, whilst to the west is the A523 Silk Road. To the south is the former Barracks Mill site which has been demolished and has planning permission for retail development with a new access from the Silk Road. The nearest residential properties are located on Withyfold Drive to the south east and to the east off Queens Avenue, along with further receptors to the west beyond A523 Silk Road. The nearest property on Withyfold Drive is located approximately 78m from the main application site area.

DETAILS OF PROPOSAL

The applicant proposes to relocate a large proportion of their existing waste management business from Moss Lane in order to allow for the construction of residential development on that site; albeit a small facility is proposed to be retained on that site which is subject to a separate planning application.

This application seeks consent for a change of use of the site from a vehicle recovery depot to a waste recycling centre for the tipping, sorting and storage of dry, non-hazardous mixed general wastes derived from household, commercial and construction and demolition sources from the applicant's collections in Macclesfield and surrounding areas. The facility would manage a maximum of 25000 tonnes of waste per year comprising 15000 tonnes of construction, demolition and excavation waste, and 10,000 tonnes from municipal sources. This is a lower waste throughput than that accepted at the applicants existing Moss Lane facility. The maximum amount of waste stored on site at any one time is anticipated to be less than 1000 tonnes.

The waste would be delivered to the site on HGV skip vehicles and RCVs. Each load would be accompanied by the appropriate paperwork detailing the source and nature of waste and the contents would be inspected prior to being deposited in a building. It would then be deposited inside a building and sorted by hand or 360 grabber to remove recyclable materials and residual waste, which would be directed to an appropriate bay inside the building or in the external storage bays. Any unsuitable waste would then be removed from site to an appropriate waste facility.

The application proposes two new buildings. The first comprises two 'bunker' style bay enclosures with a PVC canopy stretched onto a steel frame. The bunkers, which form the walls to the sides and rear of the building would be constructed using interlocking concrete blocks to a height of 4 metres and the canopy would be fixed to the blocks. The building would be open fronted to allow east access for tipping and loading. The building would be 29.2m by 18.2m with a floor area of 504sqm and a height of 7.8m (to top of canopy).

The second would be an open sided single 'bunker' style bay enclosure with a PVC canopy, stretched onto a steel frame and would be 7.5m by 7.5m covering a floorspace of 56sqm and a height of 5.6m (to top of canopy).

The proposal also includes:

- Installation of a weighbridge
- Removal of the existing temporary B1/B8 storage/warehouse building
- Retention of the existing office for administration and welfare facilities, and the retention of the existing B1 workshop building for use as a maintenance building for vehicles, plant and skips/containers;
- Change of use of existing B1 garage building to allow storage of non-ferrous metals;
- Retention of existing storage bays for waste/aggregate storage;
- Provision of 27 staff parking spaces and 6 HGV parking spaces, and turning areas;
- Additional 3 floodlights located on 4 metre poles and 6 building mounted floodlights.

The proposed operational hours are 0800 to 1800 hours Monday to Friday, 0800 to 1300 hours Saturday with no operations on Sundays or Bank/Public Holidays.

Access to the facility is proposed to be taken from Withyfold Drive via the existing access road. An access to Snape Road has also been included in the application site, although use of this access has not been agreed by the relevant third parties.

In order to facilitate further discussions with neighbouring landowners whilst allowing the waste facility to continue operating, the applicant is seeking a temporary permission of 3 years from commencement of waste operations on the basis of using the existing access off Withyfold Drive. The applicant advises that should an alternative access not be secured, they would apply for permission to extend the timescales of the development.

RELEVANT HISTORY

- 96/1085P – change of use from gas board depot to vehicle recovery depot granted 1996
- 97/1953P – application to remove conditions to allow continued use of existing access and removal of condition restricting hours of operation refused 1997. Subsequently granted on appeal with respect to the use of the access only. The previous restrictions on the hours of operation remained in place.
- 07/1578P - retrospective permission for the creation of an access and erection of security gates granted 2007. This permission allowed access to the site outside of the normal operations via Snape Road (from the access in the north of the site).

POLICIES

The Development Plan comprises the Cheshire East Local Plan Strategy, the Cheshire Replacement Waste Local Plan 2007 (CRWLP), and the Macclesfield Borough Local Plan.

The relevant development policies are:

Saved policies of the Cheshire Replacement Waste Local Plan (2007) (CRWLP)

Policy 1: Sustainable Waste Management
Policy 2: The Need for Waste Management Facilities
Policy 4: Preferred Sites for Waste Management Facilities
Policy 12: Impact of Development Proposals
Policy 14: Landscape

Policy 17: Natural Environment
Policy 18: Water Resource Protection and Flood Risk
Policy 22: Aircraft Safety
Policy 23: Noise
Policy 24: Air Pollution; Air Emissions Including Dust
Policy 25: Litter
Policy 26: Odour
Policy 27: Sustainable Transportation of waste
Policy 28: Highways
Policy 29: Hours of Operation
Policy 32: Reclamation
Policy 36: Design

Cheshire East Local Plan Strategy (CELPS)
SD1: Sustainable Development in Cheshire East
SD2: Sustainable Development Principles
SC3: Health and Wellbeing
SE1: Design
SE2: Efficient Use of Land
SE11: Sustainable Management of Waste
SE12: Pollution, Land Contamination and Land Instability
SE14: Jodrell Bank
PG1: Overall Development Strategy
PG3: Open Countryside
EG1: Economic Prosperity
EG2: Rural Economy
EG3: Existing and Allocated Employment Sites

Saved policies of the Macclesfield Borough Local Plan (MBLP)
NE11: Nature Conservation
E4: Industry
E5: Special Industries
DC3: Amenity
DC6: Circulation and Access
DC9: Tree Protection
DC13 and DC14: Noise
DC17, DC19: Water Resources
DC21: Temporary buildings and Uses

National Planning Policy and Guidance
National Planning Policy Framework
National Planning Policy for Waste
National Planning Practice Guidance

Other Material Considerations
Cheshire East Waste Needs Assessment Refresh 2019
Noise Policy Statement for England

CONSULTATIONS (External to Planning)

Highways: no objection. Recommend condition in respect of temporary three-year permission and controls over the number of vehicle movements.

Ecology: No objection. Recommend conditions in respect of protecting nesting birds and securing an ecological enhancement strategy to incorporate features to increase the biodiversity value of the final development.

Landscape: the changes proposed are unlikely to result in any significant landscape or visual impacts.

Forestry: do not anticipate any significant arboricultural implications with this application.

Environmental Protection:

Noise

- No concerns with respect to on-site operations.
- Remains concerned that noise from vehicles slowly manoeuvring around parked cars in low gears may be more noticeable to residents and could still impact their amenity in terms of opening windows and enjoying garden areas, and that noise impacts could be more significant for those living in terraced properties that abut the pavement such as properties on Garden Street and Steeple Street. Consider that, as the control of noise from traffic on the highway is not within the remit of noise nuisance legislation available to Environmental Health, their officers could not uphold this matter at any planning appeal.
- Should planning permission be granted, conditions are recommended in respect of implementing the mitigation identified in the acoustic report, controls over hours of operation, number of vehicle movements, submission of noise management plan and use of white noise reversing alarms and chain socks.

Odour, Dust, Mud, Debris and Pests
Recommend conditions in respect of implementing the submitted schemes to control odour, dust, litter, pests/birds, mud and debris

Air Quality – No comments

Contaminated Land
No objection subject to implementation of conditions as recommended by the Environment Agency.

Flood Risk:
No objection subject to the conditions recommended by the Environment Agency being secured, and condition to secure a detailed strategy / design limiting the surface water runoff generated by the proposed development, associated management / maintenance plan and managing overland flow routes for the site.

Spatial Planning: no comments received

National grid: no objection

United Utilities: no comments received

Cadent Gas: no objections

Health and Safety Executive: do not advise, on safety grounds, against the granting of planning permission in this case

The Environment Agency:
No objection subject to conditions being imposed in respect of securing a remediation strategy and verification report, measures to deal with unexpected contamination, and a scheme to dispose of foul and surface water.

Macclesfield Civic Society –

- This is perceived as a bad neighbour use but does provide a benefit to the locality as a whole in the management of waste. Site for such uses are difficult to find and at least this proposal would be located in an area with historic and current industrial activities, as such the use could be acceptable in principle.
- Occupiers of dwellings along Withyfold Drive are likely to suffer adverse effects from the development of the retail park, should it proceed, and every effort should be made to mitigate any further adverse impacts.
- the amenity impact on residents occupying frontage dwellings on local roads around the site would be adversely affected in terms of noise/disturbance and risks of vehicle/vehicle and pedestrian/vehicle conflicts
- In this context and to avoid future amenity conflicts the Society fully supports an alternative access option preferable via Snape Road (from the north). If this cannot be secured, then the use of Withyfold Drive should be examined critically at the expiry of any temporary permission.
- It is disappointing to see that efforts are being made to try and argue that there would be no increase in traffic using Withyfold drive, no change in the character of that traffic and no adverse impact on either amenity or public and highway safety. It matters not what the alleged "fall back" position may be, as the proposal is to introduce a new land use with a resulting pattern of traffic which would impact upon its neighbours. It is not sufficient to say that because there would be no significant deterioration (which is arguable) the proposal must be acceptable. Whatever happened to the primary objectives of planning control namely the improvement of the physical environment and the management of traffic; we should be aiming to improve rather than just not making things worse. More effort should be put into securing a more satisfactory means of access which avoids potentially adverse impacts on the residential areas to the south and east of the site.

Coal Authority: standing advice provided

Macclesfield Town Council: object on the grounds of:

1. Harmful impact to the health of residents in the area,
2. Safety concerns resulting from large vehicles travelling on residential roads,
3. Noise disturbance created by large vehicles visiting the site,

4. Noise disturbance from the site,
5. Noxious smells from the site,
6. Fumes resulting from increase in traffic,
7. Concerns of the potential for hazardous waste,
8. Disturbance of existing contaminants on the site,
9. Increase to air pollution,
10. Danger from flying debris,
11. Contamination of the River Bollin,
12. Disturbance to rare wildlife.

The committee also raised concerns on the potential longevity of the depot beyond the three year period due its detrimental impact on the neighbourhood.

OTHER REPRESENTATIONS

In excess of 250 letters of representations has been received from local residents including comments of Councillor Bennet-Wake of Macclesfield Town Council. Copies of all objections received are available to view on the website. A summary of the objections are as follows:

- Existing traffic congestion (particularly from HGVs) will be made worse. Road system was not designed to handle HGVs and cannot cope with any increase. Drivers unfamiliar with the area will cause road congestion and safety issues. There are 7.5t weight restrictions in the area, one way systems and speed calming which are unsuitable for HGVs. Melview Road has an HGV left turn only sign onto Queens Avenue. Also concern over speeding vehicles;
- Potential for damage to roads, and damage to verges from HGVs mounting the pavement and damage to utilities;
- Highway safety concerns due to narrow residential roads with on-street parking and poor visibility (particularly at junctions). Difficulty for vehicles to pass or manoeuvre around parked cars. There is also lots of on-street parking from local commercial uses;
- Potential hazards to pedestrians especially those more vulnerable, note the area is also used as a throughfare for school children;
- HGV access via Withyfold Drive is unsuitable and unsafe, the Withyfold Drive junction has a blind spot in both directions and access onto Nicholson Avenue is difficult for HGVs. This access cannot support the size and number of vehicles required;
- Some roads are part of National Cycle Network, HGV use in these areas would present hazards to vulnerable road users and will inhibit use of Middlewood Way and the national cycle network, counter to CEC policies to encourage cycling for transport and well being;
- Consider calculations and assumptions made in the technical assessments to be incorrect or unsubstantiated. The identified number of vehicle movements associated with the previous user of the site is inaccurate and was much lower and a lot of the vehicle movements went through the access onto Snape Road not Withyfold Drive;
- An alternative access is needed which links to the Silk Road, the adjacent site should be used for this;
- Concern over inability of the operator to control the amount of vehicle numbers so the impacts would be much greater;
- Potential for deposits of debris, mud and litter, and potential for flying litter;
- Noise, disruption and vibration to houses from the site operations and passing and waiting HGVs will impact on residents and pets ;
- HGVs in low gear will create more noise than has been assessed in the report

- Noise assessment is inaccurate and incorrect, and only reflects where the monitoring equipment was placed, not the reality. The noise mitigation will not be effective;
- Noise and Smell are covered by “The Anti-Social Behaviour, Crime and Policing Act 2014” has this received adequate consideration;
- The previous use of Withyfold Drive by recovery depot vehicles caused noise pollution, vibration and flashing lights for residents;
- More people working at home means more people affected.;
- It is not appropriate in this location being too close to residential properties, schools, outdoor play areas and local amenities;
- why has this site been chosen over other areas, there are better sites elsewhere, it should be located on an industrial estate. Potential adverse impact on neighbouring businesses;
- Its contrary to the development plan and should be refused;
- Proven history of problems with this type of operation by this applicant;
- Potential for fumes and odour from the site, and from passing vehicles particularly due to decomposing waste. Sound and smells are worse because the location is in the Bollin Valley. Potential impact on health from odour emissions;
- Air Pollution (particulates and emissions) from site operations and vehicles, potential impact on and cumulative impacts associated with the retail park. Dust generation could be a health hazard, particularly to children and elderly. The dust mitigation will not be effective to protect health and amenity;
- Risk of disease and impact on health and well-being of the community, and potential stress to residents of Withyfold Drive from the amount of traffic on the road and trying to navigate along it;
- Potential for pests and impact of pests on residents and local businesses;
- Would negatively impact on customers using tesco as its not hygienic or appealing;
- Potential for hazardous waste on site, will the waste be harmful to health and well being, potential for asbestos waste being collected and stored on site ;
- Fire risk due to adjacent electricity substation and gas mains supply;
- health and safety concerns with plant;
- potential for building waste to contain silica dust creating health problems;
- Pollution to the canal and River Bollin, ground contamination from waste storage and handling, and disturbance of ground contaminants. Question what checks would be made to ensure waste is non -hazardous;
- site constraints including presence of old mining shafts and aquifer close to gas main and national grid site could mean risk of subsidence, land instability and safety risks;
- Visual impact and impact on impression of the town and local area, building needs to be painted a suitable colour to be inconspicuous. Visual and amenity impacts of middle wood way;
- loss of privacy and glare from HGV lights;
- operator unlikely to leave the site after the 3 year temporary period ceases, potential for increase in operations after 3 years. Work being carried out without permission, the operator is unlikely to abide by their planning permission;
- no demonstrated need, too many recycling facilities in Macclesfield, not beneficial to the community;
- need to make changes to combat climate change/reduce waste;
- redevelopment of the gasholder site will be negatively affected by this proposal

- consider that, due to Covid-19 restrictions, the determination of the application should be delayed until community and public meetings can take place to debate the application. All residents on surrounding roads affected should have be consulted on the application;
- application submission lacks detail;
- financial implications to residents through vibration, collision with cars, impact on property values, council tax, costs of road maintenance;
- antisocial behaviour from HGV drivers;
- cumulative impacts from vehicle numbers, noise and air quality with the retail park;
- impacts rights as citizens and human beings;
- impact on biodiversity including rare and protected species such as common lizard recorded on Barracks Mill site, and potential for lizards in the adjacent wooded area.

Representation of Local Ward Councillor (Councillor Carter)

1. The location within a residential area is unsuitable due to detrimental effects on wellbeing and health of residents from noise, traffic and pollution;
1. Access to the site is via a 7.5 tonne weight restricted zone on one side and will make a breach of this order a regular occurrence and undermine Highways restriction zones;
2. The number of lorries will have a dramatic effect on noise pollution and cause significant disturbance for residents already subject to unnecessary breaches of the Highways restrictions which are flouted on a daily basis. The other access point is already heavily used by vehicles and there will be additional load on this road;
3. Health impacts on children, elderly and those with medical conditions from waste processing/storage. It is inappropriate to use this site for waste disposal;
4. The residents are united in opposition to this development which they believe to be entirely inappropriate, unsafe and a danger to public health and security;
5. No amount of restrictions to this proposal will remove the danger of excessive traffic in a residential area, the health risks associated with transporting and dealing with waste through a residential area and the noise impact on residents;
6. The industrial estate has a number of mixed-use leisure facilities within it and pedestrian traffic is made up of predominantly families and children. The traffic impact of vehicles accessing the site will be dangerous as will the proximity of pollutants to small children engaged in exercise.

OFFICER APPRAISAL

Principle of Development

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan unless material considerations indicate otherwise. In this instance the Development Plan consists of the Cheshire East Local Plan Strategy, the Replacement Waste Local Plan (2007) and the Macclesfield Borough Local Plan (2004). Material considerations include the National Planning Policy for Waste (NPPW) and the National Planning Policy Framework (NPPF) and the suite of documents comprising National Planning Practice Guidance (NPPG).

The application site forms part of Cheshire Replacement Waste Local Plan (CRWLP) Preferred Site WM10 ‘Hurdsfield Industrial Estate’ to which CRWLP Policy 4 applies. Policy 4 states that an application for a waste management facility on a Preferred Site will be permitted subject to

the application being for the specified use, and its compliance with other policies of the plan. It also states that if an application is made for a use other than those specified on the Preferred Site, permission will only be granted subject to compliance with other policies in the plan.

CRWLP Policy 5 also states that applications for waste facilities for uses not identified on the Preferred Site will not be permitted unless it is demonstrated that:

i) the preferred sites are either no longer available or are less suitable; or
i) the proposal would meet a requirement not provided for by the preferred sites; and
ii) the proposed site is located according to the sequential approach within the Regional Spatial Strategy

Preferred site WM10 identifies the potential acceptable uses on this site as including a material recycling facility and a bulking facility. The planning application proposes a 'waste recycling centre' which would be used for the acceptance, basic sorting and storage of wastes. These proposed activities would most appropriately fit within the CRWLP definition of a waste transfer station and a bulking facility however the proposal also incorporates some operations that would be characteristic of a basic material recycling facility. The proposal therefore accords the list of potentially acceptable uses identified for Preferred Site WM10.

The only other Preferred Site within the Cheshire East administrative boundary which is identified as potentially being suitable for a waste transfer station is at WM13 'Lyme Green, Macclesfield'. Part of that allocation is now occupied by a waste management use, and the whole of the Preferred Site now forms part of the wider CELPS Strategic Site LPS13: South Macclesfield Development Area, which was subject to an application for outline planning permission for a mixed use scheme which was granted in 2019 and is also subject to a further application for primary infrastructure works which is currently being determined. As such it is considered that this Preferred Site is no longer viable for consideration as a site for this waste recycling centre.

Objectors have questioned the choice of site and consider that there are more suitable alternatives located on industrial estates away from residential receptors, schools, play areas and local amenities.

An alternative site assessment has been submitted by the applicant which evaluated in excess of 21 sites within a 10km radius of the existing waste facility against several criteria. This included the size of the site, environmental constraints such as flood risk, proximity of ecological habitat/sites, planning constraints including green belt, previously developed land, proximity to housing, access, Jodrell bank consultation zone and other policy constraints. The sites were screened against the criteria and were all discounted for a range of reasons including being unavailable, not of sufficient size, constrained by poor access, and located in Green Belt, Open Countryside or other restrictive policy constraints and therefore unlikely to receive planning permission. Following the initial unsuccessful search exercise, the geographical search radius was widened further however this failed to identify any potentially suitable site. The findings of the alternative site assessment are accepted.

In view of the above and given the nature of waste activities that would be undertaken on the proposed site, it is considered that the proposal accords with the broad approach of CRWLP

Policy 4 and Policy 5, and the principle of a waste recycling centre on this site is acceptable subject to compliance with other policies in the Development Plan.

Economic impacts

The application site forms part of MBLP allocated employment area E4 'Industry' in which general industry (B2), Warehousing (B8), high technology (B1b), and light industry (B1c) uses would normally be permitted. In general, material recycling facilities are generally considered to be a B2 use, with waste transfer stations considered to be '*sui* generis' use; however given the nature of this proposal which incorporates some elements of a basic material recycling facility, it is considered that this proposal would be broadly compatible with a B2 use. There is provision for special industries (open storage and bad neighbour uses) to be located on two sites in Lyme Green and Adlington under MBLP policy E5. Whilst this facility is not located on either of these sites, regard is however given to the allocation of this site for a waste management use in the CRWLP and for the reasoning above it is considered that this is acceptable in principle on this site.

The proposal would provide 40 full time positions which would be relocated from the existing business on Moss Lane in Macclesfield. This application would therefore retain these positions and assist in safeguarding the local economy. This supports the approach of the NPPF and CELPS, particularly policy SD1 and EG1 and MBLP policy E4.

Sustainable Waste Management Principles

CRWLP Policy 1 states that applicants should demonstrate how the development contributes to an integrated network of waste management facilities; enables waste to be disposed of in one of the nearest installations; maximise opportunities for transporting waste by sustainable means; protect environmental, economic, social and community assets; and optimise the use of previously developed or used land or buildings. The NPPW also states that potential new waste management sites should be assessed against criteria which include:

- the extent to which the site or area will support the other policies set out in the NPPW;
- physical and environmental constraints on development, including existing and proposed neighbouring land uses;
- the capacity of existing and potential transport infrastructure to support the sustainable movement of waste, and products arising from resource recovery, seeking when practicable and beneficial to use modes other than road transport.

<u>Waste hierarchy</u>

CELPS Policy SE11 expects proposals for waste management development to maximise opportunities for waste to be managed in accordance with the principles of the waste hierarchy whereby priority will be given, in order, to waste prevention, preparation for re-use, recycling, other recovery and finally disposal. This is reiterated in Policy 1 of CRWLP and the NPPW.

The waste to be received at the site would be dry, recyclable wastes from household, commercial and construction demolition sources. The facility would enable these wastes to be separated out for onward recycling or reuse. This would assist in driving waste up the waste hierarchy by prioritising recycling and reuse over disposal and would assist with overall reductions in residual waste which accords with the broad approach of NPPW, CRWLP and CELPS policy SE11.

Proximity Principle

Planning should provide a framework in which communities and businesses are engaged with and take more responsibility for their own waste, including by enabling waste to be disposed of or, in the case of mixed municipal waste from households, recovered, in line with the proximity principle whereby waste is managed close to its place of production (NPPW). The NPPW and accompanying guidance in the NPPG makes it clear however that planning policy does not require waste to be managed using the absolute closest facility to the exclusion of all other considerations. New facilities need to serve catchment areas large enough to secure the economic viability of the facility; and the ability to source waste from a range of locations/organisations helps ensure existing capacity is used effectively and efficiently, and importantly helps maintain local flexibility to increase recycling without resulting in local overcapacity.

Whilst there is no information detailing the end location of the sorted waste, the Cheshire East Waste Needs Assessment recognises that, given the need for growing reliance on waste management facilities outside of Cheshire East administrative area to manage some of the waste generated within the authority, provision of accessible/ proximate transfer capacity to receive loads that do not move directly to their end destination is of growing importance. This application proposes the relocation of an existing business approximately 2.7 kilometres to the south west of its current location which would enable the facility to continue to serve its existing customer base and provide a waste collection service to residents in Macclesfield and their surrounding 16 kilometre catchment area. As such it is considered that the proposal would accord with the approach of NPPW and CELPS policy SE11, along with the approach of CRWLP and would contribute to a network of waste management facilities.

Need for waste management facility

Objectors have raised concerns that there is no demonstrable need for this facility. Policy SE11 of the Local Plan Strategy (LPS) requires the sustainable management of waste. This includes the provision of sufficient opportunities for waste management facilities in appropriate locations to meet predicted needs. The NPPW states that applicants should only demonstrate the quantitative or market need for new or enhanced waste management facilities where proposals are not consistent with an up-to-date Local Plan. In such cases, waste planning authorities should consider the extent to which the capacity of existing operational facilities would satisfy any identified need. CRWLP Policy 2 also states that the Waste Planning Authority will consider the planning objections and planning benefits of all applications for waste management facilities. Where the material planning objections outweigh the benefits need will be considered and if there is no overriding need for the development the planning application will not be permitted.

This proposal is not seeking to develop a new facility which would need to be examined in respect of quantitative or market need. This application would relocate a large part of an existing business to a new site and does not propose any additional waste management capacity in excess of what is provided at the existing site at present. The existing capacity of this business has been included in the Cheshire East Waste Needs Assessment Update 2019 and the conclusions of this assessment will be used to inform decisions on future planning policies for waste management facility provision in the authority. The proposal is therefore considered to accord with the approach of the NPPW, CELPS and CRWLP.

Highway Impacts

The suitability of sites for waste facilities should be assessed against the capacity of existing and potential transport infrastructure to support the sustainable movement of waste (NPPW). Consideration should also be given to the suitability of the road network, and the extent to which access would require reliance on local roads. Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe. (NPPF paragraph 109).

Similarly Policy 28 of CRWLP requires new waste management facilities to ensure that:

- the level and type of traffic generated will not exceed the capacity of the local road network and will not have an unacceptable impact on amenity or road safety;
- access arrangements are adequate for the nature, volume and movement of traffic generated by the proposal and there is adequate provision for on-site vehicle manoeuvring, parking and loading/unloading areas;
- any unacceptable impacts can be satisfactorily mitigated by routeing controls or other highway improvements;

MBLP policy DC6 also requires new development to ensure that (amongst others) provision is made for manoeuvring vehicles and sufficient space is available to enable parking and unloading off street.

Parking, internal movement and sustainable modes of travel.

The applicant has provided swept path analysis which demonstrates sufficient space for long articulated vehicles to turn within the site and adequate levels of parking for staff and HGV/RCVs through the provision of 24 staff parking spaces, 3 disabled parking bays, and overnight parking for 6 HGVs. The Strategic Infrastructure Manager considers that the level of parking is acceptable. The site is also considered to have a good level of accessibility by all major non-car modes of transport as it is accessible on foot and by public transport from Macclesfield town centre and on Hurdsfield Road, and is located close to a national cycle network.

Vehicular access to the site

Significant concern has been raised by local residents and the Town Council regarding the proposed use of Withyfold Drive and surrounding local residential roads for HGVs accessing the site due to the narrow nature of the roads and extent of on-street parking. There is concern over potential for increased congestion, highway safety for other road users, cyclists and pedestrians and damage to highway verges. Objectors note that there are highway weight restrictions, one-way systems and traffic calming measures in place which indicates the unsuitable nature of the local roads to HGV traffic.

Withyfold Drive is a cul-de-sac off Nicholson Avenue/Garden Street which provides access to the application site along with other commercial properties situated on the southern section of Hurdsfield Industrial Estate. The carriageway width of Withyfold Drive varies along its length but is generally in the region of 6m which is sufficient for two HGVs to pass one another. A number of properties on Withyfold Drive have driveways, however some on-street parking does take place on this and other connecting roads, particularly on the adjoining roads with terraced properties.

The planning application boundary includes both the existing access road connecting to Withyfold Drive along with an access to the north through the former Spectus Systems site

connecting to Snape Road and onto the Silk Road via Queens Avenue. The proposed layout plan also identifies a third gated access point on the southern boundary of the site into the adjacent former Barracks Mill site however a connection to the highway from this access point has not been included in the application site boundary. The applicant has explored a number of alternative access options to avoid the use of Withyfold Drive and connecting residential roads. Each option is discussed below.

Access via Snape Road
Use of the existing gated access on the north western boundary of the site which connects to Snape Road was granted permission for vehicles during out of hours operations under permission 07/1578P. This access falls outside of the applicant's ownership and there are no legal rights of access over the land. The property is occupied and the applicant has entered into detailed discussions with the company with a view to securing access via this route; however the company is unwilling to permit access for the waste vehicles across the site during the daytime therefore this is not considered a feasible option.

Access through Barracks Mill
A historic right of way connects to Black Lane over the former Barracks Mill site, however the applicant does not consider this a viable option as the site has permission for a retail park which has now been implemented and a route cutting through the site would also impact the retail park proposals.

The approved scheme for the redevelopment of Barracks Mill includes a new access spur directly off the Silk Road, and the applicant has already secured an in-principle agreement to utilise that access should this application be approved. This option however has a number of constraints. There is a drop in ground levels of approximately 7.5m from the application site boundary down to the proposed spur road and an electricity pylon in its immediate vicinity. It would potentially require a large access ramp on a steep incline which would need to cut through the embankment, landscaping and retaining wall proposed in the Barracks Mill scheme. It would potentially impact the number of parking spaces provided in that scheme and require a significant redesign of the car park and internal vehicular access arrangements in the north west section of the Barracks Mill site. Likewise, the design of the ramp and internal access would be constrained by the electricity pylon. If a suitable design could be agreed, this would present a potential preferred option as it provides a link directly onto the Silk Road. It is noted however that the developers of that site do not consider that the use of the retail development is compatible with the proposed HGV movements from the waste site and, given this is not an existing consented HGV access for the application site, are unwilling to negotiate further.

Other alternative access options
The applicant has engaged in detailed discussions over the use of Melville Road via land which is owned by the Electricity Board (Electricity North West) however the company has advised that they would not support this option given the infrastructure assets which traverse this area of land (HV cables and ducts) and the fact that they would require unhindered access for maintenance purposes. As a result of this, this access was not deemed viable as an alternative.

<u>Impact on Withyfold Drive and surrounding local roads</u>
The applicant identifies that Withyfold Drive was used as the main access for the vehicle recovery depot which operated at the site from 1996 until June 2019.

This proposal would utilise a fleet of articulated vehicles, 8-wheeled tipper vehicles, refuse collection vehicles (RCVs) and HGV skip vehicles. The majority of waste would be delivered to the site in bulk articulated HGVs and refuse collection vehicles (RCVs) which would be spread across the day to avoid peak times. A total of 70 HGV movements (35 in, 35 out) per day is proposed which equates to 6 HGV movements per hour (3 in, 3 out). There would also be other movements associated with employee and light commercial vehicles. In total, the proposal would generate 122 movements per day (61 in, 61 out). During weekends the number of trips would be significantly lower as operations mainly involve processing of material on site with lower deliveries.

The applicant highlights that there is an established lawful use of the site as a vehicle recovery depot which could be brought back into operation at any time without requiring planning permission and has provided an estimation of the number of vehicle movements that could be generated by an alternative occupier based on three distinct uses of the site for a commercial warehouse, a B1 office use and a vehicle repair garage, in order to reflect the existing built development on the site. They estimate that these uses could generate up to 368 vehicle movements, of which 85 could be HGVs, and as such this proposal would result in a reduction of up to 246 vehicle movements per day compared to what could lawfully be carried out by an alternative occupier.

Whist it is accepted that there is a lawful established use on the site as a vehicle recovery depot, it has not been established whether three distinct, separate uses of land for commercial warehousing, offices or vehicle repair could lawfully be carried out on the site without requiring planning permission. As such, the use of that position as the basis to estimate potential future vehicle movements from an alternative site occupier is not accepted.

The Strategic Infrastructure Manager recognises that the proposed access is via a residential road that would normally not be suited to HGV traffic, although there are other commercial units that use Withyfold Drive for access, and considers the fallback position of the former use of the site to be an important factor in the assessment of the proposal.

The applicant has presented correspondence from the former owner of the site which claims that the vehicle recovery depot generated 172 vehicle movements a day (86 in, 86 out) of which 72 (36 in, 36 out) was associated with HGVs, and on that basis, this proposal would result in a decrease of 50 vehicle movements a day (25 in, 25 out) including 2 HGVs (1 in, 1 out), including reductions of 9 movements in the Am peak hour and 12 movements during the PM peak hour. Concern has been raised by objectors that the stated number of vehicle movements by the former owner is not reflective of the actual numbers that were generated when the site was in operation and they were higher than claimed. There is no way to categorically prove or disprove the figures quoted.

A separate ‘TRICS’ assessment has therefore been undertaken by the Strategic Infrastructure Manager based on a generic industrial site with the same floorspace in an attempt to establish the potential traffic movements that a vehicle recovery depot could generate. This identifies similar figures to those quoted by the former owner and therefore the Strategic Infrastructure Manager accepts that the proposal may potentially result in a small net reduction in traffic generation compared to levels of traffic that may have been generated by the vehicle recovery depot.

Concern has also been raised by objectors that a large proportion of vehicles generated by the former vehicle recovery depot did not use Withyfold Drive but instead used the access to the north through Snape Road. There is no historical data available to verify this, however it is noted that the planning permission limited the use of the Snape Road access point to the hours outside of the periods 0800 to 1800 hours Monday to Friday and 0800 to 1400 hours Saturday; and it is likely that during these times the number of vehicle recovery trips would have been lower as there are less vehicles on the road during evening/night times and at weekends.

Given that there is a legitimate lawful use of the site for vehicle recovery and the highway impacts of this proposal are identified as potentially being no greater than that which was generated by the previous use, the Strategic Infrastructure Manager does not consider that there are any grounds to recommend refusal of the application based on highways impacts and therefore no objections are raised. Conditions are recommended in respect of controlling the number of vehicle movements and limiting the length of the permission to a temporary period of three years which are considered acceptable.

Objectors have also raised concerns regarding highway safety, conflict with HGVs, risk to pedestrians and other vulnerable road or footpath users, and potential for damage to the highway verge. The transport assessment identifies that the access off Withyfold Drive has been shown to operate safely with no records of accidents on Withyfold Drive or within 50m of the Nicholson Avenue/Garden Street junction over the last 5 years. Equally no concerns have been raised by the Strategic Infrastructure Manager in respect of highway safety; and given the proposed number and type of vehicle movements compared to the previous use of the site, it is not considered that there would be any increase in potential risk, or any potential for increased damage to the highway verge.

With respect to potential for cumulative effects, it is noted that an application for the temporary use of a site on land off Withyfold Drive as a compound for Network Rail is currently awaiting determination. No significant cumulative impacts are anticipated with the operation of this site as, aside from initial set up and demobilisation period, the proposal would involve a very small number of HGVs (around 3 per week).

The NPPF makes it clear that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe. Taking into account all of the above points and the professional assessment of the Strategic Infrastructure Manager, it is considered that it would be difficult to demonstration a conflict with planning policy on highway impacts and therefore the authority would be unlikely to be able to sustain a refusal on highway grounds.

Control of pollution

New development should be located and designed to ensure there are no harmful or cumulative impacts upon air quality, noise and dust or any other pollution which would unacceptably affect the natural or built environment or detrimentally affect amenity or cause harm. Developers will be expected to minimise and mitigate the effects of pollution arising from the development or as a result of the development (including additional traffic). Where adequate mitigation cannot be provided, the development will not normally be permitted (CELPS policy SE12).

Policies 24 and 26 of CRWLP do not permit applications for waste management facilities where the impact of dust or odour would have unacceptable impacts on the amenity of nearby

residents or occupiers of land and policy 23 does not permit proposals where it would give rise to unacceptable levels of noise pollution. MBLP policies DC3 and DC4 contain similar provisions.

Noise, Disruption and Vibration Impacts

A noise assessment has been submitted which measures background noise levels at locations representative of the nearest noise sensitive receptors to the site on Withyfold Drive, Queens Avenue and at properties beyond the Silk Road.

Noise from on-site operations

The external site activities including waste deposit, loading and handling, movement of empty skips and pallets have the potential to generate noise impacts. Some acoustic screening is provided to the residential receptors to the south and east of the site due to the intervening commercial buildings; whilst the receptors to the west are screened by the A523 which is approximately 4m higher than the adjacent residential properties. Noise levels at the nearest receptors from typical daily external operations carried out on the site are assessed as being between 2 and 10 decibels lower than the worst case background noise levels, and would not exceed the recommended technical noise limits and guidance for internal spaces and outdoor living areas. The noise from on-site activities is therefore not anticipated to cause any unacceptable levels of disturbance and the Environmental Health Officer agrees that these impacts could be appropriately controlled and mitigated to minimise disturbance to the nearest residents.

Noise impacts from passing vehicles

The Environmental Health Officer initially recommended refusal due to concerns that the scheme would generate significant HGV movements and, given the narrow road widths and close proximity of dwellings to the highway, this could interfere with the use and enjoyment of the properties, thereby materially affecting residential amenity and quality of life. There was also concern over additional noise associated with large vehicles manoeuvring around parked vehicles.

The applicants noise assessment identifies that the noise levels from a skip vehicle would be between 2 and 7 decibels lower than the typical road recovery vehicle used by the previous occupier. In respect of noise from passing HGVs, the noise assessment identifies that:

- predicted noise levels at the façade of the closest residential dwelling (based over an hourly period) would be 41 decibels which is well within the measured background noise level at this location (50-51 decibels) and would also not exceed the recommended level in technical guidance for outdoor living;
- predicted noise levels in rear gardens would be even lower (due to screening provided by the property) and would also be well within relevant guidance;
- Internal noise levels would be 26 decibels which is below the recommended threshold of 30 decibels for bedrooms and 35 decibels for living rooms and this also takes account of any open windows.
- Predicted noise levels in the front gardens of properties on roads used to access the site are 47.6 decibels, which is below the existing measured background level and within the 50 decibels threshold for external amenity areas identified in relevant guidelines.

The Environmental Health Officer however remains concerned that noise from vehicles slowly manoeuvring around parked cars in low gears may be more noticeable to residents and could still impact their amenity in terms of opening windows and enjoying garden areas, and that noise impacts could be more significant for those living in terraced properties that abut the pavement such as properties on Garden Street and Steeple Street.

In response the applicant notes that the acoustic assessment is based on a worst-case scenario of vehicles travelling in a low gear at slow speed and even when applying a longer timescale to pass properties, the predicted noise levels from vehicles remain within relevant guidelines and below the closest background sound level measured within the area. They also state that Withyfold Drive, Nicholson Avenue and Queens Avenue would be used to access the site, and vehicles would not utilise terraced streets as they would be more difficult and take more time to navigate. The applicant proposes that the routing of vehicles is included within a noise management plan to be secured by planning condition, which would also identify a range of daily operational measures that could be implemented on site in order to ensure noise is managed effectively.

Despite these points, the Environmental Health Officer remains concerns that the use of residential roads by waste vehicles would have an impact on residential amenity. Overall however they accept that, as the control of noise from traffic on the highway is not within the remit of noise nuisance legislation available to Environmental Health, their officers could not uphold this matter at any planning appeal and therefore have withdrawn their recommendation of refusal. Should planning permission be granted they recommend conditions are imposed in respect of:

- implementing the mitigation identified by the acoustic assessment;
- maintenance of the mitigation throughout the use of the development;
- controls over the hours of operation;
- controls over vehicle numbers;
- controls over white noise reverse alarms and chain socks;
- Submission of an updated noise management plan to include management arrangements for vehicles when approaching the site through the residential streets such as voluntary speed restrictions, and controls over the use of horns.

National planning policy requires new development to be appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise. Potential adverse noise impacts from new development should be mitigated and reduced to a minimum and should avoid giving rise to significant adverse impacts on health and the quality of life. The NPPG goes on to advise that, in respect of noise impacts, consideration should be given to:

- whether or not a significant adverse effect is occurring or likely to occur;
- whether or not an adverse effect is occurring or likely to occur; and
- whether or not a good standard of amenity can be achieved.

This includes identifying whether the overall effect of the noise exposure is, or would be, above or below the "significant observed adverse effect level" (SOAEL) and the "lowest observed adverse effect level" (LOAEL) for the given situation. The applicants noise assessment does

not provide information on how noise emissions from the proposal would perform in respect of these two levels and it is therefore difficult to assess compliance with the NPPF/NPPG on that point.

Nonetheless, planning policy also requires consideration of whether a good standard of amenity is achieved and does not support proposals that would present detrimental impact on amenity. The subjective nature of noise means that there is not a simple relationship between noise levels and the impact on those affected and considerations go beyond how the predicted noise levels perform in relation to relevant technical guidance. It depends on how various factors combine in any particular situation including the absolute noise level, time of day it occurs, whether it is intermittent and the tonality of the noise (NPPG) along with the character of the area, nature of the activity, and other influencing factors etc.

The points made by the applicant and the views of the Environmental Health Officer are all noted, and despite the conclusions of the noise assessment, clearly there remains some disagreement over the potential noise impacts of the proposal and some concerns remain that noise from passing vehicles could cause detrimental impacts on residential amenity which would conflict with CELPS policy SE12, CRWLP policy 23, MBLP policies DC3 and DC13, and the approach of the NPPF and NPPW. This is considered in the overall planning balance.

Vibration Impacts

With respect to vibration, the assessment identifies that the risk is low based on the following:

- ground-borne vibration associated with vehicle movements is highly unlikely to cause structural/cosmetic damage to residential dwellings off the proposed access routes;
- a number of properties are fronted by driveways which act as a buffer providing some level of attenuation;
- based on the number of vehicle movements proposed per hour passing residential dwellings and taking approximately 10 seconds to pass the property, this would equate to 1 minute per hour at which vibration may be just perceptible;
- given the proposed hours of operation the risk of considerable levels of annoyance is highly unlikely
- the previous use of the site and associated baseline of recovery vehicles would likely have provided similar levels of ground-borne vibration.

No concerns are raised by the Environmental Health Officer with regards to vibration impacts; as such the impacts from vibration are considered to be acceptable.

Dust, mud and debris

There are no proposals to mechanically screen/sort or treat waste on the site through the use of crushers, trommel, screening equipment etc which will limit dust generation on the site, and all waste would be sorted within an enclosed building. The main dust generating activities would be associated with the external storage of inert waste and the potential for soil and mud on the external yard areas. A range of mitigation measures are identified to help control any dust emissions. This includes:

- spraying of stockpiles during adverse weather conditions
- use of water bowser
- sheeting of stockpiles where necessary

- minimising drop heights and careful waste handling measures
- use of road sweeper

Subject to these measures being applied, the potential for adverse dust impacts are considered to be low. The applicant also identifies that a complaints procedure would be operated which would address any issues on site. It is noted that there would be appropriate controls in place on the Environmental Permit to ensure dust impacts are adequately managed. With respect to control of mud and debris, the applicant advises that each vehicle would be inspected prior to exiting the site to ensure no mud or debris is carried out onto the highway. Any deposits of material on the access road or public highway would be cleared immediately and a road sweeper would be in operation where required.

The Environmental Health Officer raises no concern regarding dust, mud or debris impacts subject to the mitigation measures identified by the applicant being implemented which could be secured by planning condition. Subject this being secured, it is considered that the proposal would not present any significant adverse impact on amenity and would accord with CELPS Policy SE12, CRWLP policy 24 and MBLP policy DC3.

Odour and control of waste

There are concerns from objectors over the ability to control the type of waste handled at the site. There are also concerns over odour emissions and that this could be worse due to the location of the site in the Bollin Valley.

The main source of odour would be from the handling and storage of dry, mixed wastes which could contain some limited fine organic materials which can produce an odour. Green waste would also be accepted on the site which has the potential to decompose and generate some odour.

Good working practices would be adopted on site to control odour which includes low storage volumes and strict turnaround of mixed biodegradable wastes being observed; any malodourous waste deposited on site would be stored in a sealed skip and removed from site, and all mixed wastes would be stored and sorted within a building. Odour would also be monitored twice daily to ensure any issues are addressed. The Environmental Health Officer raises no concerns regarding odour subject to the implementation of odour mitigation being secured by planning condition.

The facility would require an Environmental Permit which would be regulated by the Environment Agency. This would include controls on the site activities to ensure that all appropriate preventative measures are taken through the application of best available techniques to ensure no significant pollution is caused. This would include limits on the nature and quantities of waste permitted at the site, controls over waste handling and processing procedures, compliance with an environmental management plan and controls over dust and odour emissions. The applicant identifies that the waste would be subject to inspection before being deposited in the building and any unsuitable wastes would be returned to the producer or placed within a suitable container in an area of sealed drainage to await removal. No hazardous, liquid or clinical wastes would be accepted at the site and strict identification and quarantine procedures would ensure any non-conforming wastes would be dealt with appropriately without risk to human health or the environment.

An objector has questioned whether noise and odour has been assessed in relation to the Anti-Social Behaviour, Crime and Policing Act 2014. With respect to this point it is noted that the impacts of noise and odour have been assessed against the requirements of national and local planning policy, taking into account the relevant technical guidance and advice of the Environmental Health Officer. This, along with the Environmental Permitting regime would address the impacts of the proposal on human health and the environment. Any concerns relating to anti-social behaviour would be appropriately addressed by other legislation or by the police as relevant.

Air quality – vehicle emissions

The nearest Air Quality Management Area (AQMA) is located on Hibel Road approximately 0.5km from the site. The predicted number of HGV movements associated with the proposed development is identified as less than that which would be generated by the previous use. As such the Environmental Health Officer advises that the relevant criteria for requiring an air quality assessment of vehicle emissions has not been met. The officer also notes that not all of the vehicle movements would be routed through that AQMA given the other alternative routes available from the site.

The Environmental Health Officer advises that whilst this scheme itself is of a scale which would not require an air quality impact assessment, there is a need for the Local Planning Authority to consider the cumulative impact of a large number of developments in a particular area. In particular, the impact of transport related emissions on Local Air Quality. Macclesfield has three Air Quality Management Areas and, as such, the cumulative impact of developments in the town is likely to make the situation worse, unless managed. As such no objections are raised subject to conditions requiring a Staff Sustainable Travel Information Pack detailing sustainable transport options serving the site, locations of secure bicycle storage on site and detailing car sharing incentives to be agreed with the Council and then subsequently issued to all members of staff on operation of the site. Additionally, a condition is recommended in respect of securing electric vehicle charging points on the site.

Given these considerations and subject to the imposition of these conditions it is considered that the proposal would not present adverse impacts on air quality and would accord with CELPS policy SE12, MBLP policy DC3 and the approach of the NPPF and NPPW.

Litter, control of pests, risk of fire and light impacts from vehicles

Good site management practices would be implemented on site to address any potential for litter or pests and to ensure safe operational conditions are implemented to limit any risk of fire. Daily inspections would be carried out for the presence of vermin and good waste handling procedure would reduce the risks of pests and scavenging animals. All waste would be handled and stored within a building which would reduce the potential for wind-blown litter to escape. Regular site inspections and litter picking would also be carried out around the site boundary. Similar requirements would also be in place on the Environmental Permit and this would also require effective on site management, handling of liquids and controls on waste types and handling procedures to limit any fire risk. As such it is considered the scheme would accord with CRWLP policy 25 along with the NPPF and NPPW.

Impact on health

Concern is raised over the potential health implications of the proposal from vehicles, processing waste, inhalation of dust, risk of disease and stress of the proposal on residents. Objectors consider that a health impact assessment is necessary.

In considering planning applications, the NPPW advises that local planning authorities should seek the advice of the relevant health bodies. Health impact assessments should be used where there are expected to be significant impacts and advice should be sought from the Director of Public Health (NPPG).

The health and well-being implications of the proposal have been considered as necessary in each of the individual environmental assessments and by the technical consultees and this is addressed in the relevant sections of this report. It is also noted that the operator would be required under the Environmental Permit to operate in a way that ensures there is no risk of significant pollution from the site. The Public Health Officer raises no objection. Recommendations are made regarding enclosing the site to mitigate noise, odour, wind-blown material and pests, and controlling the hours of vehicle movements and sheeting of vehicles; these matters are addressed in the relevant sections of this report and mitigation is identified as necessary following the advice of the relevant technical consultee.

With respect to objector concerns over potential for silica dust causing a health concern, given the nature of activities proposed on the site with no substantial processing of waste, it is considered that adverse impacts from exposure to fine dust are unlikely. Silica dust in relation to human health exposure is primarily the remit of the Health and Safety Executive and controlled by separate legislation. Particulate pollution including silica dust from waste transfer stations is also regulated by the Environment Agency who would impose controls as necessary to ensure that no dust deposits go beyond the boundary of the site.

With respect to concerns over increased harm to well-being and stress from the proposals, any planning application has the potential to cause increased stress however it is accepted that there is the potential for some degree of increased stress as a result of this proposal, particularly associated with the movement of vehicles past residential properties. The potential impact of stress on the overall wellbeing of local residents is difficult to measure and therefore assess and mitigate, however the impacts on overall quality of life to residents is considered in the planning balance.

Water Resources and Land Contamination

CELPS Policy SE13 requires new development to reduce flood risk and avoid adverse impacts on water quality and quantity by directing new development to the lowest risk of flooding and requires new development to seek improvements to the current surface water drainage network and be designed to manage surface water sustainably.

CRWLP policy 18 also states that applications will not be permitted where:

- there would be an unacceptable impact on groundwater quality, resources or supply and/or surface water quality or flow which cannot be overcome by mitigation measures;
- it would result in the unacceptable culverting of an existing watercourse or have an unacceptable detrimental impact on the ecological value of a water feature; or;
- there would be an unacceptable risk from flooding affecting the site of the development; or

- the proposal would create an unacceptable risk of flooding elsewhere, particularly where the development involves the raising of ground levels, unless appropriate measures to mitigate the flood risk and safely manage any residual risks are provided.

The site lies within flood zone 1 and is less than 1ha in size therefore a flood risk assessment is not required. With respect to water quality it is noted that the site is located upon a principal aquifer and source protection zone for a nearby public groundwater supply.

There would be no changes to the proportion of impermeable area at the site or to the general surface water and foul water drainage arrangements. All site drainage from hard surfaced areas currently drains to a combined surface/foul sewer, whilst all unsurfaced areas drain to ground. Runoff from the new buildings would drain to the existing surface water drainage system on site and the buildings would sit upon a new concrete surface which would ensure that the buildings storing wastes are situated on impermeable surfaces with sealed drainage. A new surface water drainage channel is also proposed to drain the surrounding tarmac surface which would be connected to the existing surface water drainage system. With respect to sustainable drainage measures, the scheme proposes rainwater harvesting butts on the new buildings where possible however any potential for significant modification of the existing drainage to incorporate other sustainable drainage methods is constrained by the presence of buried services which cross the site.

No objections are raised by the Environment Agency subject to a condition for a scheme of foul drainage and surface water. The Flood Risk Manager supports this request and also recommends a condition in respect of a detailed strategy and design for surface water runoff from the site. Subject to the imposition of these conditions, the scheme is considered to accord with CELPS policy SE12, SE13 and CRWLP policy 18.

Land contamination
In order to control any potential for contamination on site, the surface would be inspected daily and any spillages would be cleared immediately. Any wastes that give rise to contamination would be removed from site. The fuel tank on site is stored on a bunded impermeable area and as such there are unlikely to be risks to human health or controlled waters from these contaminants. The previous use of the site presents a medium risk of contamination being mobilised during construction which could pollute controlled waters and planning conditions are recommended by the Environment Agency and Environmental Health Officer to address this risk in respect of securing a site remediation strategy and verification report along with measures to address unexpected contamination. Subject to the provision of these conditions, the proposal is considered to accord with MBLP policies DC19, DC20 and DC63, CELPS policy SE13 and CRWLP policy 18.

Land stability and impact on utilities
Objectors have raised concerns over potential for subsidence and land instability. There are no significant ground engineering works proposed which could pose potential risks of ground movement to the site or adjacent land. The site lies within the Macclesfield Coal Consultation Zone. The site is classified as a ‘Development Low Risk Area’ where past coal mining activity has taken place at sufficient depth that it poses low risk to new development. Standing advice is provided by the Coal Authority to be included on the decision notice.

There is an electricity pylon directly to the south west of the site and the site is traversed by 4 large power lines. National Grid have been consulted and raise no objection to the proposal in relation to impacts on the overhead lines.

The site is underlain by a number of high pressure and low pressure gas transmission pipelines. Cadent Gas support the proposal subject to the provision of an 8m easement under the route of the high pressure gas mine in the north eastern section of the site within which there should be no storage of materials or permanent structures. The proposed site layout plan currently identifies part of the external concrete storage bays in this location. A revised proposed site layout plan with this section of storage bay excluded from use could be secured by planning condition. The pipelines are also classified as major hazard pipelines and as such the Health and Safety Executive have been consulted on the application. They do not advise, on safety grounds, against granting permission in this case.

Landscape, Visual Impacts and Design
Policies 12 and 14 of CRWLP do not permit development which would have an unacceptable impact on the landscape and/or townscape and visual impact.

The site is located in an industrial area, and is surrounded by similar industrial and commercial buildings and land uses, therefore the proposed buildings and external machinery on the site would reflect the character of the surrounding industrial uses and the buildings are considered appropriate in terms of scale, massing and design to reflect the setting of the site and wider surroundings. The nearest views into the site from receptors would be from Withyfold Drive and views of the external site operations would largely be screened by the adjacent commercial buildings and existing workshop on the site; as such no adverse impacts are anticipated. There would be long distance elevated views of the site from the Barracks Mill site and surrounding land uses. New floodlighting is proposed in addition to the existing lighting on site however it would be located in the northern section of the site and screened by the existing buildings and wider commercial buildings, and trees on the site boundary. The site already benefits from a large belt of mature planting on the western boundary which provides screening from the Silk Road, and further strips of mature trees are located on the northern and eastern boundary. Additional landscaping could be secured by planning condition to provide some screening for long distance views of the site. Concern has been raised over the potential for glare and flashing lights from HGVs and the loss of privacy from passing vehicles. Given the proposed number and type of vehicle movements, the potential for flashing lights from passing vehicles would be likely to be less than that generated by the previous users of the site and not likely to be significant. No concerns have been raised over these issues by the Environmental Health Officer. On this basis, it is considered that the proposal would accord with policies 12 and 14 of CRWLP and the approach of the CELPS and NPPW.

With respect to concerns regarding potential overlooking from passing HGVs, it is noted that on Withyfold Drive, due to the natural slope of the land downwards towards the south west, houses on that side of the road are set quite low relative to the road with upstairs windows potentially at the cab level of a HGV and there is therefore more potential for glimpsed views into those properties. Such impacts are likely to have been similar to those generated by the previous occupier and have previously been considered acceptable in the grant of permission for the recovery depot on the site.

Ecology

The area of land to the west of the site bordering the Silk Road comprises predominantly scrub vegetation and a tree belt which may have some ecological value. The proposals have been designed to ensure there are no adverse impacts on this area. The western boundary has a grass strip of up to 6 metres which would be retained as part of the proposal however no landscape planting is proposed in this area due to the pipeline easement and overhead power line restrictions. The proposed removal of the temporary building is not considered to impact upon roosting bats as its steel and PVC construction would make it unsuitable but roosting habitat.

The Nature Conservation Officer raises no objections and recommends conditions in respect of protecting breeding birds and a strategy for incorporating biodiversity features into the proposal for roosting bats and nesting swifts. As such, the scheme is considered to accord with CELPS policy SE3 in that the proposals would not negatively affect nature conservation interests and may present some positive benefit. It would also accord with CRWLP policy 17; along with the approach of the NPPF and NPPW.

Forestry

There are mature trees located on the western site boundary however the proposed waste sorting building would at its closest point be approximately 12 metres from the site boundary and the existing concrete bays are approximately 28 metres away, as such no adverse impacts on the trees are anticipated. Planning conditions could be imposed requiring tree protection measures during any construction works.

Other issues

Objectors have raised concerns over negative impacts of a waste management facility on adjacent businesses and any future development of the area. The NPPW identifies that industrial sites are acceptable locations for waste management facilities. The principle of a waste facility on this site has been accepted by virtue of the allocation in the CRWLP. The corresponding Inspectors Report into the Plan states that the waste management uses would not be incompatible with existing activities on the Hurdsfield estate, and a modern, well-designed and operated waste management facility on this site should be capable of contributing positively to the general area. The Inspector concluded that subject to all environmental considerations being satisfied, a waste management facility in this location would neither threaten the current vibrancy and vitality of the estate, nor deter future investment or cause any planning blight or stagnation in terms of the future viability of the estate or benefit to Macclesfield town. These conclusions are considered to remain applicable to this proposal.

The potential impacts of the proposal including any cumulative impacts on the wider area have been taken into account as necessary in the individual technical assessments and mitigation has been identified to protect against any adverse impacts on neighbouring land or communities. The impacts of the proposal on adjacent businesses and future proposed development is therefore considered acceptable.

Objectors have raised concerns that more people working at home will result in greater numbers affected. The assessments consider the impact at the nearest receptor (each receptor being a property not an individual) therefore this would not have any implications on the conclusions drawn.

With respect to reference in objector submissions to previous alleged enforcement breaches on the applicants existing waste site and risk of future breaches of planning control or future expansion of the site, this application must be considered on its merits regardless of any previous enforcement investigations and any future plans of the operator would be subject to further applications for planning permission as necessary.

With regard to any potential health and safety impacts from the use of plant, the site would have to adhere to any relevant Health and Safety Executive guidance and legislation.

Concern is expressed regarding the scope and conclusions drawn by the technical assessments. The assessments have been reviewed and examined by relevant technical consultees and the conclusions have been accepted. Equally concerns are raised that the public consultation should be delayed due to the Covid-19 pandemic and the extent of public consultation was not sufficient. It is noted that the public consultation undertaken on this application reflects legislative requirements and adopted Council protocol for processing planning applications and the measures adopted by the Council for processing planning applications during the pandemic.

Objectors have raised concerns over potential for antisocial behaviour from HGV drivers. Any antisocial behaviour is a matter for the Police to investigate. Concerns have also been raised regarding financial implications of the proposals to residents and the potential impact on house prices however this is not a material planning consideration.

Conclusion

The principle of a waste management facility on this site has been considered acceptable in planning policy by virtue of the allocation of this site in the Cheshire Replacement Waste Local Plan and the type of waste facility proposed is considered appropriate for that allocation. Whilst an assessment of alternative sites is not required by planning policy in this case, nonetheless this has been undertaken and it has demonstrated that none of the range of sites considered are suitable or available. The only other Preferred Site identified in the Plan for a waste transfer station is not available and forms part of CELPS Strategic Site LPS13: South Macclesfield Development Area. As such the proposal accords with CRWLP policies 4 and 5. It is also considered that a waste management use is broadly compatible with the MBLP employment allocation E4. The proposal is located on the edge of an industrial estate on previously developed land and utilises existing buildings which accords with the locational criteria identified in the NPPW.

The proposal accords with a range of sustainable waste management policies in CRWLP and NPPW in that it would enable an existing waste management facility to continue to operate and provide a service in which dry, recyclable waste from households, commercial and construction demolition sources in Macclesfield and the surrounding local area is sorted and separated out for onward recycling or re-use. It would enable waste to be disposed of in close proximity to its source and would maximise the amount of waste to be recycled or re-used. This would drive waste up the waste hierarchy and help to achieve national recycling targets, complying with national and European legislation. This would accord with the approach of the NPPW, CRWLP and CELPS policy SE11. No additional waste management capacity is proposed over that already provided in the current facility therefore a demonstration of quantitative or market need is not considered necessary to satisfy planning policy.

The impact of the proposal in relation to landscape, visual impact and design, flood risk and drainage, water quality, land contamination, land stability, utilities, vehicle emissions, litter, pests, forestry, and ecology is considered acceptable subject to a range of controls being imposed by planning condition and implementation of good site management practices.

The suite of planning conditions and controls under the Environmental Permit would ensure any dust, mud and odour impacts are minimised to an acceptable level and do not generate pollution beyond the site boundary. As such, the proposal would satisfy CELPS policy SE12, CRWLP policies 24 and 26, MBLP policy DC3 and the approach of the NPPW and NPPF with respect to dust, mud and odour impacts.

It has been demonstrated that the other potential vehicular access options are not viable for use in this proposal. Understandably local people are very concerned regarding the potential for detrimental adverse highway and safety impacts arising from HGVs and other commercial vehicles using residential roads to access the site.

The previous lawful use of the site is noted and in particular the following points are given due weight:

- The access has been shown to operate safely with no records of accidents on Withyfold Drive or within 50m of the Nicholson Avenue/Garden Street junction over the last 5 years;
- The site could be lawfully operated as a vehicle recovery depot, with no restrictions in relation to the number or type of HGVs permitted to use Withyfold Drive and other local residential roads;
- The Strategic Infrastructure Manager accepts that this proposal could potentially result in a small net reduction in traffic generation compared to that generated by the previous occupier, and on the basis of all these factors, does not consider that there are any grounds to recommend refusal of the application on highways impacts.

The NPPF makes it clear that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe; likewise CRWLP policy 28 requires new development to ensure the level and type of traffic generated does not exceed the capacity of the local road network, and does not have an unacceptable impact on amenity or road safety, and access arrangements should be adequate for the nature, volume and movement of traffic generated by the proposal.

When assessing the proposal against these policy requirements, given that this would be a time limited proposal for a maximum of three years, given the conclusions drawn over the traffic impacts compared to the previous use, the views of the Strategic Infrastructure Manager, and in view of restrictions that could be placed on vehicle numbers, it is considered that it would be difficult to sustain a refusal on highway grounds. Additionally, a temporary three-year permission would allow a trial period during which time the actual highway impacts of the proposal could be assessed, with an opportunity to review the situation should the operator decide to seek a further permission. As such subject to the imposition of the recommended conditions, it is considered that the proposal would not conflict with CRWLP policy 28, and the approach of the NPPF and NPPW.

Objectors have also raised significant concerns regarding the potential for large waste vehicles on narrow residential roads to generate significant noise, vibration and disruption and the potential for this to materially affect residential amenity, quality of life and associated stress.

The noise assessment has identified that the predicted noise levels at the façade of the closest residential properties, in garden spaces and internally would all remain within relevant thresholds in technical guidance. Likewise, predicted noise levels from HGVs manoeuvring around parked cars would also remain within recommended thresholds.

Despite these conclusions, it is clear that the Environmental Health Officer remains concerned that the vehicles could detrimentally impact the amenity of residents and the impacts could be more significant for those living in terraced properties that abut the pavement. The applicant maintains that HGVs would avoid terraced streets and vehicle routing arrangements could be secured by planning condition, in practice however, whilst the operator could encourage drivers to follow preferred routes, they would have very little control of the vehicles on the public highway, and there would be nothing preventing the vehicles from using those roads. It would be very difficult for the planning authority to enforce this effectively, therefore this cannot be relied upon and the concerns of the Environmental Health Officer are accepted.

The Environmental Health Officer does not consider that they could defend their concerns at appeal on the basis that noise from vehicles on the highway is not within the remit of statutory noise nuisance legislation available to Environmental Health.

Planning policy however requires consideration of impacts which are broader than statutory noise nuisance and requires a good standard of amenity to be achieved. Significant loss of amenity will often occur at lower levels of emission than would constitute a statutory nuisance, and it is therefore important for planning authorities to consider properly the loss of amenity from noise in its wider context. Whilst the noise assessment has demonstrated compliance with relevant technical guidance, noise management is a complex issue and the subjective nature of noise means there is not a simple relationship between noise levels and the impact on those affected, it will depend on how various factors combine in any particular scenario and considerations go beyond solely how the predicted noise levels perform in relation to relevant technical guidance.

In weighing up all these considerations, the fallback position of the lawful use of the site with no restrictions on vehicle movements or routing must be taken into account along with the conclusions of the Strategic Infrastructure Manager that the proposed level of traffic may potentially be slightly less than was previously generated by the former occupier, and the conclusions of the noise assessment.

This is clearly a very finely balanced case to consider and it must be noted that the lack of objection from the Environmental Health Officer and lack of quantifiable evidence to support their expressed concerns would make this a difficult argument to defend at a planning appeal.

Overall, however, the requirements of planning policy in terms of securing a good standard of amenity and the outstanding concerns of the Environmental Health Officer are given significant weight in the assessment of this application. Whilst it is accepted that commercial vehicles have previously used these residential roads to access the site, the residents have not experienced this level of disturbance and disruption for the past 2 years. This proposal would

result in HGVs and other commercial vehicles presenting further disruption and disturbance to those properties, and this would be in addition to that already generated by vehicles associated with the other commercial businesses currently operating in the area. This is likely to result in an unacceptable adverse impact on residential amenity, particularly for residents of Withyfold Drive, which is a narrow road with short front gardens, and for those in terraced properties which abut the road.

Whilst there are a number of benefits to this application in respect of supporting sustainable waste management principles, driving waste up the waste hierarchy, supporting an existing business and job retention, and providing a facility for the community to manage waste locally which accords with provisions in planning policy, this is not considered to outweigh the disbenefits presented by the proposal in terms of detrimental impact on residential amenity. As such it is considered that the proposal would conflict with policy SE12 of the CELPS, CRWLP policy 23, MBLP policies DC3 and DC13 and the NPPF.

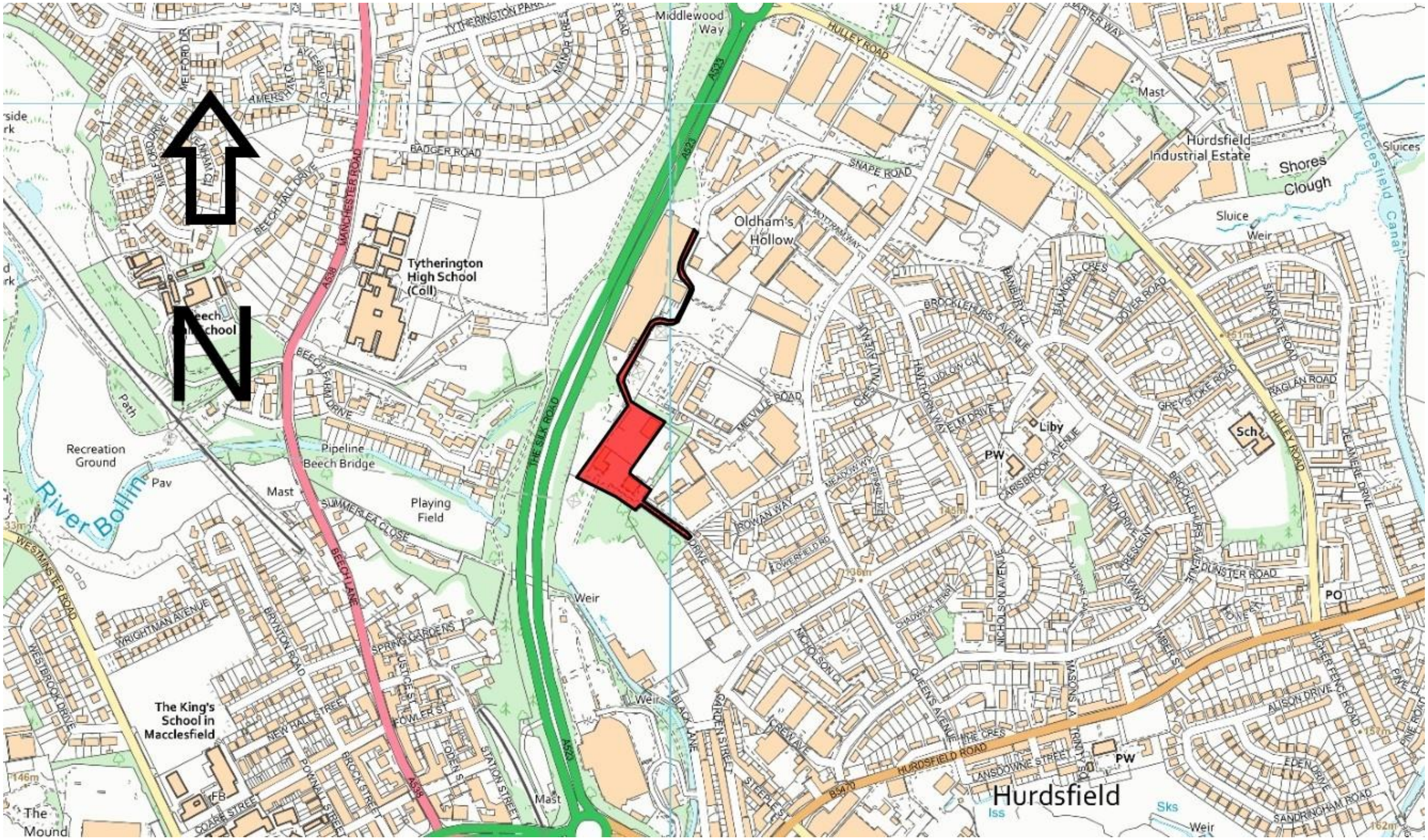
RECOMMENDATION

REFUSE for the following reasons;

1. **The proposed use of residential roads by HGVs and other commercial vehicles accessing the site would cause harm to residential amenity in terms of noise and disruption, and adversely impact on the quality of life for those residents. This would be contrary to policy SE12 of the CELPS, CRWLP policy 23, MBLP policies DC3 and DC13 and the NPPF.**

Application for Full Planning

RECOMMENDATION:


N
Middlewood Way
HULLEY ROAD
TYTHERINGTON PARK
MANOR CRES
BADGER ROAD
SNAPE ROAD
MANCHESTER ROAD
A538
A523
Mast
Hurdsfield Industrial Estate
Shores Clough
Sluices
Sluice
Weir
Macclesfield Canal
Oldham's Hollow
Tytherington High School (Coll)
BEECH HALL DRIVE
MELFORD DRIVE
BEECH FARM DRIVE
THE SILK ROAD
MELVILLE ROAD
BROCKLEHURST AVENUE
BANBURY CL
BALMORAL CRES
DOVER ROAD
GREYSTOKE ROAD
RAGLAN ROAD
HAWTHORN WAY
LUDLOW CL
ELM DRIVE
Liby
PW
Sch
CARISBROOK AVENUE
ROWAN WAY
Recreation Ground
Path
Pav
River Bollin
Pipeline
Beech Bridge
Mast
SUMMERLEA CLOSE
Playing Field
BEECH LANE
WESTMINSTER ROAD
WRIGHTMAN AVENUE
BRYNTON ROAD
SPRING GARDENS
NEW HALL STREET
FOWLER ST
STATION STREET
Weir
BLACK LANE
GARDEN STREET
QUEENS AVENUE
NICHOLSON AVENUE
DUNSTER ROAD
PO
ALISON DRIVE
HURDSFIELD ROAD
B5470
LANSDOWNE STREET
PW
Hurdsfield
Iss
Sks
Weir
SANDRINGHAM ROAD
The King's School in Macclesfield
FB
The Mound
146m
162m

Application No: 21/1575C

Location: BRITISH SALT LTD, CLEDFORD LANE, MIDDLEWICH, CW10 0JP

Proposal: Construction of new salt manufacturing facility comprising: the removal of tanks and associated equipment; the construction of new tanks and associated equipment; external alterations to existing Evaporation Building; erection of pipe bridge; construction of new Drying / Packing Building; and associated ancillary development.

Applicant: Richard Diggle

Expiry Date: 21-Jun-2021

SUMMARY

The proposal is for the development of a pharmaceutical grade salt manufacturing facility which would be situated within part of the British Salt factory site. It lies within the settlement zone line of Middlewich, which is identified as a Key Service Centre in CELPS where employment development is supported in principle. The proposal would enable British Salt to grow and expand their operations and reach new markets and would enable the provision of additional employment. This accords with CELPS policy SD1 which supports development which contributes to a strong, responsive and competitive economy, prioritises investment and growth in key service centres and provides access to local jobs. It also accords with the approach of CELPS SE2, PG2, EG1 and CBLPFR policy PS4.

No objections have been received from consultees or members of the public. The proposal has been revised in order to limit the scale and potential dominance of the proposed building. Whilst this would still be of significant scale and height, it would be congruous in this location given the existing infrastructure and would be in keeping with its immediate and wider industrial and commercial context, as such no unduly detrimental effects on amenity from visual intrusion or adverse impacts on landscape character are anticipated. As such it is considered to accord with CELPS policy SE1, SE4, CBLPFR policy GR6 and the approach of the NPPF.

Whilst the proposal would be visible from the conservation area and listed buildings, it is unlikely to materially alter the setting of these built heritage assets or the ability to appreciate their historical significance and would cause less than substantial harm to the setting of these assets. As such the proposal is considered to accord with CELPS policy SE7 and CBLPFR policies BH5 and BH9, and the NPPF. No significant adverse impacts anticipated on highway safety or capacity given the proposed increase in vehicle numbers and the proposal is considered to accord with CELPS policies CO1, CO2 and CO4, and CBLPFR policies GR9 and GR18. Likewise no significant adverse impacts are anticipated associated with air quality or noise given the design of the proposal, proposed mitigation and level of vehicle movements. This would accord with CELPS policy SE12, CBLPFR policies GR6 and GR7, and the approach of the NPPF.

Sufficient mitigation can be secured in order to ensure that there would be no potential for land or water pollution and drainage arrangements are acceptable, and there are no anticipated risks of flooding on or off site. Equally no unacceptable impacts on biodiversity or ecological designated sites are anticipated and some biodiversity enhancements could be secured by planning condition. All other environmental impacts have been demonstrated to be acceptable and adequately mitigated.

Given all of the above factors, it is considered that the proposals accord with the relevant policies of the Development Plan and all other material considerations.

RECOMMENDATION: Approve subject to conditions
DESCRIPTION OF SITE

The application site is a 1.73ha parcel of land located within the British Salt factory in Middlewich. The factory is located on the southern side of Middlewich between the A533/Trent and Mersey Canal to the south and the railway line to the north.

The factory is accessed from Faulkner Drive off Cledford Lane which provides access to Booth Lane (A533) and Middlewich.

The British Salt site consists of several large industrial buildings, tanks, pipes, other structures, storage areas and handstanding. The application site is situated within the south eastern part of the factory site on land currently taken up by a garage, hardstanding, tanks and other infrastructure and the evaporation building.

The factory site boarders onto other industrial development to the north. To the east is a railway line, beyond which is farmland. to the south is vacant hardstanding and vegetation. The Trent and Mersey Canal forms the western factory site boundary with the A553 Booth Lane located on the opposite side of the canal. Residential areas of Middlewich are located to the west of Booth Lane. The closest properties are located approximately 75m from the nearest part of the proposal. Rump Lock House on the eastern side of the canal is approximately 90m from the neatest part of the proposal.

Land opposite the factory site beyond the A533 Booth Lane is allocated in CELPS LPS 42 ‘Glebe Farm Middlewich’ for residential development and has outline permission for 450 dwellings (13/3449C) and is subject to further applications for approval of reserved matters awaiting determination. This allocation is adjacent to the southern extent of the built up area of Middlewich. Two parcels of land to the north of the application site are allocated in the Congleton Borough Local Plan as owner specific employment sites, whilst further north beyond the railway lie and to the south east lie areas of undeveloped land which form part of strategic allocation LPS44 ‘Midpoint 18’ in the Cheshire East Local Plan Strategy. The land to the north is also part of the route of the proposed Middlewich Eastern Bypass. An area of land situated directly adjacent to the northern boundary of the railway is allocated for waste management uses (WM5) in the Cheshire Replacement Waste Local Plan.

The section of the Trent and Mersey Canal running past the factory site lies within the Kent Green Conservation Area. A listed lock approximately 100m lies to the west. A public right of

way (Middlewich FP20) lies beyond the railway line approximately 300m to the north west. Part of the application site also lies within the inner and middle consultation zone of a hazardous installation. There is one public right of way to the north of the site (east of the railway), and the canal towpath forms part of the Cheshire Ring Canal walk long distance route.

DESCRIPTION OF PROPOSAL

The factory currently imports raw brine by pipeline from the Warmingham brinefield, which is used to create salt for use in the manufacturer of a variety of different products. This proposal would enable the company to create a new pharmaceutical grade salt and would utilise existing infrastructure within the purification plant and evaporation plant, and include the development of new tanks, and construction of a new drying and packing building with associated pipe bridge.

The process to turn brine into salt consists of five main stages: brine production, purification, evaporation, drying and packing. The proposal would require changes to three of those stages as follows:

Purification stage – four tanks would be removed from the site and eleven additional tanks would be erected, along with new pumps and pipework. There would also be new raised walkways, steps and ladders. The tanks are of varying widths and heights of between 4.5m up to 20m and would be constructed of steel or reinforced plastic and coloured blue to match existing tanks on site.

Evaporation – External changes would be minor and comprise modifications to the pipework to link the new pipe bridge. Some internal modifications would also take place inside the evaporator building including the addition of a degasser and modification of existing pipework to allow one of the evaporators to produce pharmaceutical grade salt.

Drying and packing – development of a new drying/packing building. This would be located to the north west of the purification plant and evaporator building on an area currently partly used for lorry parking, storage and a garage building which already benefits from permission to be demolished.

The proposed rectangular building would measure 64m by 31m (excluding the loading area) at its longest point and have a footprint of 1880sqm. The height of the building would vary. The northern projection would be part one and two storeys with a maximum height of 7.5m. The main part of the building would be at a height of 12.5, whilst the north eastern section of the building would extend to a height of 23.5m with a flue that extends approximately 3m above that.

The building would house a range of specific plant and machinery required for the drying and packing process. The main drying and packing areas (along with storage/circulation areas) would be at ground floor level. A metal roller shutter would be installed on the north east elevation and another on the south eastern elevation which would open up onto a covered HGV product loading area measuring 30m by 12m. Also at ground floor level the projection to the north would contain a reception, and welfare facilities.

The floorspace at first floor level would be limited to circulation space and staff canteen in the northern projection. There would be a void to the space below across the remainder of the footprint. The floorspace at second level is made up of a large mezzanine which would operate

as a conveyor room, with other associated rooms. A relatively small third floor level on the north western side of the building would contain other rooms and the fourth floor would be smaller again and contain another room.

The building would have a brick plinth around its base and would be clad in an insulated smooth faced wall cladding made of pre-finished steel. The building would incorporate a number of aluminium small windows, access doors and metal staircase.

The proposal also includes the construction of a 51m pipe bridge from the north west elevation of the evaporator building to the north eastern elevation of the proposed drying/packing building. A metal walkway would run in parallel for approximately 26m of its length, accessed by a metal staircase and ladder.

The pharma grade salt would either be stored on site or alternatively taken off-site to an appropriate storage facility. Prior to export the salt would be packed and loaded onto HGVs. The HGVs would utilise the existing access into the site from Faulkner Drive and follow the existing internal access road to access the building.

As per the existing facility the plant would operate on a continuous basis, 24 hours a day and 7 days a week. Product dispatch would take place Monday to Friday 0600 to 1800 hours.

A temporary construction compound would be created within the British Salt site for the duration of the construction works which would include cabins, welfare buildings, storage of equipment, plant and vehicles. The construction programme is anticipated to be approximately 19 months.

PLANNING HISTORY
The wider British Salt site has an extensive planning history dating back to 1972. Relevant permissions include:

- 21/1436C – prior approval for demolition of garage building
- 19/1133C – permission for a new boiler plant, pipebridge and flue stack.
- 7/2007/CCC/13 – permission for brine extraction and underground gas storage, gas processing plant, pipelines and associated infrastructure with connections to British Salt factory.
- 13/1052W and 13/011344/FUL - Pipeline corridor and associated development between Warmingham and Lostock via the British Salt factory.

POLICIES
The Development Plan comprises the Cheshire East Local Plan Strategy, and the Congleton Borough Local Plan First Review.

Cheshire East Local Plan Strategy (CELPS)
MP1: Presumption in favour of Sustainable Development
SD1: Sustainable Development in Cheshire East
SD2: Sustainable Development Principles
SC3: Health and Wellbeing
SE1: Design
SE2: Efficient Use of Land
SE12: Pollution, Land Contamination and Land Instability

PG2: Settlement Hierarchy
EG1: Economic Prosperity
SE3: Biodiversity and Geodiversity
SE4: Landscape
SE7: Historic Environment
SE9: Energy Efficient Development
SE12: Pollution, Land Contamination and Instability
SE13: Flood Risk and Water Management
CO1: Sustainable Travel
CO2: Enabling Business Growth through Transport Infrastructure
CO4: Travel Plans and Transport Assessments

Congleton Borough Local Plan First Review (CBLPFR)
PS4: Towns
GR6: Amenity and Health
GR7: Amenity and Health
GR9: Accessibility and parking provision
GR18: Traffic Generation
BH5: Heritage
BH9: Conservation Areas
NR2: Statutory Sites

National Policy:
National Planning Policy Framework

Other Considerations:
National Planning Practice Guidance (NPPG)

CONSULTEES

Landscape - no objections

Forestry – no comments received

Heritage - no objections

Environmental Health - no objections. Note that due to the history of industrial use in the site and surrounding area, there is potential for contamination.

Planning conditions recommended in respect of acoustic mitigation being implemented in full and the agreed mitigation scheme being maintained for the purpose originally intended throughout the use of the development, submission of updated ground investigation, risk assessment and if necessary, remediation strategy, along with verification report and measures to deal with unexpected contamination.

Highways – No objection. Parking provisions are considered acceptable. The proposed level of additional traffic would not result in any capacity problems on the network.

Flood Risk Management – no objections providing all surface water is contained on site and re-used within the site boundary, all finished floor levels set at least 0.15m above adjacent ground, a condition survey of the existing surface water drainage system is carried out prior to development, and all works being carried out in strict accordance with the plans and drainage strategy

Ecology - No objection. Condition recommended in respect of nesting birds

Public rights of way - No comments received

Environment Agency - no objection subject to planning condition requiring a remediation strategy, verification report and restrictions on infiltration of surface water to the ground.

Cheshire Wildlife Trust – no comments received

Natural England - no objection subject to securing the mitigation identified in the CEMP.

Jodrell Bank – no comments received

Canal and Rivers Trust
Works on site have the potential to result in the exposure of pollution to the canal, notably through dust migration from disturbed soil. Recommend phase II geo-environmental report secured by planning condition and advice is provided on the scope of the investigations.

United Utilities - No objection, conditions recommended in respect of drainage arrangements.

Health and Safety Executive – do not advise, on safety grounds, against the grant of planning permission

National Grid – no comments received

Scottish Power – no comments received

Middlewich Town Council
The Council supports the proposals in principle but considers that before any approval should be granted an up to date Air Quality Assessment and Travel Plan should be provided. It is also noted that there is no Emergency Response plan contained as part of the application. The Council also requires that a condition is added to any permission granted for s106 monies to be provided to enable the rewilding of the lime beds and provide interpretation boards detailing the species to be found there.

OTHER REPRESENTATIONS
None received

OFFICER APPRAISAL

Principle of Development
CELPS policy MP1 and the NPPF have a presumption in favour of sustainable development. Proposals that accord with the development plan and which support sustainable development

principles will be approved. Policy SD1 supports development which contributes to a strong, responsive and competitive economy, prioritises investment and growth in key service centres and provides access to local jobs. Middlewich is identified as a key service centre in which development which is of a scale, location and nature that recognises and reinforces the distinctiveness of the town will be supported (CELPS policy PG2). CELPS policy EG1 also supports in principle employment development within key service centres. Proposals for employment development on non-allocated employment sites are also supported where they are in the right location and support the strategy, role and function of the town.

Similarly Congleton Borough Local Plan First Review (CBLPFR) saved policy PS4 contains a general presumption in favour of development within the settlement zone line of Middlewich provided it is in keeping with the town's scale and character. Development which is not otherwise allocated for a particular use must also be appropriate to the character of its locality in terms of use, intensity, scale and appearance.

The proposal would provide additional floorspace and infrastructure to support the growth and expansion of an existing industrial facility which currently provides employment for 105 people and would provide a further 19 full time positions. The development would be congruous with the industrial nature of the wider area and would form a part of a wider cluster of employment uses in this part of Middlewich. As such it would accord with CELPS policy SD1 and reflects the spatial approach of the development plan in focusing development within Key Service Centres. It also reflects the provisions of CELPS policy SE2 which seeks to encourage the redevelopment and re-use of previously developed land and buildings. As such it is considered that the principle of the development is acceptable and the proposal would accord with CELPS policies SD1, PG2, and EG1 and CBLPFR policy PS4.

Landscape and visual impacts

CELPS policy SE4 requires all new development to conserve landscape character and quality and, where possible, enhance and effectively manage the historic, natural and man-made landscape features that contribute to local distinctiveness. Development will be expected to (amongst others) incorporate appropriate landscaping, preserve local distinctiveness and protect and/or conserve the historical and ecological qualities of an area. CBLPFR policy GR6 does not permit development which would have an unduly detrimental effect on amenity due to visual intrusion.

With respect to effects on landscape character, during construction any impacts are assessed as being temporary and localised, would not appear out of place given the industrial context of the wider site and therefore not significant. On its completion the proposed building would be of a significant size and scale and would be apparent from the undeveloped areas to the east and from the canal and Booth Lane. The development would however be situated within the existing collection of structures on the factory site, and the proposed building would not project beyond the height of the existing evaporator building on the site. The existing facility already exerts a marked influence in this area and this would only increase incrementally as a result of the proposal. It would not introduce any characteristics that are not already present and the wider landscape character would remain very similar, therefore the change would be limited in scale and geographic extent, and the overall landscape character effects are assessed as being minor.

In relation to visual impacts, whilst the proposal includes a building of significant size and scale, this would be within an area already dominated by existing industrial structures. The overall amount of visible development would increase, however the nature of the views would be similar to that already experienced and the extent of visibility would not increase as the new built development would not be as tall or physically extensive as the existing structures.

It is also noted that the proposal would not be widely visible due to screening provided by the vegetation cover and existing built development at the factory site.

There would be clear views of the proposal from a stretch of A533 Booth Lane and the canal corridor, and from the footpath to the north east, however from both directions any change in view would be experienced in the context of the existing structures at the factory which would be more prominent than the proposed new building. The dense tree cover along Booth Lane would limit views of the site from the A553 and properties on the edge of Middlewich. To the south east, views would be largely screened by the existing factory buildings/structures and any visible elements would be viewed against that backdrop. Some long distance views would be experienced to the north and north east across agricultural fields however there are limited publicly accessible locations in this area. It is considered that there is sufficient separation distance to residential receptors to ensure that the intensification of the use would not impact significantly on the visual amenity of residents. The Landscape Officer also raises no objection to the proposals. Given the above considerations, the proposal is not considered to have any unduly detrimental effect on amenity due to visual intrusion or have any adverse impact on landscape character. As such it is considered to accord with CELPS policy SE4, CBLPFR policy GR6 and the approach of the NPPF.

Design

CELPS policy SE1 requires developments proposals to make a positive contribution to their surroundings in terms of (amongst others) protecting and enhancing the quality, distinctiveness and character of settlements. Sensitive design should also respond to local heritage assets and their setting. The Cheshire East Council Design Guide is a Supplementary Planning Document and identifies Middlewich as being in a character area of salt and engineering towns with the general landscape being predominantly flat and highly influenced by the urban centres.

The proposed development has been designed to undertake its functional requirements and its layout and scale is influenced by the operational requirements of Pharma Grade salt production, and the site constraints including the electricity pylons and existing factory infrastructure and access roads. The proposal has been designed to be as compact as possible and is located within the footprint of the existing factory infrastructure to maximise efficiency.

The design and scale of the proposed building reflects the equipment required to dry and pack the salt, and the footprint is the minimum necessary to operate effectively and safely. The design of the proposal has been modified following pre-application advice in order to limit the scale and potential dominance of the proposed building. The building has been reduced in height from 31.2m to 23.5m at its highest point and is now below the height of the Evaporator building. It is also below the height of the large storage building to the south east and is of a much lesser scale. The building has also been reorientated such that the highest part is situated away from the heritage assets and receptors on the canal and Booth Lane. The proposed pipe bridge is positioned to be as short and direct as possible, and the scale of the

tanks broadly match those that they would replace. Whilst some would be taller, given the existing cluster of tanks and the industrial context they would not appear out of scale and from the most prominent viewpoint on the canal and Booth Lane, they would be seen as part of the existing facility with large buildings behind them.

The proposed materials would reflect the wider British salt factory and the chosen colour scheme utilises blocks of grey and blue in order to reduce the perceived mass and prominence of the building and to link visually with the existing structures at British Salt.

Overall the proposed built development would be appropriate and congruous with the existing infrastructure and would be in keeping with its immediate and wider industrial and commercial context. As such the design of the proposal is considered to accord with CELPS SE1 and the approach of the NPPF.

Sustainability
CELPS policy SE9 states that the Council will look favourably on development that follows the principles of the Energy Hierarchy and that seeks to achieve a high rating under schemes such as BREEAM. Non-residential development over 1000 sqm of floorspace are expected to secure at least 10 per cent of predicted energy requirements from decentralised and renewable or low carbon sources unless it can be demonstrated that this is not feasible or viable.

The proposal has been designed to maximise energy efficiency by using high quality technology with low energy uses. The applicant notes that renewable options are not available or viable in this instance, in part because the plant will be powered through energy generated on site. The existing site includes a combined heat and power (CHP) facility which provides heat and electricity for the site. There is no import or export of steam heat on site and there no electricity is exported to third parties. The high pressure steam is used to create electricity whilst the low pressure steam generated by that process is used as the principle source of heat energy in the salt manufacturing process. The electrical power and thermal heat requirements from this proposal would be provided by the existing CHP facility on site which has sufficient capacity to accommodate the additional heat and power requirements. As such the site is net self-sufficient which complies with the Energy Hierarchy. Given the requirements of CELPS policy SE9 to achieve at least 10 percent of energy requirements from decentralised and renewable or low carbon sources, the proposal achieved well in excess of this.

Cultural Heritage
CELPS policy SE7 requires the character, quality and diversity of the historic environment to be conserved and enhanced. All new developments should seek to avoid harm to heritage assets and make a positive contribution to the character of the historic and built environment including the setting of assets and wide historic environment where appropriate. Proposals that do not cause harm to, or which better reveal the significance of the heritage asset will be supported. In all proposals a high quality of design should be achieved which fosters innovation and creativity that is sensitive and enhances the significance of heritage assets in terms of architectural design, detailing, scale, massing and use of materials. Equally CBLPFR policies BH5 and BH9 do not support proposals that would have a detrimental impact upon a listed building or a conservation area.

The NPPF states that when considering the impact of a proposal on the significance of a heritage asset, great weight should be given to the asset's conservation, and the more

important the asset, the greater the weight should be. This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance. Any harm to the significance of a heritage asset should require clear and convincing justification and substantial harm to or loss of grade II listed buildings should be exceptional. Where a development will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal, including securing its optimum viable use.

The extent and importance of setting should be considered in reference not only to the visual relationship between the asset and the proposed development and views of or from an asset, but also other environmental factors such as noise, dust, smell and vibration from other land uses in the vicinity. When assessing any application which may affect the setting of a heritage asset, local planning authorities may also need to consider the implications of cumulative change (NPPG).

Built heritage

The application site is adjacent to the Trent and Mersey Canal, Middlewich – Kent Green Conservation Area. The canal conservation area in this location is relatively open with some sparse modern development and 19th century houses on the southwest side of Booth Lane, along with the factory buildings on the northeast side of the canal. The area to the northwest is increasingly developed with early 20th century terraces lining the southwest side of Booth Lane.

There are nine listed buildings within 1km of the site, including a Grade II listed bridge, Kings Lock and Rumps Lock, and two Grade II listed canal mileposts. The closest of which are the 1777 Grade II Trent and Mersey Canal Rumps Lock and its associated 19th century lock cottage (approximately 90m to the west of the application site) together with the 1819 Grade II canal milepost further north of the lock. These form a coherent group of structures with a historical association with the canal. The submitted heritage assessment therefore identifies that these assets are particularly sensitive to changes in their settings but will have very limited intervisibility with the proposed development. Views towards the proposal from the lock and cottage are prevented by the tree belt to the rear and southeast of the lock cottages. The proposal would also be largely screened from the towpath adjacent to the northern lock landing by dense vegetation along the bank of the canal. On this basis the heritage assessment concludes that the proposal is not likely to materially alter the setting of these assets or the ability to appreciate their historical significance and would cause considerably less than substantial harm to the setting of these assets.

The dense vegetation would prevent views from sections of the conservation area to the northwest of the proposed development and from the 19th Century Kinderton Arms which also makes a positive contribution to the historic setting of the Conservation Area. The proposal would be clearly visible from the south east of Rumps Lock however this would be against the backdrop of the industrial buildings and structures on the factory site. As such, overall any harm to the setting of the conservation area as a whole is assessed in the Heritage Assessment as being less than substantial. The Built Heritage officer advises that the proposed development would be visible from the conservation area however there is already development within the area of a similar character, mass, form and nature and whilst there would be a change in form and mass, it would not further undermine the existing character and

appearance of the conservation area or its setting. Therefore, on that basis the proposal is considered acceptable.

Buried Heritage Assets

The heritage assessment identifies a moderate potential for Roman remains given the proximity of the proposal to the route of King Street Roman Road. The road is however thought to have been largely truncated by canal works and industrial development around the area, and the development of the factory site is likely to have truncated or removed any remains which may have been present on or around the site. The potential for remains from other periods is low as they are likely to have been removed during development of the factory site. Overall therefore it is concluded that the setting of the heritage assets would not be materially altered. The Archaeological Officer advises that the proposed development is unlikely to impact significant below ground remains and therefore there is no archaeological mitigation required for this proposal.

Given the scale and design of the development when viewed in the context of the wider British Salt factory, the conclusions of the Built Heritage Officer and the Heritage Assessment are accepted, and it is considered that the harm to the setting of the Listed Buildings and Conservation Area as a whole would be less than substantial and the proposal would not further undermine the existing character and appearance of the Conservation Area or its setting. Equally no adverse impacts on buried heritage assets are anticipated. As such the proposal is considered to accord with CELPS policy SE7 and CBLPFR policies BH5 and BH9, and the NPPF.

Highway Impact

CELPS policy CO1 requires new development to be guided to sustainable and accessible locations with priority given to walking, cycling and public transport; likewise Policy CO2 supports developments which minimise the need to travel by being located where there is a good range of jobs, shops and services accessible by sustainable transport options. Policy CO4 requires development to demonstrate that the capacity and efficiency of the highway network will not be severely affected by the proposal and will link into existing sustainable transport infrastructure. Likewise CBLPFR policy GR18 does not permit proposals where the scale of traffic generation would worsen existing traffic problems to an unacceptable level. Policy GR9 also sets out a range of access, servicing and parking requirements for new development which include requirements for adequate and safe access for vehicles, pedestrians and other road users, and making adequate provision for unloading/loading, and parking.

The site is reasonably well located to allow journeys by sustainable transport modes with pedestrian and cycling infrastructure and is within walking distance of bus services and Middlewich Town Centre. The proposed car and cycle parking provision will remain as existing comprising 80 parking spaces, 2 disabled spaces and 30 cycle spaces. The Strategic Infrastructure Manager considers this provision acceptable. A Travel Plan has also been submitted setting out the measures to be adopted by the operator to encourage users of the site to utilise sustainable modes of transport.

Access to the site is from Faulkner Drive which is an unadopted road serving several operators. Faulkner Drive is accessed off Cledford Lane which connects to Booth Lane via a signalised junction with Cross Lane/A533 Booth Lane. HGVs would enter the factory site via Faulkner

Drive, and follow the existing one-way internal road layout to the application site. The Transport Assessment identifies that the Cledford Lane/Faulkner Drive junction and internal access arrangements could adequately serve the proposal and no concerns are raised regarding the access arrangements by the Strategic Infrastructure Manager.

The Transport Assessment identifies that on average an additional 143 two way HGV movements would be generated per week, many of which could be regulated to avoid peak hour traffic. As such, it is forecast that the proposal would generate 2 two-way additional vehicle movements in the AM peak hours and 2 in the PM peak. There would also be 19 additional staff, the majority of which (15) would operate over 3 shifts a day, with the remainder working daytime hours of 0800 to 1600. In total over an average weekday, there would be 55 two-way movements which equates to one two-way vehicle movement approximately every 30 minutes in the AM and PM peak hours. This is assessed as being imperceptible and is not anticipated to have any material impact on local highway safety or capacity. In addition, the transport assessment identifies that the construction of the Middlewich Eastern Bypass would provide a route towards wider strategic connections including M6 motorway whilst avoiding Middlewich town centre which would provide benefits for all HGV movements generated by the British Salt factory and it is anticipated that all site related HGV movements would be via this route once this is available.

The Strategic Infrastructure Manager identifies that the predicted additional HGV movements would not result in any capacity problems on the network and the staff movements would not raise any highway concerns. The officer also advises that, whilst there would be an increase in traffic generation resulting from this new operation, it is considered to be a minor increase in vehicle movements overall that does not require any mitigation measures to be provided or contributions towards the Middlewich Eastern Bypass. As such on the basis of these conclusions, the proposal is considered to accord with CELPS policies CO1, CO2 and CO4, and CBLPFR policies GR9 and GR18.

Pollution Control

NPPF states that planning decisions should ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should (amongst others) mitigate and reduce to a minimum potential adverse impacts resulting from noise and avoid noise giving rise to significant adverse impacts on health and the quality of life.

CELPS Policy SE12 requires development to ensure there is no harmful or cumulative impact upon air quality, surface water and groundwater, noise, smell, dust, vibration, soil contamination, light pollution or any other pollution which would unacceptably affect the natural and built environment, or detrimentally affect amenity or cause harm. The effects of pollution arising from or as a result of the development should be minimised and mitigated, and where mitigation cannot be provided, the development will not normally be permitted. Development will only be deemed acceptable where it can be demonstrated that any contamination or land instability issues can be appropriately mitigated against and remediated if necessary.

Equally CBLPFR Policy GR6 does not support development within close proximity of sensitive receptors which would have an unduly detrimental effect on amenity due to environmental disturbance/pollution, whilst policy GR7 does not permit development which would (amongst

others) lead or contribute to significantly increased air, land, water, light or noise pollution to environmentally unacceptable levels; involve significantly greater risk to the lives and health of the public, or expose more members of the public to unacceptable risk.

The nearest residential receptors are located on the opposite side of Booth Lane to the application site approximately 42m from the site boundary. A number of receptors are located to the north west of the site on Booth Lane and surrounding residential roads, with further properties located to the south east. There are also further receptors who would utilise the canal towpath.

Noise and Vibration

The noise assessment identifies that predicted noise levels from the proposed development including HGV movements, operation of plant/machinery and loading bay operations would not exceed representative background noise levels. The cumulative effects of the proposal alongside the existing site operations are assessed as being negligible. The construction noise is also assessed as remaining within thresholds identified in relevant technical guidance. In view of the location and connection to the industrial estate and baseline traffic flows on the local road network, the proposed increase in traffic movements are not expected to generate any significant increase in road traffic noise.

Overall therefore the noise assessment identifies that predicted noise levels from operation of the development would not exceed background noise levels and would fall within relevant guidance for internal rooms of residential dwellings, and during construction works the noise levels would not exceed thresholds for short term noise levels

The noise assessment identifies that mitigation measures would include:

- New building fitted with acoustic cladding and roller shutter doors
- Control over construction hours of operation;
- Control over vehicle idling, use of horns etc
- Broadband reverse alarms for plant and on-way systems and/or use of banksmen to minimise reverse alarms;
- Regular maintenance of plant/machinery and use of effective silencers;
- Use of non-percussive vibration techniques;
- Maximise distance between any significant noise source and residential receptor locations;
- Liaison with local community over planned construction works.

With respect to vibration impacts, the assessment identifies that the highest levels are likely to be generated by construction plant however the application of mitigation and best practicable should effectively control vibration impacts and ensure that vibration remains below the threshold of perceptibility.

The Environmental Health Officer agrees with the conclusions of the noise assessment and recommends planning conditions in respect of implementing the mitigation identified in the noise assessment throughout the operation of the development. Given these conclusions, it is considered that noise and vibration and impacts would be acceptable subject to the imposition of the recommended conditions and the proposal would accord with the provisions of the NPPF, CELPS policy SE12, and CBLPFR policies GR6 and GR7.

Air Quality

There are air quality management areas (AQMA) located in Middlewich, the closest of which is approximately 1.9km to the north west. An air quality impact statement has been submitted which considers the potential for dust and particulate matter from construction activities and potential impacts of the proposed traffic on local air quality and nearby receptors with regards to the Middlewich AQMAs.

With respect to the potential for construction activities giving rise to fugitive dust and PM10, It is noted that the residential properties are located upwind of the site with the prevailing wind direction being southwesterly, There is very limited potential for dust to be generated during the operation of the proposal given the nature of raw material (brine) and the processes taking place on site. As such there is a low risk for dust emissions to impact the local air quality without mitigation. The most likely potential sources of dust would be from the construction works, material storage, internal haulage and materials handling. Such impacts are temporary and can be mitigated by standard site management practices. A draft construction environmental management plan (CEMP) has been submitted which outlines mitigation measures to help minimise the environmental impacts of the proposed works. Mitigation includes:

- Inspection of vehicles prior to utilising the public highway and hosing of vehicles where necessary;
- Internal haulage routes located away from sensitive receptors;
- Use of closed tankers and sheeted vehicles where relevant;
- Dust suppression by regular spraying in dry conditions;
- Storage of materials in enclosed or bunded areas of the site;
- Sheeting of stockpiles where necessary
- Inspection and complaints procedure

With respect to potential vehicle exhaust emissions, the proposed increase in vehicles as a result of the proposal is low and below the threshold identified in relevant guidance where an air quality assessment would be required. It is anticipated that 80% of the additional HGV traffic proposed would travel via Middlewich, resulting in an average additional 17 two way daily HGV movements through the Lewin Street AQMA and 4 through the former Sandbach AQMA; and these volumes are less than the levels identified in relevant guidance where an air quality assessment is required. Likewise for staff and other commercial vehicles, the additional movements to be generated would be substantially below the relevant thresholds in guidance where an air quality assessment is required and would be distributed across the local road network. The air quality statement therefore concludes that the proposal would not result in significant adverse impacts on local air quality, particularly within the exiting AQMAs. The Environmental Health Officer also raises no concerns with respect to air quality.

Given the conclusion of the air quality statement, and the views of the Environmental Health Officer it is considered that subject to the implementation of mitigation measures being secured by planning condition, the proposal would not present any unacceptable impacts in respect of air quality and would accord with CELPS policy SE12, CBLPFR policies GR6 and GR7, and the approach of the NPPF.

Contamination and water quality

The site investigations identify that with regards to risks to human health, all potentially toxic metals, and inorganic/organic compounds are within appropriate levels, the potential risks to future occupiers is low and the risk to site workers could be adequately controlled through use of appropriate PPE and application of dust suppression. The site is not located within a groundwater source protection zone and levels of potential contaminants are low, therefore the risks to water resources are low. Equally risks to vegetation on site is low due to low concentrations of phytotoxic metals. With respect to risks to buildings and services on site, elevated pH levels were encountered on the site which has the potential to degrade certain types of pipe and therefore recommendations are made with respect to the use of alkali resistant pipework on site.

The Contaminated Land officer raises no objections to the proposal but identifies some further aspects to investigate including potential risks from ground gas, asbestos in soil and the presence of a potential buried fuel tank and fuel pump. As such, planning conditions are recommended for an updated phase II ground investigation and risk assessment, and where necessary a remediation strategy prior to the commencement of development, along with a verification report submitted prior to the development being brought into use. A condition is also recommended for dealing with unexpected contamination.

It is noted that the Trent and Mersey Canal (a controlled water) is located 15 metres to the south west and is 0.5m below the level of the factory site. The Environment Agency identify that the close proximity of the canal could present a potential risk to surface water quality but note that the ground investigation considers that it will be possible to manage the risks. As such no objections are raised subject to planning conditions mirroring those requested by the Contaminated Land officer. It is also noted that there would be no runoff from the proposed development and the site is enclosed by a large bund which would assist in controlling any potential for pollution to surface water. The Environment Agency advise that based on the geological characteristics of the site, the risks to wider groundwater resources from contamination at the site are low. With respect to the proposed drainage, they advise that as this does not include infiltration, the proposal will not increase the risk of contaminant mobilisation in the subsurface, and they are satisfied that this will not pose a risk to water quality of controlled waters. A planning condition is recommended to restrict any infiltration of surface water to the ground.

A range of pollution control measures are also identified in the CEMP as being implemented on site which would assist in controlling any potential for water pollution. This includes:

- Training on precautions to prevent sediment-laden runoff from entering watercourses, methods to dispose of water from excavations and procedures for waste storage and segregation.
- Plant and machinery kept in good working order
- Bunding for any oils stored on site
- All direct drains covered during construction works to prevent leakages
- No refuelling within 30m of a watercourse and fuel storage areas located away from sensitive areas of the site
- hardstanding and access roads kept clean and prompt action taken to address any spillages;
- sediment control implemented through the introduction of catchpits and road gullies.

The Canal and Rivers Trust welcome the measures identified in the CEMP and raise no objection. They mirror the recommendations of the Environment Agency and Contaminated Land officer in respect of imposing conditions for further ground investigations and have provided further advice in respect of the scope of works necessary. Subject to implementation of the recommended conditions it is considered that the proposal would not result in a harmful or cumulative impacts with respect to land or water contamination and would therefore accord with CELPS policy SE12, CBLPFR GR7, and the approach of the NPPF.

Light pollution

The proposal would have a limited number of windows and rooflights to the potential for light spill would be limited. Any lighting would be low level and for security and health and safety purposes only. No additional impacts are anticipated over that already generated by the existing site. As such the proposal would accord with CELPS policy SE12, CBLPFR policy GR7, and the approach of the NPPF.

Drainage and flood risk

CELPS policy SE13 requires new development to integrate measures for sustainable waste manage to reduce flood risk and avoid an adverse impact on water quantity. All development should demonstrate that proposals would not increase flood risk on site or elsewhere and that opportunities to reduce flood risk are sought taking into account the impacts of climate change. All development should seek improvements to the current surface water drainage network, be deigned to manage surface water and should enhance and protect surface and ground water quality.

Sandersons Brook (which is a main river) lies 90m to the north of the site, and an unnamed watercourse is culverted beneath the site which flows northwards towards the brook. The site is located within flood zone 1 which is identified as having a 1 in 1000 probability of flooding.

The flood risk assessment identifies that any surface water flooding relates predominantly to localised depressions within the site, and there is a low flood risk along the western boundary of the site although this risk only impacts on the woodland in the western corner of the site. Flooding from the Trent and Mersey Canal is not considered to be a risk given that the site is approximately 0.5m higher than the canal. Likewise there is no risk of flooding associated with the brine pool on the site (used to collect surface water) as it is enclosed by a raised embankment. The site is also not considered to be at risk from any other artificial sources and is assessed as being of negligible risk of groundwater flooding.

In order to mitigate any remaining risk of flooding from surface and groundwater, the flood risk assessment recommends setting finished floor levels above adjacent ground levels to enable any potential overland flows to be conveyed across the site without impacting property. This could be secured by planning condition.

Surface water drainage

There would be no changes to the existing drainage arrangements whereby all on-site surface water is collected and recycled as part of the brinefield solution mining process or alternatively stored on a temporary basis in the storage lagoon on site. Given that all surface water would be fully utilised, there would be no requirement for on-site soakaways or attenuation tanks to discharge or store run-off. Equally no significant changes are proposed to the area of

impermeable surfaces, therefore no increase in surface water runoff rates are anticipated; as such no further surface water management is required and the proposals are not anticipated to increase flood risk elsewhere.

Foul drainage
The foul water flows from the development would connect to the existing on-site foul sewage network. At present a combination of existing foul and combined sewers collect onsite wastewater which is believed to flow offsite to the public sewer. There is an existing combined drain flowing across the footprint of the proposed building towards the south west of the site which will either be avoided or diverted as appropriate following further assessment. No contaminated water would enter the public sewer.

The flood risk engineer raises no objection subject to all surface water being contained on site and re-used within the site boundary, all works being carried out in accordance with the submitted plans, finished floor levels set above adjacent ground levels and a condition survey of the existing surface water drainage system to ensure its present and future capability; all of which could be secured by planning condition. United Utilities consider the proposals acceptable subject to it being carried out in accordance with the submitted drainage statement and no surface water or reused contaminated water draining to the public sewer which could be secured by planning condition.

Subject to the imposition of the recommended conditions it is considered that the proposal would not increase flood risk on site or elsewhere and proposes acceptable measures to sustainably manage drainage which accords with CELPS policy SE13 and the approach of the NPPF.

Ecology
CELPS policy SE3 seeks to ensure that proposals which would adversely affect the integrity of SSSI are not normally permitted and requires all development to aim to positively contribute to the conservation and enhancement of biodiversity and geodiversity where relevant. Likewise CBLPFR policy NR2 does not support development which would result in the loss of damage of sites of nature conservation importance.

The application site lies within the impact risk zone of the Sandbach Flashes Site of Special Scientific Interest (SSSI) and is located approximately 645m from this designated site. There are also four Local Wildlife Sites within 2km of the application site, including the Cledford Lane Lime Beds approximately 570m to the north west. The site is separated from Sandbach Flashes SSSI by the A533/Trent and Mersey Canal, properties and agricultural fields, as such the proposal would not directly affect the SSSI habitats nor directly affect any qualifying bird interests within the SSSI. Any potential for indirect effects on habitats associated with the SSSI and other designated sites from air quality is low and limited to the construction phase given that there would be no emissions from the operation of the facility and only a limited increase in vehicle emissions. The standard pollution control measures identified in the CEMP would assist in controlling any impacts and Natural England advise that there would be no significant effects on the SSSI subject to that mitigation being secured by planning condition. Given the separation distances to the nearest local wildlife site, there are no predicted direct or indirect impacts, and the Nature Conservation Officer also raises no concerns with respect to impacts on the local wildlife sites.

The existing site consists of hardstanding which has limited value for ecology and the proposal will not result in any loss of vegetation or habitats. Adjacent habitats to the west and north comprise areas of semi-improved grassland and in the wider area lies areas of broadleaved semi-natural woodland and scrub vegetation. Standard pollution control measures would control any potential runoff to ensure no adverse impacts on these habitats.

With respect to birds, the former garage building and other plant have the potential to support nesting birds and the Nature Conservation Officer recommends a planning condition to require a survey for nesting birds prior to the removal of vegetation or building works.

The site is assessed as having low suitability for foraging and commuting bats and the proposal is highly unlikely to adversely affect local bat populations. Prior to the demolition of the garage building (permitted under 21/1436C) bat surveys will be undertaken and if any roosts are identified, any potentially disturbing works would be carried out under licence from Natural England. This proposal includes provision of a minimum of one bat box within the British Salt site regardless of the results of any survey, and any new temporary or permanent lighting will be directed to avoid light spill. The Nature Conservation Officer raises no concerns with respect to impact on bats and this mitigation could be secured by planning condition.

The Canal provides potentially suitable habitat for otters and watervoles however this species is unlikely to be present within the application site. Equally badgers are not likely to be present on the site given the extent of hardstanding and industrial activities taking place.

No permanent waterbodies are located within the site and the lagoon within the factory site is likely to be unsuitable as breeding habitat for great crested newts. The ecological assessment identifies that the site lacks vegetation and provides only sub-optimal habitat for amphibians, and it is unlikely great crested newts could be present on the site given the distance between the site and nearby ponds, lack of favourable habitat on site and presence of more suitable terrestrial habitat to the east and south closer to ponds. The Ecological Assessment identifies that common and more widespread amphibian species may be present on the site and a range of reasonable avoidance measures (RAMs) are identified to mitigate the impacts. The implementation of these measures could be secured by planning condition. With respect to reptiles, the hardstanding and lack of vegetative cover and high levels of disturbance site does not provide favourable habitat and it is highly unlikely that reptiles would be present. The adoption of RAMs would protect any reptiles identified during construction.

The Nature Conservation Officer raises no concerns with the proposal and advises that Badgers, Water Voles, Otters, Amphibians and Reptiles are not reasonably likely to be present or affected by the proposal.

Given the conclusions of the ecological assessment, and the views of the Nature Conservation Officer and Natural England, it is considered that subject to securing the mitigation identified above by planning condition, the proposal would not adversely affect any designated sites or harm protected species and their habitat. The proposal would also potentially provide some limited enhancement to biodiversity. This would accord with CELPS policy SE3, CBLPFR policy NR2 and the approach of the NPPF.

With respect to the request of Middlewich Town Council to require s106 funding to secure the rewilding of the lime beds and provision of interpretation boards, National Planning Practice

Guidance clarifies that planning obligations assist in mitigating the impact of unacceptable development to make it acceptable in planning terms. They may only constitute a reason for granting planning permission if they meet the tests that they are:

- necessary to make the development acceptable in planning terms;
- directly related to the development;
- fairly and reasonably related in scale and kind to the development.

In this case, the development has been demonstrated to accord with the provisions of the development plan and is considered acceptable in planning terms. The proposal is located on existing hardstanding within the British Salt site approximately 570m from the lime beds and given the separation distance, no direct or indirect impacts are anticipated on this designated site. As such the request for these measures to be secured by a s106 obligation are not considered to be fairly and reasonably related in scale and kind to the development. Additionally it is noted that ecological mitigation has been identified based on the specifics of the site and the development, and all mitigation can be provided on the site itself and secured by planning condition which would address any ecological impacts, therefore a s106 obligation is not considered justified in this instance.

Other matters

Given that the proposed application boundary lies entirely within existing hardstanding, no adverse forestry impacts are anticipated. A planning condition could be imposed requiring tree protection measures for any trees in close proximity of the application boundary.

The proposal would be a significant distance from neighbouring properties, the distance of the front elevation to the closest receptor on Booth Lane being approximately 30m. As such there is not considered to be any adverse impacts with respect to daylight, sunlight or overshadowing. There is also no potential for overlooking given this distance and the lack of window in the drying/packing building.

The proposed building has been positioned to avoid the electricity pylon and associated buffers, although the pipe bridge would pass underneath the cables. Scottish Power and National Grid have been consulted on the application and their comments are awaited and will be report at committee.

The proposal is located within the consultation distance of a Major Hazard Site. The Health and Safety Executive have been consulted on the application and do not advise on safety grounds against the grant of planning permission. with respect to land instability there are no unacceptable impacts anticipated.

Middlewich Town Council note that an emergency response plan has not been provided. The British Salt site is heavily regulated to ensure it complies with relevant legislation and guidance. There are procedures and protocols in place to ensure that an emergency is responded to appropriately. It is noted that the site operates under a Permit which requires appropriate procedures to be adopted on the site in the event that abnormal emissions are generated which are likely to have an effect on the local community. As such it is considered that sufficient provisions exist in other legislation to address such requirements and it not considered

necessary to would not be appropriate to impose a planning condition requiring the submission of this detail.

Conclusion
The proposal would enable British Salt to grow and expand their operations and reach new markets and would enable the provision of additional employment. This accords with CELPS policy SD1 which supports development which contributes to a strong, responsive and competitive economy, prioritises investment and growth in key service centres and provides access to local jobs. It also accords with the approach of CELPS SE2, PG2, EG1 and CBLPFR policy PS4. The proposal has also been demonstrated to accord with the sustainable energy requirements of CELPS policy SE9.

The proposal has been revised following receipt of pre-application advice in order to limit the scale and potential dominance of the proposed building. Whilst the building would still be of significant scale and height, it would be appropriate and congruous with the existing infrastructure, and would be in keeping with its immediate and wider industrial and commercial context, and it is considered that it would not have any unduly detrimental effects on amenity due to visual intrusion or have any adverse impact on landscape character. As such it is considered to accord with CELPS policy SE1, SE4, CBLPFR policy GR6 and the approach of the NPPF.

The development is unlikely to materially alter the setting of the built heritage assets or the ability to appreciate their historical significance and would cause less than substantial harm to the setting of these assets. Whilst it would be visible from the conservation area and potentially from listed buildings, there is already development within the area of a similar character, mass, form and nature, and whilst there would be a change in form and mass, it would not further undermine the existing character and appearance of the conservation area or its setting. Equally no adverse impacts on buried heritage assets are anticipated. As such the proposal is considered to accord with CELPS policy SE7 and CBLPFR policies BH5 and BH9, and the NPPF.

There are no significant adverse impacts anticipated on highway safety or capacity given the proposed increase in vehicle numbers and the proposal is considered to accord with CELPS policies CO1, CO2 and CO4, and CBLPFR policies GR9 and GR18. The predicted noise levels from operation of the development would not exceed background noise levels and would remain within relevant levels identified in technical, and during construction works would not exceed relevant thresholds; likewise for air quality impacts, it is considered that subject to the implementation of mitigation measures, the proposal would not present any unacceptable impacts and would accord with CELPS policy SE12, CBLPFR policies GR6 and GR7, and the approach of the NPPF.

Sufficient mitigation can be secured in order to ensure that there would be no potential for land or water pollution and drainage arrangements are acceptable, and there are no anticipated risks of flooding on or off site. Equally no unacceptable impacts on biodiversity or ecological designated sites are anticipated and some biodiversity enhancements could be secured by planning condition. All other environmental impacts have been demonstrated to be acceptable and adequately mitigated.

Given all of the above factors, it is considered that the proposals accord with the relevant policies of the Development Plan and all other material considerations.

RECOMMENDATION:

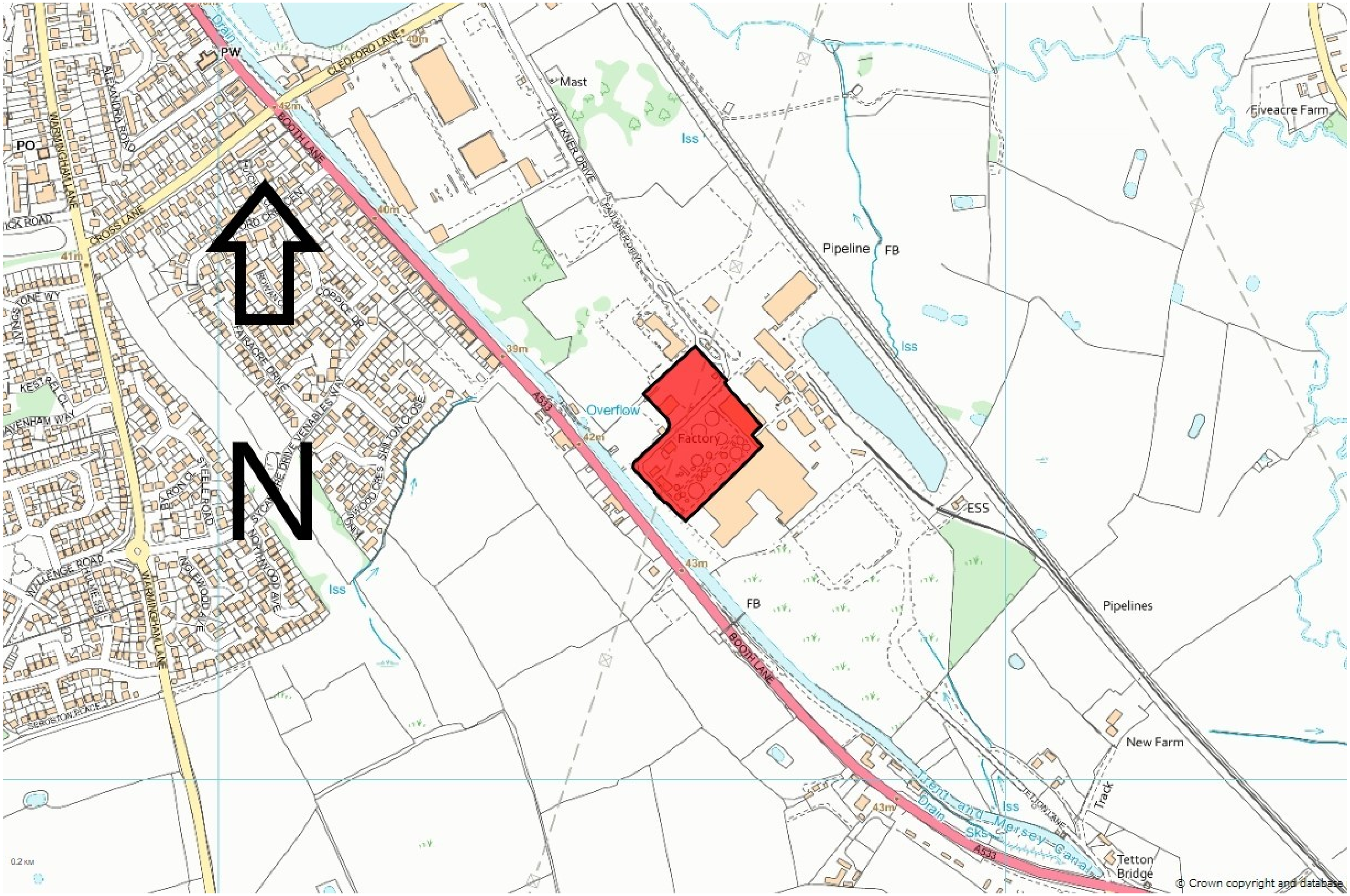
Approve subject to the following conditions:

1. timescales for implementation
2. approved plans
3. notification of commencement of development
4. implementation of the travel plan
5. implementation of the noise mitigation
6. implementation of construction and environmental management plan
7. prior to the commencement of development submission of an updated phase II ground investigation and risk assessment, and where necessary, remediation strategy
8. verification report prior to the development being brought into use
9. measures to deal with unexpected contamination
10. restrictions of any infiltration of surface water to the ground
11. set finished floor levels
12. all surface water contained on site and reused within the site boundary, with no surface water or reused contaminated water draining to public sewer
13. condition survey of the existing surface water drainage system
14. nesting birds survey
15. bat box provision
16. all new lighting to be diverted to avoid light spill
17. implementation of reasonable avoidance measures for protected species
18. tree protection measures

In the event of any changes being needed to the wording of the Committee's decision (such as to delete, vary or add conditions/informatives/planning obligations or reasons for approval/refusal) prior to the decision being issued, the Head of Planning has delegated authority to do so in consultation with the Chairman of the Strategic Planning Board, provided that the changes do not exceed the substantive nature of the Committee's decision.

Application for Full Planning

RECOMMENDATION:


N
PW
CLEDFORD LANE
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Fiveacre Farm
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ALEXANDRA ROAD
CROSS LANE
FAIRACRE DRIVE
COPPICE DR
VENABLES WAY
SHILTON CLOSE
STEELE ROAD
Pipeline
FB
Overflow
Factory
ESS
A533
Pipelines
New Farm
Track
Trent and Mersey Canal
Tetton Bridge
42m
40m
39m
41m
43m
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Application No: 20/3762N

Location: Land off Sydney Road, Crewe

Proposal: Residential development for 151 new build dwellings & associated works

Applicant: Andrew Taylor, David Wilson Homes/Duchy of Lancaster

Expiry Date: 16-Dec-2020

SUMMARY

The proposal seeks to provide 149 dwellings on a greenfield site off Sydney Road which is allocated under CELPS policy LPS 6 Crewe Green for around 150 dwellings. The principle of residential development on the site has been established. Although the north-western corner of the site is located within the strategic green gap, this will only accommodate POS and consequently maintain openness in accordance with the aims of CELPS Policy PG5.

Amendments to design and layout of the proposal have been secured during the application. Following the deferral by Strategic Planning Board the play area has been relocated to a more central position within the development. It is considered that the overall benefits of relocating the play area to an easily accessible position with an enlarged areas of POS at the centre of the site would in this case, outweigh issues arising from the siting of further dwellings alongside the main access road, and the slight shortfall in combined amenity green space and children's play space.

The proposal provides the required amount of affordable housing with an appropriate mix of housing. The proposal achieves an appropriately designed residential development and its detailed design and layout accords with the overall principles for the development of the site and the CEC Design Guide. It achieves an acceptable relationship with the both character of the locality, without material harm to neighbouring residential amenity, and would provide sufficient amenity for the new occupants.

The proposals would not adversely affect the significance of heritage assets including the Crewe Green Conservation Area and nearby listed buildings nearby. Tree and hedgerow losses have been accepted and would be mitigated in the proposed landscaping of the site and through off-site habitat creation to achieve biodiversity net gain.

The proposed access arrangements for the development will not adversely affect highway safety or result in traffic management issues on the local highway network, and provides satisfactory on-site parking. The impact on Air quality arising from the proposals and the impact of on development itself from road traffic noise can be satisfactorily mitigated.

To satisfactorily address the impact on local services/facilities, contributions to education, healthcare provision and indoor/outdoor sport will be secured through a S106 agreement.

On this basis, the proposal is for sustainable development which would bring environmental, economic and social benefits and is therefore considered to be acceptable in the context of the relevant policies of the adopted Cheshire East Local Plan Strategy, the Borough of Crewe and Nantwich Local Plan, and advice contained within the NPPF.

RECOMMENDATION
Approve subject to s106 agreement and conditions

UPDATE

This application was deferred by Cheshire East Council's Strategic Planning Board on the 15th June 2021 for the following reasons;

1.Reconsideration of the proposed location of Public Open Space to be more central on the site;

2.Reconsideration of the design of the apartments at the southern end of the site and in particular concerns of the balcony/outdoor amenity space of the apartments facing onto Crewe Green roundabout

And to seek further clarification on the following issues:

- *Traffic levels at the time of traffic flow assessments undertaken and the implications for the accuracy of noise/air quality assessments*
- *Parking provision and Electrical Vehicle Charging Points*

Revised proposals

In response to the concerns raised by Members, the applicant has amended the site layout to enable the play area to be re-located to a more central position within the development. The originally proposed "pocket park" has effectively been enlarged to accommodate an enhanced Locally Equipped Play Area (LEAP).

The scheme has been reduced to an overall total of **149 units**. To achieve this number of dwellings more units are now located alongside the access into the site from Sydney Road. These units occupy part of the formerly proposed area of POS located in the north-western part of the site but are sited to remain outside of the Strategic green gap. An area of POS is proposed behind these units, and this extends up to the northern site boundary with the PROW.

The housing mix has also been slightly adjusted from that previously proposed with one additional 3-bedroom unit and two additional 2-bedroom units, and three fewer 4-bedroom units and two less 1-bedroom units. The proposed development now comprises;

1 bed unit x 10
2 bed unit x 22
3 bed unit x 85

4 bed unit x 32

There is no change to the proposed affordable housing proposals (45 units = 30%) as set out in the original report below.

Open Space, Sport and Recreation

The local plan allocation (LPS 6) states that the development of this site should include, "the incorporation of green infrastructure, to include open space provision, including children's equipped play space/multi-use games area"
Policy SE6 of the CELPS sets out the open space requirements for housing development which are (per dwelling):

- Children's play space - 20sqm
- Amenity Green Space - 20sqm
- Allotments - 5sqm
- Green Infrastructure connectivity 20sqm

Therefore, based on a scheme of 149 dwellings a minimum requirement of 5,960 m² of combined amenity green space should be provided.

The amended layout provides two areas of POS, with the largest area (3,468 sqm total) in the north west corner of the site and an enlarged area (2,209sqm total) at the centre of the development which was formerly identified as a "pocket park". This provision falls slightly short of the minimum combined amenity green and children's play space.

Re-located Play Area

The Leisure Officer considers that the provision of an "enhanced" LEAP will address the above shortfall, as well as being provided in lieu of the provision of a MUGA (or financial contribution).

The play area has been relocated to a central position within the scheme. This is a safer and more accessible position for use by residents of the development than that previously proposed within the north western part of the site and adjacent to the main vehicular site access. In addition, it will also be easily accessible from nearby housing areas which have little formal play space via a pedestrian/cycle link into the development adjacent to the position of the enhanced crossing (Toucan) required to be provided on Sydney Road.

The Leisure Officer has advised that although available space is limited within the POS at the centre of the site a LEAP of a "bespoke" and creative design can be satisfactorily accommodated here and still meet the necessary stand-off distance to adjacent property.

The proposed play equipment for the LEAP is indicated to be of a height which would not over-dominate the space or impact on the privacy/amenities of the surrounding properties. The proposals also show buffer areas of 20m being provided between equipment and the nearest adjacent dwelling. Natural materials (primarily timber) are also proposed to be used to ensure a less intrusive feel to the play area. A multi-unit has been selected as the 'base' of a bespoke design, which will include multi-use aspects of play. In addition, a steam train

play unit is also proposed to sit on 'railway tracks' for very young children, to add co-ordination, sliding and role/imaginative play as well as educational value to the play area. However, detail of the design of the play area remain to be finalised.

A condition is therefore recommended requiring full details of the design and specification of play area to be submitted to and agreed, to ensure appropriate provision of play space for the development. Details of its hard and soft landscaping, including the specification of planting, will be secured by a condition.

The provision of the LEAP will be secured by the S106 agreement prior to the occupation of no more than 50% of the dwellings.

Northern POS

The applicant has stated that to enable the provision of the enlarged area of POS to accommodate the play area and also to secure the provision of 149 units in line with the site allocation (LPS 6), further dwellings need to be provided along the site access road.

The gardens of several of these dwellings adjoin the retained public open space. The boundaries of these properties will be secured from the adjoining POS by a boundary wall, augmented by planting to deter antisocial activity and crime.

In addition, to ensure acceptable levels of natural surveillance of the adjoining space is achieved, together with active frontages along the access road, the proposed units will be dual aspect, with 'corner turner' house types being used in this prominent location.

However, the Design Officer considers that the introduction of additional plots in this location will weaken the quality of the entrance to the development, as garden boundaries will extend up to the highway on both sides of the main access street to the shared surface area, which prevents significant roadside tree planting.

The Leisure Officer has advised that to fulfil the requirement for growing space under Policy SE6, and in preference to an off-site financial contribution, the northern POS should incorporate an area for the provision of fruiting trees located near the pumping station to fulfil the requirement for growing space by Policy SE6. This provision will be secured as part of the approved landscaping scheme for the development.

On balance, it is considered that the overall benefits of relocating the play area to an easily accessible position with an enlarged areas of POS at the centre of the site would clearly outweigh the issues arising from the siting of dwellings alongside the northern area of POS and the slight short fall in combined amenity green space and children's play space.

Design

Layout

The revised proposals offer an opportunity for additional greening within the centre of the estate, resulting from the enlarged POS to accommodate the children's play space.

Revised planting proposals particularly around the periphery of the proposed play area will be secured through a condition. As set out above, given the limited size of the available space, care is being taken to ensure that the design and specification of the play area to ensure it will not constitute unduly dominant feature particularly in view of the proximity of adjacent dwellings.

It is recognised that in design terms that roadside tree planting at the site entrance should ideally be strengthened, but as set out above this cannot be secured due to the siting of additional units sited close to the edge of the highway within the formerly proposed area of POS.

Following assessment of the latest amendments and landscaping proposals, the Design Officer has advised that whilst some improvement has been achieved, there remain some additional opportunities to enhance the overall greening of the scheme. As recommended previously to secure further improvements a condition is considered suitable requiring the submission of full details of site landscaping and enable details of planting to be finalised and approved.

The criteria of '*Character*' and '*Creating well defined streets and spaces'* of the BFL 12 assessment therefore reman rated at amber.

Apartment Balconies

Members raised concerns in respect to the proposed provision of balcony/outdoor amenity space of the apartments facing onto Crewe Green roundabout and the resulting impact of passing traffic. To address these concerns, the applicant has submitted a sectional drawing to demonstrate the large separation distances that will remain between the proposed balconies and carriageway of the roundabout.

The ground floor balcony is located more than 25 metres from the back edge of kerb, and this distance from passing traffic increases for 1st & 2nd floor balconies when the height of the building is taken into account.

Furthermore, landscaping of the southern edge of the site with roundabout will be strengthened. This will include the retention of newly planted hedgerow associated with the roundabout enlargement, additional wildflower and tree planting within the site, and to establish a naturalised verge between the footway and site boundary further to agreement with the Highway Officer. Given the proposed planting on the site boundary and on the roundabout itself, together with the setback of the apartment buildings from the carriageway, this will create an acceptable outlook from the scheme once matured.

In view of this relationship with the roundabout, it is therefore considered the balconies would provide reasonably attractive and usable private amenity space for residents of the apartments, and particularly at evenings and weekends when traffic is lighter.

Traffic levels at the time of traffic flow assessments

The Environmental Health Officer (EHO) has confirmed that with reference to the submitted Noise Report, and as also advised by the applicant, noise monitoring was undertaken on the

5th-6th March 2020, which was before the start of the national lockdown due to COVID-19. Therefore, the EHO remains satisfied with the noise assessment, its recommendations and proposed mitigation for the development.

The Environmental Protection Officer has advised that for the Air Quality Assessments it is standard practice to use the same year for all modelling inputs, i.e. diffusion tube data, meteorological data and traffic data. The Air Quality Assessment used 2019's tube data and the submitted transport assessment is also dated 2019. The applicant has confirmed that as travel patterns had been impacted by the Covid19 pandemic at the time Air Quality Assessment was prepared, traffic data was therefore used from the Transport Assessment which was factored to 2019.

Car Parking Provision

The Councils Highway Officer has assessed the amended layout and has raised no concerns in respect of highway safety or in respect of the proposed car parking provision.

It is further advised that as set out in by Table 4.1 of the Transport Assessment below the scheme previously considered by SPB on 15 June provided the appropriate number of spaces in accordance with CEC parking standards.

The development comprises 151 residential dwellings, including 106 private market and 45 affordable homes. The type and mix of properties are set out in Table 4.1.

Table 4.1: Type and Mix of Homes

House Type	No. of Private	No. of Affordable	Total
1 Bedroom	0	10	10
2 Bedroom	4	24	28
3 Bedroom	56	11	67
4 Bedroom	46	0	46
Total	106	45	151

Development Type	Car Parking
1 Bedroom	1
2 Bedrooms	2
3 + Bedrooms	2

Following consideration of the amended layout for 149 units, the required changes to parking arrangements are very limited and primarily relate to the amended siting of units adjacent to the site access, and consequently the proposed provision is acceptable and in line with CEC standards.

Electrical Vehicle Charging Points (EVCPs)

The applicant has advised that in line with the Environmental Protection Officer (EPO) requirements all charging points will be Mode 3 (fast charging) units. A layout plan has been submitted showing that each dwelling will have a charging point and all apartments will have access to shared, post-mounted, charging points of mode 3 specification.

It is recommended that a condition is imposed to secure the provision of the proposed Electric Vehicle Infrastructure within the development.

Other Matters

For completeness, matters referred to in the update to the previously considered officer report presented on 15th June 2021 are set out below:

Additional Representations

Since publication of the previously considered report, 13 further representations have been received objecting to the proposals following the Re-consultation exercise undertaken on 24 May 2021 in relation to amended proposals.

The grounds of objection of these representations have reiterated those summarised within the previous report which were made to the original proposals.

Representations do however question whether there is a need to develop this site given the Council has a 5-year Housing land Supply and housing delivery over the past three years has exceeded the number of homes required. The housing position is updated below.

Housing Land Supply

The Local Plan Strategy sets out the overall strategy for the pattern, scale and quality of development, and makes sufficient provision for housing (minimum 36,000 new dwellings over the plan period, equating to 1,800 dwellings per annum) in order to meet the objectively assessed needs of the area.

The council's most recent Housing Monitoring Update (base date 31 March 2020) was published on the 11th March 2021. The published report confirms a deliverable five-year housing land supply of 6.4 years. The 2020 Housing Delivery Test Result was published by the Ministry of Housing Communities and Local Government on the 19 January 2021 and this confirms a Cheshire East Housing Delivery Test Result of 278%. Housing delivery over the past three years (8,421 dwellings) has exceeded the number of homes required (3,030). The publication of the HDT result affirms that the appropriate buffer to be applied to the calculation of housing land supply in Cheshire East is 5%. In the context of five year housing land supply and the Housing Delivery Test, relevant policies concerning the supply of housing should therefore be considered up-to-date and consequently the 'tilted balance' at paragraph 11 of the NPPF is not engaged through either of these mechanisms.

Importantly, the existence of a 5-year supply of housing land is not a reason, in principle, to prevent permission being granted for a site that is allocated in the Local Plan for housing

development. The requirement is to maintain at least a 5-year supply of deliverable housing land. This is an ongoing requirement reliant on the timely release of additional land for housing development so this can be maintained. It is also a minimum requirement. It is not a ceiling that should be used to prevent the release of land for further housing development where such schemes are consistent with Local Plan policy – as is the case with this site, in principle, through its allocation.

The Allocation of a site in the Local Plan Strategy establishes the principle of development on that site. The site contributes towards the Council's housing land supply and assist in meeting the development requirements of Crewe and the wider Borough. It is important that the Council maintains not only a five year supply of deliverable sites but also provides for sufficient sites to meet the plan supply of a minimum of 36,000 new dwellings (2010 – 2030) at an average of 1,800 dwellings per annum. Indeed, the Housing Monitoring Update (base date 31 March 2020), appendix 5 also includes the allocated site at Crewe Green (LPS 6) within its forecasting and assumes that the site delivers 84 units within the next five years.

This site therefore contributes to the Council's overall five-year supply of deliverable sites.

Education

The Council's Education team has confirmed that a scheme comprising of 149 dwellings (dwelling 2bed+), is expected to generate:

149 dwellings x 0.19 (28 – 1 SEN pupil) = 27 Primary Children
149 dwellings x 0.15 (22 – 1 SEN pupil) = 21 Secondary Children
149 dwellings x 0.51 x 0.023 (2.3%) = 2 SEN Children

As set out in the Committee report, the development is expected to impact on primary school, secondary school, and SEN places in the locality. To alleviate forecast pressures, the following contributions would be required to account for the increase of unts within the scheme.

27 x £11,919 x 0.91 (Cheshire East weighting factor) = £292,850
21 x £17,959 x 0.91(Cheshire East weighting factor) = £343,196
2 x £50,000 x 0.91 (Cheshire East weighting factor0 = £91,000 (SEN)
Total education contribution: **£727,046**

Without a secured contribution of £727,046, Children's Services would raise an objection to this application. This position is on the grounds that the proposed development would have a detrimental impact upon local education provision as a direct cause from the development. Without mitigation, the proposal would not comply with LPS 6 in the CELPS.

The contribution will be secured through a Section 106 agreement as set out in the recommendation.

Healthcare

The NHS CCG has re-calculated the financial contribution based on the revised development of 149 dwellings and which is required towards funding improvements to GP practice infrastructure as set out in the Committee report.

The financial contribution is calculated on the basis of occupancy x number of units in the development x £360. This is based on guidance provided to other CCG areas by NHS Property Services.

Size of Unit	Occupancy Assumptions Based on Size of Unit	Health Need/Sum Requested per unit
1 bed unit	1.4 persons	£504 per 1 bed unit
2 bed unit	2.0 persons	£720 per 2 bed unit
3 bed unit	2.8 persons	£1,008 per 3 bed unit
4 bed unit	3.5 persons	£1,260 per 4 bed unit
5 bed unit	4.8 persons	£1,728 per 5 bed unit

1 bed unit x 10 = £5,040
2 bed unit x 22 = £15,840
3 bed unit x 85 = £85,680
4 bed unit x 32 = £40,320

Total: £146,880

The contribution of £146,880 is required towards the development of Hungerford, Millcroft and Earnswood Medical Centres and will be secured through a Section 106 agreement as per the recommendation. This would comply with policy LPS 6 of the CELPS.

Designing Out Crime

The applicant has confirmed that gates can be provided to the entrances to the underpasses serving parking courts to address issues raised by Cheshire Police (Designing Out Crime Officer) as regard the potential for anti-social behaviour / criminal activity. This will provide additional security to those areas, (southern courtyards) and give the impression of private space. The detailed design of these gates and their provision will be secured though a planning condition.

The application therefore remains **recommended for approval**, subject to the completion of a Section 106 Agreement and the conditions detailed at the end of this report.

Previously considered Committee Report below (incorporating updated recommended conditions)

DESCRIPTION OF SITE AND CONTEXT

The application Site (4.52ha) is an undeveloped greenfield site approximately 1.45 km from Crewe Town Centre. The majority of the site is allocated for housing development under policy LPS 6 (Crewe Green) in the CELPS, which allows for the delivery of around 150 new homes. Part of the north-western corner of the site lies within the Crewe/Haslington Strategic Green Gap.

This triangular shaped site lies between Sydney Road to the West, the A534 Haslington Bypass to the east and the Crewe Green roundabout to the south.

The northern boundary is defined by an existing hedgerow beyond which lie open fields within the Strategic Green Gap. A private access road leading to Fields Farm extends along part of the northern boundary which is also a Public Right of Way (Haslington FP41).

To the south, the site fronts onto the Crewe Green Roundabout which was subject to an improvement scheme recently implemented by Cheshire East Council. Crewe Green Conservation Area lies to the south east of the site and is centred on the junction of Crewe Road with Narrow Lane. (B5077).

The front and rear elevations of existing residential properties located on the western side of Sydney Road face towards the western boundary of the site.

DETAILS OF PROPOSAL

This application seeks full planning permission for the development of 151 new homes with associated access, public open space, and landscaping.

The development includes a mix of 2, 3 and 4 bed houses and 1 and 2 bed apartments of a range of sizes and design. The maximum height of buildings will be three storeys with most properties being 2 storeys.

The southern corner of the site adjacent to Crewe Green Roundabout is characterised by a strong built edge comprising of three storey townhouses flanked by 3 storey apartment Buildings designed to create a strong gateway feature.

It is proposed that the site is served by a single point of vehicular access onto
Sydney Road. Pedestrian/cycle connections onto Sydney Road are provided at two points along the western site boundary.

The main area of public open space serving the scheme occupies the north west corner of the site and will accommodate an equipped children's play area (NEAP). It is proposed that pedestrian routes running through the open space connect with the existing Public Right of Way FP41 which runs along the private access road to Fields Farm adjacent to the northern site boundary.

Mature hedgerows and trees around the perimeter of the site will be retained. A landscaped buffer will be provided alongside the northern site boundary with land within the green gap to ensure retention of existing trees and hedgerows.

Revised plans and additional information have been received during the application process in response to issues raised by the Council. This has been predominantly in relation to design, but also in respect of ecology, highways, drainage and enhanced planting/landscaping. The amended scheme has also increased the overall number of units from a 148 to a total of 151.

RELEVANT HISTORY

17/3096N - Redevelopment and extension of Crewe Green Roundabout to provide additional traffic lanes and improvements to pedestrian and cyclist facilities, landscaping, and re-contouring of the roundabout, and ancillary works. Approved 5th October 2017.

POLICIES

Cheshire East Local Plan Strategy (CELPS)

LPS 6 Crewe Green
MP1 Presumption in favour of sustainable development
PG1 Overall Development Strategy
PG2 Settlement hierarchy
PG5 Strategic Green Gaps
PG6 Open Countryside
PG7 Spatial Distribution of Development
SD1 Sustainable Development in Cheshire East
SD2 Sustainable Development Principles
IN1 Infrastructure
IN2 Developer Contributions
SC1 Leisure and Recreation
SC2 Indoor and Outdoor Sports Facilities
SC3 Health and wellbeing
SC4 Residential Mix
SC5 Affordable Homes
SE1 Design
SE2 Efficient use of land
SE3 Biodiversity and geodiversity
SE4 The Landscape
SE5 Trees, Hedgerows and Woodland
SE6 Green Infrastructure
SE7 Heritage Assets
SE9 Energy Efficient development
SE12 Pollution, land contamination and land stability
SE13 Flood risk and water management
CO1 Sustainable travel and transport
CO3 Digital connections

CO4 Travel plans and transport assessments

The Cheshire East Local Plan Strategy was formally adopted on 27th July 2017. There are however policies within the legacy Local Plan that still apply and have not yet been replaced. These policies are set out below.

Crewe and Nantwich Replacement Local Plan

BE.1 – Amenity
BE.3 – Access and Parking
BE.4 – Drainage, Utilities and Resources
BE.6 – Development on Potentially Contaminated Land
NE.5 – Nature Conservation and Habitats
NE.7 – Sites of National Importance for Nature Conservation
NE.8 – Sites of Local Importance for Nature Conservation
NE.9 – Protected Species
NE.11 – River and Canal Corridors
NE.17 – Pollution Control
NE.20 – Flood Prevention
NE.21 – New Development and Landfill Sites
TRAN.3 – Pedestrians
TRAN.5 – Provision for Cyclists
RT.9 – Footpaths and Bridleways

Other Material Considerations
National Planning Policy Framework (The Framework)
National Planning Practice Guidance
Cheshire East Design Guide

CONSULTATIONS (External to Planning)

United Utilities - No objection subject to surface water drainage condition.
Natural England - No objection.

Housing - No objection.

Flood Risk Manager - No objection, subject to conditions requiring the development to accord with FRA and details of surface water drainage.

Environmental Health - No objection subject to conditions relating to noise mitigation, electric vehicle infrastructure, ultra-low emission boilers and contaminated land.

Education - No objection subject to a financial contribution towards local primary and secondary school and SEN places.

Public Rights of Way – No objection

Head of Strategic Infrastructure – No objection subject to conditions to secure the upgrading of the existing pedestrian crossing and associated pedestrian/cycleway improvements, and a financial contribution towards improvements to Crewe Green Roundabout.

Leisure - No objections subject to conditions and contributions to outdoor sport and financial contribution for health & fitness equipment at Crewe lifestyle Centre.

NHS Cheshire Clinical Commissioning Group - No objection subject to a financial contribution to fund improvements to GP practice infrastructure.

Cheshire Police (Designing Out Crime Officer) - Concerns raised due to potential for anti-social/criminal behaviour as canopy court entrances act as shelters and lack of surveillance of courtyard parking in the southern part of the development.

Cheshire Brine Subsidence Compensation Board - The area has previously been affected by brine subsidence and board recommends that precautions are incorporated within the construction design of the development. (An informative will be attached on the decision notice)

Crewe Town Council - Objects on the following grounds.
- positioning of the playground area is inadequate and not appropriate as too close to the road and far from the highest density of the proposed development.
- development will create unacceptable traffic congestion at an already highly congested point of the highways network
- Insufficient parking provision, which does not meet Cheshire East Local minimum requirements
- In sufficient provision of electric vehicle charge points
- Boundary treatments to allow access through for wildlife (e.g. hedgehogs)
- The communal residential waste bin storage areas are not readily or safely accessible for kerbside waste collection services

The following additional grounds of objection have been made to the application further to re-consultation on the amended proposals.

- Lack of time for consideration of the application (consultation period to below the requisite 21 days)
- The shared waste collection points are impractically far from residences and will lead to localised waste and anti-social issues.
- The play area is inadequate provision for the density of the proposals
- Associated traffic and congestion will adversely impact air quality
- The site does not meet the net gain biodiversity policies and wildlife planning Initiative should be considered and provision for wildlife nesting and habitats should be included (e.g. pollinator and nesting bird infrastructure, wildlife dormancy provision, native planting, fruit trees and shrubs)
- the proposals represent over development and the high density / affordable housing aspect of the proposals are concentrated in one area and should be spread through the development evenly

Crewe Green Parish: Comment as follows.
- Insufficient grounds not to support the application

Haslington Parish Council: Objects as follows.

- Whilst the application site relates to the Cheshire East Local Plan strategic site LPS6 for 150 houses, it is in a very prominent position adjacent to the Green Gap separating urban Crewe from rural Crewe Green and Haslington. Any development on the site needs to minimise the intrusion into the open countryside, but also needs to screen the potential residents from the high levels of noise and fumes associated with the very busy Crewe Green Roundabout and the Haslington Bypass.
- The current development plans do not adequately screen the development from the bypass, a two or three metre soil bund covered in dense shrubs and trees should be required alongside the bypass to create higher levels of amenity to residents than the current proposals, soundproofing of the buildings will not be enough, the gardens also need protection from the noise and fumes.
- The Parish Council notes the submission from the CCG relating to the overstretched local GP Surgeries, we would strongly request funding of £120,000 be allocated to the Haslington Surgery to address the identified shortfall in accommodation.
- To avoid the development becoming isolated from the adjacent community facilities it is essential that additional pedestrian and cycling provision is made, specifically light controlled crossings on Sydney Road, safe walking routes to schools must be provided.
- The height of all properties, including the apartments need to be restricted to 2 stories to reflect the character of residential property in the adjoining communities. 2.5 storey houses and 3 storey apartments are out of character given the developments location on the rural/residential fringe.
- parking provision appears to be below the minimum acceptable standard for developments in Cheshire East.
- Concern is expressed that the Police do not consider the development to be safe and fails to incorporate acceptable features to design out crime.
- The Parish Council would also like comments from the neighbouring landowner at Fields Farm to be taken into consideration, in particular the retention and protection of the existing boundary hedgerows and trees, new access from the development onto FP41 which is a driveway used by HGV's visiting the farm and the request to move the play area to the centre of the site**.**

OTHER REPRESENTATIONS

Letters have been received from residents, interested parties and ward councillors.

Approximately 108 representation were received objecting to the proposal on the following grounds:

- Cheshire East already meets its housing supply requirements and development of site is not required.
- Development of Green Belt land contrary to local and national policy.
- Development breaches environmental policies of the National Policy Planning Framework 2019, in relation to traffic and congestion, air pollution risks and other wider environmental issues contrary to local plan

- Land was not originally a strategic allocation in the Cheshire East Local Plan but added after further consultation period.
- There are better sites elsewhere such as more suitable brown field sites more central to Crewe.
- Development required to be accompanied by an Environmental Impact Assessment (EIA)
- Environmental impact of development including increase in C02 emissions will contribute to global warming.
- Erosion of the Green Gap and green space between Haslington and Sydney/Crewe.
- Loss of open countryside detrimental to the character of the surrounding settlements.
- Adverse visual impact.
- Loss of agricultural land.
- Hedgerows and existing trees should remain in place and be protected.
- Loss of hedgerow to facilitate link to public footpath (FP41).
- Damaging to local nature and loss of wildlife habitat.
- Loss of green space detrimental to health and well-being
- Reduction in quality of life.
- Intrusion within Conservation Area.
- Excessive residential development and infilling in the Sydney Road/Crewe Green area.
- Cumulative impact of ongoing and proposed developments along Sydney Road and existing infrastructure unable to cope following developments.
- Local services including Schools, childcare, hospitals, GP services and dentists already overstretched.
- Additional pressure on road infrastructure, especially Crewe Green roundabout.
- Crewe Green roundabout is already inadequate and hazardous in its current format and additional vehicles from the development will exacerbate problems.
- Detrimental to highway safety.
- Increase in traffic and congestion on Sydney Road which is a busy road and Crewe Green Roundabout at peak times.
- Increase in pollution and adverse impact on air quality from increased traffic
- Submitted Air Quality Assessment is inadequate.
- Inadequate provision for cycling and public transport.
- Shakespeare Drive will become even more of a rat run than currently.
- Increase in speeding traffic on Sydney Road.
- Difficult for pedestrians to safely cross Sydney Road.
- Increased difficulty in ability to safely access Sydney Road from the proposed development, Stephenson Drive, and other properties, particularly when turning right.
- Insufficient on-site car parking proposed resulting in on road parking
- Inadequate turning circles for emergency vehicles and for refuse collection
- No provision of visitor car parking.
- Overdevelopment of a small site. Development crammed and of excessive density.
- Lack of space to provide adequate public open space/greenspace and play space within development.
- Provision of mainly smaller properties out of character with the locality.
- Proposed 3 storey high homes will be an eye sore.
- Housing layout does not meet the required separation distances between dwellings set out by the Councils SPD.
- Inadequate mix of houses with no provision of Bungalows to meet community needs.
- Lack of affordable housing.
- Unclear from layout plans which are the Open Market Houses / Affordable Houses.

- Conflict with affordable Housing Policy as can clearly differentiate between house types proposed for Open Market units and Affordable Homes.
- Play area is sited next to a busy road (Sydney Road) and should be located at the centre of the development.
- Proposed play area of insufficient size to serve a development of 148 dwellings.
- Lack of information as regards future management of public open spaces, which should not be by a management company funded by resident of the development.
- Access should not be provided from play area/POS to public footpath as this is also a private driveway serving Fields Farm used by HGVs and agricultural machinery.
- There should be a walkway /access from the site to the new pedestrian crossing on the A534.
- Adverse impacts from increased use of public footpath because of increased dog walking and anti- social behaviour.
- Development should include green measures such as solar panels, ground, or air source heat pumps.
- Lack of electric vehicle charging points.
- Development does not include measures to address impact of Covid 19
- Overlooking and loss of privacy.

Noise and disturbance from during construction and from new properties.

- Adverse impact of Maw Green Landfill on the local area due to odour/smell, HGV traffic and pollution.
- Exacerbate existing surface water drainage and flooding problems
- Increased strain on sewage and water services and exacerbate existing problem of low water pressure.
- Broadband coverage is weak.
- Disruption/ impact on highway network of construction work

and all construction vehicles during the development should turn left out of the site.

- Noise and disturbance during construction and from new properties.
- Adverse impact from traffic noise and need for mitigation measures
- Reduction in house prices
- Inadequate consultation with failure to inform all effected residents of the proposed development and account not taken of the current exceptional conditions of the Covid 19 pandemic restricting the consultation process

16 further representations have been received from residents following the re-consultation exercise in respect of amended proposals undertaken on 24 May 2021. The grounds of objection of these representations reiterate those summarised above which were made to the original proposals.

A Letter of objection was received Cllr Hazel Faddes set out below;

This planning application has brought forward a lot of strong opinions from nearby residents who realise the daily issues of noise and speeding traffic around Crewe Green roundabout and its surrounding highways.

Cheshire Constabulary do not support the application and I feel their views on the designs possible flaws which could encourage ASB should be noted.

Although the road safety record for five years shows no fatalities, sadly since the report was written two deaths have occurred on the inlet roads to the roundabout. Speeding traffic, and a large number of vehicles make this area quite dangerous. Having a GP surgery, school and shopping facilities within walking distance is of little use if you are worried about walking there safely.

To access one of the bus routes into town one would also have to cross a busy road. while we are trying to encourage more to walk, cycle and use public transport, I feel people living on this proposed development site would tend to use a car for both long and short journeys. both adding to the traffic congestion and high air pollution levels nearer to Crewe's town centre and hindering our bid to be carbon neutral friendly.

Even without this extra traffic the area suffers with the noise and pollution of a steady stream of traffic, to mitigate this noise I would have liked to see trees along the boundary, instead we read that a 1.8m high brick screening wall is proposed for the outer boundary of the site. Not as pleasing to the eye and certainly with none of the air purifying qualities of native trees.

I note in the Arboricultural Impact Assessment we have not received an updated ecological assessment, has this been delivered yet. I have concerns that the bat survey could still be ongoing and a report suggests that some of the established trees on site are conducive for bat colonies.

The hedgerow along the northern border of the site has been identified as meeting the criteria for important biodiversity and I hope as much of this hedgerow as possible could be retained. The application does state that a section of hedgerow on the sites western boundary will require removal for access.

It is a worrying fact that the report states there will be a high Biodiversity habitat loss of 49%, our planning policies and decisions should contribute to and enhance the local environment and provide net gain for diversity. This application does not adhere to that policy.

We read that there are 22 established trees on site 14 of high or medium value, certainly it would be hoped that any development would be finalised with as little loss of trees as possible and any new planting are of high quality species.

It is linkage will be a benefit stated that houses should not be built within a certain distance from the base of established trees, to offset any issues with roots damaging foundations and the lack of light from high species of trees, to my untrained eye some of the proposed houses are to be built very close to the original trees.

CTC state that the positioning of the playground is too close to the road.
Although ANSA states that the main open space is far from ideal, it says it has the advantage that it is linked to PRoW FP41 and both will benefit from the linkage. Whilst completely agreeing that the playground is too close to the road and the fact that the open space is far from ideal, I disagree with the latter part of ANSA's statement. I am extremely worried that the PRoW, which is the driveway for the residents and workforce of Fields farm, carries heavy tractors and haulage vehicles from the farm to the road. For excited young children this entry from the play area onto the PRoW could be dangerous as children do not always look before crossing and would not expect traffic to be on the footpath. There is also a danger that they

could wander along the path, which leads to the busy bypass, or cross onto the other PRoW which passes a small lake, water always being a temptation to inquisitive children. The linkage access spot from the play park to PRoW FP 41 is a short distance from the busy Sydney Road, a danger for those older children out on their own.

For these reasons I feel that the linkage between the play area and the PRoW should be avoided, and indeed this makes the statement that the linkage will be a benefit to both obsolete. I feel the developers should consider a playground more in the centre of the development, in view of residents properties and not squashed into a poorly overlooked corner.

I am in favour of the widening of the existing footpath along Sydney Road to 3m wide, for shared pedestrian and cycle use.

I am also pleased that 10 one bedroom properties and 28 two bedroom houses are included in the plans, but worry that those older residents who may buy a property here at a younger age will one day be without the advantage of being able to drive a car and find themselves isolated here. There does not appear to be any consideration for disabled access to properties, I hope this can be addressed.

In all, I cannot give my support to this application and wish to raise my objections, which far outweigh any benefits I can find.

A Letter of objection has also been received from Cllr Suzanne Brookfield which is set out below;

- I *consider this site to be over developed. The original plans for this site were fewer units.*
- I have concerns about the access and egress to the site from Sydney Road. Whilst the new Crewe Green roundabout works well in terms of congestion there have been concerns from nearby residents that vehicles leaving the roundabout can be travelling at speed and with an additional junction onto Sydney Road this is a worry.
- The number of allocated parking spaces per dwelling is inadequate. There is little space for any on street parking if required. In current times there should also be a requirement for more electric car charging points.
- I would like reassurance that the Public Right of Way is not fettered in any way and am looking into this more. As proposed, this may affect nearby properties.
- As mentioned by other parties I would ask if there are sufficient medical provisions in the locality as nearby doctor practices/medical centres have in recent months removed patients due to over-subscription.

In respect of the Re-consultation on the amended proposals Cllr Brookfield has further added the following grounds of objection;

- *There has to be concern about the increase of 300 vehicles accessing the nearby highway network.*
- The amount of properties being constructed onto this site is in my opinion excessive, which will result in over development.

- The volume of development along this corridor has resulted in flooding in other locations in the ward and I would request further detail in order residents are assured there will not be issues in nearby locations.
- In similar developments concerns are always raised by new occupiers of the play areas. The location of the play park is in my opinion situated too far from the majority of the properties, which will from experience increase the likelihood of anti-social behaviour as seen on other new build estates in the locality. I would also raise questions about the ongoing maintenance of the play area and the suitability/adequacy of the proposed equipment.
- In respect of the communal waste collection points I consider these to be inadequate and would foresee there to be issues as the properties are occupied.

OFFICER APPRAISAL

Principle of Development

The application site is an allocated Strategic Site for housing in the CELPS. Site LPS 6 states that the development of land at Crewe Green over the Local Plan Strategy period will be achieved through:

1. The delivery of around 150 homes;

2. The provision of land to Cheshire East Council that is necessary to facilitate the delivery of highway improvements at Crewe Green Roundabout. Such improvement to be completed before development of the new homes starts on site; and

3. The incorporation of green infrastructure, to include open space provision, including children's equipped play space/multi use games area.

The proposal for 151 dwellings is considered to meet the definition of “around 150 new homes” and is therefore considered to be acceptable in principle. The delivery of the site for residential development will contribute towards the Council’s housing land supply and assist in meeting the development requirements of Crewe and the wider Borough. The further requirements of policy LPS 6 are considered further below.

In addition, a small area of the north-western part of the site lies within the Strategic Green Gap between Crewe and Haslington where Policy PG5 aims to;

- Provide long-term protection against coalescence
- Protect the setting and separate identity of settlements; and
- Retain the existing settlement pattern by maintaining the openness of the land

However, this specific part of the site will not contain built form and only accommodate public open space/pay equipment and therefore the proposal will accord with the aims of policy PG5. The openness of this small part of the green gap will essentially be retained with no adverse impact on the character of the open countryside.

An EIA Screening Opinion has determined that the proposals are not likely to have significant effects on the environment and consequently the application is not required to be accompanied by an Environmental Statement (EIA).

SOCIAL SUSTAINABILITY

Housing

Affordable Housing

Policy SC5 of the CELPS states that "in developments of 15 or more dwellings (or 0.4 hectares) in the Principal Towns and Key Service Centres at least 30% of all units are to be affordable." As a full application for 151 dwellings, in order to meet the Council's Policy on Affordable Housing there is a requirement for 45 dwellings to be provided as affordable units. 29 units should be provided as Affordable rent and 16 units as Intermediate tenure

The current number of those on the Cheshire Homechoice waiting list with Crewe as their first choice is 2021. This can be broken down as below:

	How many bedrooms do you require?						
First Choice	1	2	3	4	5	5+	Grand Total
Crewe	938	623	307	87	66	0	2021

The applicant's Affordable Housing Statement explains that they are providing the full policy requirement in Affordable housing. The proposal will provide:

Affordable Rent

House Type	No. of bedrooms	Number of units
P230-DG7	2	1
P231-DG7	2	1
SH72-DG7	2	1
SH73-DG7	2	1
SH 50 End (Gable)	2	2
SH 50 Mid	2	2
TARP	1	8
SH 52 Mid	3	1
SH 52 End (Hip)	3	2
SH75 -E-7	1	2
SH80 -E-7	2	2
BCRW56AP	2	6
	Total:	**29**

Shared Ownership:

House Type	No. of bedrooms	Number of units
BCWL56PI	2	2
BCWL56PE	2	4
SH 54 End (Gable)	4	2
SH 55 End	3	1

SH 52 End (Hip)	3	3
SH 52 Mid	3	4

Total: 16

The Housing Strategy and Needs Manager is satisfied that the submitted Affordable Housing Statement and the Affordable Housing Plan are meeting the identified housing need. 30% (45) Affordable Units are proposed and are s are to be split 65% Rented and 35% Intermediate in accordance with Policy SC 5 of the Cheshire East Local Plan. In addition, it is considered that the units are adequately pepper potted across the site.

The affordable housing provision will be secured as part of the S106 agreement.

Residential Mix

Policy SC4 of the CELPS states that new residential development should maintain, provide, or contribute to a mix of housing tenures, types, and sizes to help support the creation of mixed, balanced, and inclusive communities.

The proposed development comprises:
35 x 4 bed units
84 x 3 bed units
20 x 2 bed units
12 x 1 bed units

Taken together with the affordable provision outlined above, the proposed residential mix comprising of detached, semi-detached and apartment units ranging from 1-4-bedroom units is considered to meet the requirements of policy SC4 of the CELPS.

Education

One of the site-specific principles of LPS 6 in the CELPS is “contributions to education and health infrastructure”.

In the case of the original proposal for 148 dwellings (dwelling 2bed+), this is expected to generate:

27 primary children (146 x 0.19) 28 – 1 SEN child
21 secondary children (146 x 0.15) 22 – 1 SEN child
2 SEN children (146 x 0.51 x 0.023%)

CEC education have advised that to meet immediate and long term school capacity needs created by the development of allocated housing sites in the area of Crewe North, expansions have been undertaken at Monks Coppenhall and Hungerford Primary Academy, of an additional 210 places at each school. A further new primary school is proposed to meet the needs in Leighton and whilst part of Crewe North, this falls out of the 2-mile radius of this development.

Although the application site falls within Haslington Primary catchment it is closer in proximity to Hungerford Primary Academy. A financial contribution to primary school places is required

towards works forward funded by CEC for the strategic expansion of Hungerford Primary Academy, in anticipation of the development of LPS 6 and other allocated sites.

The development is expected to impact on primary school, secondary school, and SEN places in the locality. Contributions which have been negotiated on other developments are factored into the forecasts both in terms of the increased pupil numbers and the increased capacity at schools in the area. Notwithstanding that an additional 300 secondary school places being provided at Sandbach through expansion, the analyses and forecasting undertaken has identified that a shortfall of secondary school places will remain.

Special Education provision within Cheshire East Council currently has a shortage of places available with at present over 47% of pupils educated outside of the Borough. It is acknowledged that this is an existing concern, however the 2 children expected from the proposed development will exacerbate the shortfall.

To alleviate forecast pressures, the following contributions would be required:

27 x £11,919 x 0.91 = £292,850
21 x £17,959 x 0.91 = £343,196
2 x £50,000 x 0.91 = £91,000 (SEN)
Total education contribution: £727,046

Without a secured contribution of £727,046, Children's Services would raise an objection to this application. This position is on the grounds that the proposed development would have a detrimental impact upon local education provision as a direct cause from the development. Without mitigation, the proposal would not comply with LPS 6 in the CELPS.

Healthcare

The NHS Cheshire Clinical Commissioning Group (CCG) advises that the development falls within the following practice boundaries: Millcroft and Earnswood Medical Centres, based in Eagle Bridge Health and Wellbeing Centre and Hungerford Medical Centre.

The NHS CCG's updated consultation response requests a financial contribution being secured to support the development of Hungerford, Millcroft and Earnswood Medical Centres, and their ability to continue to provide the expected level of Primary Care services in Crewe.

In particular improvements have been identified to include the following GP Practice infrastructure;

- Hungerford Medical Centre – internal reconfiguration and extension to maximise use of space, create additional clinical space to enable key services to continue to be delivered. Initial scoping has resulting in indicative costs of £350,000
- Eagle Bridge Health and Wellbeing Centre – conversion of vacant space on the third floor; as a supercentre of Crewe there continues to be mounting pressure on GP Practices to enhance the service offer and with the implementation of the Primary Care Network additional roles scheme; there needs to be a large scale investment to future proof the site. Indicative costings estimate the fit out costs to be £650,000.

Additional growth in patient numbers will add pressures to the GP practices, with an increase in clinical and non-clinical staff required in order to meet these future patient needs. As set out in the CCGs consultation response, Plans have been formulated across NHS Cheshire CCG GP Practices, including for those premises listed above, to identify appropriate provision of extra space to go some way to address capacity issues due to the increasing patient population.

A financial contribution is therefore sought as part of this application, which is based on a calculation consisting of occupancy x number of units in the development x £360. This is based on guidance provided to other CCG areas by NHS Property Services.

Size of Unit	Occupancy Assumptions Based on Size of Unit	Health Need/Sum Requested per unit
1 bed unit	1.4 persons	£504 per 1 bed unit
2 bed unit	2.0 persons	£720 per 2 bed unit
3 bed unit	2.8 persons	£1,008 per 3 bed unit
4 bed unit	3.5 persons	£1,260 per 4 bed unit
5 bed unit	4.8 persons	£1,728 per 5 bed unit

1 bed unit x 10 = £5,040
2 bed unit x 22 = £15,840
3 bed unit x 84 = £84,672
4 bed unit x 35 = £44,100

Total: 151 units
Total: £149,652

As such the CCG requests a contribution to health infrastructure via Section 106 of £149,652. This would comply with policy LPS 6 of the CELPS.

Open Space, Sport and Recreation

The local plan allocation (LPS 6) states that the development of this site should include, “the incorporation of green infrastructure, to include open space provision, including children’s equipped play space/multi-use games area”

Policy SE6 of the CELPS sets out the open space requirements for housing development which are (per dwelling):

- Children’s play space - 20sqm
- Amenity Green Space - 20sqm
- Allotments - 5sqm
- Green Infrastructure connectivity 20sqm

Based on 151 dwellings the minimum requirements consist of green infrastructure connectivity, 5m² (755m² total) growing space/community gardens/allotment and a 40m² (6,040m² total) combined amenity green space and children’s play space.

The layout provides areas of POS, with the largest area (4,400m² total) in the north west corner at the entrance to the site and a small area (700m²) in the centre identified as a pocket park. This falls slightly short of the minimum combined amenity green and children's play space.

The main open space is located within the widest part of the application site. It is located between the site access road and northern boundary and extends up to the western site boundary with of Sydney Road. As pointed out by the Leisure Officer, although a more central location for this POS and further away from the site access would be preferred, the site is significantly constrained due to its triangular shape which markedly narrows towards the south as well as the reduction in its size to facilitate the Crewe Green Roundabout improvement scheme. As a result, the delivery of around 150 dwellings within this allocated site would not be achievable, if a more centrally located public open space were to be provided.

Although the proposed position of the man area of POS does have the advantage in that it is adjacent to the PROW FP41 to which a link is proposed. Concerns raised by representations in respect to this link to the PROW are addressed in a later section of the report

The Leisure Officer has advised that the amendment to the layout at the entrance to the scheme including the omission of Plot 3 has ensured an improved relationship of dwellings with the main area of POS and increases natural surveillance of this area.

The Leisure Officer considers that the provision of a multi-use games area is not appropriate for this development. A higher quality play facility on this site consisting of a NEAP should be provided and be located within the main area of POS. This needs to comply with Fields in Trust standards for inclusivity and accessibility using resign bound paths. It should contain 12 items covering all age ranges and enjoy a 30m buffer from the nearest dwelling. Amenity space for informal games should also be catered for.

A play area is proposed to be located within the main POS, and the "pocket park" in the south of the site is proposed to include informal/natural play features to give it a suitable function.

A condition is however recommended requiring details of the design and specification of the play area to ensure the provision of an appropriate NEAP, and to finalise details of features to be provided within the Pocket Park. Details of hard and soft landscaping, including the specification of planting, will be secured by a condition requiring the submission and approval of the landscape scheme for the development.

The Leisure Officer has advised that to fulfil the requirement for growing space under Policy SE6, and in preference to an off-site financial contribution the main POS should incorporate an area for the provision of fruiting trees located near the pumping station. to fulfil the requirement for growing space by Policy SE6. This provision will be secured as part of the approved landscaping scheme for the development.

A condition is also recommended to require the submission and approval of management plan for all areas of POS and landscaping. The provision of a management company to maintain all on site open space will be secured through secured in the S106.

Policies SC1 and SC2 of the Local Plan Strategy provide a clear development plan policy basis to require developments to provide or contribute towards both outdoor and indoor recreation.

In particular Policy SC2 of the CELPS requires major residential developments to contribute, through land assembly and / or financial contributions, to new or improved sports facilities where development will increase demand and / or there is a recognised shortage in the locality that would be exacerbated by the increase in demand arising from the development.

Outdoor Sport

In terms of outdoor sports facilities Policies SE6 and SC2 require appropriate provision of sports facilities. The proposal will increase demand on existing facilities and as such a financial contribution towards off site provision will be required. The financial contribution is required at a rate of £1,000 per family (2+bed) dwelling and £500 per 2+ bed apartment. The funds would be used in line with the Council's adopted Playing Pitch Strategy and the FA's Local Football Facilities Plan.

Indoor Sports Facilities

The development will increase the need for local indoor leisure provision and as such a financial contribution should be sought towards Crewe Lifestyle Centre being the nearest provision.

The Indoor Built Facility Strategy has identified that for Crewe there should be a focus on improvement of provision as set out in the Strategy. Whilst new developments should not be required to address an existing shortfall of provision, they should ensure that this situation is not worsened by ensuring that it fully addresses its own impact in terms of the additional demand for indoor leisure provision that it directly gives rise to.

Based on the size of the proposed development and participation rates for Cheshire East Council a contribution of £26,650 has been calculated to be necessary to and ensure health and fitness provision will meet increased demand for indoor physical activity.

For the above reasons the proposal is considered to comply with the open space and sport and recreation requirements of LPS 6 and policies SC2 and SE6 of the CELPS.

ENVIRONMENTAL SUSTAINABILITY

Design, Character and Appearance

Policies SD2 and SE1 of the CELPS expect housing developments to achieve Building for Life 12 (BfL12) standard, and that development proposals consider the wider character of a place in addition to that of the site and its immediate context, to ensure that it reinforces the area in which it is located. These principles are also reflected in the CEC Design Guide. BfL12 uses a traffic light system, with the aim of eliminating reds, whilst maximising the number of greens. The Council's Design Officer has undertaken a BfL12 assessment of the application, which is reflected in the commentary below.

1 Connections (subject to satisfactorily addressing the landscaping on southern and northern boundaries via condition)

The existing pedestrian crossing point on Sydney Road which provides a connection to local facilities from the development is to be upgraded to a Toucan design and footway widened in proximity to serve pedestrians/cyclists. In addition, Haslington FP41 lies immediately to the north of the site, which connects with the wider footpath network and the scheme identifies a direct connection from the main area of public open space.

A written commitment has been provided by the applicant to strengthen the landscaping of the southern edge of the site with Crewe Green roundabout. This will include the retention of newly planted hedgerow, associated with the roundabout enlargement, additional wildflower and tree planting within the site and seeking agreement with the Highway authority to establish a naturalised verge between the footway and site boundary. There is also commitment to provide the northern landscape buffer, following similar principles to that adopted for phase 2 of the Shavington Triangle development (18/2492N) Consequently, whilst the landscape detail still remains to be finalised given the commitment on the part of the applicant, this can be secured by planning condition.

Given the above a green is considered appropriate.

2 Facilities and services – Crewe town centre is within 2km of the site, with the Grand Junction retail park 1.5km away. Employment opportunity exists close by at the Crewe Business Park and along University Way

Whilst no facilities are proposed on site, there are a range of services and amenities within a relatively short distance (10 mins walk time). However, the directness of connections is affected to a degree by the busy nature of Sydney Road and the environment that creates for pedestrians. A pedestrian crossing point will however be required to be upgraded to a Toucan crossing to improve this pedestrian connection. Play provision is provided in the North western corner of the site, with a smaller local space (pocket park) in the southern part of the site.

3 Public transport – The site is less than 2km away from Crewe railway station. There is also a principal bus route on Crewe Green Road, with bus stops nearby, some 200 metres from the site entrance. There are further bus stops on Sydney Road circa 500 metres from the site.

4 Meeting Local Housing requirements – A range of house types from single bed apartments to larger family dwellings is proposed. A range of affordable housing types/tenures is provided across the site and situated in relatively small groupings although the western part of the site has no affordable provision. Whilst bungalows are not proposed, there are apartments and cottage style ground floor apartments within the mix of house types.

Creating a place

5 Character

The layout provides a framework that creates a positive structure of streets and spaces and a distinct hierarchy of street type. It also provides a primarily outward looking development overlooking adjacent roads, public spaces, the countryside, and landscaped edges. Variation in density across the site helps to create areas of different character within the development with the highest density located at the southern end of the development with a greater proportion of apartments and townhouses and lower density across with abroad mix of house types across the remainder of the development and particularly alongside the Sydney Road frontage. Therefore, the average density at approximately 33 units per hectare across this allocated gateway site is considered appropriate to the local context and character of the site.

An area of bespoke housing has been included on the frontage adjacent to the Sydney Road roundabout occupied by the tallest buildings on the site. The Design Officer considers that the siting, distinctive design approach and presence of these buildings is appropriate for this prominent part of the site. Amendments to the scheme has ensured that the more bespoke treatments for these buildings on the southern part of the site have been used more extensively, particularly to define key points in the site as focal points/areas.

The Design Officer has commented that although the amended scheme has included more tree planting, there are some areas where further tree planting could be achieved, with the right species selection and tree pit design. Ideally the entrance into the site off Sydney Road should still be strengthened with tree lining of the main POS and in front of plots 1 and 2 if they were set further back from the street. In addition, there are remain a few locations where additional landscaping alongside site boundaries could be provided.

The incorporation of the CEC Design Guide street materials is positive in helping better characterise the street hierarchy, including the sue of the gutter detail up to the raised table. Ideally a gutter detail should extend further into the site, but this requirement can be relaxed here on the basis more street greening is achieved across the site.

The southern square and associated parking courts has been further improved but more soft panting elements could still be introduced into the space and associated courts. The ‘flats over garages’ grouping at the south of the square has been enhanced, although the Design Officer considers that the parapet design should be amended to reflect that of the key southern frontage plots with a stepped gable parapet.

The Design Officer has advised that the car ports should not be open, and some form of gating that has a degree of transparency should be used. This will be secured through a planning condition.

Despite the enhancements included within amended scheme, this is still considered to merit an amber but could become green with the suggested changes above. Planning conditions are however considered appropriate to secure the necessary improvement to the landscaping scheme and planning, including further refinement of the landscaping in the southern square and to finalise street- scape materials.

6 Working with the site and its context (subject to satisfactorily addressing the landscaping on southern and northern boundaries via condition)

The landscape treatment of the southern and northern edges of the scheme are addressed in point 1 above.

Several trees within the heart of the site are being removed and ground levels altered in the southern part of the site, with the site being raised toward the southern site edge. However cross sections and indicated treatment of levels at the southern edge of the site provides reassurance in terms of landscaping and appearance of the development that will be secured from the Crewe Green Roundabout. Finalised details of the landscape scheme, levels and retention structures will be secured through conditions.

Most existing hedgerows are retained and set within publicly accessible areas. In addition, existing hedgerows and associated trees along the northern site boundary are retained within a naturalised buffer area is shown on the landscape scheme. Details of planting of the buffer area will be finalised through a planning condition requiring the approval of the landscaping scheme for the development.

In addition to properties at the southern part of the site, the amended scheme has included an increase the use of feature glazing and Juliet balconies for house types elsewhere, but ideally there could have been a more considered approach to exploiting the passive opportunities of the site.

A green is awarded here**.**

7 Creating well defined streets and spaces

Streets are defined by perimeter blocks and improvements to the site layout have strengthened relationships between buildings and street edges. The scheme includes corner turning house types, with active secondary elevations. Spaces are generally overlooked by the fronts of properties, with the scheme being largely outward facing.

The omission of Plot 3 has achieved an improved relationship with the main areas of public open space in the north western part of the site. In addition, Plots 1 and 2 have also been re-configured to better terminate views up the western principal street.

Although the amended layout has included more tree planting there is still scope for a little more street greening, not least on the entrance street. As set out above, this will be achieved through a condition which will require details of the landscaping scheme to be submitted and finalised.

The comments from the Deigning Out Crime Officer (Cheshire Police) in respect of making courtyards secure has not unfortunately led to them being gated. The applicant has commented that gating is ineffective and the square itself is well overlooked by the flats. The car ports below plots should however have some form of permeable screen designed into them to ensure their security and a condition is recommended to ensure that a scheme is submitted and approved to ensure that the southern courtyard /parking areas are adequately secured.

Despite the enhancements to the scheme, the Design Officer still considers this criterion to merit an amber but should become green with the suggested changes which will secured through the recommended conditions.

8 Easy to find your way around

The scheme is very legible being modest in size. The open space and play at the site entrance, help to define the main gateway into the site and the southern pocket space will relate a further focus at the southern end of the site. The use of a more contemporary character range of buildings has been used to identity focal points within the layout further reinforcing the legibility of the development.

The landscaping and function of the southern green space itself has been enhanced, but the detail needs further refinement. Efforts have been made to improve the approach to the southern square/court landscaping which have improved the scheme, although there is still scope to achieve more greening.

The eastern primary street has been designed with more polite surfacing (block does not bitmap) which will help to make it feel more of a social space, but the landscape could be further enhanced. All of this is recommended to be secured through suitable conditions in respect of details of landscaping and surface treatment

9 Streets for all

Although improved, there is potential to further improve tree planting and greening of streets, as discussed in relation to several criteria above. Confirmation on the use of the gutter detail for the first part of the entrance street is positive. Despite the improvements to the southern square, there is still potential for further greening of it and the associated parking courts. This is recommended to be addressed by the planning condition requiring details of the landscaping scheme to be finalised.

10 Car parking

Amendments to the layout have reduced the visual impact of parking throughout the scheme. However, there remains a few locations where more than 4 frontage parking spaces are not broken up by landscaping (plots 52-55; 137-140,39-42 and 23-26), although all are surfaced in block rather than bitmac. Whilst localised, in a couple of locations, it is especially prominent and should really be addressed. The applicant has advised that these issues will be considered in advance of the Committee Meeting, and an update will be provided accordingly.

Furthermore, revisions have improved the dominance of parking within the southern square/courtyard, but the carports should have screens for security and landscape quality could be further enhanced, as set out above.

The Design Officer has advised that despite these enhancements, this is still considered to merit an amber but could become green with the suggested changes.

11 Public and private space (subject to satisfactorily addressing these issues via conditions)

Public open space, including play provision is provided in the NW corner of the site. Housing is now better designed to address this area, and the omission of plot 3 has increased open space and provided less rear garden against its edge. Plots 1 and 2 have also been re-configured to address townscape issues.

The pocket space in the south of the site is going to include informal/natural play features to give it a suitable function, but the detail needs to be finalised. Further street planting has been included but more could be achieved. As stated above this will secured by a landscape condition

Landscape management of open spaces is confirmed as being in perpetuity by a management company with arrangements to be secured through a Section 106 Agreement.

12 External storage and amenity space

Private garden spaces are now provided for FOGs. Juliet balconies rather than walk on have been provided for these plots. Whilst access to private space for these plots is not ideal, it is very localised. All other plots have direct access to outdoor private space.

A plan has now been provided showing bin and cycle storage areas and majority of gardens have sufficient space for external storage. Although the bin collection point adjacent to plot 3 needs review as it may be compromising potential for some greening of the southern square. Conditions are recommended requiring full details to be submitted and approved of bin and cycle storage arrangements.

Summary

There have been numerous amendments to the proposal which have addressed issues that have been raised with the applicant during the application.

Significant improvements have been made to the layout and design of the scheme, resulting in most criteria achieving green in the assessment, albeit some areas have been identified where further improvement are could be secured. In comparison to the initially submitted scheme, a significant enhancement in design quality has been achieved, better reflecting the standards set out in the Design Guide.

Overall, the design of the scheme has therefore developed to a point where it is acceptable, when considered against the requirements of policies SD2 and SE1 of the CELPS, and the CEC Design Guide.

Trees and Landscape

Policy LPS6 provides the policy background for this location and states that any development should provide high quality design on this gateway to Crewe; that the development should have regard to the need to conserve the character and appearance of the conservation area (which is located to the south of the site), including its setting; that the site should incorporate

green infrastructure and reflect the Green Infrastructure Plan for Crewe: that any development should include provision of planting buffering along the northern boundary, amongst other principles.

The site has a limited number of trees on the site. Several trees within site will require removal to accommodate the access/internal road infrastructure and dwellings, while existing trees and boundary hedges are being retained. Furthermore existing trees and the hedgerow along the northern boundary of the site are important as they provide a buffer to the countryside beyond and protect views into the site from the public footpaths (FP41 to the north). A landscape buffer area is indicated to be provided along the northern site boundary to incorporate the existing hedgerow and trees and augmented with additional planting. This buffer area will remain outside domestic garden areas.

The Council's Landscape Officer recognises that as part of the amended scheme a number of high canopy trees are proposed along the northern boundary along together with a number of smaller sized specimens that may mature into high canopy trees. However, it is considered that there is still scope to increase the percentage and number of high canopy trees along the northern and western boundaries and across the site to establish a satisfactory landscape hierarchy across the site.

While there are trees within the remainder of the site these are made up of smaller species or columnar or fastigiate species, many of which are located within the curtilages of dwellings. The location of tree planting is considered irregular and while a small number of trees are located along each route within the scheme these do not deliver sufficient visual impact as they are widely separated and of small stature and species. It is however accepted that this is mainly due to constraints of this site, but there are a number of locations that could accommodate larger tree species.

The applicant has agreed to strengthen the landscaping of the southern edge of the site with Crewe Green roundabout. This will include the retention of newly planted hedgerow associated with the roundabout enlargement, as well as additional wildflower and tree planting within the site and seeking agreement with the Highway authority to establish a naturalised verge between the footway and southern site boundary.

It is therefore recommended that a condition be imposed to ensure that landscape scheme for the development secures additional boundary planting, along with tree planting within the site as also referred to by the Design officer's assessment of the scheme.

Therefore, on this basis no significant landscape impacts will result from the development, and subject to landscape conditions, the proposal is considered to comply with policy SE4 of the CELPS.

Heritage

Crewe Green Conservation Area lies to the south east of the application site which includes several listed buildings. A Heritage Statement has been submitted in support the application to address the impact of the scheme on heritage assets.

The significance of Crewe Green Conservation and listed buildings has the potential to be affected by the development. Although the application site falls outside of the Conservation Area boundary and is physically remote from it, it nevertheless provides a context for the proposed development.

However, The narrowest point between the Conservation Area boundary and the site southern boundary measures approximately 80 metres. The nearest building to the site within the Conservation Area (Rose Tree Cottage) is over 120 metres from the application site. In addition, there is limited intervisibility between the Conservation Area and the application site due to the physical separation and intervening vegetation which includes mature trees and high hedgerows along Crewe Road and in the front and rear gardens of properties. The clearest views of the application site are from the footpath at western end of the Conservation Area footpath close to Crewe Green Roundabout.

The Heritage Statement concludes that whilst the proposals will bring built development closer to the conservation area, restricted visual impact ensures that it would not harm the character and appearance or significance of the designated area. Crewe Green will continue to be separated from built development by open land and the sense of it being a separate hamlet will be sustained. In addition, listed buildings within the Conservation Area are sufficiently distanced from the proposed Development to ensure that the experience of them and the ability to appreciate their significance will be unaffected.

The Council's Conservation Officer concurs with the Heritage Statement assessment of the impact of the scheme on the significance and setting of the Crewe Green Conservation Area and nearby listed buildings. It is therefore concluded that there will be no harm to designated heritage assets arising from the proposed development.

Ecology

There are various ecology matters to consider. These are broken down into the following subsections and assessed accordingly. Additional survey information and clarification in respect of ecological issues has been provided during the course of the application.

Designated Sites

The submitted ecological assessment does not anticipate the proposed development having any impacts upon designated sites.

The application site falls within Natural England's SSSI impact risk zones for residential developments of over 50 units**.** Natural England have been consulted on this application and has not raised any objections in respect of statutory designated sites.

Trees with bat roost potential

A number of trees on site were identified as having bat roost potential. Although the proposals will result in the removal some trees these were all found to be of low bat roost potential. The Council's Ecologist therefore advises that roosting bats are not reasonably likely to be directly affected by the proposed development. The submitted ecological assessment includes recommendations for precautionary measures for the felling of trees with low bat roost potential.

Lighting
Additional lighting associated with this proposed development could however have a localised adverse impact upon foraging and commuting bats. A condition is recommended requiring external lighting to Bat Conservation Trust Guidance Note 08/18 (Bats and Artificial Lighting in the UK) and to be agreed with the LPA.

Nesting Birds
A standard planning condition is recommended to protect nesting birds during the nesting season

Hedgerows
Hedgerows are a priority habitat and hence a material consideration. In addition, the species rich hedgerow along the northern hedgerow has been identified by the previously submitted ecological assessment as potentially being Important under the Hedgerow Regulations.

A revised plan has been submitted showing the extent of hedgerow removed. This includes the removal of a length of species rich hedgerow in the north of the site. The Councils Ecologist advises that the revised biodiversity metric (as discussed below) indicates the loss of 0.42 hedgerow units.

Where the loss of hedgerows is unavoidable, the applicant has indicated that compensatory hedgerow works would be provided at an off-site location as part of the proposed Biodiversity Net Gain works addressed below.

Amphibians, reptiles and badger
The Council's Ecologist has advised that these species groups are not reasonably likely to be affected by the proposed development. The submitted ecological assessment includes a suite of reasonable avoidance measures to minimise the risk to badgers during the construction phase.

Hedgehog
Hedgehogs are a priority species and hence a material consideration. This species is known to occur in the broad locality of the application site and so may possibly occur on the application site on at least a transitory basis. To minimise the impact on this species it is recommended a condition is imposed to secure the incorporation of features for hedgehogs. In addition, the reasonable avoidance measures proposed for badger would also assist in minimising the risk posed to hedgehog during site clearance and construction works.

Biodiversity net gain
Local Plan Policy SE 3(5) requires all developments to aim to positively contribute to the conservation of biodiversity. In order to assess the losses and gains for Biodiversity resulting from the proposed development of the site the applicant has undertaken and submitted an assessment using the Defra biodiversity 'metric'.

The submitted revised metric (As agreed with Cheshire Wildlife Trust) shows that the proposed development would result in a net loss of biodiversity amounting to -5.91 units (-56.78%).

The applicant has been in negotiations with Cheshire Wildlife Trust to deliver compensatory habitat creation works at an offsite location. The compensatory habitat creation provided by the Trust will be sufficient to deliver a notable net gain for biodiversity. An outline of the proposed offsite habitat creation works is required to be agreed with the Council's Ecologist.

A S106 agreement will secure the submission of detailed proposals for the habitat creation works, their delivery and long-term management.

Ecological enhancement

These proposals provide an opportunity to incorporate features to increase the diversity value of the final development in accordance with Local Plan Policy SE 3. A condition is recommended for the submission of an ecological enhancement strategy to include the provision of features for nesting birds including house sparrow and roosting bats, gaps in garden fences to facilitate the movement of hedgehogs and brash/deadwood piles.

Conditions

In summary, the Councils raises no objection to the development and the following conditions are recommended:

- Submission of bat friendly lighting scheme
- Safeguarding of nesting birds
- Development to proceed in accordance with measures to safeguard badgers, trees with bat roost potential as detailed in the submitted Ecological Assessment Version 2 prepared by TEP dated 13/11/2020.
- Submission of ecological enhancement strategy (bat and bird boxes etc).

A Planning S106 obligation is also required to secure off-site Biodiversity Net Gain works.

Amenity

Policy BE.1 of the Local Plan advises that new development should not be permitted if it is deemed to have a detrimental impact upon neighbouring amenity in terms of overlooking, visual intrusion or noise and disturbance Policy SE1 of the CELPS further states that development should ensure an appropriate level of privacy for new and existing residential properties.

The Crewe and Nantwich Supplementary Planning Document (SPD) relating to new residential development states that to maintain an adequate standard of privacy and amenity between residential properties interface distances should be achieved of 21 metres between principal elevations, and 13.5 metres between a non-principal and principal elevations. However, the CEC Design Guide states that separation distances should be guide rather than a hard and fast rule. The Design Guide does however acknowledge that the distance between rear facing habitable room windows should not drop below 21m. 18m front

to front will also provide a good level of privacy, but if this applied too rigidly it will lead to uniformity and limit the potential to create strong street scenes and variety, and so this distance could go down as low as 12m in some cases.

Interface distances of at least 37m will be achieved between elevations of existing residential properties which either front or back onto opposite side of Sydney Road with proposed units on the western and southern frontages of the development. In addition, Fields Farm is located about 100m to the north of the northern site boundary.

These relationships with the nearest existing dwellings are considered to result in acceptable standards of amenity for existing and proposed residents having regard to the distance guidelines set out above.

In consideration of amenity for future occupiers of the proposed development, the layout adheres to, or closely adheres with, the recommended separation standards within CEC Design Guide to ensure the future occupiers of the proposed development are not detrimentally impacted in terms of loss of light, or privacy, or an overbearing impact from each other.

Noise

The applicant has submitted an acoustic report which considers the impact of noise on the development from nearby roads including the Haslington bypass (A534), the Crewe Green Roundabout and Sydney Road in accordance with BS8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings Department of Transports (1988) Calculation of Road Traffic Noise (CRTN). This is an agreed methodology for assessing noise of this nature

The report also recommends noise mitigation measures designed to achieve BS8233: 2014 and WHO guidelines; to ensure that future occupants of the properties are not adversely affected by transportation noise sources. The Council's Environmental Health Officer has accepted the acoustic reports methodology, conclusion, and recommendations.

A condition is recommended to ensure the development is implemented in accordance with the recommendations of the acoustic report which requires the provision of noise barriers as specified for a small number of plots, together with the specification of glazing and ventilation for dwellings as set out. The proposals accord with Policy SE12 of the CELPS as satisfactory mitigation measures can be achieved to minimise and mitigate the effects of traffic noise.

A number representations raise concerns about the impact of the development upon during the construction phase in terms of noise, as well as dust etc. Impacts during the construction phase are a temporary manifestation of the development process, and as such will be temporary in nature. A residential development itself does not raise any significant concerns in this regard and it is considered that a construction environmental management plan (CEMP) can ensure that any such impacts upon existing development are minimised. The submission and implementation of a CEMP can be secured by condition.

Subject to the conditions referred to above, the proposal will comply with policy SE12 of the CELPS

Air Quality

CELPS Policy SE12 states that the Council will seek to ensure all development is located and designed so as not to result in a harmful or cumulative impact upon air quality. This is in accordance with paragraph 181 of the NPPF and the Government's Air Quality Strategy.

When assessing the impact of a development on local air quality, it is necessary to have regard to (amongst other things) the Council's Air Quality Strategy, the Air Quality Action Plan, Local Monitoring Data and the EPUK Guidance "Land Use Planning & Development Control: Planning for Air Quality May 2017).

Air quality impacts have been considered within the air quality assessment submitted in support of the application. The report considers whether the development will result in increased exposure to airborne pollutants, particularly as a result of additional traffic and changes to traffic flows. The assessment uses ADMS Roads to model NO_2, PM_{10} and $PM_{2.5}$ impacts from additional traffic associated with this development and the cumulative impact of committed development within the area.

A number of modelled scenarios have been considered within the assessment. These were:

- Scenario 1 – 2020 Baseline
- Scenario 2 – 2024 Baseline (with included committed developments)
- Scenario 3 – 2024 Baseline (with included committed developments) + Proposed Developments

The assessment concludes that the impact of the future development on the chosen receptors will be ***negligible*** with regards to NO_2, PM_{10} and $PM_{2.5}$ concentrations. None of the receptors are predicted to experience greater than a 1% increase relative to the AQAL. A sensitivity analysis has also been undertaken which makes the assumption that real world driving emissions will not reduce as much as predicted over the coming years. This can be taken as a "worst case scenario" assessment and the results of this also show that the impacts on the receptors are predicted to be ***negligible***.

However, Crewe has three Air Quality Management Areas, and as such the cumulative impact of developments in the area is likely to make the situation worse, unless managed.

Poor air quality is detrimental to the health and wellbeing of the public and also has a negative impact on the quality of life for sensitive individuals. It is therefore considered appropriate that mitigation should be sought in the form of direct measures to reduce the adverse air quality impact.

A development of this scale and duration would be expected to have an adequate demolition, construction and track out dust control plan implemented to protect sensitive receptors from impacts during this stage of the proposal and this is mentioned within the assessment as a form of mitigation.

Environmental Health recommend conditions are imposed to secure the provision of satisfactory Electric Vehicle Infrastructure within the development and the provision of ultra-

low emission boilers to ensure that local air quality is not adversely impacted for existing and future residents.

Highways

Access

The proposed access serving the development from Sydney Road is a priority junction arrangement with a carriageway width of 5.5m. The Council's Highway Officer advises that this is of an acceptable standard to serve 151 units. There is a 2.0m footway on the northern side of the access and a 3.0m ped/cycle path on the southern side that links with the existing facility at the pedestrian crossing.

The Highway Officer considers that the use of a priority junction to serve the development is a satisfactory junction arrangement and there is no requirement for a right turn lane to be provided. A capacity assessment of the junction has been undertaken in both 2021 and 2024 and it is shown to operate comfortably within capacity.

Development Impact

Policy LPS 6 requires that the improvements to Crewe Green roundabout (CGR) be completed prior to any work commencing on site. The Highway Officer advises that as part of the Council's design work for CGR the housing allocation for the site was included in committed developments to ensure that adequate capacity was provided in the roundabout design.

The improvement work at CGR has been completed and as such the Highway Officer has advised that the development can be satisfactorily accommodated. The site will generate only modest trip generation in the peak hour periods with 74 two-way am trips and 70 two-way pm trips, the distribution of these trips will be mainly south toward along Sydney Road to the CGR.

Design

A single point of access is acceptable to serve this level of development (151 units) and there is no requirement for a secondary access to be provided. The internal road layout has a looped main access road with the secondary roads connected in a similar nature. This design is promoted in regard to highway policy as it provides connectivity within the site.

The level of car parking provision for the units proposed is in accordance with CEC standards.

Accessibility

It is important that developments are readily accessible to non-car modes and measures are put in place to promote sustainable trips. It is proposed to provide a new 3m shared pedestrian/cycle track on the site frontage that links to the existing facilities at CGR, which is welcomed. However, the Highway Officer advises that the existing zebra crossing also needs to be upgraded to a Toucan Crossing to promote cycle trips to the site. It would also provide a

safer pedestrian route for residents to access the public transport services that operate along the A534 Crewe Road.

Development Contribution

The Strategic Highway Manager has requested a financial contribution of £384,800 towards the Crewe Green Roundabout improvement scheme under the provisions of Policy LPS6. This is essentially on the basis that the Council has implemented and forward funded the CGR Improvement Scheme and the development of this site (LPS 6) has relied upon the capacity improvements at CGR being implemented to enable it to be acceptable in highway terms given the high levels of congestion previously.

However it is not considered that the requested contribution to the completed CGR scheme is justifiable and CIL compliant.

CELPS Policy LPS 6 states that the development of Crewe Green over the plan period will be achieved by…." the provision of land to [CEC] that is necessary to facilitate the delivery of highways improvements at Crewe Green Roundabout. Such improvements to be completed before development of the new homes starts on site". It was always envisaged that the land transfer would occur before the development, as reflected in the policy.

In addition, site specific principles of LPS 6 includes:
(b) "the development of this site will assist in the facilitation and delivery of highway improvements at Crewe Green roundabout".
(h) "the development will be expected contributions to education provision and health infrastructure.

The supporting text of policy LPS 6 (at paragraph 15.106) states that "funding sources for improvements to the Crewe Green roundabout are a Local Growth Fund Grant and third-party developer contributions secured by the council". In comparison, Policy LPS 7 (Sydney Road, Crewe) expressly references expected contributions to highway improvements at Crewe Green Roundabout.

As a result, Policy LPS 6 provides no justification for the requested contribution (£384,800). Paragraph 15.106 is supporting text, not policy and has to be read in context. The key context is the requirement for the provision of land, which has been provided to facilitate the CGR improvement. The land Transfer documents expressly acknowledge that CEC's purchase of the land is for the purpose of completing the defined highways works and using it as a roundabout and associated highways land.

Summary

The proposed access is of a suitable design to serve the 151 units proposed and has been assessed regarding capacity to ensure that it can operate satisfactory. The proposed internal road layout conforms with CEC design standards and provides internal connectivity within the site.

The proposed accessibility improvements to provide a pedestrian/cycleway on the site frontage and the crossing upgrade to a Toucan on Sydney Road will and secured by conditions and be subject to a S278 Agreement

The proposal therefore raises no significant highway safety or traffic generation issues, in accordance with policy BE.3 of the CNRLP.

Public Rights of Way

It is proposed that pedestrian routes running through the open space connect with the existing Public Right of Way FP41which runs along the private access road to Fields Farm adjacent to the northern site boundary.

No objections are raised by the Council's Public Rights of Way Officer who and stresses the benefits of linking development to the footpath network. In particular attention is drawn to the National Planning Policy Framework (para 98) which states that "planning policies and decisions should protect and enhance public rights of way and access including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails"

Concerns have been raised, including the proximity of the proposed NEAP to the connection to FP41 from the POS with the potential risk of young children wandering onto the PROW. However, the detailed design of the NEAP will incorporate perimeter fencing and gates.

It is not considered that the increased use of this public right of way would result in any unacceptable safety issues. Particularly as it is not uncommon for public footpaths to run along private tracks, such as in this case, which carries limited farm and domestic traffic associated with Fields Farm. Given the nature and low level of vehicular movements along the track, the Council's Highway officer has also advised that the footpath connection to the site and likely use of FP41 would not pose a highway safety problem.

There is also no evidence that the increased use of the FP41 by residents of the development, facilitated by the proposed link, would result in increased anti- social behaviour within the locality.

Flood Risk/ Drainage

The site is situated within Flood Zone 1, which is deemed to have a low probability of flooding A site specific Flood Risk Assessment (FRA) supports the application and The Council's Flood Risk Officer (LLFA) considers this satisfactorily demonstrates that the proposed development would not be subject to fluvial flooding, and would not increase the risk of flooding elsewhere.

The Flood Risk Officer has raised no objection in principle to the proposed development and indicated drainage arrangements. It is however noted that an existing Land Drain within the site boundary and alterations to this existing culvert will be subject to a Land Drainage Consent application.

A condition is recommended requiring that full details of the surface water drainage scheme are submitted and approved prior to the commencement of development. Such details will need to include the specification, precise location and depth of the proposed attenuation tank located below the main area of public open space.

In summary, the Councils Flood Risk Team (LLFA) and United Utilities have not raised objections to the indicative drainage arrangements for the site, subject to a condition securing details of its detailed design. It is considered that the drainage system will satisfactorily address the development, without resulting in flooding within the locality or elsewhere because of surface water discharge.

The application proposals are therefore deemed to adhere with Policy SE13 of the CELPS.

ECONOMIC SUSTAINABILITY

With regard to the economic role of sustainable development, the proposed development will help to maintain a flexible and responsive supply of land for housing as well as bringing direct and indirect economic benefits to the wider area including additional trade for local shops and businesses, jobs in construction and economic benefits to the construction industry supply chain.

OTHER MATTERS

Material planning considerations raised by representations have been considered by the relevant specialist officers of the Council, and in the preceding text. Other issues are addressed below.

COVID-19

Representations consider that the development should be designed to take account of issues arising from the COVID-19 pandemic. However, National planning policy has not been changed in the light of COVID1 9. The Government's focus has been to introduce greater planning flexibilities through changes to permitted development rules and the Use Classes Order so buildings and changes of use can take place without the need for a planning application. The Government has also made changes to enable planning decision making and consultation to continue. It is therefore considered that CELPS policies are generally well placed to respond to these challenges in terms of good placemaking and the need to create quality homes and neighbourhoods, amongst other things.

Consultation

Representations have raised concerns that inadequate consultation has been undertaken in respect of the application (20/3762N) and particularly during the pandemic. However, the planning application notification process is a statutory led process, with the requirements stated in the Development Management Procedure Order. The procedures governing the publicity of planning applications are also set out in the Council's Statement of Community Involvement, and the Council has complied with these regulations and has exceeded them in this case

A further round of publicity concerning amendments to this planning application was undertaken prior to the Committee meeting for which there is no Statutory requirement and is therefore entirely at the Council's discretion. In view of the changes to the description of the development and also the additional information which had been submitted in support of the application, reasonable and proportionate neighbour re-notification and re-consultation of relevant consultees was undertaken.

S106 HEADS OF TERMS

Further to the comments above, a s106 agreement will be required to secure:

- 30% affordable housing
- Off-site habitat creation and contribution of £86,656
- Open space provision and management
- Education contributions of:
    - £292,850 (primary)
    - £343,196 (secondary)
    - £91,000 (SEN)
    - Total - £727,046
- Indoor sports contribution of £26,650
- Recreation and outdoor sport contribution
- Healthcare contribution of £149,652

CIL regulations

In order to comply with the Community Infrastructure Levy (CIL) Regulations 2010 it is necessary for planning applications with legal agreements to consider the issue of whether the requirements within the S106 satisfy the following:

(a) necessary to make the development acceptable in planning terms;
(b) directly related to the development; and
(c) fairly and reasonably related in scale and kind to the development.

The provision of affordable housing, off-site ecological mitigation, indoor and outdoor sport (financial) mitigation, education (financial) and healthcare (financial) mitigation are all necessary, fair and reasonable to provide a sustainable form of development, to contribute towards sustainable, inclusive and mixed communities and to comply with local and national planning policy.

The development would result in increased demand for primary school, secondary school and SEN places within the catchment area. In order to increase the capacity of the schools which would support the proposed development, a contribution towards primary, secondary and SEN school education is required based upon the number of units applied for. This is considered to be necessary and fair and reasonable in relation to the development.

All elements are necessary, directly relate to the development and are fair and reasonable in relation to the scale and kind of the development

CONCLUSION

The principle of residential development on the site has been established through its allocation within the Cheshire East Local Plan Strategy (CELPS) under Policy LPS 6 (Crewe Green). Furthermore, the proposal for 151 dwellings is considered to meet the definition of "around 150 new homes" as set out under LPS 6. Although the north western corner of the site will be located within the Strategic Green Gap, this will only accommodate POS and consequently maintain its openness in accordance with the aims of CELPS Policy PG5.

The proposal provides the required amount of affordable housing with an appropriate mix of housing. The proposal achieves an appropriately designed residential development and its detailed design and layout accords with the overall principles for the development of the site and the CEC Design Guide. It achieves an acceptable relationship with the both character of the locality, without material harm to neighbouring residential amenity, and would provide sufficient amenity for the new occupants.

The proposals would not adversely affect the significance of heritage assets including the Crewe Green Conservation Area and nearby listed buildings nearby

The proposed accessed arrangement for the development will not adversely affect highway safety or result in traffic management issues on the local highway network.

Appropriate public open space including a Neighbourhood Equipped Area for Play (NEAP) will be provided.

Tree and hedgerow losses have been accepted and would be mitigated in the proposed landscaping of the site and through off-site habitat creation to achieve biodiversity net gain.

The impact on Air quality arising from the proposals and also the impact on the development from traffic noise can be satisfactorily mitigated

To satisfactorily address the impact on local services/facilities, contributions to education, healthcare provision and indoor/outdoor sport will be secured through a S106 agreement.

On this basis, the proposal is for sustainable development which would bring environmental, economic and social benefits and is therefore considered to be acceptable in the context of the relevant policies of the adopted Cheshire East Local Plan Strategy, the Borough of Crewe and Nantwich Local Plan, and advice contained within the NPPF.

RECOMMENDATION

APPROVE, Subject to conditions and the prior completion of a S106 Agreement to secure the following:

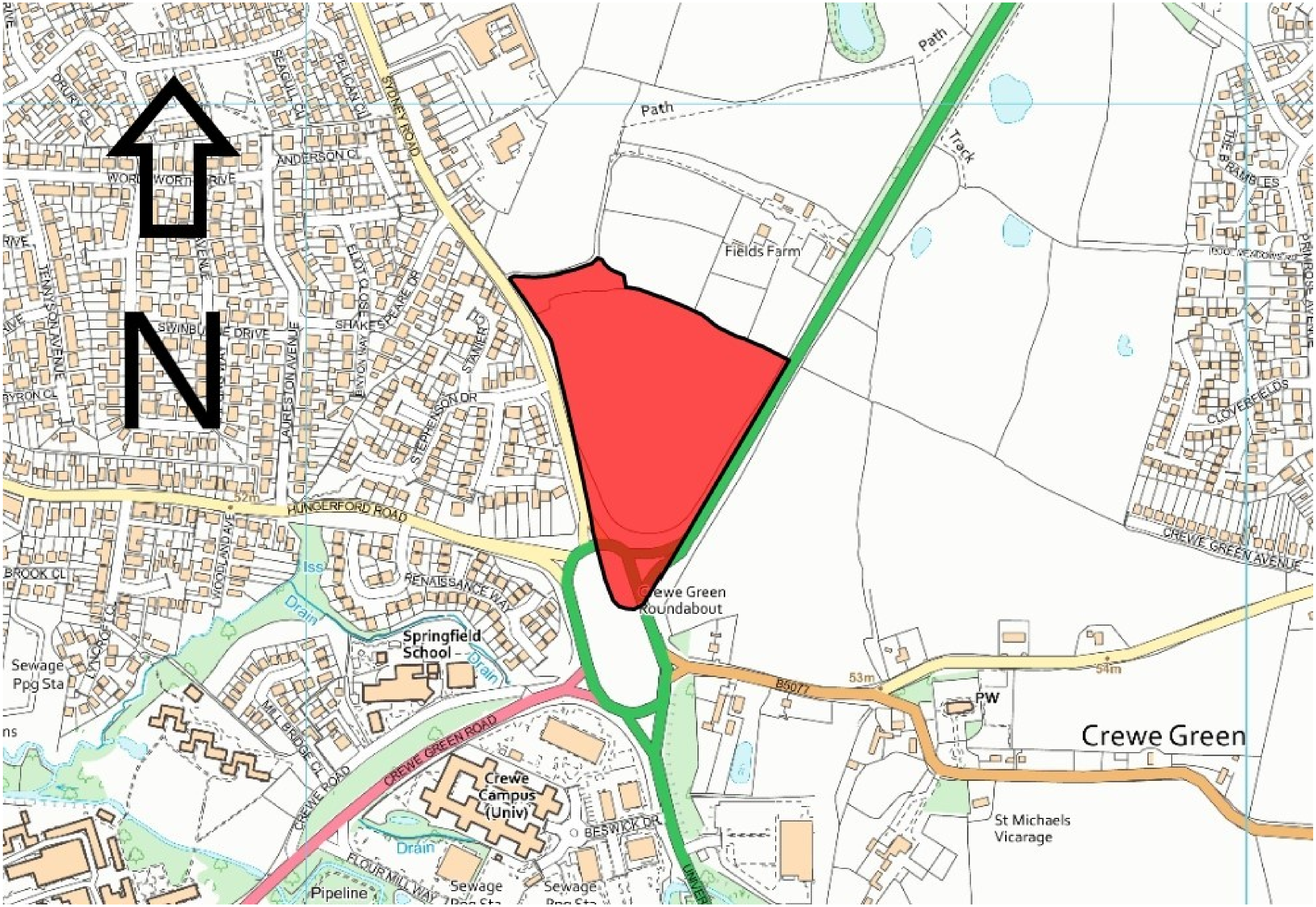
	Requirement	**Triggers**
Affordable Housing	30% of total dwellings to be prided (65% Affordable Rent / 35%	No more than 80% open market occupied prior to affordable provision within

	Intermediate)	each phase. (dependent on agreement of Affordable Housing Statement)
Biodiversity Net Gain - Off site Ecological Mitigation	£86,656 toward off- site habitat creation in conjunction with Cheshire Wildlife Trust. - To offset the 5.91 habitat units: £76,698. - To offset the 0.42 hedgerow units: £9,758.	Prior to commencement
Open Space	Management Scheme for POS, play area and landscaped areas Provision of enhanced LEAP and POS	Prior to occupation Prior to the occupation of no more than 50 % of the dwellings
Indoor Sport	£26,650 towards Crewe Lifestyle Centre	Prior to commencement
Recreation & Outdoor Sports Contribution	£1,000 per family (2+bed) dwelling and £500 per 2+ bed apartment.	Prior to commencement
Education	Total - **£727,046** Primary - £292,850 towards the expansion at Hungerford Academy. Secondary - £343,196 towards mitigation measure as local schools are forecast to be cumulatively oversubscribed SEN £91,000 - Due to significant shortage of SEN placements across the Borough.	50% Prior to first occupation 50% at occupation of 75th dwelling
Healthcare	**£146,880** towards development of Hungerford, Millcroft and Earnswood Medical Centres.	50% Prior to first occupation 50% at occupation of 75th dwelling

1. Commencement of development (3 years)
2. Development in accordance with approved plans
3. Details of materials and finishes
4. Details of Surfacing materials
5. Details of Levels
6. Submission and approval of Landscaping scheme
7. Implementation of landscaping scheme
8. Design detail, specification and implementation of play area
9. Submission of Landscape Management Plan
10. Details of Boundary treatment and retaining structures
11. Tree Protection
12. Details of lighting – minimise impact on bats
13. Safeguarding of nesting birds
14. Development in accordance with Ecological Assessment Version 2
Submission of strategy to secure features to enhance biodiversity
15. Details of surface water drainage scheme to be submitted, approved and implemented
16. Development in accordance with Flood Risk Assessment (FRA)
17. Provision of Toucan crossing
18. Implementation improvements to cycleway/footways
19. Provision of Electric Vehicle infrastructure
20. Provision of Ultra Low Emission Boilers
21. Contaminated Land – Remedial scheme to be carried out in accordance with Enabling Works Remediation Strategy
22. Contaminated land – works to stop if any unexpected contamination is discovered on site
23. Contaminated land - imported soil
24. Implementation of noise mitigation
25. Submission, approval, and implementation of a Construction Environmental Management Plan (CEMP)
26. Details of cycle storage
27. Details of Bin Stores
28. Detailed scheme to secure southern parking courts
29. Removal of permitted development rights (Part 1 Classes A-E)

In order to give proper effect to the Strategic Planning Board's intent and without changing the substance of its decision, authority is delegated to the Head of Planning in consultation with the Chair (or in their absence the Vice Chair) to correct any technical slip or omission in the resolution, before issue of the decision notice.

RECOMMENDATION:


N
Path
Path
Track
Fields Farm
SYDNEY ROAD
ANDERSON CL
PELICAN CL
SEAGULL CL
DRURY CL
SWINBURNE DRIVE
TENNYSON AVENUE
AURELSTON AVENUE
BYRON CL
ELIOT CLOSE
SHAKESPEARE DR
STEPHENSON DR
HUNGERFORD ROAD
52m
RENAISSANCE WAY
WOODLAND AVE
BROOK CL
Drain
Springfield School
Sewage Ppg Sta
CREWE GREEN ROAD
CREWE ROAD
MILL BRIDGE CL
Crewe Campus (Univ)
BESWICK DR
FLOUR MILL WAY
Pipeline
Sewage Ppg Sta
Crewe Green Roundabout
B5077
53m
54m
PW
Crewe Green
St Michaels Vicarage
THE BRAMBLES
CLOVERFIELDS
CREWE GREEN AVENUE
PRIMROSE AVENUE

Application No: 18/4921C

Location: Land Off, LONDON ROAD, HOLMES CHAPEL

Proposal: Residential development of 25 no. dwellings (and a change in tenure of plots 120, 121 and 304 of permission 19/3855C to affordable rent) - (revised application)

Applicant: Bloor Homes

Expiry Date: 14-Jan-2019

SUMMARY

The site lies within the open countryside, where national and local policy seeks to restrict development. The proposal does not fall within any of the exceptions prescribed by policy. However, the principle of a mixed residential and office development for 190 dwellings and 4200 sq m of Class B1 offices has already been established on this site and the adjoining land at appeal. This is a significant material consideration in favour of the scheme. This application seeks to provide an additional 25 dwellings and is submitted in full. Vehicular and pedestrian access would be taken from the adjoining development. The delivery of the site for residential development will provide a small but positive contribution towards the Council's housing land supply and represents an efficient use of land. It is considered that, coupled with the economic benefits of the scheme, these are material considerations that outweigh the conflict with the development plan.

The proposal provides the required amount of affordable housing, for which there is an established need in the area and there would be a good mix and density of housing. Two bungalows would be provided on site, which would assist in providing some level access accommodation. The proposal achieves a high quality designed residential development providing continuity with the adjoining development. The proposal would not materially harm neighbouring residential amenity and would provide sufficient amenity for future occupants.

Mitigation for the impact of the proposal on local infrastructure including education, healthcare, open space and provision for outdoor and indoor sports (subject to update) and recreation would be secured as part of a s106 legal agreement. The objection from the NHS is noted, however, the 25 additional units is a marginal uplift in the context of the 190 already permitted and can be mitigated by financial contributions.

With respect to highways, the development will not have a detrimental impact on the local highway network even accounting for other committed developments. However, the development will need to mitigate its impact on the nearby London Road / Chester Road junction to provide some highway and pedestrian improvement works. These would be secured by financial contribution. Similarly, the impact on local air quality (including cumulative impacts) will be acceptable also.

The impact on Jodrell Bank Radio telescope will be minor and balanced by the provision of electromagnetic screening measures in the proposed 25 units and the adjoining 114 units on Phase 2, which were not required to incorporate such measures.

The impact on trees and landscape is acceptable and subject to further review with respect to biodiversity net gain, the impact on ecology would be acceptable.

Details of drainage secured by condition will adequately mitigate the residual risk of flooding from surface water and not increase the risk of flooding to neighbouring properties.

On this basis, the proposal is for sustainable development which would bring environmental, economic and social benefits and is therefore considered to be acceptable in the context of the relevant policies of the adopted Cheshire East Local Plan Strategy, the saved policies of the Congleton Borough Local Plan, the Brereton Neighbourhood Plan and advice contained within the NPPF

SUMMARY RECOMMENDATION:

APPROVE subject to conditions and a s106 agreement / formal deed of variation

DESCRIPTION OF SITE AND CONTEXT

The entire mixed development site measures 16.02 hectares and is located to the south of the settlement boundary of Holmes Chapel, in the parish of Brereton. It is located to the west of London Road, with its eastern boundary running parallel with the road for a distance of approximately 500 metres. The northernmost part of the site is located opposite Sanofi Aventis, and south of existing and proposed residential development. There are large commercial buildings in the landscape nearby (for example, RW Pugh farm equipment depot/large agricultural type shed is on the other side of London Road nearby), The western and southern boundaries of the site adjoin open countryside, with some sporadic residential and commercial development within the vicinity. The railway line runs in a north-easterly, south-westerly alignment to the north/west of the site.

The portion of the site to which this application relates comprises measures 1.87 ha in area and is directly to the south of the land with detailed consent for 190 no. dwellings. To the east is the area with approval for employment development and beyond this, London Road. The topography of the site is generally flat.

DETAILS OF PROPOSAL

This application seeks full planning permission for the erection of 25 no. dwellings. The site is part of the larger development for which outline planning permission has already been granted for the erection of up to 190 dwellings (planning ref; 14/5921C refers). Vehicular access would be provided through that adjoining development. The reserved matters pursuant to the outline consent have been considered and accepted under a number of applications for the various phases of development. This application also seeks approval to

change the tenure of plots 120, 121 and 304 of reserved matters approval 19/3855C from open market units to affordable rent.

There have been a number of revisions to the scheme during the life of the application, with the original scheme proposing 50 units, a subsequent scheme proposing 35 units and this scheme reduced down to 25. Each scheme has been the subject of its own consultation.

RELEVANT HISTORY

14/5921C - Outline permission granted on appeal a mixed use development including residential and commercial (outline) - Granted pp on Appeal 31/10/16.

17/4869C - S73 application for of Variation of conditions 1 and 4 on application – Approved 05-Jan-2018

17/5721C - Retention of highways works to London Road – Approved 11-Dec-2017

17/6123C - Reserved Matters application for appearance, landscaping, layout and scale for the first phase of development (76 dwellings and open space) following outline approval 14/5921C - A mixed use development including residential and commercial - approved subject to conditions – Approved 14-May-2018

18/2611C - Reserved matters on application 14/5921C - A mixed use development including residential and commercial (outline). Comprised 3 office buildings in commercial zone - total floor area 3500 sq m of which Bloor Headquarters building (Building 1) is 2020 sq m – Approved 28-Sep-2018

18/5148C - S73 application for Variation of condition 4 to planning application 17/4869C - Variation of conditions 1 and 4 on application 14/5921C (allows 4200 sq m B1 floorspace on the site) - approved subject to conditions and S106 Agreement 19-Dec-2018

19/0014C - Reserved matters application for buildings 2 & 3 of the commercial development of 4,200 sq.m of employment use relating to application 14/5921C - A mixed use development including residential and commercial (outline) – Approved 21-Mar-2019

19/3855C – Reserved Matters (layout, appearance, landscaping and scale) for 114 dwellings of the remaining area to be developed as approved by outline 14/5921C – Approved 20-Mar-2020

POLICIES

Development Plan

Cheshire East Local Plan Strategy (CELPS)

MP1	Presumption in favour of sustainable development
PG1	Overall Development Strategy
PG2	Settlement hierarchy
PG6	Open Countryside
PG7	Spatial Distribution of Development
SD1	Sustainable Development in Cheshire East

SD2	Sustainable Development Principles
IN1	Infrastructure
IN2	Developer Contributions
SC1	Leisure and Recreation
SC2	Indoor and Outdoor Sports Facilities
SC3	Health and wellbeing
SC4	Residential Mix
SC5	Affordable Homes
SE1	Design
SE2	Efficient use of land
SE3	Biodiversity and geodiversity
SE4	The Landscape
SE5	Trees, Hedgerows and Woodland
SE6	Green Infrastructure
SE9	Energy Efficient development
SE12	Pollution, land contamination and land stability
SE13	Flood risk and water management
CO1	Sustainable travel and transport
CO3	Digital connections
CO4	Travel plans and transport assessments

Congleton Borough Local Plan saved policies (CBLP)

PS8	Open Countryside
GR6&7	Amenity & Health
GR9	Accessibility, servicing and parking provision
GR10	Managing Travel Needs
GR18	Traffic Generation
GR19	Infrastructure
GR20	Public Utilities
GR23	Provision of Services and Facilities
NR1	Trees & Woodland
NR4	Nature Conservation (Non Statutory Sites)
NR5	Maximising opportunities to enhance nature conservation

Brereton Neighbourhood Plan (made on 29 March 2016)

HOU01	Settlement Boundary
HOU02	Exceptions to New Housing Development
HOU05	Open Space in new Housing Development
HOU10	Layout and New Design in Development
ENV04	Biodiversity and Geodiversity
ENV05	Development and Landscape

Other Material Considerations

National Planning Policy Framework (The Framework) 2021
National Planning Practice Guidance
Cheshire East Design Guide

CONSULTATIONS (External to Planning)

ANSA / Greenspaces / CEC Leisure – No comments

Education - The Council's Children's Services have confirmed that the proposal would result in the requirement for financial contributions to offset the impacts of the proposal on secondary and primary school provision.

Environmental Protection – No objection subject to conditions relating to noise mitigation, provision of electric vehicle charging infrastructure, low emission boilers and a contaminated land informative.

Head of Strategic Infrastructure – No objection subject to a financial contribution of £4,827 per unit (= total of £120,675) to be used towards implementation of highway and pedestrian improvements at London Road / Chester Road junction.

Housing Strategy & Needs Manager – No objection

Lead Local Flood Authority – No comments

NHS - The NHS has requested a financial contribution of £54,432 should the application be approved. The NHS has also objected in support of both the individual GP Practice (Holmes Chapel Health Centre) and wider Primary Care Network in their views that this development would result in considerable pressures in primary care in the area.

United Utilities (UU) – No objection subject to drainage conditions requiring foul and surface water to be connected on separate systems and submission of a scheme of surface water drainage.

University of Manchester (Jodrell Bank) – Object to the 35 unit scheme - note that some development is already approved on this site but the impact from the additional potential contribution to the existing level of interference will be minor. This is a general direction in which there is already significant development close to the telescope.

VIEWS OF THE PARISH COUNCILS

Brereton Parish Council (BPC) – Object on the following grounds:

1. The scale of the proposed development is inappropriate for the rural area of Brereton and contrary to the Brereton Neighbourhood Plan
2. The additional houses proposed would further overload the facilities in the Local Service Centre of Holmes Chapel
3. The proposed development does not reflect the function and character of Brereton contrary to the Cheshire East Local Plan
4. The proposed development is in the Open Countryside and conflicts with the policies of the Cheshire East Local Plan and SADPD
5. The scale of the development is out of character with the Open Countryside setting
6. The increase in the number of houses would have a harmful impact of the efficiency of the Jodrell Bank Observatory

7. Site is in an area of open countryside outside of any settlement boundary including the settlement boundary proposed for Holmes Chapel in the SADPD

Holmes Chapel Parish Council (HPC) – Object on the following grounds:

1. No demonstrable need for more homes in Holmes Chapel
2. Housing mix
3. Density of development and housing type inappropriate
4. Existing infrastructure cannot cope
5. Accuracy of the applicant's planning statement
6. Contravenes several policies of the Cheshire East Local Plan (CECLP), the draft CEC Site Allocations Development Policy Document (SADPD), the Cheshire East Design Guide Volume 2 and the Brereton and Holmes Chapel Neighbourhood Plans
7. There is a concern that further development on this site will not be sustainable with drainage of foul and surface water being overloaded.
8. Traffic will increase onto and off the site which has not been fully assessed.
9. CIL will apply and the existing S106 agreement will need modification. As the site is deemed to be part of the Settlement Area for Holmes Chapel as stated in the draft SADPD, it is assumed that all CIL payments will be made to Holmes Chapel Parish Council and suitable payments will be agreed for education and contributions towards health services as well as highways infrastructure improvements – footways and cycle lanes

OTHER REPRESENTATIONS

Representations have been received from over 73 properties (including Local Councillors Cotton and Gilbert) over the three periods of consultation objecting to this application on the following grounds:

- Contrary to local and neighbourhood plan policies
- Infrastructure - Local schools, GP surgery and dentist (o longer taking NHS patients) will not cope with additional demand
- Do not need more houses or more affordable units which are not justified
- Existing newbuilds are not selling
- Amount of development is creating a town and undermining the village feel
- Loss of countryside, wildlife, and agricultural land
- Need land such as this to produce our own food - allotments
- Traffic impact from additional cars including increased hazards for pedestrians and cyclists, congestion, and air pollution
- Insufficient parking within the village
- The SADPD acknowledges that Holmes Chapel does not need any more houses
- Construction in the area is causing noise and disruption
- Village is experiencing problems with drugs with the construction of other new builds
- Development too dense for a rural area
- Detrimental impact on Jodrell Bank Observatory
- Development contravenes the parish boundaries
- This will lead to further phases of development

- Limited affordable housing which does not seem to be restricted to occupation by local residents
- Proposal does not fulfil the three dimensions of sustainable development
- Appeals in the area have been dismissed on the basis that Cheshire East already has a 5-year housing land supply
- Damage to roads and property from construction
- Have all the impact assessments originally done been updated
- Local bus service has just been reduced
- Allocate more of the site to green space
- Local school Ofsted report declined due to new houses and overcapacity
- Most of the residents will drive to Holmes Chapel, not walk

OFFICER APPRAISAL

Principle of Development

Sec.38 (6) of the Planning and Compulsory Purchase Act 2004 states that planning applications and appeals must be determined "*in accordance with the plan unless material considerations indicate otherwise*". In this case, the development plan comprises of the Cheshire East Local Plan Strategy (CELPS), the made Brereton Neighbourhood Plan (NP) and the relevant saved policies of the Congleton Borough Local Plan First Review (CBLP).

According to the proposals map in the CBLP, the site subject of this application is within the open countryside. It does not fall within any of the settlement boundaries within the Brereton Neighbourhood Plan and therefore is subject to open countryside policies.

Cheshire East Local Plan Strategy Policy PG6 states that within the Open Countryside, only development that is essential for the purposes of agriculture, forestry, outdoor recreation, public infrastructure, essential works undertaken by public service authorities or statutory undertakers, or for other uses appropriate to a rural area will be permitted. Exceptions may be made where there is the opportunity for limited infilling in villages; the infill of a small gap with one or two dwellings in an otherwise built up frontage elsewhere, affordable housing or where the dwelling is exceptional in design and sustainable development terms. Similarly, saved Policy PS8 of the Congleton Borough Local Plan affords similar protection and remains part of the Development Plan until it is superseded by Part 2 of the Cheshire East Local Plan for Site Allocations and Development Management policies (SADPD).

This proposal specifically would deliver an additional 25 units pursuant to the 190 originally consented. This uplift in numbers would not fall within any of the categories of exception to the restrictive policy relating to development within the open countryside or development outside of the settlement boundaries identified in the Brereton Neighbourhood Plan. As a result, it constitutes a "departure" from the development plan and there is a presumption against the proposal, under the provisions of sec.38(6) of the Planning and Compulsory Purchase Act 2004 which states that planning applications and appeals must be determined "in accordance with the plan unless material considerations indicate otherwise". The issue in question is whether there are other material considerations associated with this proposal, which are a sufficient material consideration to outweigh the policy objection. This is in line with the advice of the Framework, where para 12 states:

> "The presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision-making. Where a planning application conflicts with an up-to-date development plan (including any neighbourhood plans that form part of the development plan), permission should not usually be granted. Local planning authorities may take decisions that depart from an up-to-date development plan, but only if material considerations in a particular case indicate that the plan should not be followed."

The key issue is whether the material considerations in this particular case are sufficient to outweigh the conflict with the development plan.

The principle of developing the wider site was established on appeal when a scheme was allowed for a mixed-use development including residential and commercial (outline) which comprised of up to 190 residential units and 3500 m2 Office development. The site subject of this application was included within that approval (and later variations), with the parameters plan / framework plans apportioning some of the 190 residential units in this area. Subsequently, the 190 units were able to be accommodated within a smaller area on the wider site, primarily through a higher proportion of smaller units than originally envisaged at outline stage. This has also assisted in providing a better mix of housing, which will be considered in more detail later in this report. Accordingly, the principle of residential development on the site has been accepted as part of the wider proposals for the site and indeed is well established with the delivery of the first phases of the approved development. This is a significant material consideration weighing in favour of the scheme.

The delivery of the site for residential development will provide a small but positive contribution towards the Council's housing land supply and assist in meeting the development requirements of the Borough over the remainder of the plan period. It will also make efficient use of land by providing additional units within a site where it has already been accepted that it would be given over to development. The harm arising from the provision of a further 25 units in the context of the scheme for 190 would not be significant, representing an uplift of only 13%. CELPS Policy SE 2- Efficient Use of Land states that all windfall developments should 'build upon existing concentrations of activities and existing infrastructure'. This proposal would align with this aim and would represent an efficient use of land. This is given moderate weight in favour of the scheme.

Other benefits of the scheme cited by the applicant are as follows:

- *Would provide more affordable housing which is much needed*
- *A further 2 bungalows are proposed in addition to the 3 no. bungalows currently approved*
- *A good housing mix*
- *Measures to mitigate the impact on the efficiency of the telescope at Jodrell Bank would be incorporated and have been on Phase 2 of the scheme, which were not required by the inspector when the appeal for 190 units was allowed*
- *Economic benefits from increased CIL payment, increase in direct and indirect construction jobs, increased direct and indirect in resident expenditure per annum; and additional supported jobs from increased expenditure in the local area*

Matters relating to affordable housing, housing type and mix and impact on the Jodrell Bank Telescope will be considered further. However, the provision of additional affordable units, 2 additional bungalows and the indirect economic benefits including additional trade for local shops and businesses, jobs in construction and economic benefits to the construction industry supply chain do attract moderate weight in this case.

Taking these benefits in the round, but having particular regard to the existing commitment to develop the site for housing, it is considered that the benefits outweigh the conflict with Policy PG 6 of the Cheshire East Local Plan Strategy, Policy PS8 of the Congleton Brough Local Plan and Policy HOU01 of the Brereton Neighbourhood Plan.

Site Allocations and Development Policies Document (SADPD)

The second part of the Council's Local Plan, the Revised Publication Draft Site Allocations and Development Policies ("SADPD") has been submitted. The policies in the Revised Publication Draft SADPD are emerging at this time. The applicant states that the *"proposals map is currently being revised to take into account (amongst other things) existing commitments. Therefore, the proposals map which will be adopted once the SADPD is adopted should show the site located within the settlement boundary of Holmes Chapel".* Whilst SADPD para 2.4a may permit additional windfall development in each Local Service Centre settlement boundary during the remainder of the plan period, the SADPD has yet to be examined and the policies have outstanding objections. Accordingly, the policies carry limited weight in decision taking at this time.

Affordable Housing

Policy SC 5 of the CELPS and the Councils Interim Planning Statement on Affordable Housing (IPS) requires the provision of 30% affordable housing on all 'windfall' sites of 15 dwellings or more. This relates to both social rented and/or intermediate housing, as appropriate. Normally the Council would expect a ratio of 65/35 between social rented and intermediate housing (shared ownership).

As this is a scheme for 25 no. units, 8 of the units will be required to be affordable. To satisfy the required tenure split, 5 of the units would need to be provided as social rented accommodation and 3 of the units as shared ownership.

The current number of those on the Cheshire Homechoice waiting list with Holmes Chapel as their first choice is 181. This can be broken down as below;

	How many bedrooms do you require?						
First Choice	1	2	3	4	5	5+	Grand Total
Holmes Chapel	**69**	**56**	**35**	**12**	**9**		**181**

The intermediate need is the same as across the whole of Cheshire East. The need is for dwelling for 1st time buyers, couples and families who wish to buy but cannot without subsidy. As such, there is a clear need for the additional affordable units.

The submitted details show that 5 (20%) of the dwellings within the proposed 25 units will be provided as affordable units. The balance of 3 (10%) will be provided by changing the tenure of 3 of the open market units within the adjoining development to affordable rent units (plots 120, 121 and 304 of permission 19/3855C). The affordable units would comprise of:

2 x 1 bed apartment (affordable rent)
3 x 2 bed (1 affordable rent / 2 shared ownership)

It is considered that the tenures are appropriately pepper potted through the site and the Housing Strategy and Needs Manager has confirmed that these 25 extra units combined with the swop to rented of the 3 units on the permitted development provides 30% Affordable Housing across the site and they are split 65%/35% as required. Housing also confirm that the types, including the much-needed bungalows will meet the local need for Holmes Chapel, and this is a benefit of the scheme. The location of the units on site are positioned well and pepper potted to an acceptable degree. Accordingly, the proposal complies with policy SC 5 of the CELPS. The affordable housing will need to be secured by a s106 agreement and the balance provided on the adjoining site will need to be formalised through a formal deed of variation to the existing s106 attached to the outline consent.

Residential Mix

Policy SC4 of the CELPS states that new residential development should maintain, provide or contribute to a mix of housing tenures, types and sizes to help support the creation of mixed, balanced and inclusive communities. Reference is made to the need for development proposals to accommodate units specifically designed for the elderly and people who require specialist accommodation.

The proposed development comprises of:

3 x 1 bed units
5 x 2 bed units
12 x 3 bed units
5 x 4 bed units

A range of housing types are being proposed from a small sized 1 bed apartment, 2 no. bungalows (1 and 2 bed) offering ground floor single storey entry, a number of 2 bed dwellings, 3 bed and 4 bed dwellings. This general makeup of dwellings would provide a good mix of type, size and coupled with the affordable provision. The proposal would provide a diverse community and would fit in with the existing residential development. As such, the scheme is found to comply with Local Plan Policy SC 4.

Design - Layout, Scale and Appearance

Amongst other criteria, policy SD2 of the CELPS expects all development to contribute positively to an area's character and identity, creating or reinforcing local distinctiveness in terms of:

a. Height, scale, form and grouping;

b. Choice of materials;
c. External design features;
d. Massing of development - the balance between built form and green/public spaces;
e. Green infrastructure; and
f. Relationship to neighbouring properties, street scene and the wider neighbourhood

Policy SE1 of the CELPS expects housing developments to achieve Building for Life 12 (BfL12) standard, and that development proposals consider the wider character of a place in addition to that of the site and its immediate context, to ensure that it reinforces the area in which it is located. These principles are also reflected in the CEC Design Guide. The relevant BfL12 headings are considered below:

Connections (Amber) - The proposal would be only accessible through the adjoining application site. The proposed layout would allow good pedestrian and cycle access around the perimeter and through the site and would link in with London Road to the east through the adjoining development.

Accommodation and Tenure Mix (Green) - The affordable units are situated towards the eastern edge of the site, however, in terms of the wider site, the affordable units are pepper-potted. The housing mix, size type and tenure are good with specific benefits arising from the provision of bungalow accommodation also.

Layout, Density and Frontage (Green) – This site is on the rural/urban fringe. It is part of a sizeable site which has an extensive frontage on to London Rd (A50). There are established landscape features that are extremely important to the character of the site, not least the strong tree and hedge lined frontage to London Road. Whilst peripheral hedging is indicated for retention some hedging is being lost to make way for the development. However, there is replacement planting provided.

The units are well laid out and would integrate successfully with the adjoining layout, which is well designed. Units would address key views and provide a focus for views to terminate on at key nodal points. Public spaces would be well overlooked, and feature corner plots utilised.

Character (Green) – The appearance of the units would follow that of the adjoining scheme, which achieves a good quality of design in line with the principles of the Design Guide. The units are found to be acceptable on their merits.

In terms of appearance, the proposed dwellings would be acceptable within the context of the site and would offer a degree of variation within the street. It is considered that the overall design, scale, form, and appearance of the proposals would be acceptable subject to the use of high-quality materials. The proposal achieves a well-designed residential development which would accord with the Cheshire East Design Guide.

Jodrell Bank

Radio telescopes at Jodrell Bank carry out a wide range of astronomical observations as part of national and international research programmes, involving hundreds of researchers from the UK and around the world. The telescopes are equipped with state-of-the-art cryogenic low-noise receivers, designed to pick up extremely weak signals from space. The location of

Jodrell Bank was chosen by Sir Bernard Lovell in 1945 as a radio-quiet rural area away from the interference on the main university campus in Manchester.

Policy SE 14 pf the Cheshire East Local Plan Strategy (SE14) states that development within the Jodrell Bank Radio Telescope consultation zone will not be permitted if it can be shown to impair the efficiency of the Jodrell Bank radio telescope in terms of its ability to receive radio emissions from space with a minimum of interference from electrical equipment.

Equipment commonly used at residential dwellings causes radio frequency interference that can impair the efficient operation of the radio telescopes at Jodrell Bank. This evaluation is based on the definition of the level of harmful interference to radio astronomy specified in ITU-R.769, the International Telecommunications Union 'Protection criteria used for radio astronomical measurements', which has been internationally adopted and is used by Ofcom and other bodies in the protection of parts of the spectrum for radio astronomy.

It is recognised that there is significant development across the region surrounding the telescopes and the University of Manchester has carried out an analysis which takes into account the distribution of development and the effect of the intervening terrain between any location and the telescope itself. This analysis uses data provided by Cheshire East and the Ordnance Survey and uses the officially recognized propagation model provided by the ITU 'Prediction procedure for the evaluation of interference between stations on the surface of the Earth at frequencies above about 0.1 GHz' (ITU-P.452).

Jodrell Bank Observatory now opposes development across a significant part of the consultation zone as a matter of principle, in order to protect the efficiency of the Jodrell Bank radio telescope's ability to receive radio emissions from space with a minimum of interference from electrical equipment. On this basis, the University of Manchester object to the proposal to add further units. The University note the reduction in additional dwellings and accept that this would lessen the impact on the telescopes. However, their objection remains as 25 additional dwellings would impair the efficiency of the telescopes. The reduction in additional dwellings reduces the impact from moderate to minor.

However, in the case of this proposal, it is important to note that in allowing the appeal to develop the wider site, the Inspector failed to impose a condition requiring the incorporation of electromagnetic screening measures within the external elevations of the development. Such measures help to impede the transmission of electromagnetic interference in the direction of the telescope typically associated with household items and equipment. The applicant has confirmed that despite not being required to do so, they are installing screening measures within all of the units on Phase 2 (114 units) and will do so within the additional 25 units. In context of the wider site, 25 units is a modest uplift. Coupled with this, the implementation of screening measures in 114 units which would not have otherwise been installed with such mitigation, would in this particular case, lessen the impact of the additional 25 units. Given that the University of Manchester have concluded that the impact of the scheme for 35 units would be 'minor', it is not considered that a refusal of planning permission could be sustained in this case even noting that the cumulative impact of this and other developments is more significant than each development individually. This is having regard to the balancing out of impacts from the additional screening measures.

Education

In the case of the current proposal for 25 dwellings (23 x 2bed plus), a development of this size would generate:

- 4 primary children (23 x 0.19)
- 3 secondary children (23 x 0.15)
- 0 SEN children (23 x 0.51 x 0.023%)

The development is expected to impact on both primary school and secondary places in the immediate locality. Any contributions which have been negotiated on other developments are factored into the forecasts undertaken by the Council's Children's Services both in terms of the increased pupil numbers and the increased capacity at schools in the area as a result of agreed financial contributions.

The Council's Children's Services have confirmed that there is a shortfall in school places and this needs to be alleviated by financial contributions. Children's Services have confirmed that this proposal would result in a claim for:

- 4 x 11,919 x 0.91 = £43,385 (primary)
- 3 x £17,959 X 0.91 = £ 49,028 (secondary)
- Total education contribution: £92,413

This would be secured by of a s106 legal agreement.

Healthcare

The views of the NHS Eastern Cheshire Clinical Commissioning Group (CCG) have advised that *"Holmes Chapel Health Centre operates from GP owned premises in the centre of Holmes Chapel. Built in the 1970s, the purpose built building was extended in the 1980s by expanding up and over the original single storey building. Two further extensions were added in 2011 and 2020 to help cope with additional demand. Further expansion and development will be required over the coming years if the Health Centre is to continue meeting local demands based on organic growth of the population. Housing developments in the local area will add additional pressure on the existing infrastructure which will need investment in order to be able to accommodate future additional demand".*

Holmes Chapel Health Centre is running at full capacity in terms of care for the existing practice population. The Practice has scoped its future demands, and advise that an extra 149 houses, places their predictions of capacity and capability to provide the supportive care at risk. The extended Primary Care Network have also had to absorb an extensive expansion programme of housing and as such, cannot assist in absorbing any additional demand. However, this proposal is for 25 units only. The NHS did not object to the larger scheme and having regard to the modest increase proportionately to the site wide scheme, it is not considered that a refusal could be sustained. The NHS did originally confirm that the increase could be suitably mitigated by financial contributions. Subject to these, the scheme is found to be acceptable in this regard.

Public Open Space and Recreation

Policy SE6 of the Cheshire East Local Plan Strategy provide a clear policy basis to require new developments to provide or contribute to Children's Play Space, Amenity Green Space, Green Infrastructure Connectivity and Allotments.

Policy SE6, Table 13.1 denotes the level of green infrastructure required for major developments. This shows that the development should provide 40m^2 children's play and amenity green space per family dwelling. In addition to this 20m^2 should be allocated to G.I. Connectivity (Green Infrastructure Connectivity). In line with CELPS Policy CO1, Design Guide and BFL12 "Connections" this should be an integral part of the development connecting and integrating the site into the existing landscape in a sustainable way for both walking and cycling.

Using these figures, the development would be required to provide 920m^2 of children's play and amenity green space for the family dwellings, and 500m^2 of G.I. Connectivity.

The submitted plans show that the wider development would far exceed these policy requirements to serve the proposed development in accordance with Policy SE6.

Policies SC1 and SC2 of the Cheshire East Council Local Plan Strategy provide a clear policy basis to require new developments to provide or contribute towards both outdoor and indoor recreation.

The views of the council's ANSA and Greenspaces officers have been sought and will be reported to members by way of an update. Any recommended contributions would be secured as part of a S106 Agreement.

Residential Amenity

The Congleton Borough SPG requires the following separation distances.

21.3 metres between principal elevations
13.8 metres between a non-principal and principal elevations

However, the CE Design Guide states separation distances should be seen as guide rather than a hard and fast rule. The Design Guide does however acknowledge that the distance between rear facing habitable room windows should not drop below 21m. 18m front to front will also provide a good level of privacy, but if this is applied too rigidly it will lead to uniformity and limit the potential to create strong street scenes and variety, and so this distance could go down as low as 12m in some cases.

The nearest existing residential properties are located well in excess of any minimum separation standards. Internally, the layout within the site ensures the relationships between the new dwellings result in acceptable standards of space, light and privacy for future occupants, having regard to the way in which the units are set out and the high quality of design that units achieve. There will be sufficient private amenity space for each new dwelling. The proposal is therefore considered to accord with policy GR6 of the CBLP.

Noise

The application is supported by a Noise Assessment. The impact of noise from road traffic on the A50 London Road and the Crewe to Manchester railway line on the proposed development has been assessed in accordance with BS8233:2014 Guidance on Sound Insulation and Noise Reduction for Buildings and Department of Transports (1988) Calculation of Road Traffic Noise (CRTN). The report recommends mitigation designed to ensure that occupants of the properties are not adversely affected by environmental noise. The Council's Environmental Protection Unit has confirmed that conclusions of the report and methodology used are acceptable. Subject to conditions requiring implementation of the noise mitigation measures, the proposal complies with policy SE 12 of the CELPS and GR6 of the CBLP relating to noise and soundproofing.

Air Quality

Policy SE 12 of the Local Plan states that the Council will seek to ensure all development is located and designed so as not to result in a harmful or cumulative impact upon air quality. This is in accordance with paragraph 186 of the NPPF and the Government's Air Quality Strategy.

When assessing the impact of a development on Local Air Quality, regard is had to the Council's Air Quality Strategy, the Air Quality Action Plan, Local Monitoring Data and the EPUK Guidance "Land Use Planning & Development Control: Planning for Air Quality January 2017).

This proposal is a full application for 25 dwellings as part of a larger development. These extra dwellings represent an increase on the original number submitted under the initial outline application, which combined will impact on air quality. However, the Council's Environmental Protection Unit has confirmed that subject to conditions relating to electric vehicle charging infrastructure, low emission boilers and a dust management plan, the proposal will not have a detrimental impact on the air quality and the proposal will comply with Policy SE 12 of the CELPS.

Highways

The Head of Strategic Infrastructure (HSI – Highways) has confirmed that the internal road elements are similar to the layout previously approved and there are no technical highway issues with the proposed internal layout. The main difference is that the numbers of residential dwellings have increased by 25 units.

With regard to the wider development, the impact in regards traffic was at the nearby London Road/Chester Road junction in Holmes Chapel and a financial contribution was secured at appeal for measures to be implemented at this junction.

Given that this application would increase the impact of the development, a further contribution is required based upon the previous secured contribution of £4827/unit. For the amended 25 unit scheme, this would amount to a commuted sum of £120,675. This sum would be spent on highway and pedestrian improvements at the London Rd/Chester Rd

junction. Subject to this being secured by way of as106 legal agreement, there are no highways objections to the application.

The level of off-street car parking is in accordance with CEC parking standards across the development.

Landscape and Trees

Policies SE 4 and SE 5 of the CELPS states that the Council will seek to ensure the sustainable management of trees, hedgerows and woodland in development proposals whilst respecting landscape character. The proposals would allow for the retention of almost all of the existing trees, hedgerows, ponds and woodland areas. In addition, the planting of new trees, hedges and shrubs are proposed throughout this phase of development. The Council's Principal Landscape Architect has confirmed that the amended proposals will not result in any significant landscape or visual impacts. Accordingly, compliance with policies SE 4 and SE 5 of the CELPS is confirmed.

Ecology

Hedgerows - Hedgerows are a priority habitat and hence a material consideration. The construction of the proposed additional houses and associated access roads would result in the loss of additional sections of hedgerow. The Council's Nature Conservation Officer (NCO) has advised that adequate compensatory planting is shown on the submitted landscape plans.

Badgers - Previous surveys of the application site have recorded evidence of badger setts and badger activity. The most recent survey confirmed that whilst badgers are active on the site, no setts were present. The NCO has advised that the proposed development is not reasonable likely to have a significant adverse impact upon this species. The submitted badger survey report includes recommendations for precautionary measures to ensure any setts excavated during the construction phase on site are identified. These reasonable avoidance measures should be secured by condition.

Biodiversity Net Gain - In accordance with Local Plan policy SE 3(5), all development proposals must seek to lead to an overall enhancement for biodiversity.

In this instance the proposed additional houses would result in the loss of an area of wildflower grassland habitat proposed under reserved matters consent 19/3855C. The loss of this proposed habitat would result in the development of this site making a reduced contribution to biodiversity. To assess the overall loss/gains of biodiversity resulting from the development, an assessment undertaken in accordance with the Defra Biodiversity 'Metric' version 2 must be undertaken and submitted. If additional habitat creation measures are required to ensure the site achieves a net gain for biodiversity, The NCO advises that consideration should be given to the creation of additional ponds and species rich grassland. This is currently being reviewed and will be reported to members by way of an update.

Subject to the satisfactory resolution of biodiversity gain, the scheme is found to be acceptable in terms of its ecological impact and accords with CELPS Policy SE 3.

Flood Risk and Drainage

The site is located within Flood Zone 1 as defined by the Environment Agency indicative flood maps and as a result the chance of flooding from rivers or sea is 0.1% (1 in 1000) or less. A Flood Risk Assessment has been submitted. Whilst no comments have been received from the Local Lead Flood Authority, comprehensive scheme of surface water attenuation and drainage strategy has been developed for the wider site and will accommodate the proposed increase of 25 units. United Utilities have been consulted on this application and have no objection subject to conditions. The development is considered to be acceptable in terms of its flood risk and drainage impact and will comply with policy SE 12 of the CELPS.

S106 HEADS OF TERMS

Subject to the receipt of further consultee comments, a s106 agreement is currently being negotiated to secure:

- Affordable Housing comprising 30% (65% of which will be for affordable rent and 35% for shared ownership)
- Education contributions of £92,413
- NHS contributions of £54,432
- Public open space and indoor and outdoor recreation contributions tbc
- Highway and pedestrian improvements contribution of £120,675

CIL Regulations

In order to comply with the Community Infrastructure Levy (CIL) Regulations
2010 it is necessary for planning applications with legal agreements to consider the issue of whether the requirements within the S106 satisfy the following:

(a) necessary to make the development acceptable in planning terms;
(b) directly related to the development; and
(c) fairly and reasonably related in scale and kind to the development.

The provision of affordable housing, public open space, indoor and outdoor sport (financial) mitigation and highway and pedestrian improvements at Chester Rd / London Rd junction would be necessary, fair and reasonable to provide a sustainable form of development, to contribute towards sustainable, inclusive and mixed communities and to comply with local and national planning policy.

The development would result in increased demand for primary and secondary school places within the catchment area which currently have a shortfall of school places. To increase the capacity of the schools which would support the proposed development, contributions towards primary and secondary school education are required based upon the number of units applied for. This is considered to be necessary and fair and reasonable in relation to the development.

All elements are necessary, directly relate to the development and are fair and
reasonable in relation to the scale and kind of the development

CONCLUSIONS

Whilst the proposal seeks to provide 25 dwellings in the open countryside, they would be accommodated on a site already committed for development. The comments received in representations have been given due consideration, however, subject to the satisfactory receipt of outstanding consultation comments, the proposal is considered to be a sustainable form of development. The proposal would bring environmental, economic and social benefits that would outweigh the policy conflict with the development plan in this case and the objections in relation to Jodrell Bank and healthcare provision, the impacts of which would be minor in the context of the wider development proposals. Accordingly, there are material considerations that outweigh the conflict with the development plan, and the application is therefore recommended for approval.

RECOMMENDATION

APPROVE subject to conditions, a formal deed of variation to the existing S106 Agreement attached to the outline consent (to secure the balance of 3 affordable rented units) and a S106 Agreement making provision for:

- **Affordable Housing comprising 30% (65% of which will be for affordable rent and 35% for shared ownership)**
- **Education contributions of £43,385 (primary), £ 49,028 (secondary) Total: £92,413**
- **NHS contribution of £54,432**
- **Public Open Space and Indoor Sport and Outdoor Sport tbc**
- **Highway and pedestrian improvements contribution of £120,675 towards Chester Road / London Road junction**

And the following conditions:

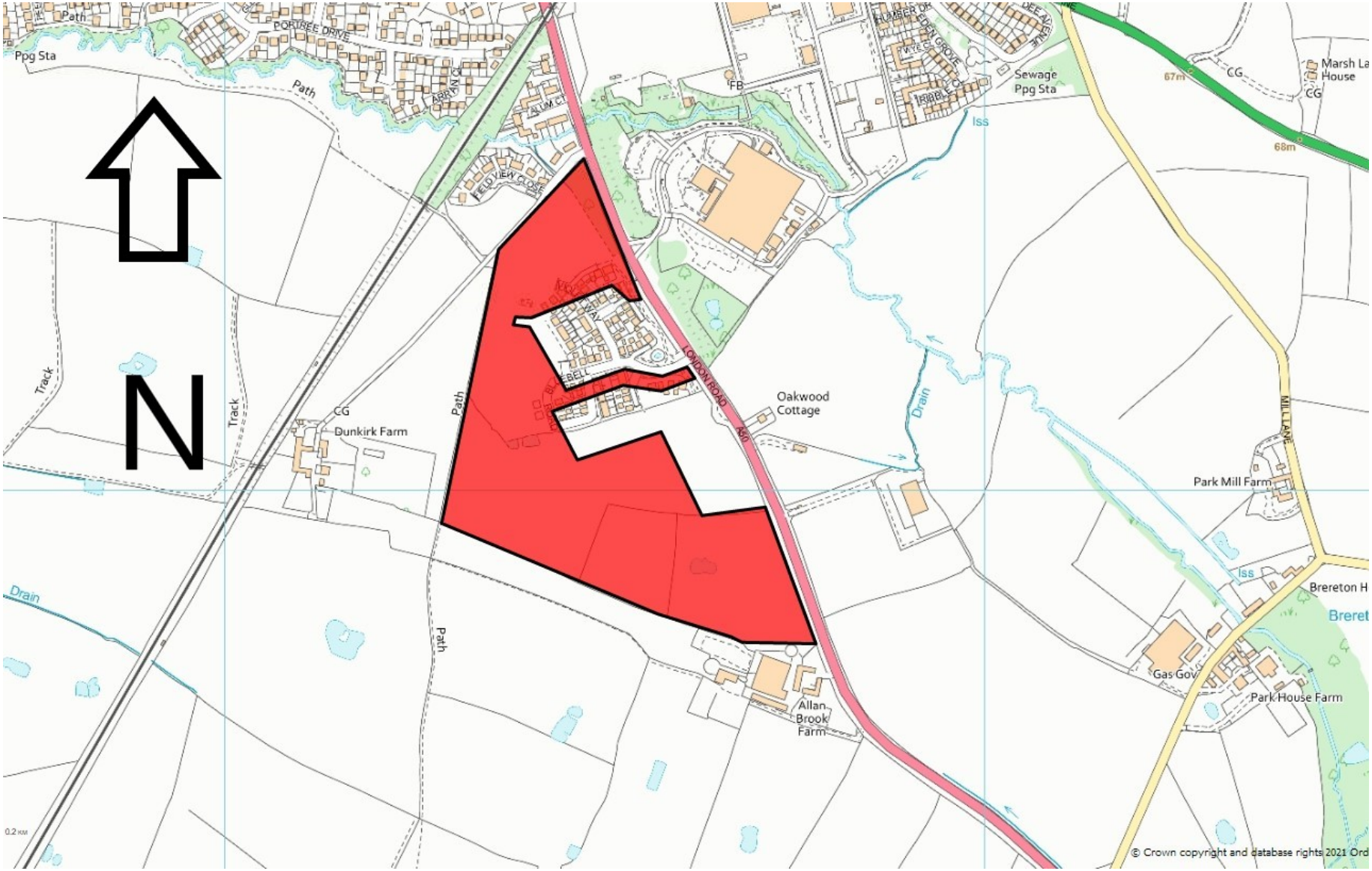
1. **Standard Time limit – 3 years**
2. **Accordance with Approved / Amended Plans**
3. **Access to be constructed in accordance with approved plan prior to first occupation**
4. **Accordance with submitted noise mitigation scheme**
5. **Implementation of electric vehicle infrastructure plan (charging points)**
6. **Development to be carried out in accordance with submitted Flood Risk Assessment**
7. **Scheme of foul and surface water drainage to be submitted with foul and surface water to be connected on separate systems**
8. **Submission of a detailed drainage strategy / design, associated management / maintenance plan**
9. **Development to be carried out in accordance with the recommendations of the submitted Ecological Report**
10. **Nesting Birds Survey to be carried if works are to be carried out during the bird breeding season**
11. **Proposals for the incorporation of features into the scheme suitable for use by nesting birds to be submitted**
12. **Lighting scheme including mitigation for bats**

13. **Accordance with submitted Affordable Housing Scheme**
14. **Facing materials to be submitted and approved**
15. **Submission of a scheme for the implementation of electromagnetic screening measures**
16. **Implementation of landscaping scheme**
17. **Submission of a landscape and habitat management plan**
18. **Implementation of boundary treatments including measures for incorporation of gaps for hedgehogs**
19. **Removal of permitted development rights classes A-E**
20. **Removal of permitted development rights for fences, gates oand walls**

In the event of any changes being needed to the wording of the Committee's decision (such as to delete, vary or add conditions / informatives / planning obligations or reasons for approval/refusal) prior to the decision being issued, the Head of Planning has delegated authority to do so in consultation with the Chairman of the Strategic Planning Board, provided that the changes do not exceed the substantive nature of the Committee's decision.

Application for Full Planning

RECOMMENDATION: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Application No: 21/1205C

Location: Former CLEDFORD HALL FARM, CLEDFORD LANE, MIDDLEWICH

Proposal: Erection of 10 gypsy and traveller transit pitches and associated amenity block.

Applicant: Mr Tim Allen, Cheshire East Council

Expiry Date: 03-Aug-2021

SUMMARY

The site is located within the Settlement Zone but in an area with a distinctly rural character. Some concern is raised over the visual impact of the proposal in terms of the wider landscape, most notably through the provision of a 2.5-metre-high acoustic fence around the boundary of the site. The fence also conflicts with the aims of the Planning Policy for Traveller Sites (PPTS) in terms of enclosing the site with so much hard landscaping, high walls or fences, the impression may be given that the site and its occupants are deliberately isolated from the rest of the community. Although this is tempered somewhat by the presence of existing vegetation that will screen the fence both internally and externally to the site. The issues associated with the fencing weigh moderately against the proposal.

There is also a section of Cledford Lane that has no footway or street lighting, which may deter people accessing local facilities from the site on foot or by bicycle. However, given the relatively short distances involved, walking and cycling would certainly be an option for occupants of the site for some trips, and therefore this is considered to only attract limited weight against the proposal.

Balanced against this, the site is generally within walking distances of several local facilities and public transport links, and is reasonably accessible, and no significant amenity, ecology, tree, highway safety, flood risk or contaminated land issues are raised. In addition, Cheshire East does not currently have a transit site for Gypsies and Travellers, and the provision of such would significantly help to reduce the number of unauthorised encampments across the Borough, and meet an identified need, which is a significant benefit of the proposal that carries substantial weight. Unauthorised encampments can be costly, time-consuming and disruptive for local businesses and settled communities.

The site is also allocated for 10 transit pitches in the draft SADPD, which was submitted for examination in April 2021. However, whilst the SADPD has been through a consultation process, it is still a draft document with outstanding objections to it, which limits the weight that can be afforded to it. However, there are no known alternative locations for a transit site and the site has previously had planning permission for nine transit pitches and one permanent Warden's pitch (ref 14/5721C). Therefore, the scale of the site, and the principle of its use, in a rural / semi-rural area has been accepted previously.

Consequently, having regard to the information above, including those comments received in representation objecting to the proposal, it is considered that the factors in favour of the proposal for a transit site outweigh any negative impacts, and a recommendation of approval is therefore made.

SUMMARY RECOMMENDATION

Approve subject to conditions and the satisfactory receipt of outstanding information.

PROPOSAL

The application seeks full planning permission for the erection of 10 gypsy and traveller transit pitches and an associated amenity block and open space. The pitches will be available to rent for a fixed term period of up to 13 weeks. It is understood that each family will have an initial stay of between 2-4 weeks and under very special circumstances it can be extended up to a maximum of 13 weeks.

When the site is occupied there will be a staff presence, which initially will be office hours Monday to Friday, and there will be an “on call” system to pick up any encampments over the weekend, thereby providing staff when required. When the site is not occupied, the site will still be monitored regularly. The role of the staff (warden) on the site will be to sign up new residents; health & safety checks across the site and buildings; signpost families to education and health (or other support facilities) – if required; ensuring all databases are up to date; and dealing with any issues/problems.

Visitors will not normally be allowed to return to the site and occupy a pitch within 3 months of their last stay.

SITE DESCRIPTION

The application site comprises an access from Cledford Lane, with a driveway leading into the site. The former Cledford Hall and barns have all been demolished in recent years, and the site is now open land. A large industrial building is located to the north east of the site and immediately adjacent to the west and south of the application site is predominantly farmland with three residential properties located on the opposite side of Cledford Lane. The site is located within the Settlement Zone of Middlewich as identified in the Congleton Borough Local Plan.

RELEVANT HISTORY

17/3197C - Demolish a grade 2 listed barn and other derelict buildings within the farm site – Approved 09.10.2017

17/3198C – LBC to demolish a grade 2 listed barn and other derelict buildings within the farm site – Approved 09.10.2017

14/5721C - 9no transit pitches and 1no permanent Wardens pitch, open space for play, and the conservation and conversion of an existing grade two listed barn within the site. The barn is to provide washing and toilet facilities and office accommodation for the resident warden. The barn is also to provide office accommodation for Cheshire East – Approved 05.05.2015

14/5726C - Listed Building Consent for grade two listed barn to be converted from an agricultural barn into washing and sanitary accommodation for the transit Gypsy and Travellers. Office accommodation is to be provided for the permanent Warden and for the Cheshire East office staff – Approved 05.05.2015

06/1290/FUL - Conversion of existing farm buildings to 5 dwellings. Conversion of farmhouse to 2 dwellings. New garages and sewage treatment plant. Demolition of outbuildings – Approved 21.08.2007

06/1287/LBC - Conversion of existing farm buildings to 5 dwellings conversion of farmhouse to two dwellings, new garages, sewage treatment plant, demolition of out buildings – Approved 21.08.2007

NATIONAL & LOCAL POLICY

National Policy
The National Planning Policy Framework (the Framework) establishes a presumption in favour of sustainable development. The Framework sets out that there are three dimensions to sustainable development: economic, social and environmental. These roles should not be undertaken in isolation, because they are mutually dependent.

Planning Policy for Traveller Sites (PPTS) 2015 sets out the Government's planning policy for traveller sites. It should be read in conjunction with the Framework. The overarching aim is to ensure fair and equal treatment for travellers, in a way that facilitates the traditional and nomadic way of life of travellers while respecting the interests of the settled community.

Cheshire East Local Plan Strategy (CELPS)
MP1 Presumption in favour of sustainable development
PG1 Overall Development Strategy
PG2 Settlement Hierarchy
SD1 Sustainable Development in Cheshire East
SD2 Sustainable Development Principles
IN1 Infrastructure
SC7 Gypsies and Travellers and Travelling Showpeople
SE1 Design
SE2 Efficient Use of Land
SE3 Biodiversity and Geodiversity
SE4 The Landscape
SE5 Trees, Hedgerows and Woodland
SE7 The Historic Environment
SE12 Pollution, Land Contaminations and Land Instability
SE13 Flood Risk and Water Management
CO1 Sustainable Travel and Transport

Congleton Borough Local Plan First Review 2005
GR6 Amenity and Health
GR8 Amenity and Health
GR9 Accessibility, Servicing and Parking Provision
GR10 Accessibility, Servicing and Parking Provision
GR13 Public Transport Measures
GR14 Cycling Measures
GR15 Pedestrian Measures
GR17 Car Parking
GR18 Traffic Generation
GR20 Public Utilities
GR22 Open Space Provision
GR23 Provision of Services and Facilities
NR3 Habitats
H7 Residential Caravans and Mobile Homes

Neighbourhood Plan
There is no Neighbourhood Plan for Middlewich and the site lies outside of the Moston Neighbourhood Plan area.

Other relevant documents
Cheshire East Gypsy, Traveller and Travelling Showpeople Accommodation Assessment (August 2018)
Cheshire East Council Gypsy, Traveller and Travelling Showpeople Site Identification Study Final Report (April 2014)
Cheshire East Local Plan – Site Allocation and Development Policies Document – Gypsy, Traveller and Travelling Showpeople Site Selection Report – August 2020
Revised Publication Draft Site Allocation and Development Policies Document (September 2020)

CONSULTATIONS (External to Planning)

United Utilities – No objection subject to conditions relating to drainage

Cheshire Police – No comments received

Cheshire Brine Subsidence Compensation Board – Located outside of consultation area – advise of stability considerations

Cadent Gas – No objection subject to informative note relating to gas apparatus

National Grid - No objection subject to informative notes relating to gas apparatus

Natural England – No objection

Cheshire Wildlife Trust – Object on grounds of inaccurate calculation of loss of biodiversity

Housing Standards – No comments received

Gypsy Traveller Co-ordinator – No comments received

Strategic Housing – No objection – no affordable housing requirement

Lead Local Flood Authority – No objections subject to condition relating to drainage strategy

Environmental Health – No objections subject to conditions relating to noise mitigation and contamination.

Education Services – No comments received

Head of Strategic Transport – No objections

Moston Parish Council – Object on following grounds:

- Site is in wrong location and could be counter productive to established integration between the large travelling community who have settled in Middlewich and Moston and the non-travelling population.
- Introducing transient Gypsies and Travellers to this community could quite easily cause resentment between the non-travelling population and those settled Gypsies and Travellers, destroying for ever the efforts which have been made over the last decade or so.
- Middlewich, Cledford and Moston already have 12 Transit pitches on privately owned sites, the basis of this application does not appear to address a shortfall in local transit provision
- To propose a transit site in this location shows a remarkable lack of understanding and sensitivity of the problems which are faced.

Middlewich Town Council – Object on grounds that site is unsuitable for living accommodation for following reasons:

- Flood risk
- Ground conditions
- No safe route to school, no travel plans and not within easy access of local amenities
- Air quality

Cllr Bullman – Objects on the following grounds:

- Site fails on every point of latest Government instructions and advice regarding the siting of such facilities
- Transient sites should conform to the same standards as permanent sites with regard to proximity to amenities such as doctors, buses, schools, shops. The site is not in easy walking distance of such essentials.
- Site is surrounded by noise pollution from HGV traffic from Wincantons, the ANSA recycling plant, MidPoint 18 and bypass construction traffic
- Cledford Lane is not on the Gypsy & Traveller general route – preference for a site near Crewe
- Land is not fit for domestic building due to contamination (Cledford Hall Farm has contaminated areas.)

- Several better sites across Cheshire East that should be considered. The only reason Cledford Lane is the site currently favoured by CEC officers is because there is a fine to pay should this land be used for any purpose other than as a Gypsy & Traveller site.
- Our large, settled Gypsy, Roma and Traveller community do not welcome the development of a transient site at Cledford Lane

REPRESENTATIONS

Neighbour notification letters were sent to all adjoining occupants, a press advert was placed in the local newspaper and a site notice was erected.

12 letters of representation have been received from local residents, local businesses and Fiona Bruce MP, objecting to this proposal on the following grounds:

- Site not suitable for housing or a traveller transit site
- No footpaths in that area of Cledford Lane and it is poorly lit – safety risk for pedestrians and cyclists
- Inadequate pedestrian and cycle provision, and access to public transport (contrary to strategic priorities of CEC and policies SD2 and SC7)
- Impact on capacity at schools, doctors, dentists
- Too close to Middlewich's settled traveller community – potential for conflict
- Too close to waste site and associated air quality issues
- Flood risk and subsidence arising from salt mines and health complications from limestone and chemical deposits
- Impact on house prices
- Slow moving vehicles using access raise highway safety concerns
- No travel plan, transport statement or transport assessment prepared in association with the planning application
- 2.5m high fence raises concerns over amenity and quality of life for residents
- No sustainable development
- Too close to industrial units that operate 24/7 resulting in constant noises within the site
- Isolated from Middlewich and its facilities (conflicts with part A of PPTS)
- Site not accessible to health services and providers (conflicts with part B of PPTS)
- Location of the site is such that it cannot encourage attendance at school on a regular basis (conflicts with part C of PPTS)
- Location is not appropriate nor suitable for use by Travellers, it cannot provide a settled base and so address the issues arising from unauthorised encampment (conflicts with part D of PPTS)
- Site is significantly influenced by the noise and activities of the adjoining industrial buildings. As such, travellers will suffer from adverse impacts on their health and well-being (conflicts with part E of PPTS)
- In order to address the problems associated with the location of the site, local services would have to respond to needs generated by occupiers of the site (conflicts with part F of PPTS)
- The site is too small to offer opportunities for both living and working (conflicts with part H of PPTS)
- Contrary to CELPS policy SC7

OFFICER APPRAISAL

Policy SC7 of the CELPS sets out considerations that will be taken into account to ensure that proposals for Gypsy and Traveller and Travelling Showperson sites are sustainable and acceptable in terms of location and design. These are:

i. Proximity of the site to local services and facilities;
ii. Access to public transport;
iii. Safe pedestrian, cycle and vehicular access onto the site;
iv. Appropriate pitch sizes;
v. Adequate provision for parking, turning and servicing;
vi. Adequate provision for storage and maintenance, particularly where needed for Travelling Showpeople;
vii. Mix of accommodation types and tenures;
viii. Impact on the character and appearance of the surrounding area;
ix. Impact on the Green Belt;
x. Impact on the historic environment.

These points will be considered as part of the assessment below.

The application site is located within the settlement zone for Middlewich, which is identified as a Key Service Centre within the CELPS. The CELPS states that Key Service Centres will deliver sustainable economic growth that can meet the aspirations of the borough and local communities.

The site previously comprised Cledford Hall and barns. Cledford Hall was a grade II listed building, which was de-listed in 2014, and subsequently demolished, following catastrophic fire damage. The barns, which were also grade II listed in their own right, remained for some time after, and their re-use was included as part of the previous planning permission for a transit site on this site (14/5721C). However, two years after this permission was obtained, consent was granted for the demolition of the barn due to its poor condition, with the building in imminent danger of collapse and reports of continual unauthorised access despite the landowners best efforts to secure the site.

All the buildings have therefore now been cleared from the site, however signs of the previously developed nature of the site are evident, notably through the presence of the access drive leading from Cledford Lane. The site is therefore considered to be a previously developed site; the redevelopment / reuse of previously developed land is encouraged by policy SE2 of the CELPS.

Character and Appearance

CELPS policy SD2 notes that development will be expected to contribute positively to an area's character and identity, creating or reinforcing local distinctiveness in terms of height, scale, form and grouping, choice of materials, external design features, massing of development, and relationship to neighbouring properties, street scene and the wider neighbourhood. Policy SE1 expects development proposals to make a positive contribution to their surroundings. Similarly, in wider landscape terms, policy SE4 requires, as a minimum, for all development to conserve the landscape character and quality of an area.

Policy H of the PPTS requires local planning authorities to attach weight to the following matters, when considering applications:
a) effective use of previously developed (brownfield), untidy or derelict land
b) sites being well planned or soft landscaped in such a way as to positively enhance the environment and increase its openness
c) promoting opportunities for healthy lifestyles, such as ensuring adequate landscaping and play areas for children
d) not enclosing a site with so much hard landscaping, high walls or fences, that the impression may be given that the site and its occupants are deliberately isolated from the rest of the community.

The application site is located within the Settlement Zone, however, as the site is approached from the A533 the character of the area changes dramatically from a commercial / industrial area to one that is distinctly rural. Then as you carry on along Cledford Lane past the application site a very substantial industrial building presents itself to this rural lane. In addition, the Middlewich Eastern bypass is proposed to be constructed further to the east of the application site. Therefore, whilst the location of the site has rural qualities, there are also significant urban influences. The proposed use of the site is therefore not considered to be out of keeping with the mixed-use nature of the local area.

Policy C of PPTS requires local planning authorities to ensure that the scale of sites in rural or semi-rural settings does not dominate the nearest settled community. Cledford Lane comprises what would best be described as a dispersed settlement of individual and small groups of dwellings, together with larger commercial buildings / warehouses. The proposed development would form another such small group, and therefore is not considered to dominate the settled community. The scale of the site has previously been accepted as part of planning permission 14/5721C, which granted approval for nine transit pitches and one permanent warden's pitch.

Now the site has been cleared of all buildings (which also removes any significant impact upon the historic environment) it appears as an open field when viewed from Cledford Lane, with vegetation mainly along the boundaries. The wording of policy C of the PPTS suggests that gypsy and traveller sites may be acceptable in rural settings and hence there can be no in principle presumption that they should be hidden from view or that a degree of harm to the character and appearance of the countryside is unacceptable. That being said, their relationship to the wider landscape is an important consideration. The sight of caravans in a rural or semi-rural location is not unusual, however the proposed plots of varying sizes would extend the previously developed area of the site to the west, and by doing so the prominence of the developed area, when viewed from Cledford Lane, would increase significantly. Most notably by the provision of a 2.5-metre-high acoustic fence surrounding the site, required to minimise noise impacts from the future bypass and industrial noise from adjacent sites. Such a fence would also be contrary to the aims of the PPTS, where in Policy H it states that local planning authorities should attach weight to "not enclosing a site with so much hard landscaping, high walls or fences, the impression may be given that the site and its occupants are deliberately isolated from the rest of the community".

The site is currently enclosed by vegetation and mounding to three of the four boundaries. Given the extent of the existing enclosure by vegetation the impact of the fencing in terms of

adding to the impression of separation from the wider community will not be so great. There is scope to locate the fence between vegetation along some of the boundaries, which will minimise the visual impact of the fence, and importantly additional landscaping is proposed within the site, in addition to the retention of some of the existing vegetation, including two large mature trees that will create a central focal point to the open space / play area in the centre of the site. However, the western boundary is relatively open, and this will be subject to the greatest visual impact arising from the proposed acoustic fence. The site plan has been updated to move the position of the fence on the western boundary slightly into the site to allow planting to be carried out to its external face, which will help to soften the impact of the fence. There are also some outstanding queries regarding land levels to the north and west boundaries, where there is mounding, and the precise location of the fence still to be confirmed. It is therefore recommended that final details and positioning of the acoustic fence, and proposed landscaping are secured by condition.

The proposed amenity block has a very simple linear form, similar to the barn that previously existed, but smaller in scale and without its heritage value. The amenity building appears to be something built for function rather than form, similar to an agricultural building, or even the large commercial buildings in the local area. However the building, which will be externally faced in cement cladding that will have the appearance of timber, is relatively low level, and will be well screened by the surrounding vegetation. The materials have been chosen in order to make the building unintrusive, and in keeping with the semi-rural / natural location of the site. The cement cladding is non-combustible, hard wearing and easy to replace individual boards.

Given the extent of boundary vegetation and the scale and form of the proposal, the proposal is considered to comply with policies SE1 and SD2 of the CELPS.

Living conditions

Saved policy GR6 of the CBLP requires that new development should not have an unduly detrimental effect upon the amenities of adjoining or nearby residential property or sensitive land uses due to loss of privacy, loss of sunlight or daylight, visual intrusion or other forms of disturbance or pollution.

Policy SE12 of the CELPS states that the council will seek to ensure all development is located and designed so as not to result in a harmful or cumulative impact upon air quality, surface water and groundwater, noise, smell, dust, vibration, soil contamination, light pollution or any other pollution which would unacceptably affect the natural and built environment, or detrimentally affect amenity or cause harm.

The nearest neighbours are a group of three properties which are located opposite the entrance to the application site on Cledford Lane. Background noise is currently very limited in this area; therefore any increase in activity is likely to be noticeable to existing residents.

The site proposes 10 transit pitches, and it is acknowledged that there will be an increase in activity over and above the existing redundant farming use. However, given the scale of the site, any resultant traffic associated with the proposed use of the site, or general activity within the site, would not significantly harm the living conditions of neighbours through noise or disturbance. Indeed the proposed acoustic fence would serve to further minimise noise emanating from the site, although it should be noted that the fence is not required for this purpose.

There are proposals to construct the Middlewich by-pass approximately 500 metres to the east of the application site. Improvement works to Cledford Lane are also proposed directly in front of the site as part of the by-pass permission. The by-pass is proposed to extend between Pochin Way in the north along the eastern side of the Midpoint 18 employment allocation to the A533 Booth lane in the south. The impact of this road upon the living conditions of the residents of the site therefore needs to be considered. As does the impact from the adjacent industrial units. With the proposed 2.5-metre-high acoustic fence Environmental Health advise that the impact from the proposed road and the existing industrial units, upon the occupants of the site, is acceptable.

Middlewich Town Council, and others, have raised concerns regarding air quality and odour, particularly with reference to the nearby ANSA waste site on Cledford Lane. Environmental Health advise that the ANSA site was assessed for air quality impacts on the local area when it was originally planned and was found to be acceptable, and therefore they consider that the impacts on the proposed area for the travellers' site will also be negligible. Environmental health has also recently investigated odour from the ANSA site following a complaint. As part of that investigation, Environmental Health contacted the Environment Agency who regulate the site and they were satisfied that all areas covered by the permit for the site were odour free and all procedures to control odour were being adhered to. Environmental Health have also monitored the site regularly over the last 2 months with no odour detected. Therefore, no significant odour concerns are raised.

Overall it is considered that the impact upon the living conditions of existing neighbouring residents will be adequately maintained and an acceptable standard of amenity will be provided for future occupants of the site, in accordance with policy GR6 and GR8 of the Congleton Local Plan, and relevant sections of policy SE12 of the CELPS.

Ecology

Policy SE3 of the CELPS requires all development to positively contribute to the conservation and enhancement of biodiversity and geodiversity and should not negatively affect these interests.

Statutory Designated Sites

This application site falls into Natural England's SSSI impact risk zones for residential developments. Natural England have been consulted on this application and raised no objections in respect of statutory designated sites.

Non-statutory designated sites

The nature conservation officer advises that it is not anticipated that there will be any significant adverse impacts on non-statutory designated sites as a result of the proposed development.

Great Crested Newts

The on- site pond supports a population of great crested newts. Great Crested Newts have been cleared from the development site under an extant Natural England license. Provided that the works on site continue to proceed under the current protected species licence the proposed development would be unlikely to have a direct adverse impact upon this species.

The submitted ecological assessment does however identify a potential risk to the pond if it is accessible and recommends that the pond be fenced off to limit access to it. Details of appropriate fencing have now been submitted and are shown on the submitted 'Proposed Fence Plan' Drawing no. 12 Rev. F, which will remove the risk of any post development interference with the pond.

Badgers

Badgers were recorded as being active on this site, but no active setts were present. The nature conservation officer advises that based on the current levels of badger activity on site the proposed development would result in a low-level adverse impact upon badgers as a result of the loss of foraging habitat. As the status of badgers on a site can change in a short time scale, it is recommended that if consent is granted a condition be attached which requires an updated badger survey to be undertaken and a report submitted prior to the commencement of development.

Bats and Barn Owl

Bat and barn owl boxes are present on site. The bat boxes are located within two trees on site. These trees would be retained as part of the proposed development and so any bats present would not be directly affected by the proposed development.

A recent survey of the barn owl box did not record any evidence of breeding barn owls, however other bird species have previously been found to be breeding within the box. No evidence of breeding activity was however recorded during the follow up survey and so the box has been temporarily closed to prevent any birds using it during the next season and then potentially being disturbed during the construction phase. If planning consent is granted a condition is recommended to ensure that the barn owl box is reopened following the completion of construction works on site.

Lighting

To avoid any adverse impacts on nocturnal wildlife resulting from any lighting associated with the development it is recommended that if planning permission is granted a condition should be attached requiring any additional lighting to be agreed with the LPA.

Nesting Birds

Similarly, if planning consent is granted a condition is recommended to safeguard nesting birds.

Hedgerows

Native hedgerows are a priority habitat and hence a material consideration. Based upon the submitted plans it appears that most of the existing interior hedgerows would be removed in order to accommodate the proposed development. Compensatory planting should be provided to address its loss.

Hedgerow planting is shown on the submitted landscape masterplan. Losses and gains of biodiversity associated with hedgerows are assessed as part of the biodiversity metric calculation. The submitted landscape plan has been amended to include an additional length of compensatory hedgerow planting. The nature conservation officer advises that sufficient compensatory hedgerow planting has been proposed to compensate for that lost and deliver a minor net gain for hedgerow biodiversity.

Biodiversity Net Gain

In accordance with Local Plan policy SE3(5) all development proposals must seek to lead to an overall enhancement for biodiversity. In order to assess the overall loss/gain of biodiversity an assessment undertaken in accordance with the Defra Biodiversity 'Metric' version 2 has been carried out and submitted with the application.

The Biodiversity metric has been revised in light of consultation comments made by the nature conservation officer and Cheshire Wildlife Trust (CWT). The metric as submitted shows a net gain for biodiversity amounting to 37.19%, which is a substantial gain.

Cheshire Wildlife Trust have made further comments on the revised version of the metric. If the metric is revised in response to CWT comments the level of biodiversity net gain is reduced. Whilst the local plan policy requires all developments to deliver a net gain for biodiversity, it does not set a threshold for the level of gain required.

Habitat Management Plan

A habitat management plan has been submitted with the application. In order to realise the ecological enhancements proposed in the biodiversity metric the management plan must be for a minimum of 30 years. This is because the proposed woodland on site would take this long to reach its target condition. A condition is therefore recommended to secure this.

Given that the proposal is considered to result in an overall net gain, and having regard to the information above, the proposal is considered to comply with policy SE3 of the CELPS.

Trees / landscape

CELPS policy SE 5 relates to Trees, Hedgerows and Woodland. It seeks to protect trees, hedgerows and woodlands, that provide a significant contribution to the amenity, biodiversity, landscape character of historic character of the surrounding area.

Policy SE4 of the CELPS requires all development to conserve the landscape character and quality and should where possible, enhance and effectively manage the historic, natural and man-made landscape features that contribute to local distinctiveness of both rural and urban landscapes.

The submission includes an arboricultural report dated December 2020. The report states that it follows the methodology in BS 5837:2012 Trees in relation to design, demolition and construction. The development proposals indicate removal of individual trees and groups of trees from within the site although the more significant trees are identified for retention with protective measures during the construction period.

Subject to the implementation of the tree protection measures and special construction techniques identified, no significant arboricultural concerns are raised in relation to retained trees.

Additional tree planting is proposed to adequately compensate for the trees that are lost due to the development. The majority of the replacement planting is proposed to the south west corner of the site close to Cledford Lane. The proposal is therefore considered to comply with policy SE5 of the CELPS.

In landscape terms the main impact will be from the proposed 2.5m high acoustic fence to the site boundaries. On the Cledford Lane frontage the fence is set back from the road and will be set behind existing vegetation, and in front of the proposed replacement planting, which will help to minimise any landscape impact on this prominent boundary.

On the eastern and northern boundaries the fence abuts existing vegetation and the boundary to factory/warehouse units and is acceptable in this location, subject to clarification of levels as highlighted earlier in this report.

The site is readily visible from Cledford Lane although the roadside hedge affords some screening. When approaching the site from the west on Cledford Lane, the site is at a higher level than the Sanderson Brook and is clearly visible on higher ground than the road.

Until any planting is established, the fence and any caravans or vehicles taller than 2.5 metres would be prominent and exposed when viewed from Cledford Lane to the west. On this long western boundary constructing a 2.5m high acoustic fence on the outside of the existing hedge (northern third) and on the perimeter, without any external planting (southern two thirds) does raise some concern in landscape terms. Revised plans have now been provided to show the fence constructed on the inside of the existing hedge and additional space provided for the planting of a new hedgerow, where there is not currently a hedge.

The fence will also require “softening” on the inside of the site except where it is adjacent to existing or proposed planting. For example, where it is the rear fence to caravan spaces. This could be achieved by appropriate drifts of not thorny shrub species and climbing plants where there is less space. Appropriate landscape conditions are therefore recommended.

Highways
CELPS policy CO 1 deals with Sustainable Travel and Transport. It seeks to encourage a shift away from car travel to public transport, cycling and walking.

Saved CBLP policy GR9 relates to access, servicing and car parking. It requires adequate and safe provision for suitable access and egress by vehicles, pedestrians and other road users, and the provision of adequate car parking.

There is an existing site access from Cledford Lane to the site, this has a wide bellmouth and adequate visibility is achievable at the access point. It is proposed to provide lockable gates in a similar location to the existing gates to the site. The main access is a two-way 5m wide road with a security barrier, the internal road will be a one-way circular road 6m wide. Swept path drawings have been provided that show how a refuse vehicle, emergency vehicle (fire engine) and a HCV with caravan can enter the site and leave in a forward direction.

Each of the 10 pitches are capable of accommodating two caravans and therefore in total there could be 20 touring caravans on the site. Car parking is also provided adjacent to the caravans and there are two spaces for each pitch, which is adequate for the proposed use.

There is also a service block on site that provides toilets and shower rooms and a manager’s office, and there are an additional 5 car parking spaces provided for staff and visitor parking.

The Head of Strategic Transport (HST) advises that although Cledford Lane is a rural road in the location of the site, the proposals would not lead to any significant traffic impact issues on the road network. The site is situated in a rural location but is suited to the proposed use which provides temporary accommodation for residents. The HST raises no highway objections to the application.

Accessibility

There is a bus service between Sandbach and Middlewich along the A533 at a distance of around 800m from the application site. There is also a convenience store and pharmacy approximately 1.2km from the site, and a primary school 1.6km away. However most day-to-day facilities are available in Middlewich Town Centre approximately 1.8km from the site. It should be noted that there is also a distance of approximately 350 metres between the application site and Faulkner Drive that has no footway or street lighting, which may deter people accessing local facilities from the site on foot or by bicycle. However, given the relatively short distances involved, walking and cycling would certainly be an option for occupants of the site for some trips.

Given the nature of the proposed use, and its location, it is anticipated that most trips will be made by car. Pedestrians and cyclists will need to use the same access as vehicular traffic. However, given the relatively low levels of traffic that will be associated with the proposed use, this is considered to be acceptable. Cycle parking facilities are provided within the site for occupants, staff or visitors.

Flood Risk

Policy SE13 of the CELPS requires developments to integrate measures for sustainable water management to reduce flood risk, avoid an adverse impact on water quality and quantity within the borough and provide opportunities to enhance biodiversity, health and recreation.

The application site is located within Flood Zone 1, where there is a low probability of flooding. The LLFA has no objection in principle to the proposed development. However, a detailed drainage strategy will be required, and subject to this condition the development will comply with policy SE13 of the CELPS.

Contaminated Land

Policy SE12 of the CELPS sets out that the Council will seek to ensure all development is located and designed so as not to result in a harmful or cumulative impact upon air quality, surface water and groundwater, noise, smell, dust, vibration, soil contamination, light pollution or any other pollution which would unacceptably affect the natural and built environment, or detrimentally affect amenity or cause harm.

The application is for a proposed use that would be particularly vulnerable to the presence of contamination. A number of reports have been submitted with the application which recommend remedial measures and a watching brief be undertaken. This includes a methodology for the verification of imported soils. The Council's contaminated land officer is in agreement with this approach. Accordingly, in order to ensure compliance with policy SE12, conditions relating to the submission of a verification report and required action in the event of any unidentified contamination being found are recommended.

Other matters

The PPTS makes it clear that sustainability is important and should not only be considered in terms of transport mode and distance from services. But other factors such as economic and social considerations are important material considerations. It is considered that authorised sites assist in the promotion of peaceful and integrated co-existence between the travellers and the local community. The provision of a transit site will ensure that unauthorised encampments can be moved on, either to this site or out of the Borough, and will help with easier access (albeit for a temporary period in this case) to GPs, schools and other services.

The Criminal Justice and Public Order Act 1994 is particularly important with regard to the issue of Gypsy and Traveller transit site provision. Section 62A of the Criminal Justice and Public Order Act allows the Police to direct trespassers (unauthorised encampments) to remove themselves, their vehicles and their property from any land where a suitable pitch on a relevant caravan site is available within the same Local Authority area. A suitable pitch on a relevant caravan site is one which is situated in the same Local Authority area as the land on which the trespass has occurred, and which is managed by a Local Authority, Registered Provider or other person or body as specified by order by the Secretary of State.

Need

The updated Gypsy and Traveller Accommodation Assessment (GTAA) (2018) identifies a need in the Borough for the following provision over the remaining CELPS plan period (to 2030):

- 32 additional permanent residential pitches for Gypsies and Travellers;
- a transit site of between 5 and 10 pitches for Gypsies and Travellers, and;
- 5 Travelling Showperson plots

It is accepted that limited progress has been made in achieving these additional pitches and plots since the publication of the latest GTAA. The draft SADPD, which was submitted for examination on 29 April 2021, incorporates this need into draft policy HOU5a (Gypsy and Traveller Site Provision) and HOU5b (Travelling Showperson Site Provision), and HOU5a does allocate 6 sites for Gypsy and Traveller accommodation. These sites would provide a total of 45 permanent pitches and 10 transit pitches, which would serve to meet the identified need in the GTAA. The location of the transit site allocated within the draft SADPD is the application site.

Transit sites

Transit sites serve a specific function of meeting the needs of Gypsy and Traveller households who are visiting an area or who are passing through. A transit site typically has a restriction on the length of stay (in this case 13 weeks) and has a range of facilities such as water supply, electricity and amenity blocks. They do not have a function in meeting local need which must be addressed on permanent sites.

Local Authorities are not able to use transit provision on private sites as part of their enforcement action policies and therefore, whilst it does provide an option for visiting households it is at the discretion of the site owner who is allowed on to the site. Planning permission for eight private transit pitches has been granted at Horseshoe Farm, Warmingham Lane, and whilst this site provides an option for visiting households, it is at the discretion of the site owner who is allowed onto the site.

A public, Council owned, transit site provides both a place for households in transit to an area and also a mechanism for greater enforcement action against inappropriate unauthorised encampments.

Site Identification Study

Peter Brett Associates were appointed by the Council to carry out research to identify gypsy, traveller and travelling showpersons sites across the Borough. Sites have been assessed to determine if they are suitable, available and achievable. The results of the study were used to inform the development of relevant policies in the CELPS.

Potential sites were established from a review of information relating to: a call for sites; existing authorised sites subject to full, temporary or personal consents or certificates of lawful use; existing unauthorised and tolerated sites and encampments; other sites owned by gypsies, travellers and travelling showpeople; surplus Council owned land; sites from previous and current land studies; housing allocations and potential urban extensions, and; sites owned by Registered Providers (housing associations).

It should be clarified that the site identification study did not allocate land for the proposed use or confirm the acceptability in planning terms of the identified sites. It simply served to highlight options available to the Council to meet the identified need for accommodation for gypsies, travellers and travelling showpeople within the Borough.

From this study, one site was identified as potentially suitable for residential, or transit Gypsy and Traveller use to meet identified future needs in the short to medium term period. This was a site at Mill Lane in Sandbach, which is in private ownership. However, since the Site Identification Study was published, this site has secured permission for 4 pitches (under application 14/2590C) and is currently the subject of a current planning application (20/1876C) for 8 permanent pitches (an additional 4 to those approved under 14/2590C) which indicates that the site is not currently available.

In terms of the current application site at Cledford Hall, the 2014 Site Identification Study notes that:

“The site is not suitable for Gypsy and Traveller use as it would have an unacceptable impact on a Listed Building. The building is on site and the Council are in discussions with the landowner concerning the Listed Building status. If the Listed Building status was to be removed then the site has potential to be suitable for Gypsy and Traveller or Travelling Showperson use. Although unsuitable at this moment in time, this site should be monitored in future reviews of this study.”

As noted above, all the buildings have now been removed from the site, which removes the listed building concerns previously raised.

Alternatives

The Council has been seeking a suitable site for transit accommodation for Gypsies and Travellers for some time, and whilst some of the letters of objection refer to other more suitable sites for a transit site, these alternatives are not specified.

The Gypsy, Traveller and Travelling Showpeople Site Selection Report (2020) submitted as part of the evidence base to the SADPD examination earlier this year confirms that no other

sites have been submitted to the Council through the Call for Sites process for transit provision in the Borough.

The application site is the one which is considered to be the most deliverable, available, suitable and achievable. There are no known alternatives.

Response to objections
With regard to the comments received in representation, not addressed above, several of the letters suggest that the site is too close to Middlewich's settled traveller community and as such the proposed site creates potential for conflict. However, no evidence has been provided to support this claim, and the proposed site is intended to assist in the promotion of peaceful and integrated co-existence between the travellers and the local community. Any visitors to this site will be very short term, usually up to 4 weeks, extending to 13 weeks in very special circumstances. The opportunities for conflict to arise with such short stay durations is therefore limited. Comments relating to the increased impact upon schools, doctors, dentists, etc. are noted, but the number of people proposed to be occupying the site is not considered to be so great to cause any significant impact in this regard. The impact of the proposal upon local house prices is not a material planning consideration and cannot be afforded any weight in the determination of this application.

PLANNING BALANCE & CONCLUSION

The site is located within the Settlement Zone but in an area with a distinctly rural character. Some concern is raised over the visual impact of the proposal in terms of the wider landscape, most notably through the provision of a 2.5-metre-high acoustic fence around the boundary of the site. The fence also conflicts with the aims of the PPTS in terms of enclosing the site with so much hard landscaping, high walls or fences, the impression may be given that the site and its occupants are deliberately isolated from the rest of the community. Although this is tempered somewhat by the presence of existing vegetation that will screen the fence both internally and externally to the site. The issues associated with the fencing weigh moderately against the proposal.

There is also a section of Cledford Lane that has no footway or street lighting, which may deter people accessing local facilities from the site on foot or by bicycle. However, given the relatively short distances involved, walking and cycling would certainly be an option for occupants of the site for some trips, and therefore this is considered to only attract limited weight against the proposal.

Balanced against this, the site is generally within walking distances of several local facilities and public transport links, and is reasonably accessible, and no significant amenity, ecology, tree, highway safety, flood risk or contaminated land issues are raised. In addition, Cheshire East does not currently have a transit site for Gypsies and Travellers, and the provision of such would significantly help to reduce the number of unauthorised encampments across the Borough, and meet an identified need, which is a significant benefit of the proposal that carries substantial weight. Unauthorised encampments can be costly, time-consuming and disruptive for local businesses and settled communities.

The site is also allocated for 10 transit pitches in the draft SADPD, which was submitted for examination in April 2021. However, whilst the SADPD has been through a consultation

process, it is still a draft document, with outstanding objections to it, which limits the weight that can be afforded to it. However, there are no known alternative locations for a transit site, and the site has previously had planning permission for nine transit pitches and one permanent Warden's pitch (ref 14/5721C). Therefore, the scale of the site, and the principle of its use, in a rural / semi-rural area has been accepted previously.

Consequently, having regard to the information above, including those comments received in representation objecting to the proposal, it is considered that the factors in favour of the proposal for a transit site outweigh any negative impacts, and a recommendation of approval is therefore made.

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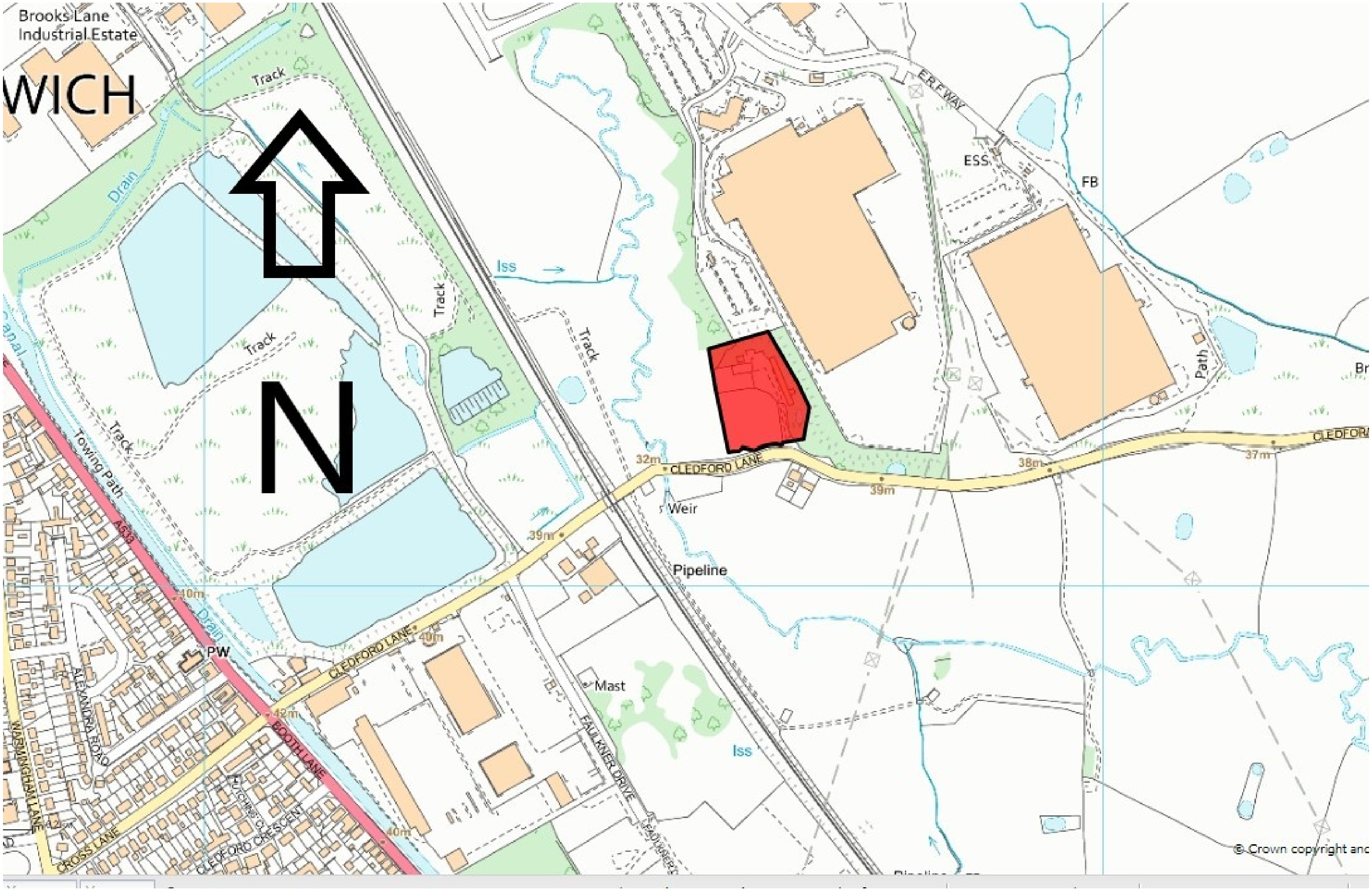
Application for Full Planning

RECOMMENDATION: Approve subject to following conditions

1. A03FP - Commencement of development (3 years)
2. A01AP - Development in accord with approved plans
3. A01HP - Provision of car parking and cycle parking
4. A06EX - Materials as application
5. A02HA - Construction of access prior to occupation
6. A01LS - Landscaping - submission of details
7. A04LS - Landscaping (implementation)
8. Maximum duration of stay (4 weeks initial stay, up to a maximum of 13 weeks)
9. The site shall not be occupied by any persons other than gypsies and travellers as defined in Annex A of Planning Policy for Traveller Sites.
10. No fences, gates or walls other than those expressly authorised by this permission shall be constructed.
11. No more than 2 caravans per pitch
12. Detailed drainage strategy and associated management / maintenance plan to be submitted
13. No commercial activities shall take place on the land
14. Breeding birds survey to be submitted
15. Barn owl box to be reopened on completion of construction works
16. Updated badger survey to be submitted
17. Details of any external lighting to be submitted
18. Habitat management plan to be submitted

19. Details and positioning of acoustic fence to be submitted
20. Verification report to be submitted (in accordance with remediation strategy)
21. Actions in event of unidentified contamination
22. Implementation of tree protection measures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WARMINGHAM LANE
CROSS LANE
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Working for a brighter future together

Strategic Planning Board Report

Date of Meeting:	18 August 2021
Report Title:	Draft Sustainable Urban Drainage Systems Supplementary Planning Document
Report of:	Executive Director of Place

1. Executive Summary

1.1. This report is to brief the Strategic Planning Board (SPB) on the current public consultation on the draft Sustainable Urban Drainage Systems Supplementary Planning Document ("SUDS SPD").

1.2. On 7th July 2021 a decision was taken by the Environment and Communities Committee to consult on the Draft SUDS SPD. Therefore, no decision is required by SPB, however the committee is asked to note the consultation period and requested to provide feedback on the draft SUDS guide within this timeframe, where the Board feels it appropriate to do so.

1.3. SUDS are design and engineering solutions to manage the surface water of a development site. The approach that can be taken to manage such water can vary significantly from multiple small scale, landscape and design led solutions that work with green space and habitats to delay and mange run off, to 'hard' engineering projects that store excess water to release into the mains water system. This SPD provides guidance on the prefered approach for development in Cheshire East and sets out the ways in which development sites are expected to work with water and manage drainage on site.

1.4. The preparation of a SPD involves two stages of public consultation. This first consultation stage began on 9th August and will remain open for six weeks until 20th September.

1.5. Following this, the document will be redrafted, and a further consultation will be undertaken, with opportunity to comment on a final draft version of the SPD. The final draft of the SPD will be accompanied by a consultation

statement setting out the feedback from stage one, and how the document has been altered in response to that feedback. Having also considered comments made at stage two, the SPD may then be considered for adoption by the Council.

1.6. Once adopted, the SPD will provide additional planning policy guidance on the implementation of Local Plan Strategy policies SE13 'Flood Risk and Water Management', and the Site Allocations and Development Policies Document (SADPD) Policy ENV 6' Surface Water Management and Flood Risk'. The SPD, once adopted, will be a material consideration in decision making and support the delivery of key policies in the Development Plan.

2. Recommendations

2.1. To note the draft SUDS Supplementary Planning Document (Appendix A) and its consultation period, and to provide commentary and feedback on the document where the Board wishes to do so.

3. Reasons for Recommendations

3.1. An SPD is not part of the statutory development plan. It is a recognised way of putting in place additional planning guidance and a material consideration in determining planning applications in the borough. The SPD should assist applicants when making relevant planning applications, and the Council in determining them.

3.2. Strategic Planning Board is therefore asked to exercise a consultation and advisory role, commenting upon the content of proposed planning policy, any document which forms part of or linked to the Local Plan as stated within the Constitution.

4. Other Options Considered

4.1. The Council could choose not to prepare an SPD on SUDS. Any relevant planning application would continue to be assessed against existing planning policies. However, this would not allow the Council to provide additional practical guidance on this matter or give clarity to the approach that should be employed by all parties in a consistent way that gives certainty to applicants and decision makers.

4.2. Providing improved guidance on SUDS, particularly through the toolkit contained in the SPD allows site promoters to select a range of policy compliant approaches to managing surface water and improves the ability of the Council to secure positive solutions that improve the local environment.

5. Background

5.1. Cheshire East Council's Corporate Plan sets out three aims. These are to be an open and enabling organisation, a Council that empowers and cares about people, and to create thriving and sustainable places. In striving to create thriving and sustainable places, a key objective is to protect residents and improve our environment. As such, this SPD sets out guidance on policies contained in the Local Plan Strategy and SADPD that will support these objectives by setting out clear expecations on how surface water can be managed in new devleompent in a way that benefits the natural environemt and works within the landscape.

5.2. One of the key objectives of the LPS is for the Plan to protect and enhance environmental quality through a range of measures including the management of water, and to promote measures that reduce the impact of climate change, including flooding.

5.3. CELPS policy SE13 'Flood Risk and Water Management', sets out the preferred approach to managing water and flood risk in new development and requires proposals to integrate measures for sustainable water management.

5.4. Policy ENV 6 'Surface Water Management and Flood Risk', of the Site Allocations and Development Policies Document (SADPD) provides further detail and requires that sites adopt a SUDS approach unless it can be demonstrated this is cannot feasibly be achieved. This SPD provides guidance on how SUDS can be achieved through a range of solutions.

5.5. This SPD provides greater clarity to developers, landowners, communities and decision makers on the approach the Council will take to securing SUDS in new delveopment and provides additional guidance to applicants on how they should respond to the policy requirements in the LPS and SADPD. It also 'signposts' sources of information, including relevant documentation and Council services.

5.6. The draft SPD has been prepared by the Environmental Planning Team with assistance from the Strategic Planning Team.

5.7. Subject to the approval of the recommendations in this report, the SPD will be consulted on in accordance with the Council's Statement of Community Involvement for a period of four weeks.

5.8. The process for preparing an SPD is similar in many respects to that of a local plan document. However, they are not subject to independent examination by the Planning Inspectorate. There are several stages in their production:

5.8.1. Publish the initial draft SPD for four weeks public consultation;

5.8.2. Consider feedback received and make any changes necessary;

5.8.3. Publish the final draft SPD, along with a consultation statement setting out who has been consulted in its preparation, the main issues raised in feedback and how those issues been addressed in the final draft SPD;

5.8.4. Having considered representations, the SPD may then be adopted;

5.9. Following adoption, the SPD must be published and made available along with an adoption statement in line with the 2012 Regulations. The adoption of the SPD may be challenged in the High Court by way of judicial review within three months of its adoption.

5.10. Once adopted, the effectiveness of this SPD will be monitored as part of the Authority Monitoring Report, using information from planning applications and decisions. The outcome of this ongoing monitoring work will help inform future decisions about the SPD.

6. Consultation and Engagement

6.1. The draft SPD will be subject to six weeks consultation, from 9th August to 20th September. Following this, all comments will be considered, and changes made to the SPD, as appropriate, before a final version of the SPD is prepared for approval and further consultation.

7. Implications

7.1. Legal

6.1.1 The Planning and Compulsory Purchase Act 2004 (as amended) and the Town and Country Planning (Local Development) (England) Regulations 2012 provide the statutory Framework governing the preparation and adoption of SPDs. These include the requirements in Section 19 of the 2004 Act and various requirements in the 2012 Regulations including in Regulations 11 to 16 that apply exclusively to producing SPDs.

6.1.2 Amongst other things, the 2012 regulations require that an SPD contain a reasoned justification of the policies within it and for it not to conflict with adopted development plan policies.

6.1.3 The National Planning Policy Framework and the associated Planning Practice Guidance also set out national policy about the circumstances in which SPDs should be prepared.

6.1.4 SPDs provide more detailed guidance on how adopted local plan policies should be applied. They can be used to provide further guidance for

development on specific sites, or on particular issues, such as design. SPDs are capable of being a material consideration in planning decisions but are not part of the development plan.

7.1.1. Strategic Environmental Assessment

6.1.5 Strategic Environmental Assessment involves evaluation of the environmental impacts of a plan or programme. The requirement for SEA is set out in the European Directive 2001/42/EC adopted into UK law as the "Environmental Assessment of Plans or Programmes Regulations 2004".

6.1.6 The SEA Directive sets out a legal assessment process that must be followed. Often within the planning context, the SEA requirements are met by incorporating it within a Sustainability Appraisal ("SA"), which is a requirement for development plan documents.

6.1.7 There is no legal requirement for SPDs to be accompanied by SA, and this is reinforced in Planning Practice Guidance (PPG ref: 11-008-20140306). However, "in exceptional circumstances" there may be a requirement for SPDs to undertake Strategic Environmental Assessment where it is felt they may have a likely significant effect on the environment that has not been assessed within the SEA/SA of the local plan.

6.1.8 A screening assessment has been undertaken (in Appendix B) which has determined that a SEA (or an appropriate assessment under the Habitats Regulations) is not required for the SPD.

7.2. Finance

7.2.1. There are no significant direct financial costs arising from consultation on the SPD. The costs of printing and the staff time in developing the SPD are covered from existing budgets of the planning service.

7.2.2. The SPD will help to improve the process through which financial contributions are secured toward infrastructure.

7.3. Policy

7.3.1. The SPD will expand and amplify existing development plan policies related to the provision of funding for infrastructure. An SPD will give additional advice to applicants on how they can demonstrate they have complied with relevant policies of the development plan related to this matter.

7.4. Equality

7.4.1. The Council has a duty under Section 149 of the Equalities Act to have due regard to the need to: eliminate discrimination; advance equality of opportunity between persons who share a “relevant protected characteristic” and persons who do not share it; foster good relations between persons who share a “relevant protected characteristic” and persons who do not share it.

7.4.2. The draft SUDS SPD provides further guidance on the approach that is expected from developers on this matter. The SPD is consistent with the LPS which was itself the subject of an Equalities Impact Assessment (EqIA) as part of an integrated Sustainability Appraisal. A draft EQiA on the draft SUDS SPD has been prepared (appendix C) and will be published alongside the draft SPD for comment.

7.5. Human Resources

7.5.1. There are no direct implications for human resources.

7.6. Risk Management

7.6.1. The subject matter of the report does not give rise for any particular risk management measures because the process for the preparation of an SPD is governed by legislative provisions (as set out in the legal section of the report).

7.7. Rural Communities

7.7.1. The draft SUDS SPD seeks to provide further guidance on implementing surface water management in new development. Whilst most major development is expected to take place in, or adjacent to urban areas the guidance will apply to sites in rural areas too, where relevant, and therefore communities directly or indirectly from improved water management on such sites.

7.8. Children and Young People/Cared for Children

7.8.1. The draft SPD seeks to does not have a direct implication for children and young people or cared for children but will assist in securing development that manages surface water in a more positive way.

7.9. Public Health

7.9.1. The draft SPD does not have any specific public health implications but will generally improve the environment which can create a positive impact on a range of health indicators.

7.10. Climate Change

7.10.1. The draft SPD will help the council to manage the impact of climate change and reduce surface water run-off from new development sites, therefore helping to reduce the overall risk of flooding in the borough.

Access to Information	
Contact Officer:	Tom Evans, Neighbourhood Planning Manager> Tom.Evans@cheshireeast.gov.uk 01625 650023
Appendices:	Appendix A: Draft SUDS Supplementary Planning Document Appendix B: SEA / HRA Screening Report Appendix C: Draft Equalities Impact Assessment Screening Report
Background Papers:	N/A

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SuDS Guide

Sustainable Drainage System design guidance for Cheshire East

Cheshire East Council

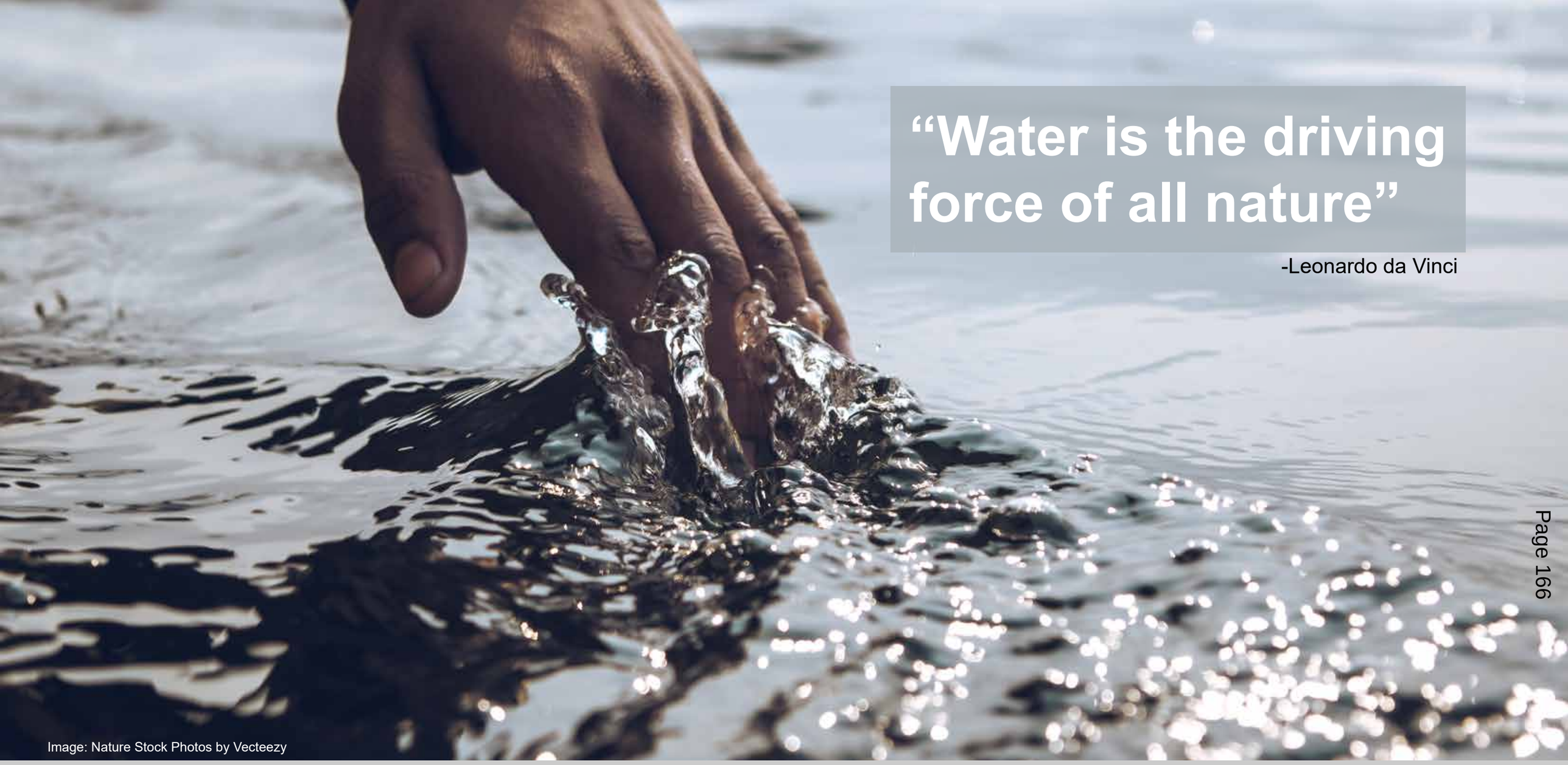


Image: Nature Stock Photos by Vecteezy

Acknowledgements:

Cheshire East Council would like to acknowledge the following for their assistance in the preparation of this guide:

- United Utilities
- Warrington Borough Council
- Cheshire West and Chester Council
- Halton Borough Council
- Peak District National Park
- JBA Consulting (authors of initial combined-authority draft)
- Environment Agency
- Manchester City of Trees
- Ringway Jacobs
- Green Blue Urban
- Polypipe Ltd
- Timberplay Ltd
- Deeproot Urban Solutions Ltd

Cover Photo:

Caroline Benzies Photography

Foreword

Water has always influenced the location and growth of human settlement - our villages, towns, and cities. Water is a positive force in shaping places, but it can become a destructive one if not given sufficient space and consideration in development.

Climate change is creating more serious and unseasonal weather and, with this, flooding incidents are becoming more commonplace and unpredictable. We must act now to manage water more effectively and reduce the risk to people and property both now and in the future. There is a social and commercial imperative to address this.

This challenge is also an opportunity. Waterscapes are an important and positive aspect of our local landscapes, both urban and rural. Water significantly improves the quality of our environment and our sense of belonging.

In the face of the limitations of traditional drainage systems and continued climate change, sustainable drainage systems (SuDS) provide a solution to the issue of water management as a key element of sustainable growth.

The national and local design agendas promoting beautiful and healthy places provide further impetus to enable creative, well-designed SuDS to play a significant part in shaping places. SuDS can enhance the opportunities for leisure, play and education, improve health and wellbeing and promote high quality environments for home, work and leisure.

This guide will assist developers and designers to help achieve these joint objectives: to reduce climate change and enrich people's lives.

Water is our lifeblood. We should manage it creatively to make our places better and improve quality of life for our communities and for future generations.

Political representatives of Cheshire East tba

PORTRAITS OF LOCAL REPRE-SENTATIVES NEEDED

PORTRAITS OF LOCAL REPRE-SENTATIVES NEEDED

The positive effects of water on our environment, health and well-being (Image: L.Long)

The negative effects of unsustainable drainage (Image: I.Dale)

Primary Purpose

The primary purpose of this Supplementary Planning Document (SPD) for Sustainable Drainage Systems (SuDS) is to provide guidance on the ways and means that planning approval applicants can achieve compliance with policy requirements set out in the NPPF and the Cheshire East Local Plan.

By working with the landscape of a site, a holistic and integrated approach to drainage can be achieved that builds-in a range of surface-level SuDS solutions to deliver multiple benefits and higher quality development. This SPD is a tool to help applicants achieve this objective and to demonstrate how they can do so through the planning process.

Planning proposals that use this SPD to achieve the objectives of the Local Plan will demonstrate policy compliance. Where schemes ignore opportunities to positively work with water on site, planning permission may be refused.

The objective of the policies in the Local Plan is to realise the multiple benefits of positive on-site water-management, that can improve biodiversity, and enhance landscape character and quality of place.

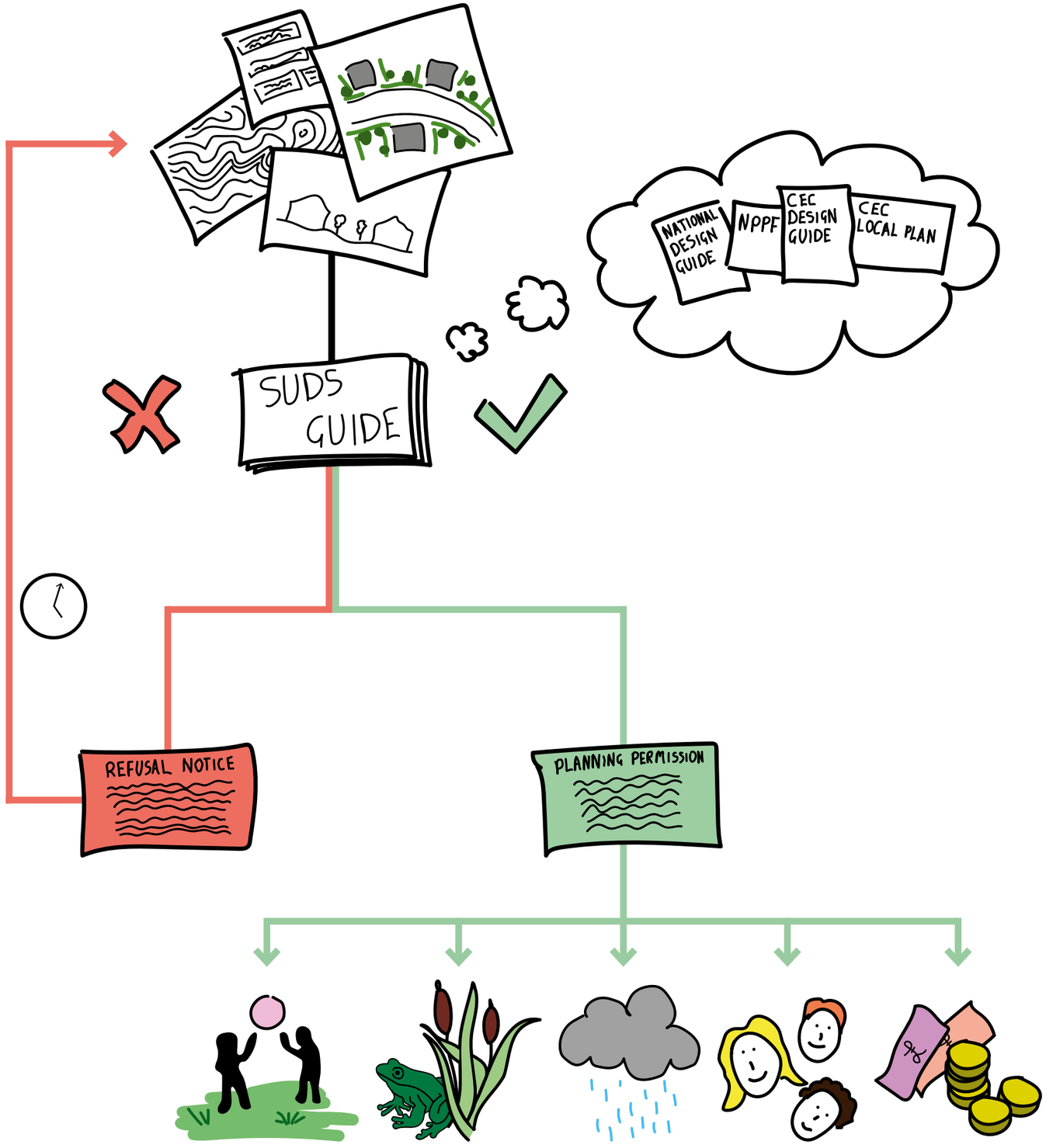
Hard engineering solutions are not the preferred approach and are unlikely to deliver integrated environmental and design benefits. Instead, the Local Plan requires applicants to **incorporate surface level SuDS with multifunctional benefits**. Only where this is not possible will hard engineering solutions be acceptable as part of a surface-water management strategy.

This SPD aims to assist all those involved in the design and development process to achieve well designed SuDS, as part of high-quality development proposals. Doing so will ensure that relevant drainage and design policies are met, and can create opportunities to meet other requirements related to greenspace and recreation, community wellbeing and climate change.

To demonstrate compliance with Local Plan policies, applicants should run through the SuDS Component Selection Matrix and SuDS Suitability Matrix (pg.61-62) and follow the guidance set out in sections 5 and 6 - demonstrating how SuDS have been fully considered and addressed throughout the design process.

Key planning policies

Supporting planning policies and guidance



Contents

Appendices

How to use this document

EXAMPLE WAY MARKER

Information on Way Markers

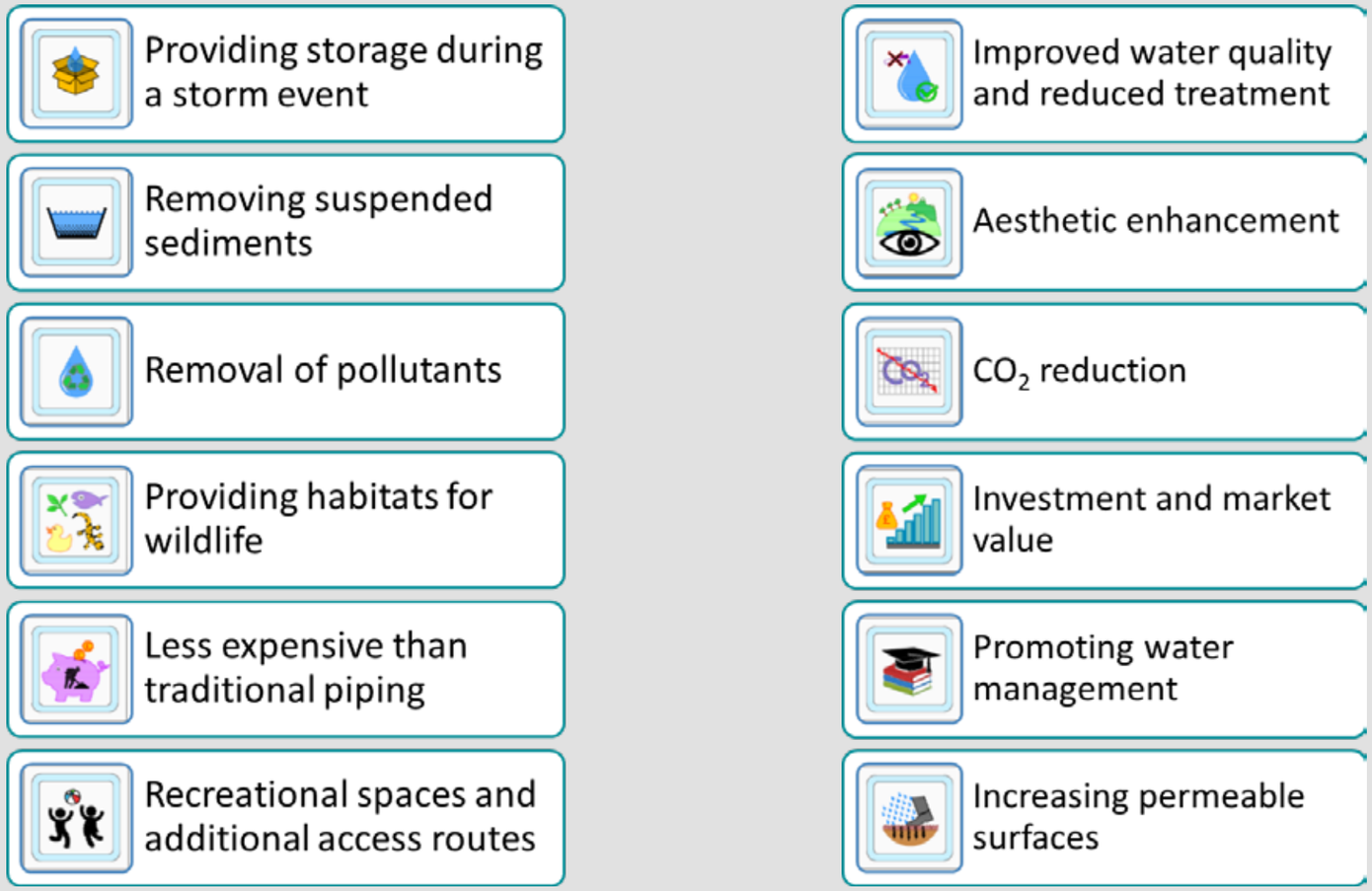
Throughout the document there will be Way Markers similar to the one shown here. These Way Markers will provide additional information on specific topics, often providing links to external websites/information.

There are also hyperlinks not contained within waymarkers which link to external websites and specific sections of this document.

HYPERLINKS NOT ACTIVE CURRENTLY

Icons

Throughout this document, the following icons have been used to highlight the economic, environmental and social benefits and opportunities of each SuDS method. These can be used to identify and realise the maximum potential of incorporating SuDS within development.



1
INTRODUCTION TO SuDS

1 Introduction to Suds

1.1 The Bigger Picture

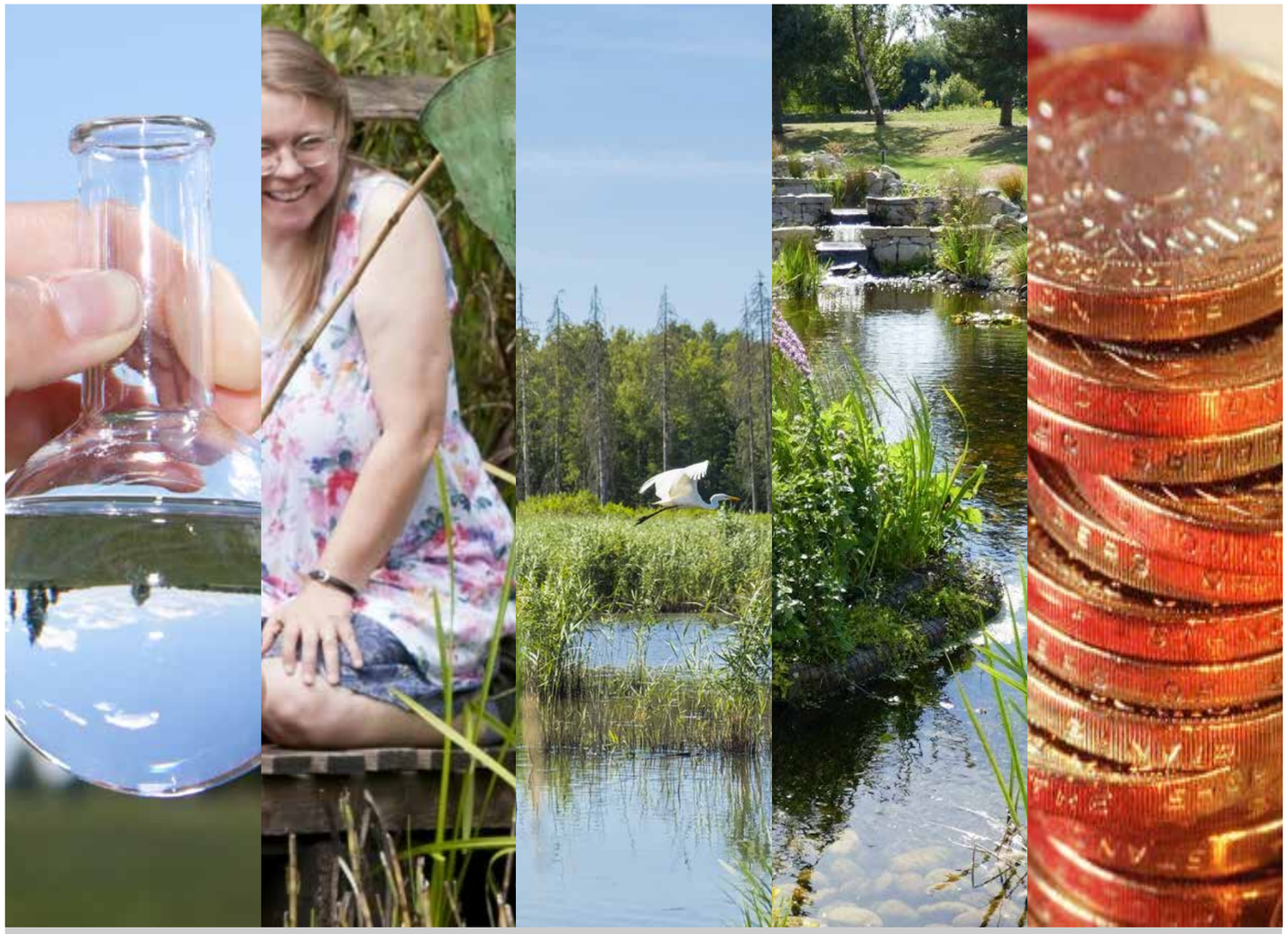
Cheshire East, like numerous Councils across the country, has declared a state of climate emergency. In essence, this means that in everything we do, we have to consider the impacts upon the environment. The Council's Corporate strategy focuses heavily upon the protection and enhancement of the environment and achieving sustainable development. One of the major impacts of climate change is more extreme and altered weather patterns and, consequently, the increased risk of flooding.

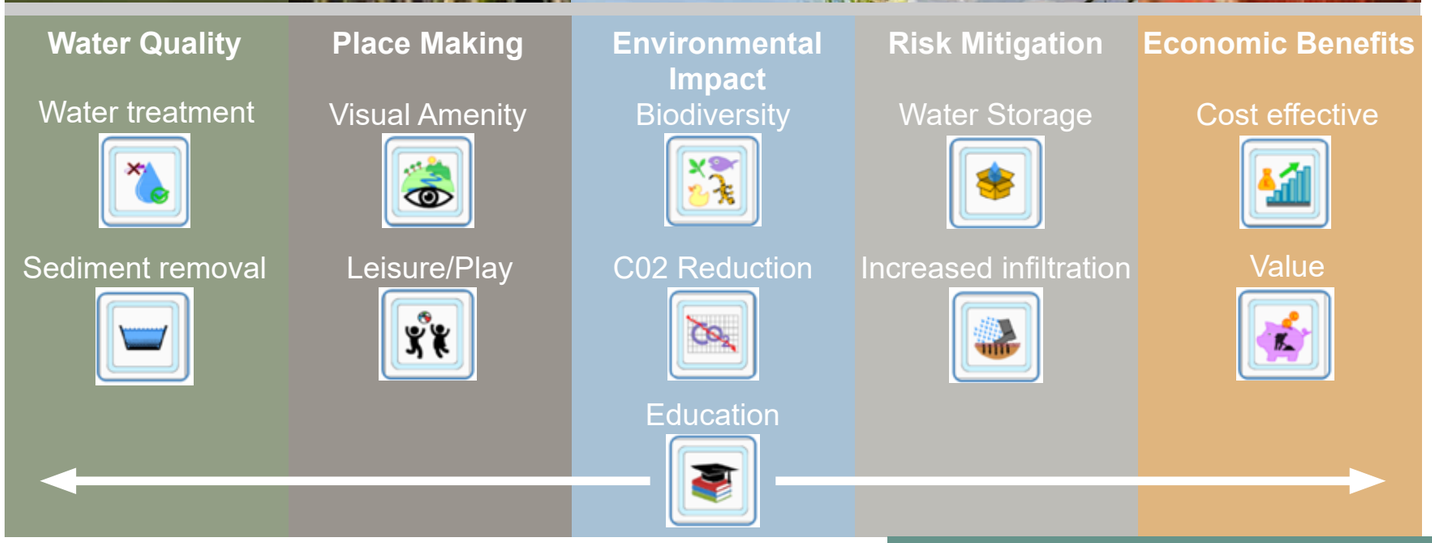
Growth will continue to be a major pressure upon the environment, therefore it is important that we design in ways which improves the quality of places and reduces the impact that new development has on the environment. Creatively designed SuDS provide a real opportunity to enrich both new development and existing areas, reducing the pressure on drainage systems and creating more attractive, nature rich, and enjoyable places within Cheshire East.

1.2 Who is This Guide For?

This guidance is primarily aimed at developers to assist in designing SuDS as part of new developments and to explain the information needed to enable the assessment of SuDS proposals by the Council as the Lead Local Flood Authority (LLFA) and by other Statutory Consultees. This guidance is intended to provide an informed approach to SuDS design. To achieve this, it is intended that this guidance be used by:

- Developers
- Architects and Urban Planners,
- Drainage Engineers,
- Landscape Architects,
- Local Authority Departments and internal stakeholders such as Planners, Building Control, Highways Maintenance and Design Engineers
- The Lead Local Flood Authority (LLFA) as a Statutory Consultee in their assessment of SuDS proposals.
- Local communities and householders
- Maintenance and management professionals
- Other Statutory Consultees involved in the assessment of SuDS proposals.





1.3 What are SuDS?

Water is a defining feature of the landscape, from the large rivers and estuaries to the man-made canals and smaller watercourses that drain to them.

As urban areas grow, and impermeable areas increase, we face challenges in making space for water and ensuring effective management of surface-water run-off and drainage.

These challenges include:

- reduction in green spaces,
- increased pressure on existing infrastructure,
- increased risk of flooding and erosion,
- effective management of soils.

Development, and redevelopment of land, can lead to increased flood risk. The cumulative impacts of development, if left unmanaged, could lead to harmful impacts on the local environment.

Most twentieth-century development employed artificial drainage systems which do not mimic the drainage patterns of undeveloped land leading to faster rates and volumes of run-off. This is unsustainable as increased volumes and flow-rates stress our Water Services Infrastructure and increases the risk of flooding.

This is further exacerbated by the cumulative loss of natural habitat which contributes to the acceleration of climate change, leading to more extreme rainfall events.

The extent of built development and the effects of climate change demand a new, sustainable approach to drainage.

A **Su**stainable **D**rainage **S**ystem (**SuDS**) reduces, slows and controls run-off rates and volumes by emulating natural drainage systems. The effective use of SuDS is an essential aspect of all new development proposals to manage and reduce surface-water run-off.

SuDS provide an approach to surface-water management where water is drained in a more sustainable way than traditionally engineered methods, by controlling surface-water run-off close to where it falls, slowing the rate of run-off and improving infiltration. SuDS reduce the risk of flash-flooding which can occur when rainwater rapidly flows into the public sewerage and drainage systems.

1.4 When Should SuDS be Considered?

The revision of SuDS National Standards (November 2015) provides the opportunity to address pressures on the water environment by establishing systems which aim to mimic the natural processes of interception, infiltration and conveyance to the ground and existing rivers and streams whilst also realising the additional benefits which SuDS can provide.

The National Planning Policy Framework (NPPF) sets out the requirements for SuDS based on development type, size, and location. This is further explored in Section 1.9 which explains the policy context for SuDS.

Developers and stakeholders should use the SuDS Submission Application and Approval Checklist (the Checklist) and processes outlined in this guidance as the basis for SuDS design and subsequent approval.

SuDS provide valuable opportunities to:

- Reduce the causes and impacts of flooding,
- Remove pollutants from urban run-off at source,
- Combine water management with green space benefits for amenity, recreation and wildlife`.

Example in Llanelli, Wales of retrofit SuDs
Permission granted by owners to use the image.

https://www.ice.org.uk/news-and-insight/the-civil-engineer/february/how-suds-are-being-retrofitted-to-a-whole-town

Making space for water is an important consideration for developing safe, sustainable and desirable places to live.

WAY MARKER
SuDS
(Sustainable Drainage Systems)

An approach to water management designed to drain surface water in a more sustainable way than traditional methods.

CIRIA SuDS Manual (C753)
Additional guidance on the design and implementation of SuDS can be found in the CIRIA SuDS manual.

http://www.ciria.org/Memberships/The_SuDs_Manual_C753_Chapters.aspx

WAY MARKER

Non-statutory technical standards for SuDS:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf

WAY MARKER

The **SuDS Submission Application and Approval Checklist (the SuDS Checklist)**

Checklists can be found on the Susdrain website below:

https://www.susdrain.org/resources/SuDS_Manual.html

This **SuDS Checklist** identifies the requirements for SuDS to be submitted as part of a planning application to the Council in line with the National Standards, Local Policy and these guidance documents.

1.5 What is the purpose of this SuDS Guide?

This Guide aims to provide continuity of approach within Cheshire East (with the exception of the Peak District National Park which is specifically covered by its own planning policy and legal framework) and to establish best practice for the design and implementation of SuDS.

The Council is encouraging SuDS design for developments of all sizes and settings, including new development and redevelopment, incorporating SuDS at stages from masterplanning to pre-application and application submission. The council also advocates a range of SuDS components suited to urban, urban fringe and rural settings.

This guidance will help developers to design SuDS schemes as part of the wider place design and to meet the necessary standards.

When undertaking a SuDS design using this guidance, developers should be mindful of the following:

- Pumping stations are not covered in this document
- If your surface-water drainage strategy requires a pumping station, you will need to gain approval from Cheshire East's Lead Local Flood Authority

Figure 1-2 **This guidance will:**

Provide a clear and consistent approach to implementing SuDS within the administrative area of the Local Authority

Enable developers to complete efficient site assessment, SuDS selection and detailed design

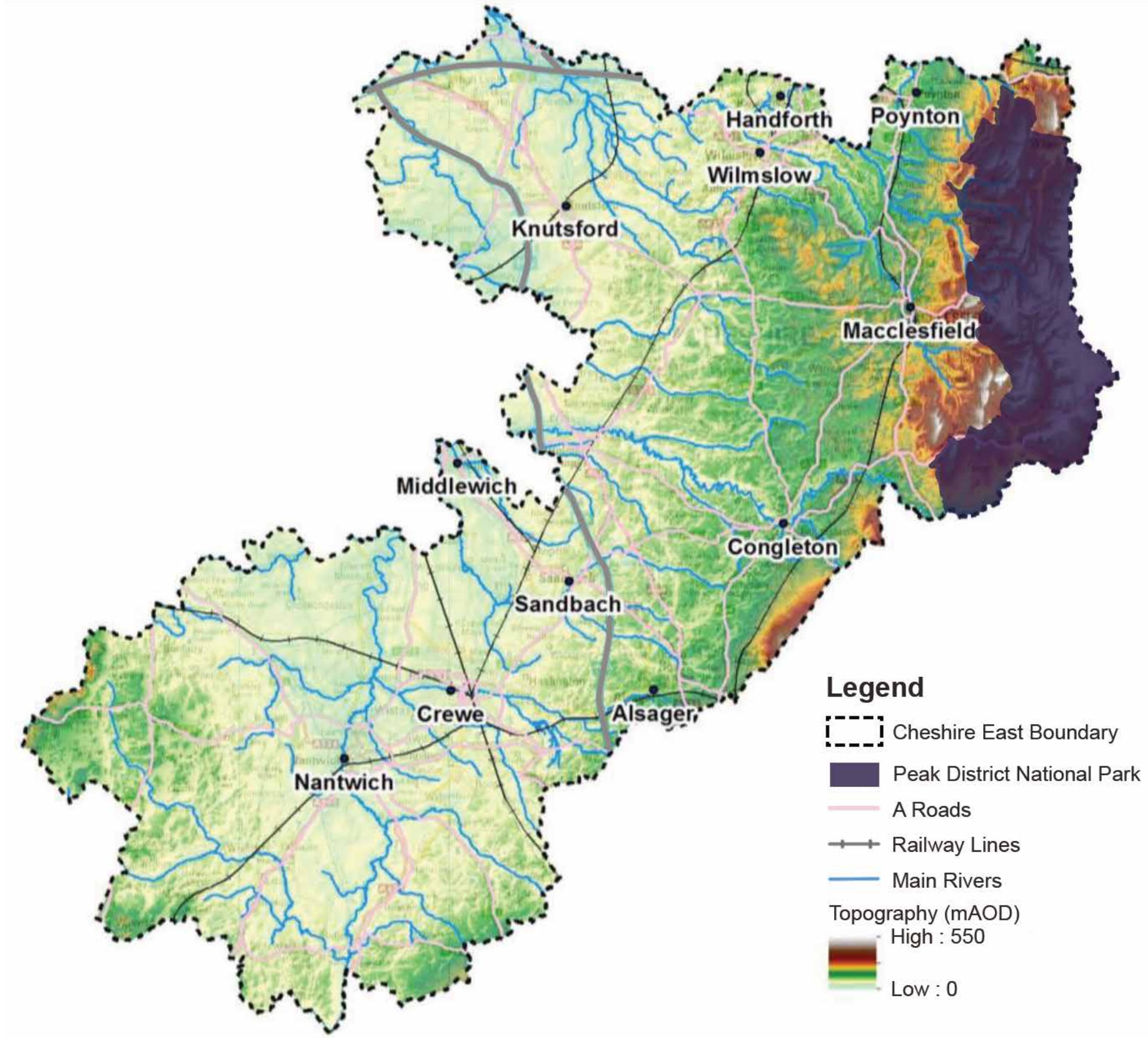
Provide an organised structure for developer applications to the LPA

Enable planning/engineering officers to identify the key design specification requirements and legislation issues

Allow efficient assessment of submitted SuDS proposals through the planning process

Facilitate successful operation and maintenance

Figure 1-1



1.6 A new context for SuDS design

There is now a much stronger focus on the quality of new development. The 2017 Housing White Paper "Fixing our broken housing market" formalised the debate. It identified areas of weakness across many aspects of housing delivery, including the quality of design in new development. As a consequence, it advocated stronger neighbourhood planning and design including use of a recognised design standard such as Building for Life, as well as use of local design tools.

Subsequently, the Building Better, Building Beautiful Commission (BBBBC) developed practical measures to ensure better quality in new development. The commission's final report "Living with Beauty" provides a blueprint for creating well-designed places and the concept of ensuring all aspects of place-making are considered in an integrated and co-ordinated way.

BBBBC (website): https://www.gov.uk/government/groups/building-better-building-beautiful-commission

The National Design Guide produced in late 2019 identifies how to achieve well-designed places that are beautiful, enduring and successful – in support of the Policy set out in the updated NPPF. The aim of the guidance is to set out the ingredients, namely ten key characteristics of well-designed places. A number of these are applicable to SuDS, if well-designed and integrated within high quality new development.

The Government's intends these essential requirements to be translated within local design guidance, to meet specific priorities whilst maintaining the "golden thread" in relation to achieving well-designed places.

National Design Guide (pdf file):

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/843468/National_Design_Guide.pdf

A National Model Design Code is also in production. Its purpose will be to set a structure that local design codes should follow, founded on the principles set out in the National Design Guide.

1.7 Evidence supporting place quality

Significant research has been undertaken to gauge the positive benefits of nature, green space, landscaping and water upon our wellbeing and the impact this can have on place quality. The Place Alliance, a body working for the collective aim of better place quality, has recently reviewed extensive past research identifying the virtuous loop between place quality and value, and its impact upon key aspects of national and local policy and governance.

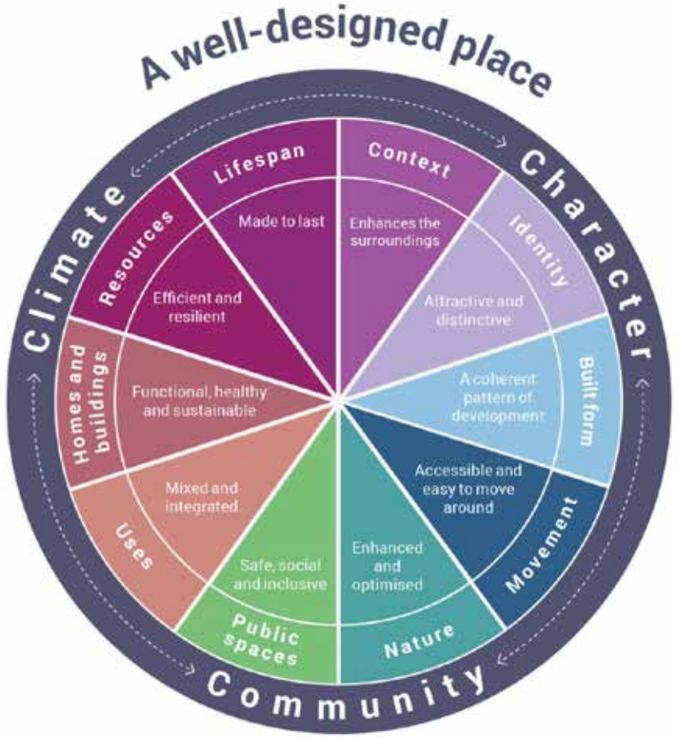
Their report entitled "Place Value and the Ladder of Place Quality" summarises place attributes, both positive and negative, within the "ladder of place quality" – with the upper rungs demonstrating positive attributes that should be essential/aspirational elements, and lower rungs demonstrating negatives ones which should be avoided. Unsurprisingly, greenness in the built environment (trees, grass, water and high-quality open space) is at the top of the list of required elements.

The recent pandemic and the impacts of confinement on people's sense of wellbeing has also served to highlight the importance of accessible and attractive landscape, waterscape and open space.

This SuDS Manual provides the ideal opportunity to develop a much more creative design and management approach, to help deliver place quality, and secure enhanced wellbeing and resilience across our Borough.

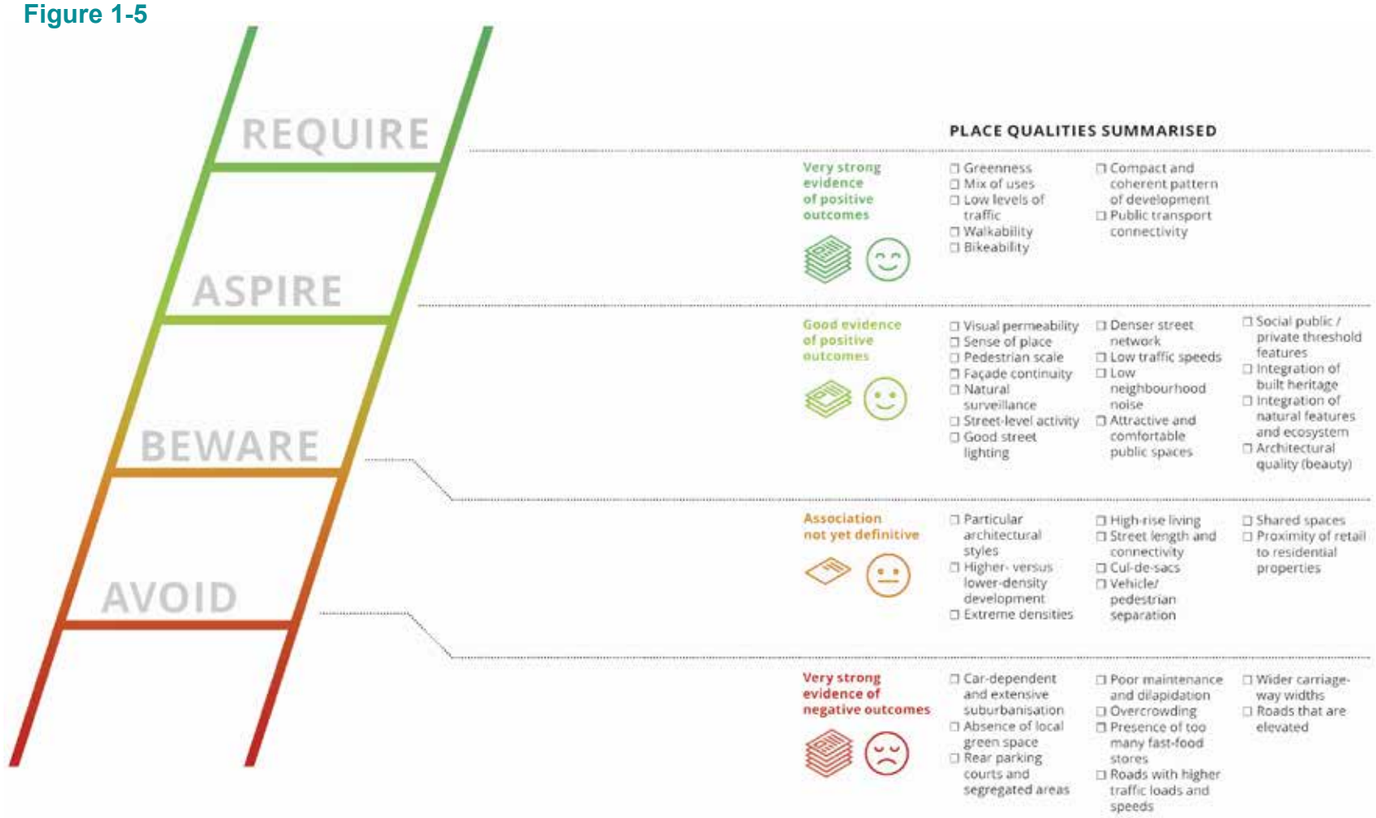
Place Alliance "Place Value" (website): http://placealliance.org.uk/research/place-value/

Figure 1-4



Extract from the National Design Guide page 8

Figure 1-5



Extract from the Place Alliance: "Place Value and the Ladder of Place Quality" (pp 14/15)

1.8 How SuDS can help achieve a well-designed place

Place design should be a multi-disciplinary process of knitting together a variety of interconnected elements when planning for change in the built environment to achieve a successful, attractive and enduring place.

CEC Residential Design Guide Parts 1 & 2 found at:

https://www.cheshireeast.gov.uk/planning/spatial_planning/cheshire_east_local_plan/supplementary_plan_documents/design-guide-supplementary-planning-document.aspx

It is important to think more widely than the red line of a site. Only by properly appreciating an area's positive and defining qualities and characteristics, its opportunities, and its limitations, can a successful place be achieved, as set out by the Cheshire East Residential Design Guide. Whilst there are differences in character across Cheshire East, new development must build upon the inherent qualities of the area.

The green and blue infrastructure for a site and its surroundings should be the foundation for any new development. Thinking positively about this could help to achieve maximum social, environmental, and economic value for a development.

SuDS provide an opportunity for habitats within and around a development. The incorporation of open water, both permanent and temporary, and associated reedbeds, wetlands and ditches provides a range of habitats for wildlife increasing the biodiversity value of a scheme.

Creatively designed SuDS, designed as a system (or train) of positive components, can be a major structuring element for new development - even on a site that has few pre-existing features or which is quite heavily constrained. They can build upon and cement the existing character of a place or help to build a new, positive identity. They can also help to educate on the environment and climate change and promote social interaction and a sense of community.

A positive example on a neighbourhood scale is Upton in Northampton where, as part of the Masterplanning and design coding for a new community, SuDS were integral elements of the place infrastructure. This fulfilled a practical need but did so in a way that also brought a distinctive townscape quality.

Images: e*SCAPE Urbanists

On a smaller infill scale, the Riverside Court scheme, at Stamford, demonstrates a different approach to SuDS as part of a creative urban design approach for a very constrained site. A full management train including canalised SuDS has enriched the townscape, and softens what could otherwise have been a hard, and somewhat featureless, development.

Images: D.Hallam

1.9 National SuDS Standards

The non-statutory technical standards for SuDS (March 2015) provide guidance for Councils to define their own standards for approval of SuDS proposals within planning applications to ensure developments suit local requirements and address common site challenges for SuDS.

Ideally, SuDS should be designed with the minimum amount of underground or traditional piped linkage as possible. The designer should always aim to use easily accessible features to connect SuDS features wherever possible.

SuDS should therefore be designed with these needs in mind: design, construction, maintenance, and operation. The following criteria should also be considered:

- **Function** - as well as treating and attenuating run-off, SuDS should be designed with multiple benefits in mind such as public-friendly spaces, enhanced and new landscape features, habitats encouraging wildlife to flourish, which in turn create better places for people.
- **Maintenance** - all SuDS components should have suitable access provisions included and component design should enable safe and easy maintainance.

1.10 Planning Policy

National and local policies provide a positive framework in relation to sustainable drainage. In addition, Cheshire East Borough Council has a residential design guide, which sets out the integration of SuDS as part of achieving sustainable development, but it isn't specific about the process of design SuDS systems or their management. This manual seeks to build upon that policy and design guidance, specifically focusing on SuDS system design, with a strong focus on place-making and creative design as part of new development. It also considers the practical matters of SuDS design to show how creative SuDS design can be delivered and managed effectively and deliver a wide range of benefits.

This section outlines the key policies in the national and local planning policy framework, whilst other relevant policies and guidance are set out in Appendix B.

National Policy

The National Planning Policy Framework (NPPF)

The framework presumes in favour of sustainable development, i.e. development that meets interdependent social, environmental and economic objectives, as set out in its various chapters.

Chapter 14 Meeting the challenge of climate change, flooding and coastal change

Establishes principles in relation to, water management, the need to plan for climate change and coastal impact from rising sea levels. In regard to water management and flooding, it requires a rigorous approach to assessment of flood risk. Paragraph 165 identifies the requirement for major development to include SuDS, stipulating specific requirements including, where possible, that they provide multifunctional benefits.

Chapter 12 Achieving well designed places

Describes the importance of achieving high quality design by creating beautiful and characterful places, influenced by an area's existing qualities and the opportunities presented by a site and its surroundings. It also emphasises the importance of design that functions well and which is responsive and resilient to change. Explicitly it requires that planning permission should not be granted where these are opportunities are not realised.

Cheshire East Local Policy*

Cheshire East Local Plan Strategy (CELPS):

SE 13 Flood risk and water management

Requires a sequential approach to site selection to ensure development in areas of lower flood risk, whilst ensuring that all schemes have appropriate flood risk assessment, also accounting for climate change. It also requires that all developments seek improvement to the surface water drainage network, including appropriate forms of SuDS that seek to reduce the run off rate.

SE1 Design

Aims to ensure new development is well designed and makes a positive contribution to its surroundings by achieving sense of place, achieving sustainable design solutions, ensuring design quality is managed throughout the development process and, to achieve a high quality of life, in our living, leisure and working environments.

Emerging Policy

Cheshire East Site Allocations and Development Management Policies (SADPD) Draft:

The SADPD will form the second part of the Local Plan. It will set non-strategic and detailed planning policies to guide planning decisions and allocate additional sites for development to assist in meeting the overall development requirements set out in the LPS.
A revised publication draft version of the SADPD was published for a period of public representations between the 26 October and the 23 December 2020.
Although the SADPD is in draft and has a few stages to go through before adoption, this draft SPD has been prepared in a way to be consistent with emerging planning policies. Whilst this is not a legal or national planning policy requirement, this approach provides opportunity for this SPD to complement and support the implementation of future development plan policies too.

ENV16 Surface water management and flood risk

The principal detailed Development Management policy in relation to sustainable water management and overlays policy SE13 of the CELPS requiring sustainable urban drainage systems (SuDS). With a preference to incorporate surface level SuDS with multi-functional benefits for the management of surface water.

GEN1 Design Principles

This reinforces policy SE1 of the CELPS to achieve well designed new development through place identity, creating sustainable and responsive developments that can adapt to climate change and other changing circumstances, that create active lifestyles and promote health and wellbeing, and which integrate positively with the natural and built environment.

*Excluding that part of the Peak District National Park within its area

2
EXISTING SITE DRAINAGE

2.1 Working with existing site drainage

An understanding of a site's existing drainage system is needed prior to designing development proposals, especially with regard to appropriate site use, scale of built development and site layout. The physical landscape characteristics of a site, and of its local and regional setting, have a major effect on its drainage. This applies to both natural and built environments.

Natural environments include visible **natural drainage system components** on the land's surface. Some of these components are indicators of water conveyance, such as streams and rivers, and others indicate water storage, such as ponds and lakes. There may also be less obvious natural drainage system components such as reed-beds which filter water and slow run-off rates, or peat-bogs which store water. Other evidence of natural drainage includes erosion which indicates areas with high run-off speeds and/or volumes, and reveals the direction of travel in its soil-scraping and silting patterns. Seasonal flooding can also be seen and can indicate areas with low and/or slow infiltration. Below ground there are hidden components including bedrock and groundwater aquifers (underground water-stores).

In built environments, **traditional artificial drainage components** accelerate drainage. Some traditional artificial drainage components may be obvious, such as hard-surfacing, hard roofs, down-pipes and gutters, however artificial routes for conveying water away from roads and hard-standings may be less obvious as they are often pipes buried underground. Identifying buried artificial drainage components usually requires site-history investigation, and/or targeted exploratory site-excavation. Traditional artificial drainage components take water more swiftly into our natural drainage system.

A **sustainable drainage system** works with natural site drainage and reduces run-off rates by emulating natural water-movement. Before a sustainable drainage system can be designed, an understanding of the site's natural drainage is needed.

Characteristics which determine your site's natural drainage

The physical landscape characteristics of your site and its surroundings determine its natural drainage. The key characteristics include:

- Geology (the underlying bedrocks)
- Topography (the lie-of-the-land, its surface-shapes and textures)
- Soils (natural subsoils and topsoils, and any imported soils or soil-forming materials)
- Vegetation (from mosses & liverworts through to high canopy woodland)

It is important to identify and understand the effects of the characteristics of surrounding land as these will influence your site, for example, higher ground to the west will prevent surface flow in that directions, and will introduce additional surface water onto your site.

Figure 2-1

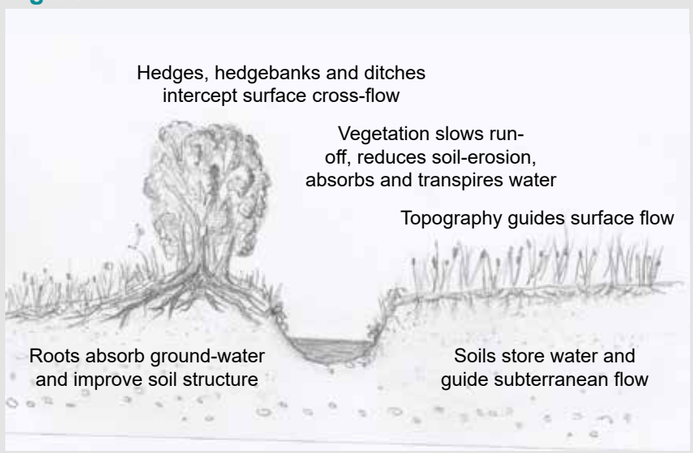
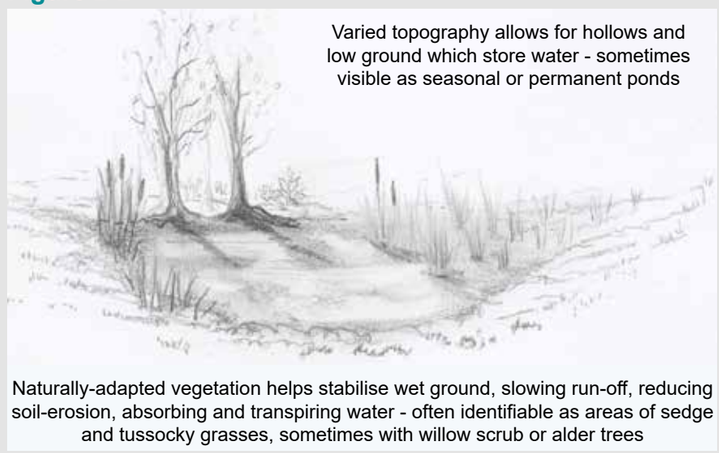


Figure 2-2



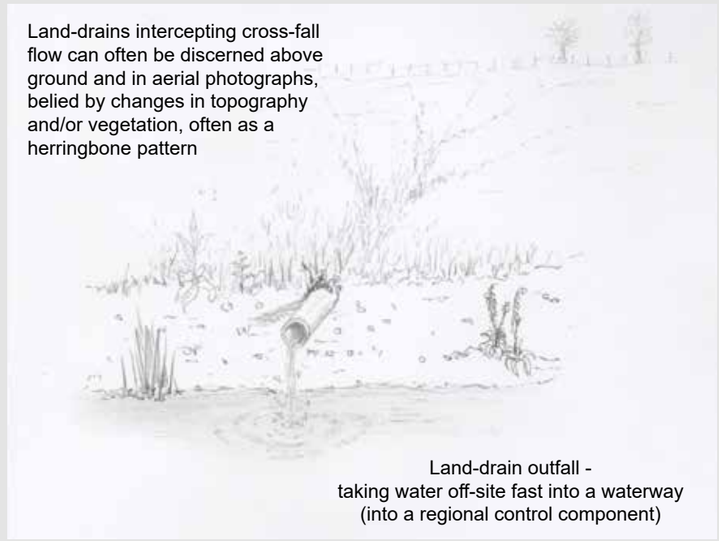
Naturally-adapted vegetation helps stabilise wet ground, slowing run-off, reducing soil-erosion, absorbing and transpiring water - often identifiable as areas of sedge and tussocky grasses, sometimes with willow scrub or alder trees

Examples of Visible Surface Components of a Natural Drainage System

Figure 2-3

Inspection chamber - where directions and rates of flow can be seen

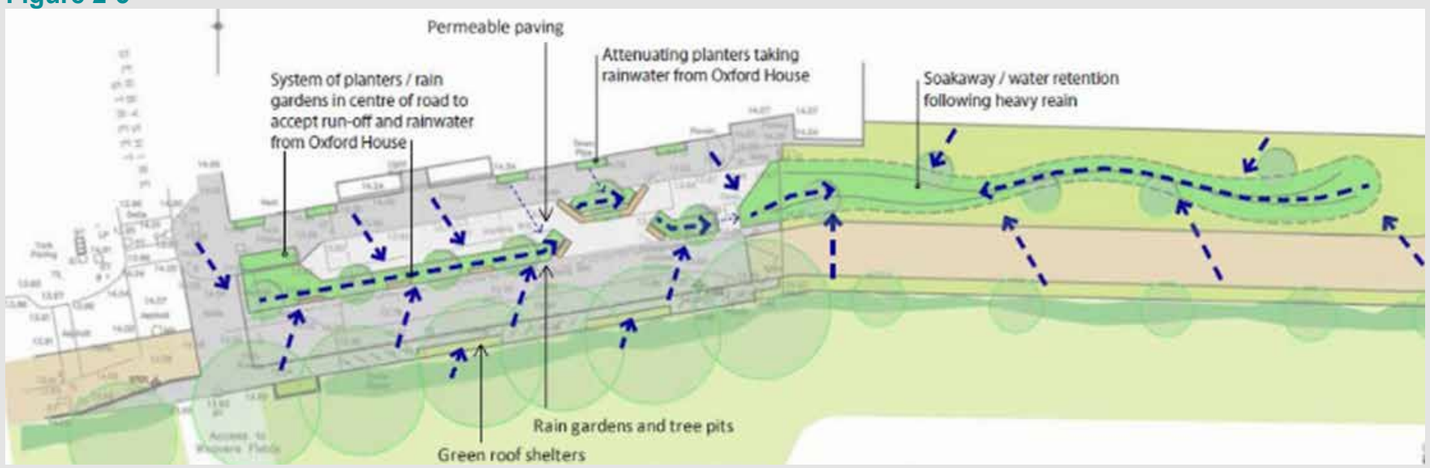
Figure 2-4



Land-drain outfall - taking water off-site fast into a waterway (into a regional control component)

Examples of Visible Surface Components of a Traditional Artificial Drainage System

Figure 2-5



Examples of Visible Surface Components of a Sustainable Drainage System

Image: Susdrain.org

2.2 Working with Geology

The geology of your site's local area will influence your site's ability to store and convey water, and determine its links to groundwater aquifers (natural underground water-stores). The types of bedrock under and around your site will affect the direction and speed of water flow, both into and out-of the site.

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You can find baseline information for hydrogeological mapping from the British Geological Society (BGS) at:

https://www2.bgs.ac.uk/groundwater/datainfo/hydromaps/home.html

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Ground investigation should be undertaken to understand site-specific hydrogeology. Specialist surveyors can be found through:

https://www.hydrogroup.org.uk/

The general geology of Cheshire East is dominated by Triassic rocks of the Mercia Mudstone Group, interspersed with smaller areas of more variable rocks, including siltstones, limestone and coal, and areas of Sherwood Sandstone to the north. The north-east of the borough is dominated by the Carboniferous Millstone Grit of the Peak District National Park.

Mercia Mudstones have a generally weak structure which has led to the formation of extensive low-lying flatter land of the Cheshire Plain. The Cheshire Plain is bisected by a ridge of Triassic sandstone, running in a generally south-north direction from Peckforton and Beeston up to Runcorn Hill, with another sandstone outcrop at Alderley Edge.

The properties of different bedrocks are very variable. The bedrock properties which are particularly relevant to drainage include permeability, angles of slope, density and hardness. These properties affect the bedrock's rate of erosion, ability to store or convey water, and its effects on the directions of underground ('groundwater') flow.

Geological faults can affect aquifers and groundwater flow in a range of ways, with faults sometimes acting as barriers to flow, or, where they have a high permeability they may form a preferential flow-path.

Figure 2-7

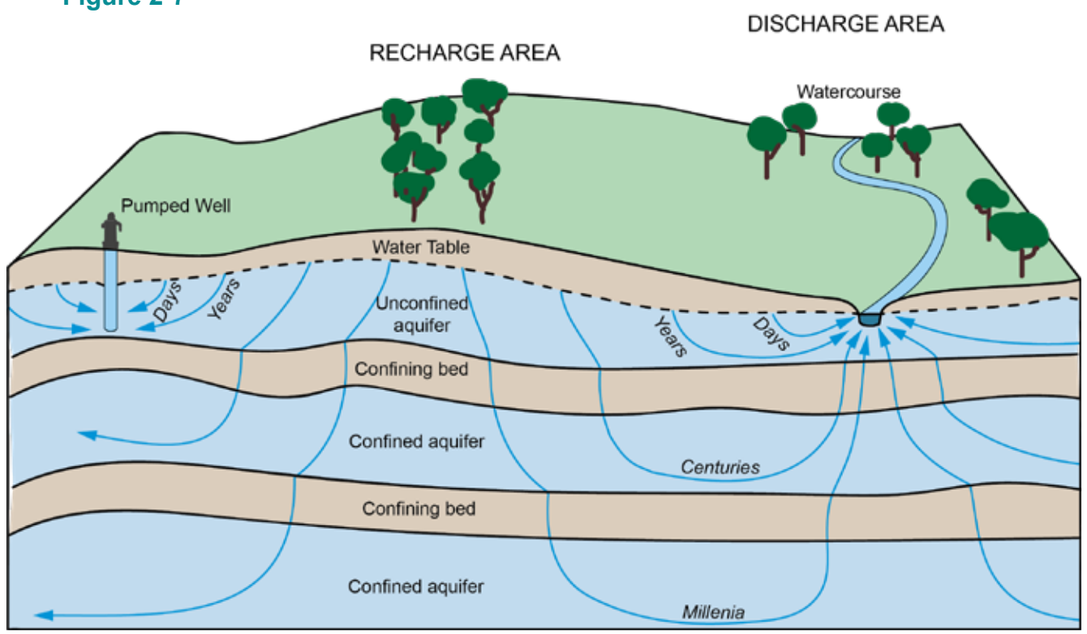


Diagram illustrating the influence of different-permeability bedrocks on underground water-movement

The Sherwood Sandstone which dominates the north and west of Cheshire is an example of an aquifer - an underground water-store. Groundwater abstraction from the Sherwood Sandstone is important in this region for public water supply, and for industry and agriculture.

Figure 2-7

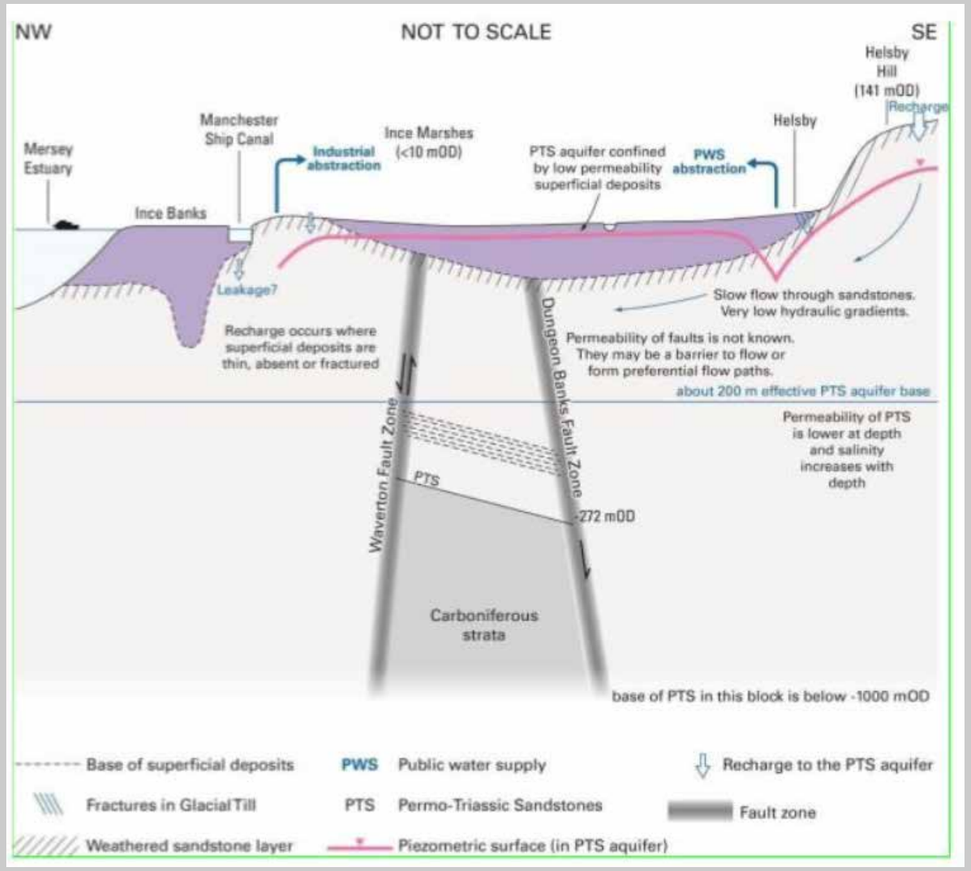


Diagram illustrating hydrogeological cross-section where the Weaver and Mersey rivers conjoin.
(SEEK PERMISSION https://www.ukgeos.ac.uk/cheshire/geological-and-hydrogeolocal-context#hydrogeology)

Figure 2-8

The inundated floodplains of the Weaver and Mersey rivers over low permeability sandstones (Image:LLong)

2.3 Working with Topography

An area's topography is primarily shaped by its geology (underlying rock) and hydrology (water movement), and to a lesser degree, wind. Topography includes the land's slopes (steepness), aspects (angles in relation to the sun) and relief (surface texture).

Harder bedrocks can resist erosion more than softer bedrocks so different bedrocks lead to different types of topography. Although localised differences may be found due to unusual events, such as glacier movement or quarrying, harder bedrocks often lead to more angular and dramatic topography.

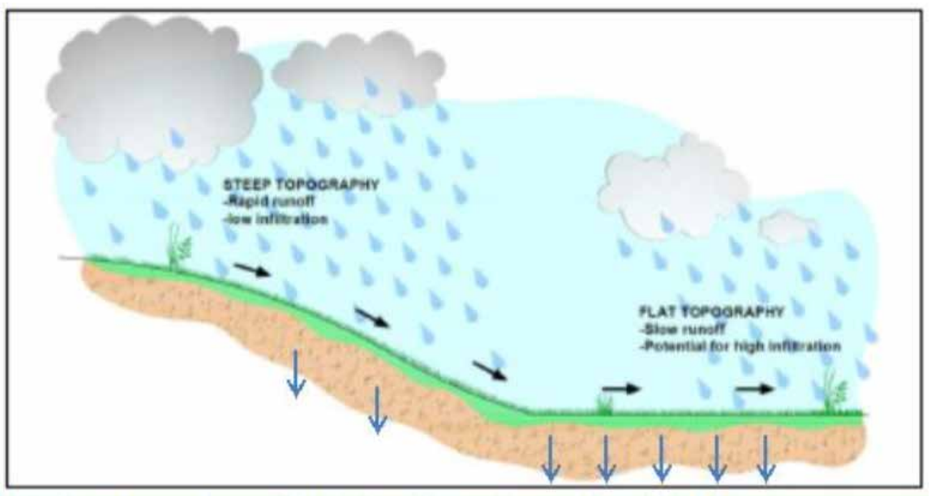
Assessing topography:
Steeper slopes where harder bedrock has resisted erosion and run-off will be faster

Assessing topography:
Flatter land where geological layers have succumbed to erosion and run-off will be slower.

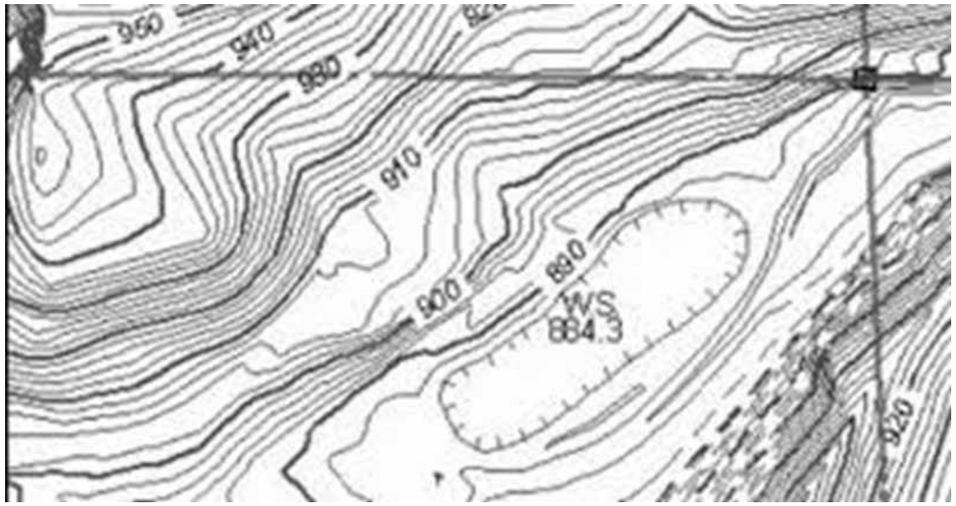
Assessing topography:
Undulating land where water run-off has accumulated on lower ground and is stored until it infiltrates or evaporates.

The topography of your site and its surrounding land will affect drainage patterns. Steeper slopes create faster water-flow, whereas shallow slopes allow gentler flow and a flatter area may slow the flow almost to a stop, encouraging the formation of water-storage areas, such as bogs or fens. Hollows, ponds and ditches all add water-storage capacity, prolong infiltration opportunity and mitigate run-off speeds and volumes.

Existing watercourses must be accommodated and appropriately managed in development proposals. In Cheshire East, CEC Byelaw 10 prevents building within 8m of a watercourse without prior consent, and 'daylighting' is encouraged, meaning any culverted watercourses should be opened-up where possible, and any existing open watercourses should not be culverted.



Speed of run-off and potential for infiltration are affected by angle of slope



A topographical survey is essential for understanding site context

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Guidance from Topographical surveys:
Royal Institute of Chartered Surveyors (RICS)

https://www.rics.org/globalsets/rics-website/media/upholding-professional-standards/sector-standards/land/measured-surveys-of-land-buildings-and-utilities-3rd-edition-rics.pdf

Responsibilities relating to Watercourses include local byelaws and national legislation:

Owning a watercourse - (www.gov.uk)

2.4 Working with Soils

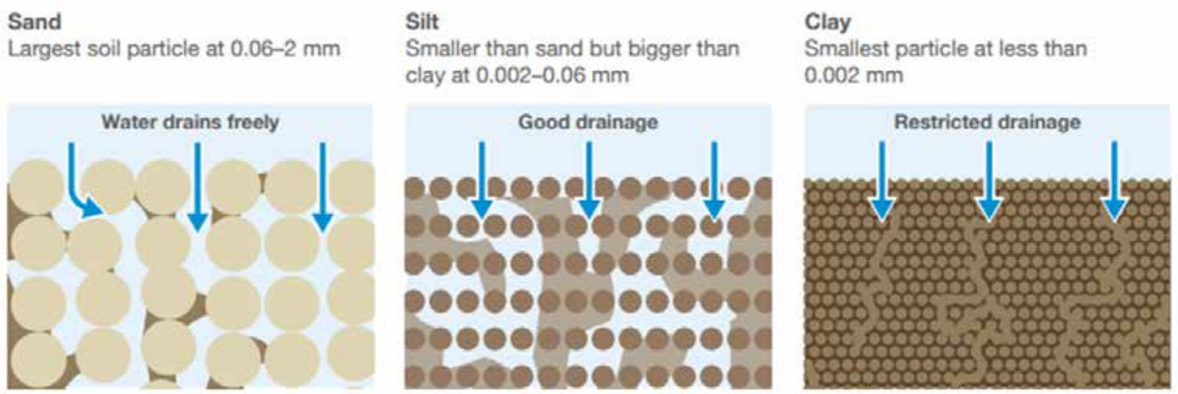
The capacity of your site to store or convey water is heavily dependent upon soil structure.

The types of soils you have will also affect your site's drainage. The grain-size of soil particles (or aggregated particles) affects the ability of a soil to retain and transport water. Fundamentally, the larger the **pore size** the more space there will be for water to move.

A soil's **porosity** determines its capacity to store water. Soil water-storage capacity increases as soil texture becomes finer because it becomes more capable of trapping water. Small pores not only restrict the passage of water but they also keep it closer to the particle surface where chemical-bonding can further slow its movement.

A soil's **permeability** determines the ease of movement of water through that soil. Soil-permeability increases as soil texture becomes coarser as soil pores are larger and water can flow through more easily.

Clay and humus affect both porosity and permeability by binding soil grains together into aggregates, thereby creating a network of larger pores, 'macropores', that allow water to move more easily.



Soils with smaller gaps between particles will hold water for longer.

Groundwater and Percolation testing should be undertaken to BRE365 / CIRIA C753 to determine suitability for site drainage/infiltration.

Well-structured and deeper soils decrease surface run-off and have greater water-storage capacity (depth limits to ensure good soil health are discussed to the right).

Compacted and shallower soils increase surface run-off and increase the site's susceptibility to erosion and flooding.

1 - James Hutton Institute; STARS; British Geological Society; CIWEM; British Ecological Society; Dr Tim Harrod; Prof Mark Hodson; Institute for Global Food Security; Lancaster Environment Centre; Microbiology Society; Soil Security Programme; Robert Palmer; Soil First Farming

Soils Management to improve or maintain Health, Depth and Structure

Soils are created by a combination of weathering of bedrock and decomposition of organic matter by soil-ecology. Soil-ecology counts for a quarter of the earth's biodiversity including earthworms, fungi and bacteria.[1] One hectare of healthy topsoil can contain up to 5 tonnes of living organisms. Potential pollutants carried-by or dissolved in water entering soils must be considered and managed.

Soil Quality

Soil movement leads to loss and deterioration of its structure and health and should be avoided where possible. Where soils require movement, whether those are in-situ site-soils or imported, SuDS proposals should show compliance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. This code of practice provides guidance for soil surveys, soils management plans and methodologies for soil stripping, storage and re-laying).

Where site soils have to be relocated to planting areas or where imported soils are required:
subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use
topsoil must meet BS 3882:2015 Specification for Topsoil.

Soil Depths

Existing in-situ site-soils must be re-used where suitable and possible to prevent loss of natural resources, prevent unnecessary transportation and prevent transit-damage to soil structure.

Soil-depths required for new planting are:

	Minimum Topsoil Depth	Maximum Topsoil Depth*	Minimum combined depth of Topsoil + Subsoil**
Grass and herbaceous species	150mm	400mm	450mm
Shrubs and hedgerows	200mm	400mm	600mm
Trees (including hedgerow trees)	300mm	400mm	900mm

*Due to particle-size and compaction, topsoil depths exceeding 400mm can lead to anaerobic conditions so subsoil should be used below 400mm depth to create suitable conditions for rootzones.

**For example: for trees 350mm topsoil to BS 3882:2015 could be laid over 700mm subsoil to BS 8601:2013 giving a rooting-depth of 1050mm.

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Code of Practice for the Sustainable Use of Soils on Construction Sites - DEFRA (includes advice for Soil Resource Surveys and Soils Management Plans):

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf

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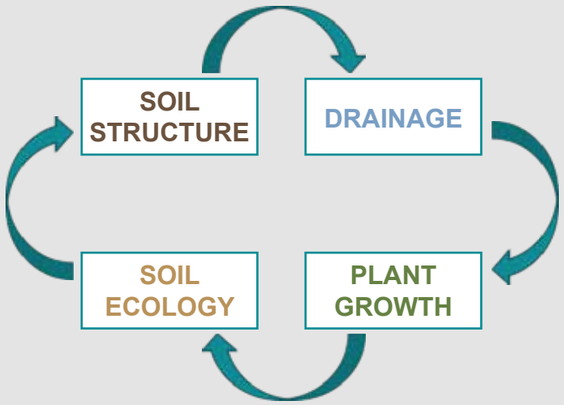
BS 8601:2013 Specification for subsoil and requirements for use
https://shop.bsigroup.com/ProductDetail?pid=000000000030209662
BS 3882:2015
Specification for topsoil
https://shop.bsigroup.com/ProductDetail/?pid=000000000030297815

2.5 Working with Vegetation

Plants are an essential component for the natural drainage system.

Plants provide the food necessary for the development of healthy soil ecology, which in turn develops good soil structure, which in turns helps with the storage and conveyance of water.

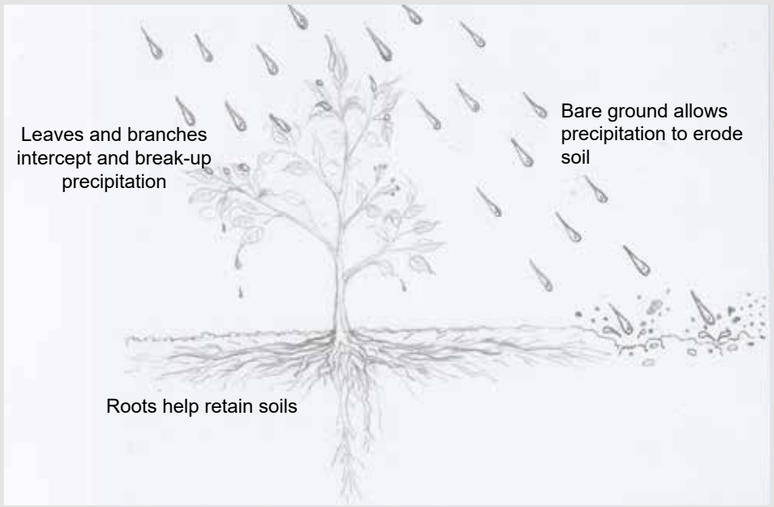


Natural vegetation cycling needs to be employed to effect sustainable drainage systems. When deciduous leaves are dropped or plants die, plant material (humus) feeds soil organisms and improves the structure of the soil, creating a less dense structure which can store or convey more water. The movement of soil organisms increases this process, helping soil pores to enlarge to macropores. As soil organisms digest and decompose humus, they release nutrients back to the soil which in turn feeds new plants.

Living plants perform other key drainage tasks:-

As plants grow, their roots open pores between soil particles, enabling increased storage and movement of water.

The growth of plant roots also helps to physically bind soil and resist erosion.

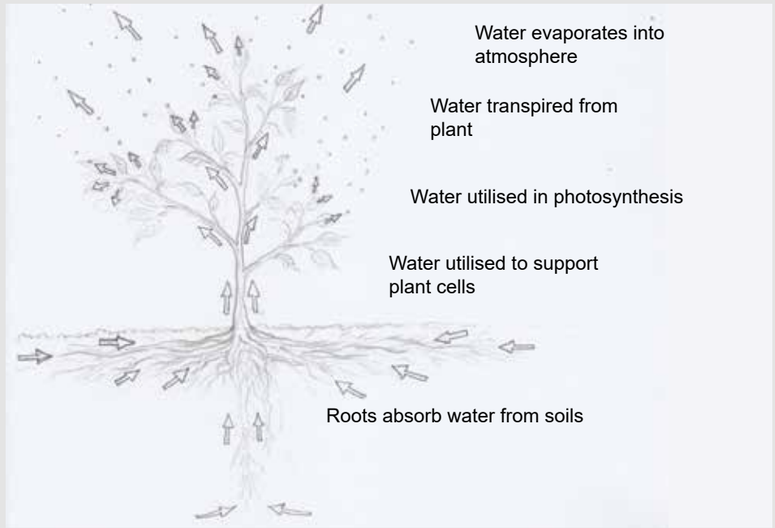


Schematic Diagram of Roots Increasing Erosion Resistance

Vegetated land showing better erosion resistance during flood conditions

Attibution: Image from: https://www.frontierag.co.uk/blog/protecting-soil-from-erosion

Plants also transpire - removing water from the ground and releasing it back into the atmosphere. Root hair cells absorb water from the soil by osmosis, some of that water is used for photosynthesis to feed the plant, some gives plant cells their rigidity, and some is released through leaf stomata.



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Surveying vegetation: Joint Nature Conservation Committee (JNCC) Handbook for Phase 1 Habitat Survey
https://data.jncc.gov.uk/data/9578d07b-e018-4c66-9c1b-47110f14d-f2a/Handbook-Phase1-HabitatSurvey-Revised-2016.pdf

A Phase 1 Habitat Survey of your site will provide you with a summary of the existing vegetation coverage on your land, and may suggest areas for improved vegetation-density and vegetation-diversity.

It is important to record and consider all vegetated surfaces, including vegetation that survives on man-made structures, such as climbing plants, succulents, ferns and mosses.

Single species vegetation:

water uptake will be restricted to the limited rootzone

Image from https://www.pennington.com/all-products/grass-seed/resources/erosion-control-planting-slopes-and-hills

Diverse vegetation:

rooting at different soil levels extends ability to absorb water

Image attribution: https://www.treeworks.co.uk/where-are-the-roots/

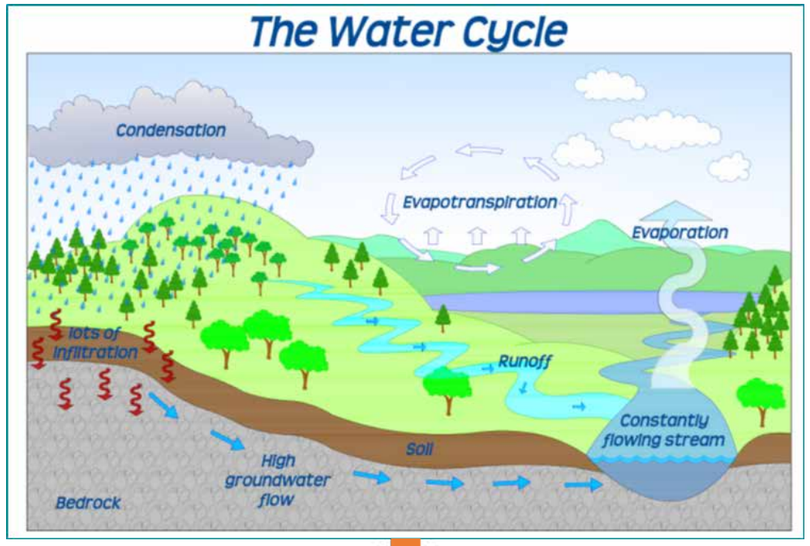
All vegetation will help to absorb and transpire water, reduce run-off volumes and slow run-off speeds.

Higher vegetation density will help provide a higher quantity of drainage benefits.

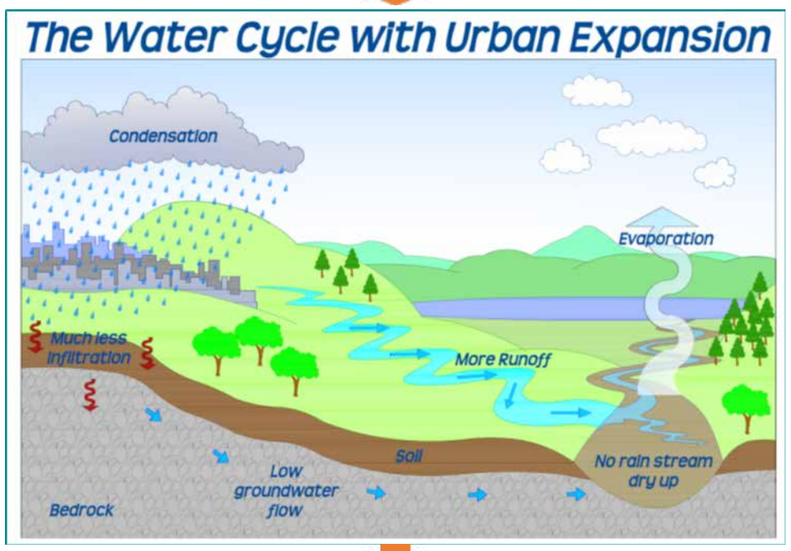
- more diverse rooting depths
- more diverse plant heights for transpiration
- greater opportunity for filtering
- greater sustainability of the natural water-cycle

2.6 Why use SuDS?

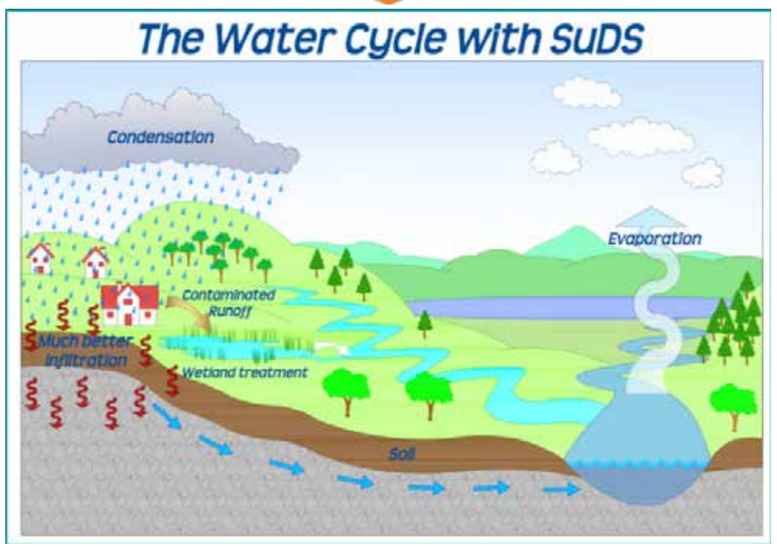
Impervious areas such as roads, footpaths, roofs, and car parks are traditionally connected to sewer systems that transport run-off away from urban areas quicker than natural, vegetated conveyances.



This can cause disruption to the natural water cycle as flows in downstream waterways can peak faster and in greater quantities than pre-developed conditions. This can exacerbate, or create new, surface water flood risks and can also increase pollution in our waterways.



SuDS aim to manage rainfall and surface runoff by allowing rainfall to be intercepted or absorbed into the ground through vegetation and specially designed landscape features. SuDS also convey any additional flows to the nearest surface waterbody (for example, groundwater, stream, river or drain) where it is discharged at the same rate and, where feasible, the same volume as would occur if the site was undeveloped. SuDS can also be used to provide biodiversity improvements to developed areas.



There are several proven benefits which can be derived from employing SuDS components, for both new and existing built environments. These include water-management benefits, such as temporary storage during a storm event to reduce flooding, improved run-off water quality and removal of sediments (an accumulation of sediments can reduce storage capacity and contribute to flooding).

SuDS can also have indirect social benefits for an area and community. SuDS components can be designed to create green areas used for recreation which also enhance the aesthetic qualities of the locality. In turn, these measures can improve the appeal of the area, and may also encourage investment in an area leading to economic benefits such as increased prices in the property market.

The implementation of SuDS within new developments may have the following benefits:

Management of increased water quantity / extreme events

- Increased precipitation, as climate change occurs, is likely to lead to wetter winters and therefore more water within the drainage system

Management of more frequent extreme rainfall events

- SuDS can help reduce surface water discharge rates and therefore prevent drainage systems being overwhelmed

Management of brownfield sites

- SuDS can provide betterment to drainage at brownfield sites and improve a particular problem or enable re-development (e.g. reduced extents of hardened surfaces)

Assistance with the protection of all water bodies from the effects of pollution and enabling the implementation of law, policy and management

- The Water Framework Directive (WFD) (Directive 2000/60/EC)
- North West River Basin Management Plan 2009
- Environment Agency 2013: North West River Basin District: Challenges and Choices

Increase in green spaces and vegetated areas and general improvement of landscapes and townscapes

- SuDS can provide an array of biodiversity benefits and help to reduce the urban heat-island effect, and provide key links in Green Infrastructure networks
- To improve visual amenity
- SuDS can contribute to the aesthetic improvement of the landscape by softening man-made environments with more naturalistic features.

Increase recreational areas and improve social wellbeing

- Planning policy encourages the provision of opportunities for access, outdoor sport, and recreation and SuDS can contribute to the quality of that outdoor leisure opportunity
- SuDS can be designed as community assets to support social cohesion and enhance communities' quality of life e.g. wetlands can be wildlife parks with stepping stones and islands.

Understanding about sustainability and functionality of SuDS

- Education of the public about the environmental importance of SuDS and the positive impact they have on the environment and people's wellbeing

Perceived improvement of an area

- The visual attractiveness of a development can help to increase developer confidence and the value people place on the area in terms of quality of life and sense of community
- SuDS can link public open spaces with green infrastructure and provide habitat corridors, helping to make areas feel more accessible and walkable

3
INCORPORATING SUSTAINABLE DRAINAGE

3 Sustainable Drainage Design Process

3.1 SuDS design - the need for a holistic approach

Until now, SuDS have often been designed in parallel with, rather than as an integrated part of urban and landscape design. Along with other positive aspects of place quality, such as GI and natural features, the place making has been secondary to commercial and other technical considerations. This has led to very few examples where SuDS have genuinely added to and enriched the place.

A more creative and joined up approach to SuDS design is essential, as advocated in national policy and guidance. This requires a much more collaborative design philosophy to ensure SuDS are integrated into the wider design to add to the quality of place. Land promoters and developers need to ensure SuDS potential is considered from the outset, and a collaborative design team is brought together from inception of the project.

Alongside this, engagement with communities and the local planning authority and drainage teams will be fundamental as part of early place-shaping work. SuDS design needs to be inbuilt into the process and timeline for community engagement, pre-application discussion and planning performance agreements (where they are entered into).

Early consideration of SuDS is is essential in the preparation of development briefs, masterplans and design codes.

3.2 Design Team for SuDS

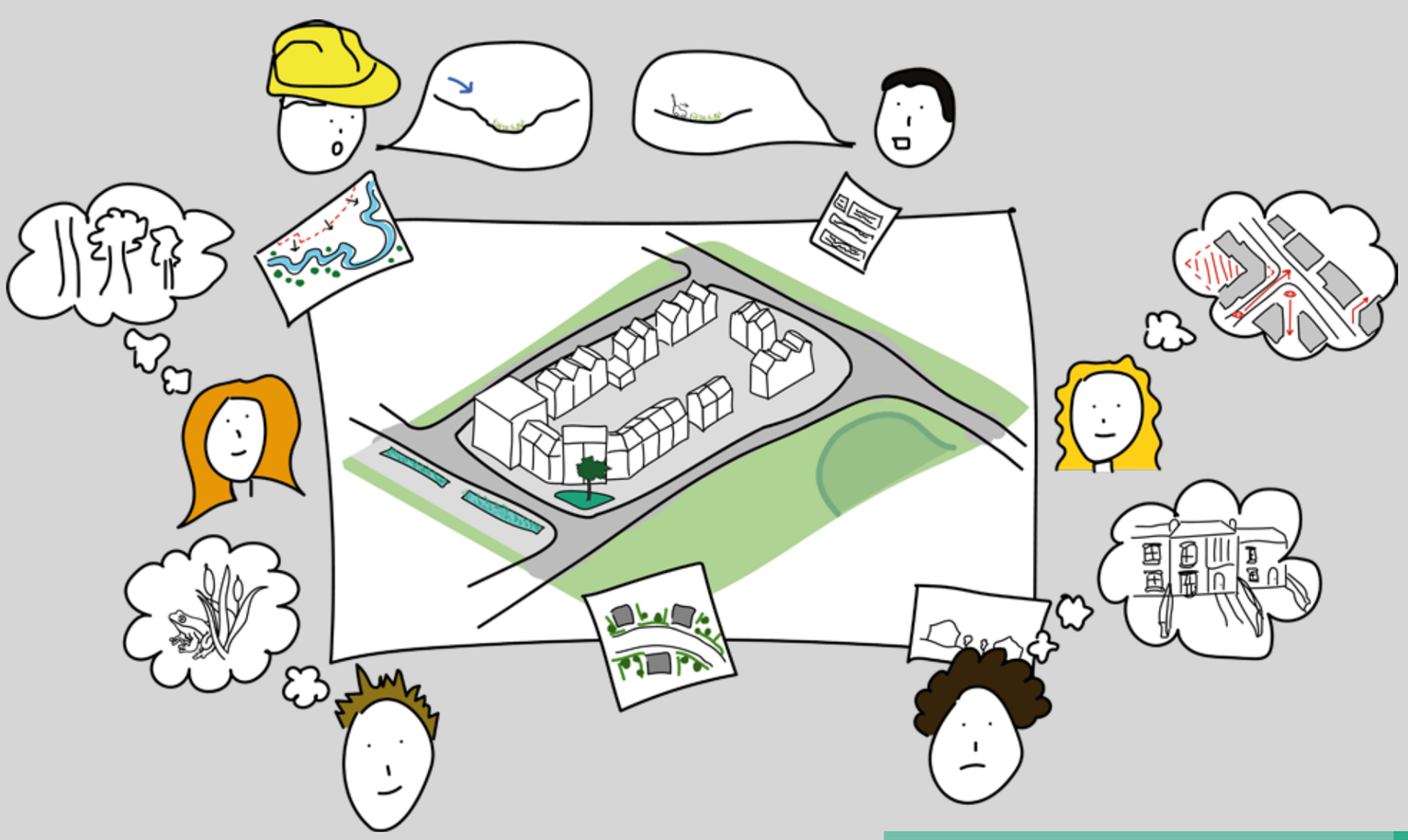
A SuDS design team should be multidisciplinary to promote a holistic approach to the design process. Identifying considerations for SuDS early on will avoid potential delays and budget issues.

Your design team should have experience of designing SuDS and should include:

- Drainage Engineer
- Landscape architect
- Ecologist
- Arborist
- Urban designer
- Architect
- Maintenance Engineers
- Town planner
- Highways Engineer
- Land developer

The Construction, Design and Management Regulations (CDM) (HSE, 2007) must be applied to the planning, design, construction, and long-term maintenance of SuDS. CDM regulations apply to all construction projects, though the scale of the project and duration of its construction period will determine whether the project is notifiable to the Health and Safety Executive.

Image:SDS Water Infrastructure systems



3.3 The SuDS Design Process

The SuDS Design Process can be broken down into the following four Stages:

1. Strategic Objectives 2. Concept 3. Outline Design 4. Detailed Design

The flowchart diagrams that follow describes best practice for the SuDS design process based on the **CIRIA SuDS Manual**.

Figure 3-1: Design Stage 1. Set Strategic Surface Water Management Objectives Discharge Hierarchy

Figure 3-2: Design Stage 2: Conceptual Design – Initial Design and Layout

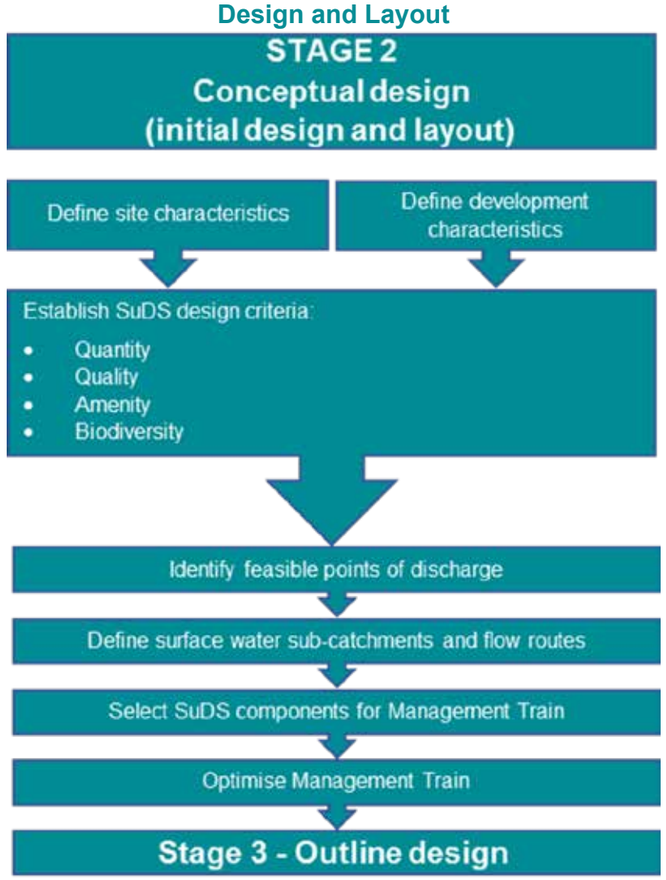


Figure 3-3: Design Stage 3: Outline Design – Including Sizing and Optimisation

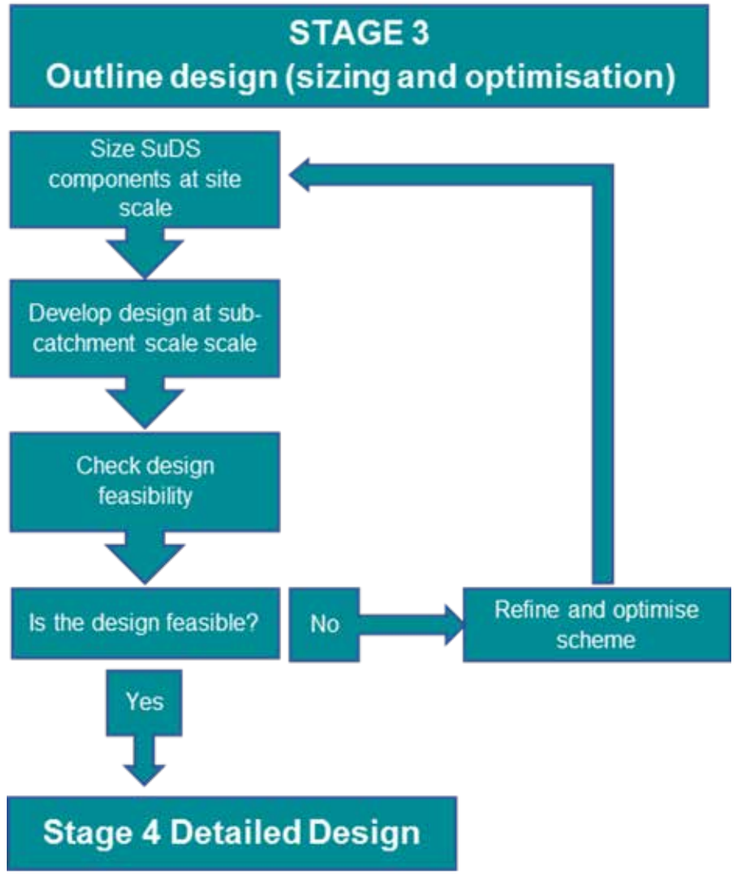
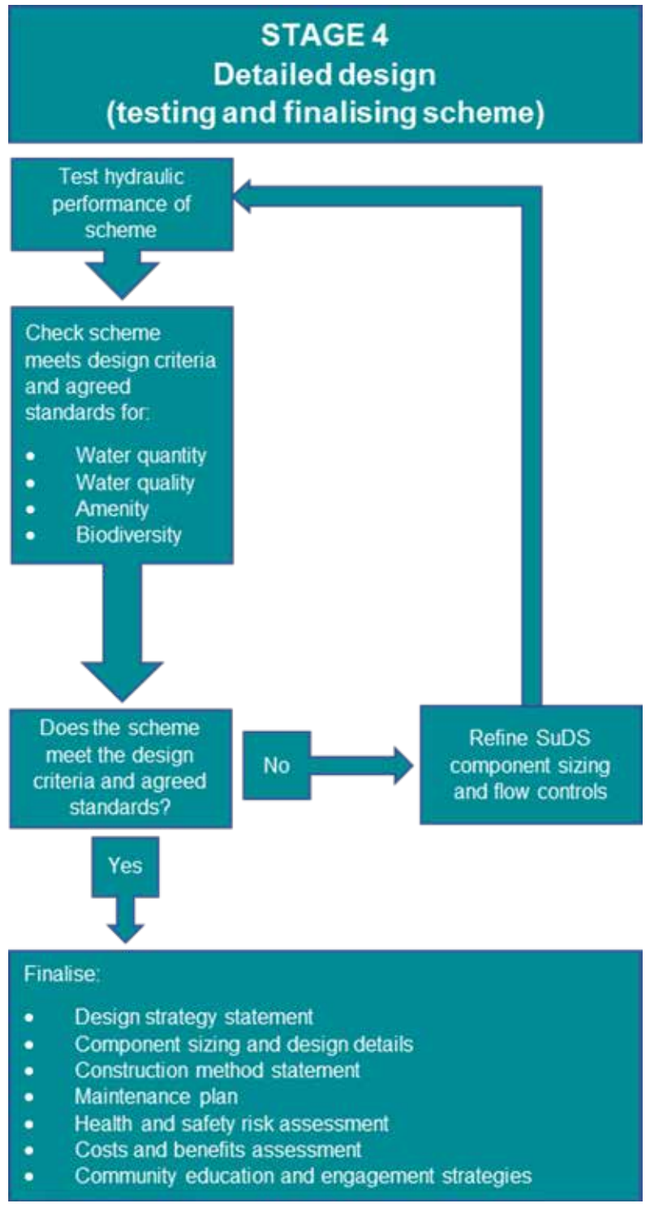


Figure 3-4: Design Stage 4: Detailed Design - Including Testing and Finalisation of the Scheme



3.4 Design considerations

There are a variety of SuDS components which may be used independently or as a combination to fit into a SuDS management train.

The list below summarises the actions and considerations which should be made when designing SuDS.

- Plan SuDS at development proposal inception,
- Enhance landscape through SuDS design,
- Ensure access and maintenance is feasible,
- Promote and encourage biodiversity,
- Reduce waste produced from SuDS,
- Replicate natural drainage and avoid pipes / pumps,
- Promote water re-use,
- Maximise benefits and multi-use features,
- Ensure iterative design process.

3.5 The Sustainable Drainage System Management Train

Sustainable drainge systems for both public and private areas should utilise a management train of components to follow and reinforce the natural pattern of drainage. The train of components should be designed to reduce the adverse effects that additional runoff from a development would have on land and watercourses.

The SuDS Management Train follows a hierarchy of techniques:

- **Prevention** – the use of good site design and housekeeping measures on individual sites to prevent run-off and pollution
- **Source control** – control of run-off at, or very near, its source
- **Site control** – management of run-off within the site
- **Regional control** – management of run-off in the locality

All developments must give priority to prevention to reduce the need for mitigative structures. **The requirements for drainage should be considered whilst determining the overall layout of the development because the site's natural features; geology, topography, soil types and existing habitats, will dictate some aspects of the drainage system design.**

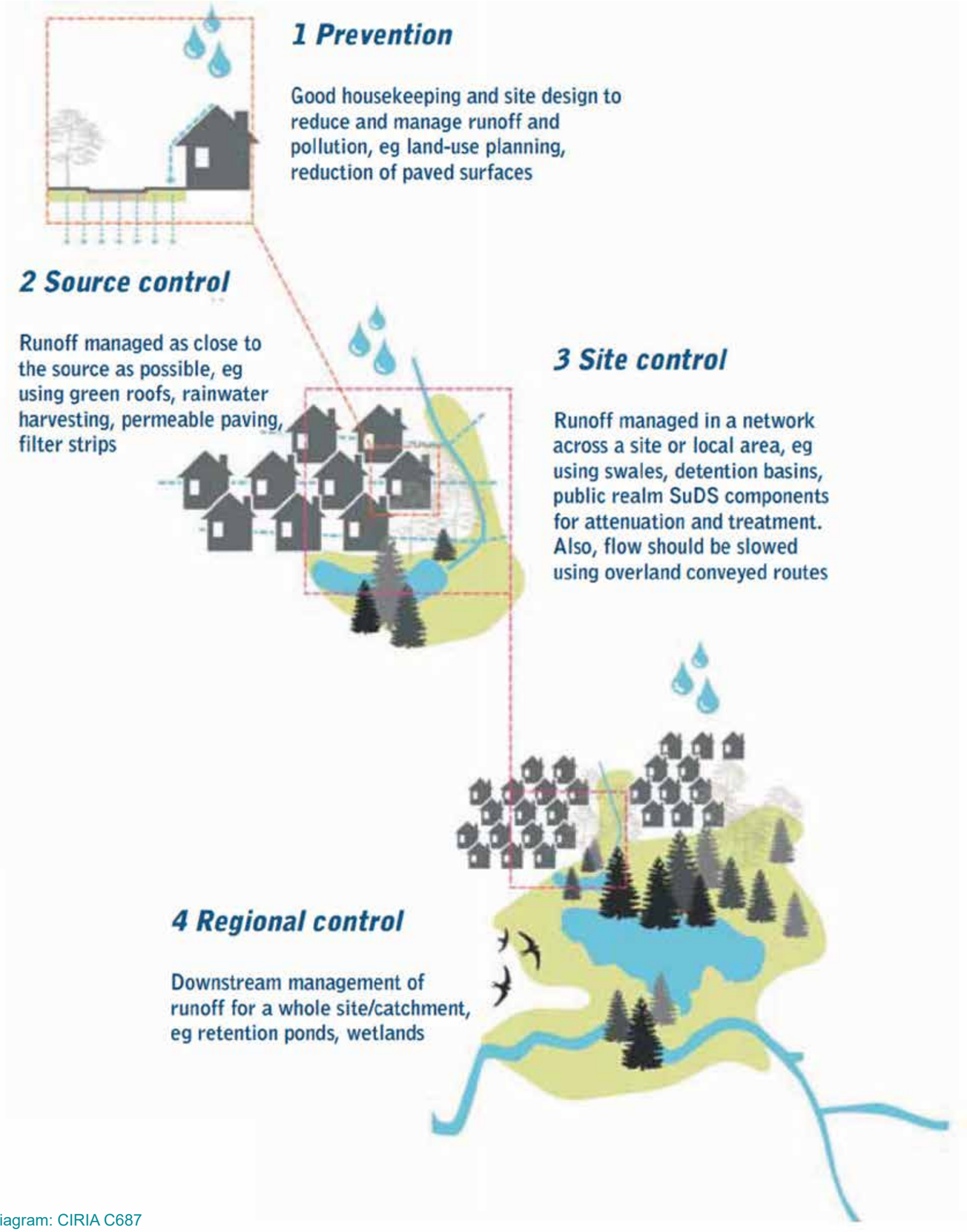


Diagram: CIRIA C687

3.6 Types of Drainage Control

3.6.1 Prevention

Preventing adverse impacts is the first priority when considering the sustainability of any development.

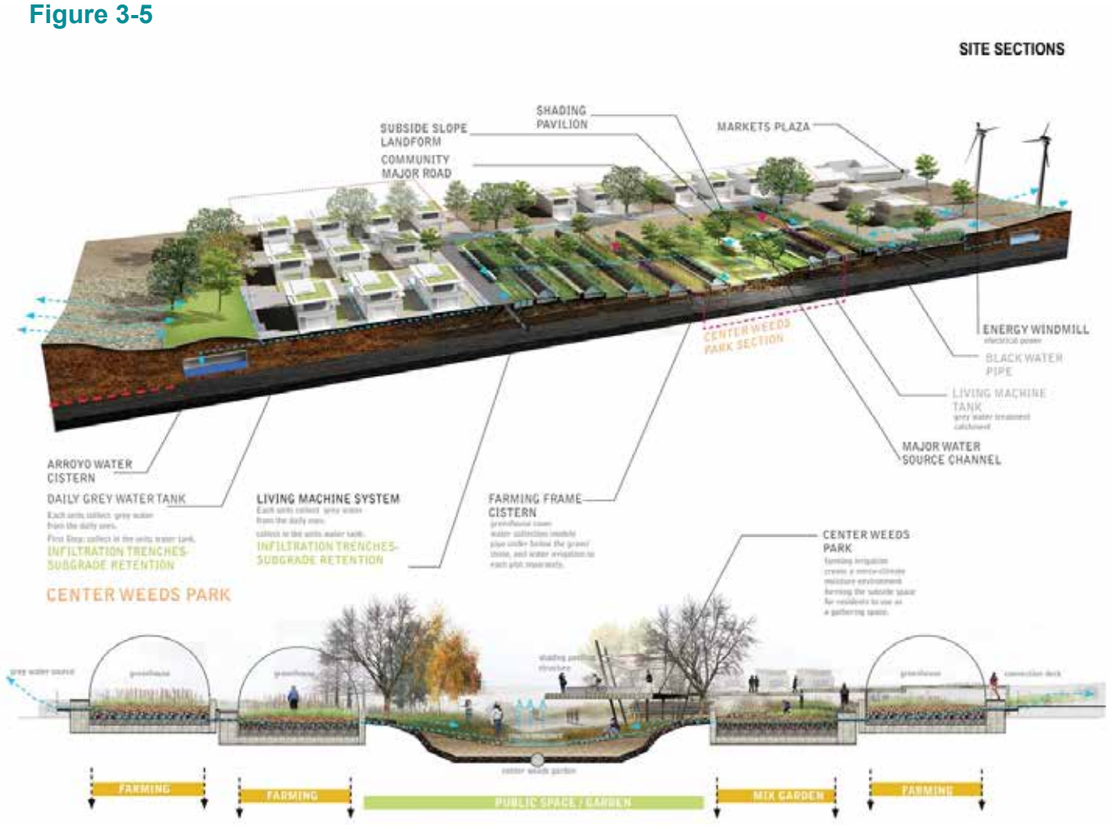
The first consideration for improving the sustainability of a drainage system for your site is preventing surface-water run-off is.

Preventing surface run-off reduces the pressure on water catchments, and on the sewerage system in times of flood. Prevention also reduces the need for SuDS components within your site.

To prevent or reduce surface-water run-off:

- **Assess and understand the natural drainage of your site and plan your layout to integrate with it**
- Minimise footprints for buildings - floor area should be a true reflection of need
- Utilise green roofs - technology is widely available and can also provide insulation, carbon absorption and visual integration
- Minimise the extent of hard-surfacing, e.g. use soft centrelines within wheel-strips for driveways and reduce paved-patio sizes
- Utilise softer surfacing, e.g. reinforced grass and grid-type vehicular surfacing
- Retain the maximum extent of natural soils
- Manage soils to preserve & improve their depths, porosity and permeability and long-term health
- Retain the maximum scale of existing vegetation on site
- Increase vegetation where possible and appropriate, e.g. hedges rather than fenced boundaries, trees where space allows, climbing plants and living walls

Figure 3-5



SuDS design teams should assess your site, integrate your development with its environment and maximise run-off prevention measures

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Directory link here for

Flood Consultants.

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Masterplanning with SuDS

https://www.kent.gov.uk/__data/assets/pdf_file/0007/23578/Masterplanning-for-SuDS.pdf

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Landscape Architects are trained in physical landscape assessment for all situations:
urban, peri-urban or rural
and can create an integrated masterplan for your site.

For masterplanning guidance refer to:
https://webarchive.nationalarchives.gov.uk/20110118111818/http://www.cabe.org.uk/files/creating-successful-masterplans.pdf

To find a Landscape Architect search the Landscape Institute directory:
https://my.landscapeinstitute.org/directory

Key Prevention Measures for All Sites:

Manage Soils: The effects of poor soil-management include death of soil-ecology and loss of soil-structure, which lead to waterlogging and flooding and an inability to support health vegetation.

Retain Vegetation: hedgerows and trees take decades to establish and develop as habitats and are essential elements of the natural drainage system, improving soil structure for infiltration and absorbing and transporting water

(downtoearth.co.uk)

Minimise Hard Surfaces:

To avoid and reduce the adverse impacts of hard surfaces, the scale of built development must be the minimum required, including roofs, approach roads, parking & turning areas and pedestrian paving.

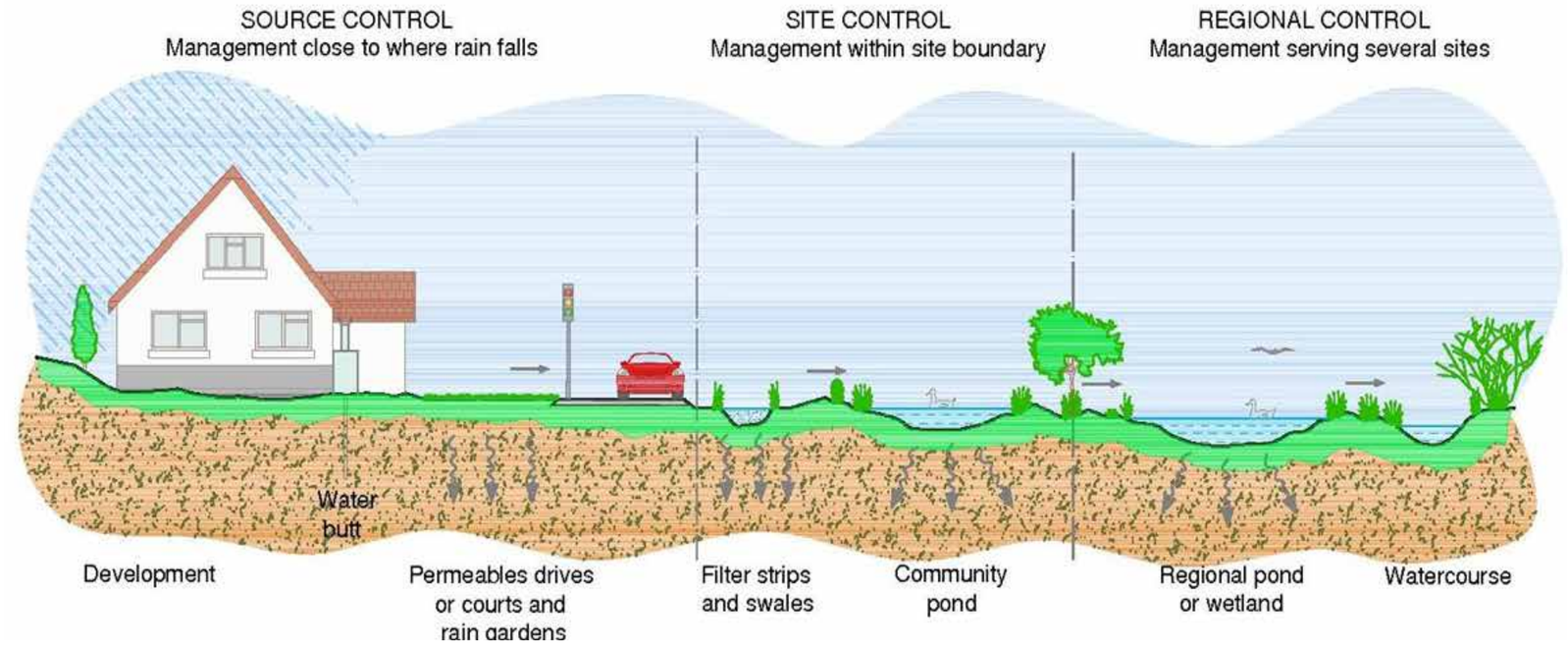
Royal Horticultural Society Research Project:
Greening Great Britain / RHS Gardening

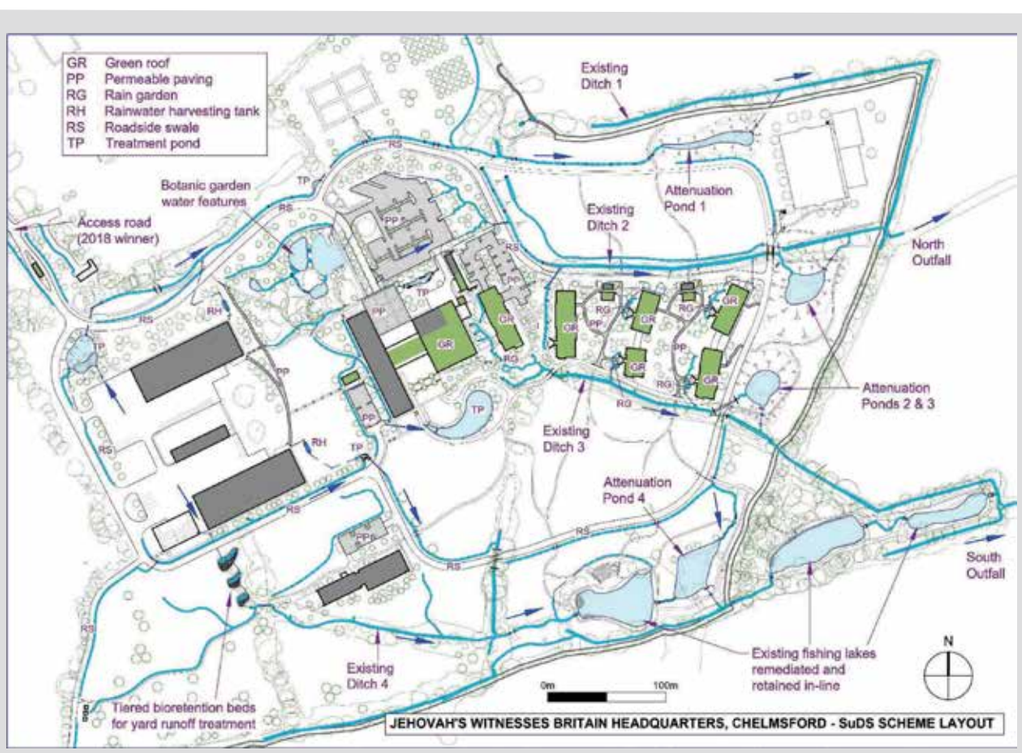
Scott Mitchell, Bridgehampton
'Ribbon driveways' and access roads reduce hard-surfacing by 60-70%

Maximise soft-surfaces: retain soft ground and utilise alternative design, new materials and green technologies

Figure 3-6 Control Zones

Once all prevention opportunities have been explored and incorporated into your development's design, there are 3 zones of water control to consider: *Source*, *Site* and *Regional.*





An example of a SuDS Train scheme (Image: susdrain.org)

3.6.2 Source control

Source control uses sustainable drainage system components to manage your site's rainwater close to where it falls. Source control components effect the speed of run-off by helping to **intercept, capture and temporarily store water close to its fall-point**.

Source control components can also **reduce run-off quantity** and **improve run-off quality**.

Examples of source control components include:

- green roofs
- living walls
- permeable surfaces
- rainwater harvesting

Many source control components can be utilised for both new developments and retro-fitting to existing development.

Aberyswth University (Singleply.co.uk)

Green roof technology reduces run-off by retaining some infiltration, evaporation and plant-transpiration over the footprint of the building

Image courtesy of K. Swindells (2021)

Permeable paving reduces run-off by allowing infiltration on what would be an otherwise impermeable surface

3.6.3 Site control

Site control components can further **reduce run-off** from your site, **temporarily store excess water** and **guide the flow of any remaining run-off**. Site controls are also needed to **manage any run-on from neighbouring land**.

There are a variety of SuDS components which act as site controls and can be incorporated in any drainage system. SuDS components should be selected for their appropriateness in the context of your SuDS management train and should integrate with your site's context, considering land character and availability, maintenance needs and adoptability.

To reduce and control development run-off within your site, infiltration systems are encouraged. The following are examples of site control components:

- **swales and filter strips**
- **canals, rills and channels**
- **raingardens**

Where infiltration does not provide sufficient reduction of run-off, water-storage components should be incorporated in your SuDS management train. Subject to site constraints and the results of a risk assessment, ponds can provide the most effective water treatment. Underground storage does not provide water quality benefit and can only be used in conjunction with other SuDS.

In order of preference, storage components include:

- **attenuation basins**
- **underground storage**

3.6.4 Regional control

Regional control components **gather run-off from multiple local sites, guide the flow of regional run-off** and **temporarily store regional run-off.**

Regional controls also affect run-off **quality**, through sedimentation, filtration or sewage treatment. Regional control components include:

- **detention ponds**

Large-scale regional controls can have multiple benefits, including providing resources for wildlife and recreation

Larger-scale regional control components can become biodiverse habitats, including temporary or permanent waterbodies, wet woodland such as alder carr, extensive wet grassland, bogs and fens. Such habitats can benefit many priority species in local biodiversity action plans

WAYMARKER

For further advice regarding providing resources for biodiversity and recreation, refer to the Royal Society for the Protection of Birds (RSPB) and Wildfoul and Wetlands Trust (WWF) publication 'SuDS: Maximising the potential for People and Wildlife'

https://www.rspb.org.uk/our-work/our-positions-and-casework/our-positions/land-use-planning/sustainable-homes-and-buildings/

The design of SuDS components for source, site and regional controls is described in Chapter 4.

3.7 Discharge and Run-off Considerations

The preference for the discharge of surface water run-off is to the ground via infiltration. However, this may not be entirely possible for all sites due to soil-permeability, contaminated land, topography of the area or quantity of sediments and contaminants within the surface water.

As shown in the run-off destination diagram (Figure 3-7), other options of discharging to a surface water body, to a surface water sewer, or a combined sewer (in that order of preference) should be explored where infiltration is not fully possible. Surface water should never be discharged to the foul sewer. Connections from developments are not permitted onto highway drainage unless they comprise solely water from highway gullies.

Considerations and actions that should be undertaken include:

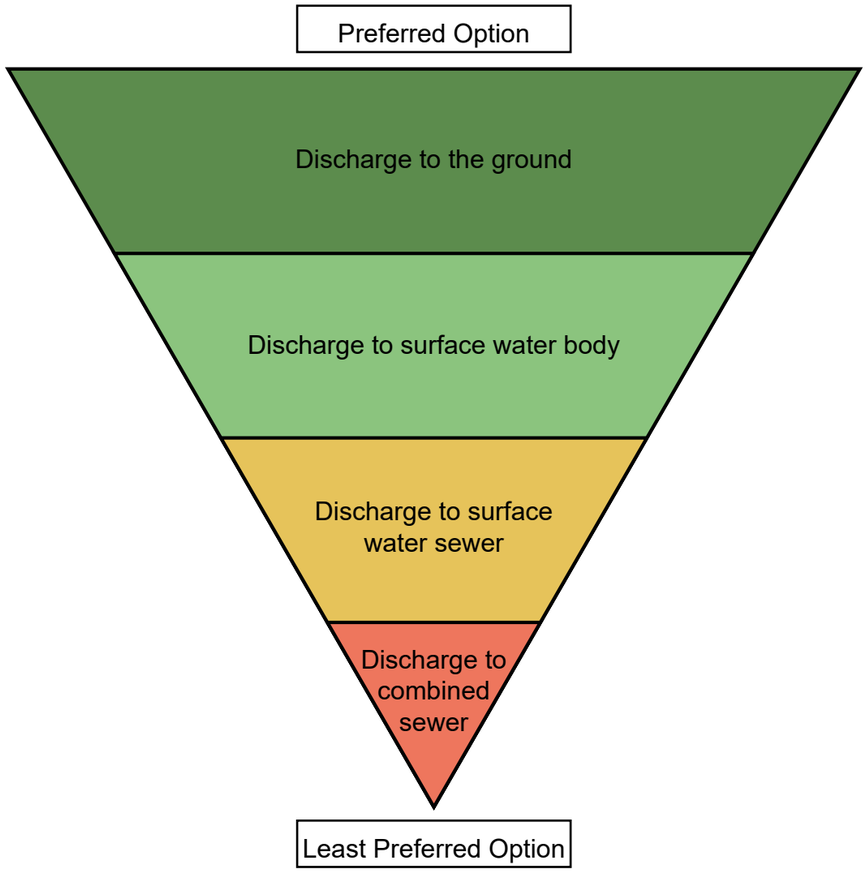
- Calculations of pre- and post-development run-off rates to ensure a neutral or better impact as appropriate.
- Consideration of the method of attenuation.
- Identification of whether the site lies within the coastal / tidal, fluvial or surface water (pluvial) flood outlines, or affected by groundwater.
- Consideration of the effects of climate change upon surface water volumes and flow pathways.
- Consultation with the relevant bodies depending on the location to which surface water is to be discharged:

    1. To the ground - consultation (where relevant) with the Environment Agency, National Coal Authority, British Geological Survey, Cheshire Brine Subsidence Compensation Board
    2. To surface water bodies - consultation (where relevant) with the Environment Agency or Council or Lead Local Flood Authority or Canal and River Trust for near / to canals or appropriate navigation authority
    3. To a surface water sewer or combined sewer - consultation (where relevant) typically with United Utilities, Dwr Cymru Welsh Water or the Highways Authority (for highway drainage only).

Once the preferred method of discharge has been decided, the following details are required to be included as identified on the **SuDS Checklist** detailed in **Appendix A** of this guidance:

- Peak run-off flows calculations and results to demonstrate pre- and post-development run-off rates in relation to greenfield run-off rates. For re-development sites, existing brownfield rates will be taken into consideration (See Section 3.8).
- Discharge volume calculations and results
- Simulation modelling of runoff (major applications)
- Flood risk (from surface water, coastal, river and groundwater sources)

Figure 3-7: Discharge Hierachy



Traditional Discharge to stream (Image: LLong)

WAY MARKER

The **SuDS Submission Application and Approval Checklist (the SuDS Checklist)**

Checklists can be found on the Susdrain website below:

https://www.susdrain.org/resources/SuDS_Manual.html

This **SuDS Checklist** identifies the requirements for SuDS to be submitted as part of a planning application to the Council in line with the National Standards, Local Policy and these guidance documents.

3.8 Site challenges for Designing SuDS

Attenuating flood flows and volumes

Addressing surface water runoff

- Proximity to sites with existing surface water issues
- Proximity to homes and other urban features
- Runoff caused by adopted highways and other impermeable surfaces

Consideration of groundwater

- Potential entry of pollutants to groundwater through infiltration of surface runoff
- High groundwater levels
- Additional restrictions of Groundwater Protection Zones

Topography

- Conveying water on ground without a gradient
- Conveying water on ground with a steep gradient

Conditions of the ground

- Highly cohesive soils restricting infiltration
- Contamination

Constrained space

- Limitations of space within site area

Existing / buried infrastructure

- Buried utilities - particularly water pipes that could come into contact with SuDS
- Predominantly impervious sites

An important criterion for all sites is the quantity of run-off. Storm flows can trigger combined sewer overflows, causing foul pollution and they can also overload wastewater treatment works, reducing treatment efficiencies. In exceptional circumstances the water authority might request that the run-off is detained completely and released only at night.

Brownfield sites

On uncontaminated brownfield sites, the water quality design criteria will depend on the existing sewerage infrastructure. If the water is discharged to a separate surface water sewer or directly to a watercourse, the site should be treated as an undeveloped site and the quality criteria will relate to the proposed land use.

If the site drains to a combined sewer that is unlikely to be converted to a separate system, the surface water should be treated with a single stage of treatment to remove grit and coarse solids. Foul sewage should be drained separately within the site.

(Image: LLong)

(Image: LLong)

Contaminated land

Where a contaminated land site is proposed for redevelopment, SuDS may still be used for drainage of surface water. However, the design of the drainage system will be site-specific and dependent upon the contaminants at the site, the remediation strategy and the risks posed by any residual contamination, in addition to normal design considerations.

The developer will need to consult with the planning authority and demonstrate that the proposed drainage system will not cause re-mobilisation of contaminants resulting in exposure to the wider environment. Infiltration systems may not be appropriate without remedial measures, and most techniques will require the use of liners. Remediation and redevelopment of contaminated land is a complex subject that requires specialist knowledge. **The CIRIA publication SP164 (Harris et al, 1998)** should be referred to for further information.

WAYMARKER

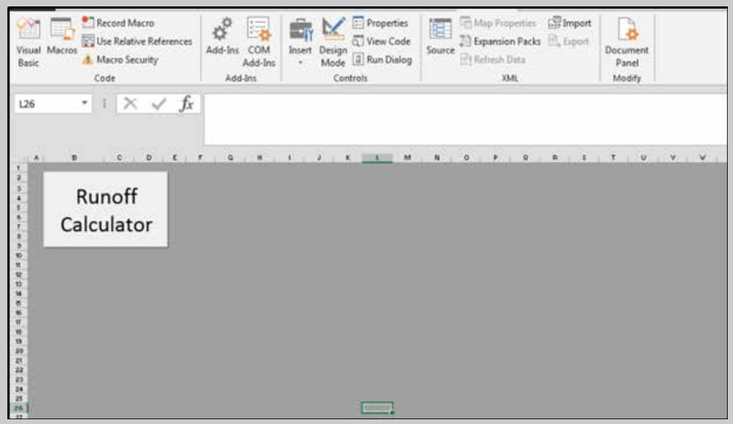
The gov.uk webpages contain extensive guidance regarding Brownfield and Contaminated Land. Here is a starting point for finding-out the condition of your land:

Performance standard for laboratories undertaking chemical testing of soil - brief guide for procurers of analytical services (publishing.service.gov.uk)

Run-off Calculator Guide

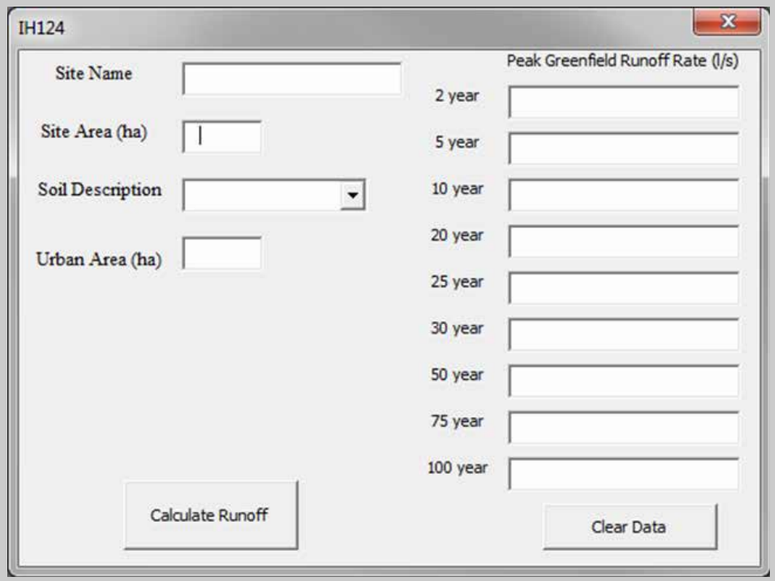
The Run-off Calculator is a programme constructed in Microsoft Excel. The run-off calculator can be downloaded from XXAdd URLTo use the programme, open the file “Run-off Calculator.xlsm” and ensure macros are enabled. When open, the file should look similar to Figure B-1.

Figure B-1



To use the Calculator, press the “**Run-off Calculator**” button. A window should be displayed similar to Figure B-2.

Figure B-2



This window in Figure B-2 should be completed as follows:

Site Name:	A name for the Site.
Site Area:	The area of the site in hectares.
Soil Description:	Select the best description of the prevailing ground conditions for the Site.
Urban Area	The area of impermeable surface within the site in hectares.

Once these have been completed press the “**Calculate Run-off**” button to calculate the peak Greenfield Run-off Rate in litres per second for the displayed return periods.

Effects of excess run-off: Landslip (Image: LLong)

Effects of excess run-off: Soils Erosion (Image: LLong)

4
COMPONENT DESIGN

4 Component Design

WHAT THIS SECTION WILL COVER:

- Choosing SuDS components
- The SuDS selection matrix
- Considerations for discharge
- Local SuDS zones
- Types of Permitted SuDS and technical requirements

4.1 Choosing SuDS components

SuDS design should focus on easy and efficient maintenance, to achieve low operation and maintenance costs and provide a safe operating environment for residents, visitors and the maintenance operatives.

One of the key elements of designing a site with SuDS is the decision about which components to use. As described in the previous chapter, there are a variety of SuDS components but not all will be suitable for all sites. It is therefore vital to have a comprehensive understanding about the nature of the site, particularly if there is contaminated ground and to ensure that a constant review is undertaken from project inception to SuDS operation. **Figure 4-2** describes the best practice for this decision-making process based on the **CIRIA SuDS Manual**.

Indicative schematic design layouts for the SuDS components described are included in **Appendix C**. Source control options are detailed in the SuDS Suitability Selection Matrix as detailed at the end of **Section 4.**

When undertaking a SuDS design using this guidance, developers should be mindful of the following:

- Pumping stations are not covered in this document
- If your surface-water drainage strategy requires a pumping station, you will need to gain approval from Cheshire East's Lead Local Flood Authority

Example of SuDS from urban to rural

Incorporating Amenity and Recreation

When designing SuDS solutions as part of place-making, there is an opportunity to celebrate water, to educate and engage both new and existing communities, to create opportunities for people of all ages to interact with water, to be playful.

Water can bring nature, movement, light, noise, drama, mark the changing seasons, add to the richness of a place and offer a more immersive experience to the user. People are drawn to water: looking at it, being near it, or even dipping fingers or toes into it. It can ignite the imagination, the senses, offer a sense of freedom and exhilaration or create places of calm reflection and playfulness. Its fluidity presents opportunities for self-initiated creative play and inclusion or creation of public art features.

As with all design, consideration of how people might use and respond to SuDS is a key consideration which should be taken into account from the outset of development planning. All ages benefit from a more creative, thoughtful integration of water and of SuDS into their environment, though particular consideration must be given to more vulnerable adults and children.

The CDM (Construction Design and Management) Regulations help all project managers, clients and designers to ensure all foreseeable risks are assessed. Any unacceptable risk should then be removed through design (designed-out) and where this is not achievable, remaining risks must be mitigated and managed. A Health and Safety file must be produced and a copy submitted to the Local Planning Authority.

SuDS should positively contribute to the amenity of developments and, whilst there are risks involved with water, with careful design, risk management and appropriate maintenance, SuDS could incorporate opportunities for community recreation, fun, and add distinctiveness and character.

Currently, the majority of drainage solutions proposed for residential developments in Cheshire East comprise pipes to detention basins. This solution can present a high risk in terms of amenity and recreation due to their potential flow-rates and depths of water and, as a consequence, these areas are often fenced off.

Image:J.Taylor

One of the objectives of this SuDs guide is to help developers move away from a 'one component fits all' solution, towards the design of an integrated, site-wide SuDS train of that combines a number of components to negate or mitigate the need for large detention-basins.

In emulating the way the natural environment absorbs water, the SuD System should naturally reduce the risks associated with recreation and spreads it across the site. Thoughtfully-designed and well-managed solutions should open-up opportunities to include safer amenity and recreational elements for all sectors of our communities to enjoy. It should be supported by engagement with new and existing communities, by materials that creatively explain their purpose and presence and be clear about the required and specific maintenance they will receive.

Increasingly, water-play opportunities are incorporated into urban play-schemes, however the most common route has been through the use of mains-fed features such as jets, fountains or paddling pools.

Mains water is an expensive and unsustainable resource. Mains-fed play features tend to be seasonal and predictable, simply spraying or wetting people during the summer months. These could be considered as part of larger public realm schemes where the increased installation costs, management and maintenance are sustainable and the use of an increasingly important resource justified. Using rainwater and SuDS for play offers more diverse opportunities. It can also be simple, cost effective and easy to implement provided it is designed-in from the outset and as part of a well-considered masterplan.

SuDS must remain safe and accessible for the life-time of the developments they serve. Cheshire East Council will only approve and adopt SuDS where the risks have been formally assessed by a suitably-qualified person, taking into account future amenity and maintenance requirements of all components of the system.

"A paddling pool, even if shallow, involves a low but inevitable risk of drowning but this [risk] is normally tolerable. The likelihood is typically extremely low, the hazard is readily apparent, children benefit through the benefit of water play and finally, further reduction or management of risk is not practicable without taking away the benefits" - *Health and Safety Executive*

Water can provide formal and informal play and learning opportunities, ranging from naturalistic exploration akin to the understanding of risk taught at forest schools, to more contained experiences, such as dipping hands in rills and channels. SuDS systems and nature ponds should be considered within every new school or educational facility where the learning opportunity is maximised.

WAYMARKER

Further advice regarding designing-out and managing risk should be sought from current national guidance which includes:

hyperlink to HSE

hyperlink to ROSPA

hyperlink to CDM Regulations

4.2.1 Source Control - Green Roofs / Living Walls

Green roofs consist of a multi-layered system including an impermeable layer, a drainage layer and a growing medium. They are designed to mimic predevelopment hydrology by intercepting and collecting precipitation; attenuating peak flows and decreasing surface water run-off. The main advantages of green roofs are high value local biodiversity, treatment of rainwater, increase in local air quality, and increased economic and aesthetic value of development (for full list of benefits please see page 233 of CIRIA SUDS Manual).

WAYMARKER

SEE MATRIX ID 9

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**

Key Characteristics

- Green roofs and walls are very effective as part of a comprehensive SuDS approach
- Potential to add significantly to ecological framework for a development
- Vaiety of options to create living surfaces
- Loadings upon structures for living roofs, need to be purpose designed
- Certain types of living wall need specialist design to enable maintenance and irrigation

Main Considerations

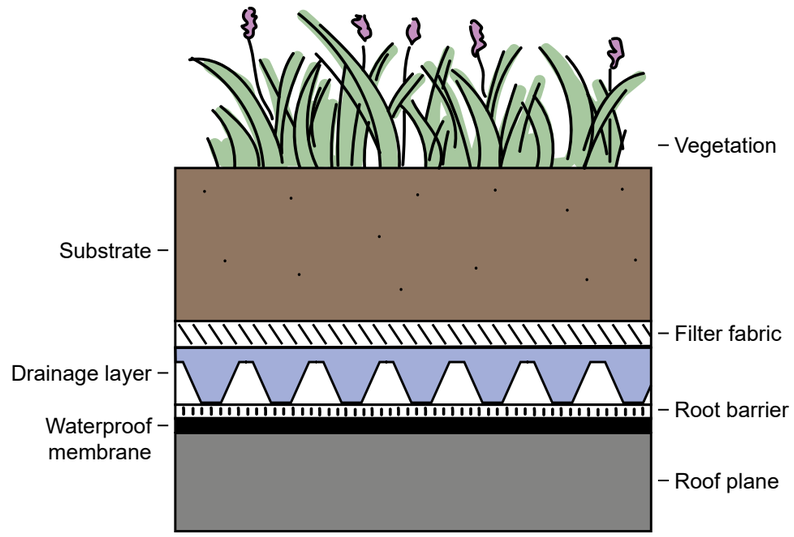
- Solar aspect important for determination of planting specification
- Choice of growing mediums will effect water storage capacity and planting choices

Key Benefits

- Can significantly reduce run-off and improve biodiversity for all types of new built developments
- Can be retro-fitted to existing built development
- Multi-functional: also providing the amenity and place-making benefits of additional living surfaces
- Scope for these to be included within functional structures associated with development and within the public realm (e.g. bus stops, toilet-blocks etc.)
- Green-roofs and living-walls are also supported in the CEC Design Guide Volume 2 Chapter 4 (p.63)

https://www.urbanplanters.co.uk/blog/new-breeam-scheme-set-reward-addition-green-roofs-walls/

Image: S.Cottle



Example Green Roof Cross-section (not to scale)

Technical Requirements: Green Roofs

There are two key categories of green roof available for installation:

Extensive Green Roofs - These generally have low loadings on the building structure due to shallow substrate depths. They typically feature a 20-150mm thick growing medium. They include resilient, slow growing, low maintenance plants e.g. succulents, herbs, mosses and grasses.

Intensive Green Roofs – These generally have deeper substrates and therefore heavier loadings on the building structure. They typically feature a deeper substrate (150mm plus). They can support an advanced landscape environment that can provide high quality amenity and biodiversity benefits.

Siting: can be suitable for:

- Residential (including high-density residential)
- Commercial
- Retrofit (providing there is sufficient structural capacity for the roof to support them).
- Contaminated Land
- Vulnerable groundwater

Design Considerations

Hydraulic design of green roofs should be focused on two aspects of performance:

- How the roof is expected to perform during an extreme rainfall event.
- How the roof is likely to perform throughout the year and during both summer and winter rainfall periods when the roof is likely to be saturated.

May need to provide an additional outfall/overflow pipe into site wide surface water drainage infrastructure for these extreme events).
Exceedance flows should be safely accommodated for onsite when events larger than those designed for may occur.

Pre-treatment, Inlets and Outlets

There is no requirement for pre-treatment or inlet, unless there are plans to use water for irrigation purposes.
Outlets – Outlets should be signed in order to reduce the possibility of blockages. They can include flow control devices to dictate downpipe flows and deliver attenuation capacity.
Outlets must be separated from the growing medium to prevent plant root obstructions and free gravel blockages.

Maintenance requirements

- The most intensive maintenance is required within the first 12 to 15 months during the establishment phase.
- Maintenance schedules should always be specific to the individual green roof design.

See Table 12.5 (pg.252 of CIRIA Report C753) for example maintenance schedule.

Safety

- All maintenance arrangements at roof level must be in full compliance with the appropriate health and safety regulations.
- Access routes to the roof must be safe and should be clear of obstruction at all times.

See p.g. 251 of CIRIA Report C753 for further guidance.

Landscaping and Amenity

- Significantly improves roofscape for local communities.
- Delivers natural environments for people to use or visit, improving their health and wellbeing.
- Can be combined with Rainwater Harvesting to provide a source of water for non-potable uses.

If designed effectively they can help deliver of key amenity principles; such as;
Improved air quality – via the increased absorption of CO2 and various air pollutants found in dense cities.

Climate Resilience - Has the possibility to significantly reduce energy demand if designed correctly due to increased thermal efficiency.

Helps to reduce Noise Pollution.

Economic Benefits

High aesthetic value increases property/rental prices.

Reduced energy costs due to increased heat conservation.

4.2.2 Source Control - Rainwater Harvesting

Rainwater harvesting is the collection of rainwater runoff from impermeable surfaces via interception which can be used as a sustainable water supply, whilst also reducing the volume of surface water run off on site and in turn reducing flood risk. Rainwater harvesting supports SUDS systems and helps to provide interception storage.

Rainwater can be collected in water butts for watering gardens or more complicated systems can be installed for re-using water to flush toilets or for supplying water for outside use.

WAYMARKER

SEE MATRIX ID 10

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**

Key Characteristics

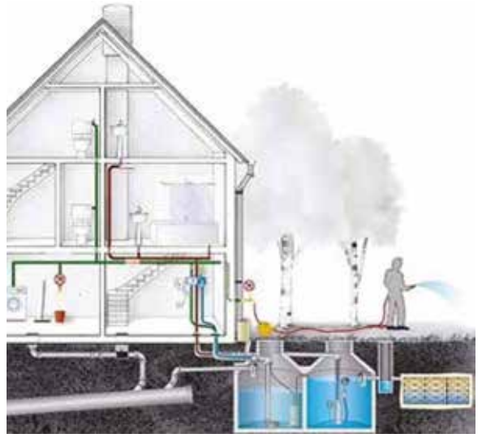
- In its simplest form this could be provided to every new property as a water butt(s)
- More complex harvesting systems provide benefits within and outside of buildings
- It can be part of a combined system that also includes 'grey' water
- Applications can be for residential and non-residential development

Main Considerations

- Controlling contaminants and managing flow into the tank are important parts of the design
- Ground/hydrological conditions need to be suitable if below-ground tanks are proposed
- Excavation proposals must include appropriate soils' management and re-use
- The more complex the system, the greater the purchase and management cost
- System type should be designed to suit the nature and context of the development
- More complex systems require water quality monitoring, depending on use

Key Benefits

- Many new developments are taking place in the Borough, where even simple harvesting could make a significant cumulative impact
- There are a number of large-scale commecial sites where harvesting systems could be utilised
- Rainwater harvesting is already discussed as part of Chapter 5 Volume 2 of the CEC Design Guide
- In many areas ground conditions should be favourable for more complex systems (tanks below ground)



Rainwater harvesting can take on many forms in a variety of situations:

Within a residential context this may include the provision of individual water butts to collect rainwater from roofs.

A commercial application could be the use of storage ponds to accumulate water for reuse as an alternative water supply for a garden centre.

https://www.renewableenergyhub.co.uk/main/rainwater-harvesting-information/large-scale-commercial-rainwater-harvesting/

Technical Requirements: – Rainwater Harvesting

There are three key types of RWH system; composite systems, gravity-based systems and pumped systems.
Gravity systems are designed so that the rainwater is collected by gravity and stored at elevation (e.g.in roof space or just below gutters) so that it can also be supplied by gravity.
Pumped systems tend to store water at ground level or underground, where it is then pumped out for supply purposes.
Composite systems use both gravity and pumped features in their design
The primary parameters used for calculating the size of the storage are:

- The rainfall volume that is to be captured.
- Average annual rainfall (AAR)
- Daily need for non-potable water
- Building occupancy number
- Contributing surface area

Hydraulic and water quality design criteria

There are various methods available to design a RWH system; the most accurate is via modelling.

Selection and siting

Rainwater harvesting is a SUDs component that can be used in a variety of development settings e.g. residential, commercial or industrial development.

- Storage tanks should be placed in secure locations and are commonly fitted underground, on roofs and adjacent to buildings.
- Geotechnical ground investigations are needed to establish site selection for RWH units (tanks should not be placed on made ground).
- Careful consideration should be given to the ground water table when using underground units as flotation issues may arise, if the ground water level is shallow on site.
- Structural considerations (e.g. depth of building foundations) should be given to RWH tanks sited parallel to buildings.

Pre-treatment, inlets and outlets

Primary screening devices are used to avoid leaves and from entering the tank. Primary screening devices often have a wire mesh screen installed near the downspout.
First flush devices can be designed to divert the first part of the rainfall away from the main storage tank; this normally contains the largest amount of dirt, debris and contaminants. This must then be safely treated and managed downstream.
RWH systems need either an inlet valve that closes flow into the container when it is full, or an overflow arrangement that conveys excess surface water runoff away from the building without causing damage.
Landscaping and Amenity

- Support the resilience of developments and their landscape to variabilities in climate and water resource availability.
- Create opportunities for learning in educational and community settings.

Safety

RWH systems should be installed using safe construction methods and manufacturers guidelines should be adhered to.

Operation and Maintenance

- Access to RWH components should be safe and easily accessible to ensure regular maintenance and inspection can be carried out.
- Maintenance requirements are specific to each individual RWH system.
- Routine inspection of the filter system should be carried out every 3 months.

Any property with an RWH system installed should be provided with appropriate information as to what equipment as been installed. This information should include:

- Its purpose
- Its maintenance requirements
- The actions required to rectify any potential failure
- The expected performance of the system.

4.2.3 Source Control - Permeable Surfacing

https://www.escofet.com/en/products/walking/permeable-paving/checkerblock

Permeable paving allows water to infiltrate through its surface into a sub-base below. Water then either infiltrates into the ground or passes through to an outfall.

Permeable pavements can be very effective at controlling surface-water run-off.

It is now a legal requirement in England that new and refurbished driveways in front gardens must be designed to be permeable.

WAYMARKER

SEE MATRIX ID 11

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**

Key Characteristics

- A variety of permeable surfacing is available
- Allows infiltration into the sub-base where water is stored and released gradually either to the ground or to an outfall (usually another SuDS component)
- Permeable surfacing is effective at slowing run-off and can help remove pollution
- Cross-construction permeability is required i.e. base layers and membrane permeability as well as wearing course
- Permeable surfacing can add water-storage capacity

Main Considerations

- Extent of any artificial surfacing should be minimised to promote natural drainage, preserve soils and promote vegetation
- Excavation proposals must include appropriate soils' management and re-use
- Construction materials should avoid landscape impacts of quarrying virgin rock by utilising appropriate re-used or recycled materials in preference to new. Any new materials should be locally-sourced where possible
- Any stone used should reflect local geology where possible.
- Ensure any new stone is certified as ethically-sourced & supplied
- Permeable paving is not presently adopted as CEC Highway
- Incorporate outflow components to manage excess

Key Benefits

- Usable for parking areas, vehicular hard-standings, pedestrian walkways, driveways, patios and other non-adoptable surfaces
- Can substantially reduce run-off at source
- Can be retro-fitted to existing development
- In many areas, ground conditions should be favourable for infiltration, however, areas with poor soil-infiltration can consider permeable surfacing as an attenuation component

WAYMARKER

Porous and permeable surfaces:

Adoptable standards will be required for public highways.

https://www.cheshireeast.gov.uk/pdf/highways/policies-and-standards-documents/highway-surface-water-policy.pdf

The Paving Expert website contains information and inspiration for available materials and commercially-tested techniques:

https://www.pavingexpert.com/

https://specificationproductupdate.com/2019/05/01/permeable-paving-by-interpave/

Technical Requirements: Porous / Permeable Surfacing

Porous Pavements: infiltrate water through their whole surface.
Permeable pavements: have a surface that is formed of material that is itself impermeable to water. The materials are positioned to provide void space through the surface towards the sub-base.
Concrete block permeable paving must be designed in relation to British standard BS 7533-13:2009.
Materials commonly used include: porous asphalt, reinforced grass, gravel, concrete or clay block permeable paving.

Hydraulic and water quality design criteria

There are three surface water management methods which can be adopted:
1) All surface water run off infiltrates through the structure and permeates into the ground. An overflow pipe may be required to manage surface water run off flows during extreme rainfall events.
2) Surface water run off which exceeds the infiltration capacity of the subsoils discharges to the receiving drainage system e.g. watercourse or sewer.
3) No infiltration to the subsoils occurs, instead water drains through the subbase and is then carried through perforated pipes to an outfall.
There are four features to the hydraulic design of pervious pavements to consider:
1) Calculation of the infiltration rate through the permeable pavement structure.
2) Calculation of the storage volume necessary to accommodate flows up to 1 in 100yr (plus percentage for climate change).
3) Calculation of the discharge rate to the outfall (l/s).
4) Exceedance design layout so that all surface water run off flows are contained and managed safely onsite without causing any increased flood risk.

- In order for the system to have a positive outfall for associated surface water run off, the infiltration rate of the soils onsite should be significantly greater than the design rainfall intensity.
- Stormwater calculations for a range of rainfall durations up to 1 in 100yr + CC event should be carried out to accurately determine the capacity of the storage volume required.
- Surface water flow paths during exceedance events should be planned for within the overall surface water drainage layout. This should ensure that flooding to property is avoided and safe access and egress from the development site is maintained.
- Where adjacent areas drain into the surface, the ratio of impermeable to pervious should be limited to 2:1 to prevent clogging.
- A minimum value of 2500mm/h is considered reasonable for a pavement surface to be considered pervious in relation to surface water management.
- It is advised that a factor of safety of 10 is applied to the surface infiltration rate of all permeable structures, to account for potential clogging of the pavements surface area over its design life.

Selection and siting

- Permeable paving is a suitable SUDs feature for a variety of sites.
- Pervious pavement should be limited to low traffic areas (unless permeable paving materials designed to withstand pressures from heavy loading vehicles can be installed).
- Within 10 feet of building foundation that is above proposed pavement location or 100 feet from a building foundation that is below the proposed pavement location.
- Within four feet water table's highest level.
- Ground investigations and infiltration testing should be carried out onsite inline with BRE 365 guidelines to determine the infiltration rate of underlying soils.
- Permeable paving should be avoided where there is a high risk of silt loads on the surface (unless regular maintenance can be guaranteed).
- Unlined pavements should not be used on brownfield sites unless it has been demonstrated that the risk of leaching of containments is managed within acceptable levels (this may need to be agreed with appropriate environmental regulatory bodies e.g. Environment Agency and LLFA).
- Permeable paving should not be used on sites where groundwater pollution is suspected.
- Unlined pavements are not suitable for use in areas which are susceptible to slope instability or close to building foundations unless a full risk assessment has been carried out by a geotechnical engineer.

Landscaping and Amenity

- Extent of any artificial surfacing should be minimised to promote natural drainage, preserve soils and promote vegetation
- Excavation proposals must include appropriate soils' management and re-use
- Construction materials should avoid landscape impacts of quarrying virgin rock by utilising appropriate re-used or recycled materials in preference to new. Any new materials should be locally-sourced where possible
- Wearing course must be in-keeping with local geology and landscape character
- Ensure any new stone is certified as ethically-sourced & supplied

Safety

Permeable pavements should be fitted using safe construction methods and in strict accordance with manufacturers guidelines.

Operation and Maintenance

- Require regular inspection and maintenance to preserve their infiltration capacity.
- The frequency of required maintenance is site specific but many of the maintenance activities can be undertaken as part of a general site cleaning contract.
- Maintenance plans and schedules should be submitted to Cheshire East's Local Planning Authority and Lead Local Flood Authority for review during the design phase.
- Table 20.15 (pg 430) of the CIRIA report C753 includes an example of a maintenance schedule.

4.3.1 Site Control - Canals, Rills and Channels

Canals, rills and channels are hardscape open surface water channels used to store run-off within a constructed container. They can be integrated into public realm areas with a more urban character. They could be above or below ground and should be sized to the storage need, having regard to safety considerations. Often they are designed as linear features as part of a system including small pools to add significantly to the townscape and landscape quality, assisting the management of water flow and cleansing. Planting within the features creates the potential for distinctive, aquatic landscape and biodiversity enrichment. They are usually designed as linking components between other components within the SuDS train.

WAYMARKER

SEE MATRIX ID 21

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**

Key Characteristics

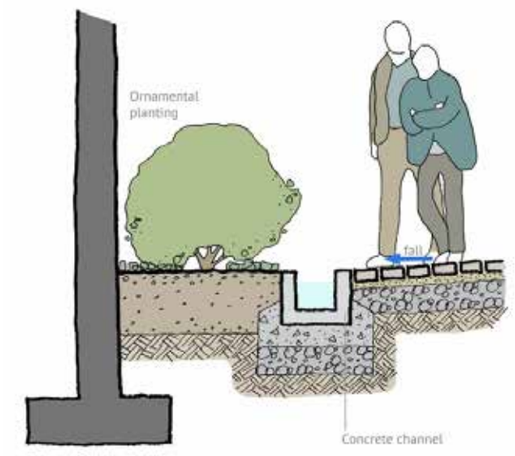
- Should be designed as an integral part of a SuDS system
- Can act as pre-treatment
- More complex storage and conveyance systems provide benefits within and outside of buildings
- Applications can be for residential, non-residential and public realm

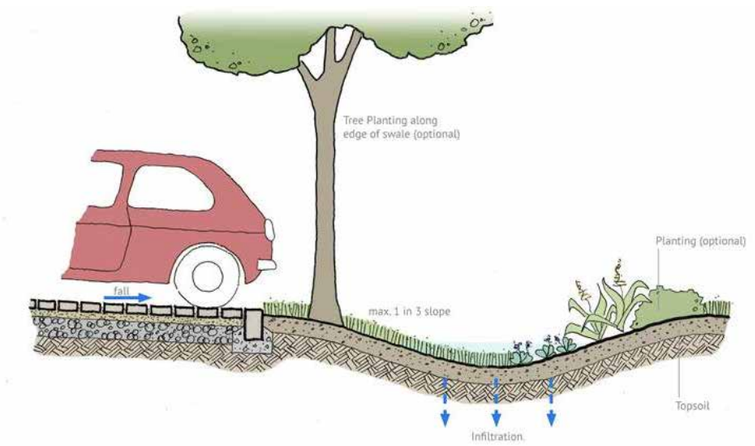
Main Considerations

- Easy to construct and manage as part of the public realm
- Excavation proposals must include appropriate soils' management and re-use
- Construction materials should avoid landscape impacts of quarrying virgin rock by utliseing appropriate re-used or recycled materials in preference to new. Any new materials should be locally-sourced where possible
- Choosing appropriate planting to prevent silt build up
- Need to give careful consideration to crossing points and people with mobility and visual impairment
- Potential complexities around adoption

Key Benefits

- Provision of above-ground solutions within higher density, space constrained contexts - predominantly urban
- Can be visually appealing and add to sense of place
- Amenity value and informal play potential for local communities





Images: susdrain.org

Technical Requirements: Canals, Rills and Channels

Canals, rills and channels are open surface water channels, usually crafted with hard edges. Their cross-sections can be adapted to suit topography, the scale of the scheme and to enable safe access for informal recreational use and management. Crossings and bridges can be incorporated to enable access to buildings and spaces and to encourage alternative views of the features and the feeling of crossing water. They should be designed so as not to require any safety railings or fencing to maximise the social benefits. Specific risk assessment will be required as part of the design process. Materials commonly used are concrete, reconstituted and natural stone. Planting needs to be tolerant to varying hydrological conditions.

Hydraulic and water quality design criteria

- Stormwater calculations for a range of rainfall durations up to 1 in 100yr + CC event should be carried out to accurately determine the capacity of the storage volume required.

Surface water flow paths during exceedance events should be planned for within the overall surface water drainage layout. This should ensure that flooding to property is avoided and safe access and egress from the development site is maintained.

- Treatment channels collect water, slow it down and provide storage for silt and oil that is captured. The outlet is designed to act as a mini oil separator thus the channel is very effective at treating pollution. They can provide excellent pre-treatment value to larger SuDS, as they are able to remove contaminants such as silt and oil before the water is conveyed into downstream SUDs features. However, it is important that they are managed effectively to prevent contaminant/sludge build up that affects their physical efficiency and the flora that assists the cleansing process.
- Depending on their placement in the SuDS management train, species selection needs to be designed based on the hydrological conditions to ensure that planting flourishes in either permanently wet, semi wet, or predominantly dry conditions

Selection and siting

They are an effective SuDS measure in more dense, urban developments where space constraints are a common challenge. Rills and canals can be used to collect water straight from hard surfaces or they can be used to convey water, for example where it has been collected via a permeable pavement structure. They can be designed as integral parts of the landscape scheme, or as more incidental elements as part of a wider SuDS/landscape scheme. They can also be used as threshold definition between private and public spaces. Consequently they are suited to a variety of scenarios:

- Public realm and parks/open spaces
- Residential development
- Commercial/industrial development
- Contaminated sites (providing they use impermeable lining)

Landscaping and amenity

All built components should be purposely designed to be in-keeping with the design philosophy for the scheme, having regard to local character, and materials and construction should be of high quality to help build a strong sense of place and character. Where stone is used then it should reflect local geology.

Bridges and crossing points can provide more dramatic linear views of the features, especially where well integrated into townscape to draw the eye to feature buildings or landscape. The potential for these features to be close to homes or commercial premises, and as part of the public realm, means potentially high levels of amenity benefit, particularly where they are designed to enable more direct access. Well designed, appropriate planting can help enrich the feel and quality of the development, bring people closer to nature and enhance the sense of community.

Operation and maintenance

Routine maintenance is required, involving removal of debris and litter, whilst more intensive maintenance work, such as removing silt, is only required intermittently (e.g. every 5 years). Repair of the structure, including grouting etc. will also be required during the lifetime of the feature. The initial cost of installation should be no greater than an equivalent underground solution, but routine maintenance cost will be higher. However, the cost of more fundamental repair is likely to be no greater given they are surface based components.

Although quite straightforward to design, problems have occurred due to a lack of attention during design and construction including silt build up due to inappropriate landscape and treatment of adjacent areas, and the landscape quality being poor due to the frequency and type of planting, both of which are easy to address at the design stage.

4.3.2 Site Control - Filter trench / Infiltration trench

Gravel or rubble filled trench that creates subsurface storage for infiltration, or filtration of surface water runoff. Trenches can be used to filter, attenuate and dissipate storm water into the ground through the base and sides of the trench and/or provide a level of treatment prior to reaching a secondary SuDS feature.

WAYMARKER

SEE MATRIX ID 19 & 12

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**
- **Design Manual for Roads and Bridges HA 103/06**

Key Characteristics

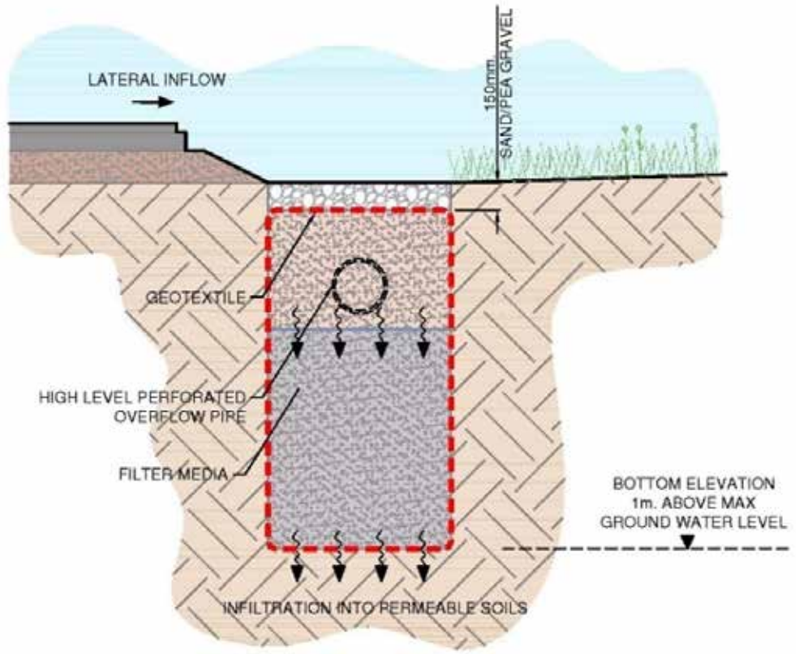
- The location of the filter trenches should be carefully considered to avoid interaction with people, vehicles, or exiting rootzones.
- Work best with SuDS components which provide attenuation of storm flows.
- Use in combination with effective pre-treatment.
- Separate filter media from surrounding ground with a geotextile where infiltration is desirable, or a membrane where infiltration is not permitted.
- Include a geotextile layer within the upper gravel and incorporate observation wells and rodding points for maintenance.
- Use a distribution pipe in combination with point discharges.
- Consider the impacts of stone scatter.

Main Considerations

- Can be prone to blockage and work best in combination with pre-treatment such as filter strips to reduce sediment load.
- Excavation proposals must include appropriate soils' management and re-use
- Features to help inspection and maintenance are critical.
- Can be expensive to replace the filter material if poorly designed or neglected maintenance.
- Difficult to identify pollution and maintenance issues underground.
- Must be sited to avoid impacts on existing hydrologically-sensitive ecological habitats
- BRE365 Percolation testing will need to be reviewed by LPA

Key Benefits

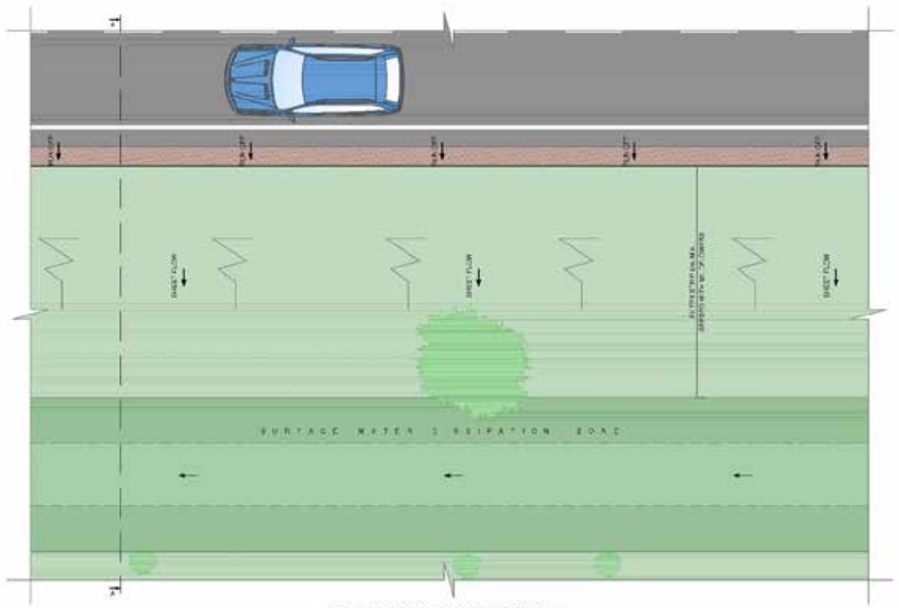
- Ideal for use with small contributing areas.
- The land-take is usually moderate, with a slope not exceeding 1 in 20.
- Moderate water quality treatment.
- Can be easily incorporated into site landscaping and alongside roads.
- Can be enhanced using grass/ wildflower seed mixes.
- Can link green areas.
- Low cost and maintenance.



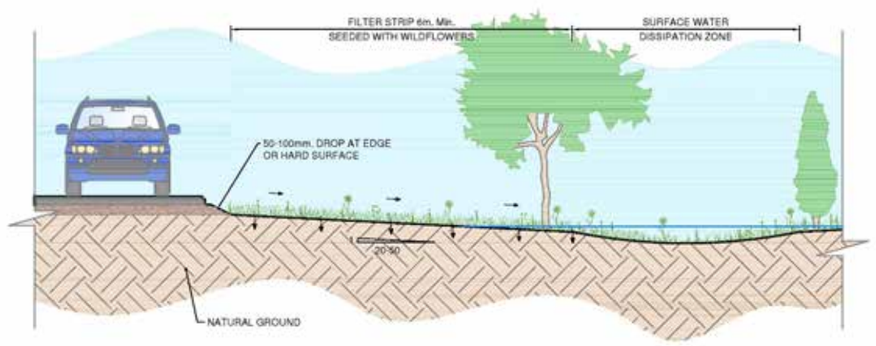
SHEET INFLOW
SECTION A-A

INFILTRATION TRENCH SCHEMATICS

New native hedge thriving alongside filter trench (Crewe, University Way)



BIORETENTION / FILTER STRIP PLAN



SECTION A-A

Technical Requirements – Infiltration Trenches & Filter Strips

Configuration and Dimensions of Infiltration Trenches & Filter Strips

- Filter / Infiltration Trenches should be used as source controls only.
- Filter / Infiltration Trenches should not be designed as sediment traps.
- Filter / Infiltration Trenches should be designed to the requirements of the **Design Manual for Roads and Bridges Volume 4, Section 2, Part 5, HA40/01 - Determination of Pipe and Bedding Combinations for Drainage Works, Drawing F2, trench Type H, the requirements of this document and Appendix D - Figure D1 and D2**.
- Existing site subsoils and site topsoils are to be reserved and re-laid in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Should existing site soils prove unsuitable (due to contamination for example) or insufficient then any relocated or imported subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use and relocated or imported topsoils must meet BS: 3882:2015 Specification for Topsoil.
- Filter / Infiltration Trenches should not exceed 3m in depth.
- It is preferred that storm water inflow be sheet flow from drainage areas. Where this is not practical point flow inputs will be acceptable.
- Where point flows are used, a pre-treatment stage be installed that will effectively remove particulate matter present in the water and prevent clogging of the trench.
- Point flow inputs should be connected to a slotted high level distributor pipe. The pipe should be capable of conveying the design flow.
- The stone filter material should be wrapped in geotextile to the diagram as shown on **Appendix D**, **Figure D1**, with a minimum 150mm overlap at all joins. The geotextile should meet the requirements of the **Specification for Highway Works Series 500**.
- Filter / Infiltration Trenches should be provided with a high-level overflow to accommodate design exceedance.

Hydraulic and Water Quality Design Criteria

- The trench design should be checked for design exceedance and modelled explicitly and holistically to demonstrate the impact to the downstream drainage components.
- Infiltration trenches should be designed to half-empty in 24 hours to allow for incoming flows from subsequent storms.
- The base of the trench should be at least 1m above the highest seasonal or permanent groundwater table.

Selection and Siting

- A risk assessment shall include all relevant safety and environmental issues associated with siting a filter / infiltration trench.
- The trench shall be designed for easy maintenance.
- Infiltration trenches should be sited on stable ground, soil and groundwater conditions should be assessed to verify ground stability.
- Design of infiltration trenches must comply with **groundwater protection regulations and with EA policy on infiltration**.
- Must not direct water towards existing dry habitats or direct nutrient-rich water towards existing habitats with a low nutrient status. If the trench directs water towards high value habitat, the pH of the water discharged must be comparable with that of the existing habitat.

Safety

- Risk assessment shall include risks associated with scatter of filter material.

Operation and maintenance

- All maintenance access points shall be clearly visible and documented in the Operation and Maintenance plan.

4.3.3 Site Control - Swales

A vegetated shallow channel or depression designed to treat, filter, store and convey run-off. Swales can be either 'dry' (where water is stored beneath the ground in a gravel layer) or 'wet' where run-off is stored above the surface in the channel so may be permanently wet. Lining can be added to enable infiltration even when there are known contaminants in the water.

WAYMARKER

SEE MATRIX ID 22 & 23

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**
- **Design Manual for Roads and Bridges HA 103/06**

Image: COrton

Key Characteristics

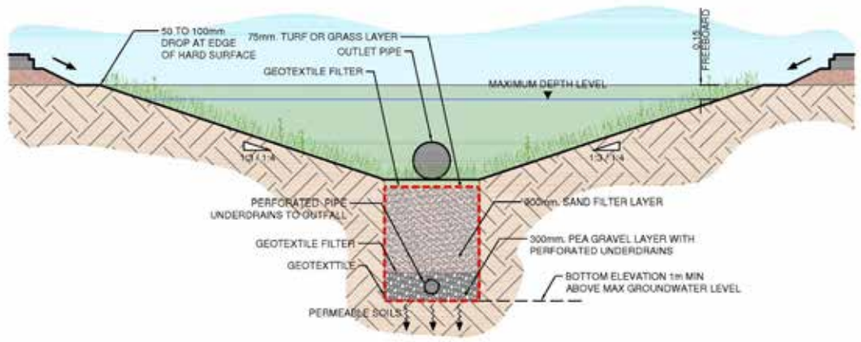
- Conveyance swales are suited to directing flow
- Dry swales provide additional filter treatment
- Wet swales encourage filtering and attenuation through wet and marsh-like conditions
- Parts of a swale designed to hold water permanently can be planted up with a range of native aquatic or marsh plant species. Other parts of the swale which may only be wet temporarily can be seeded with a pond-edge type mixture which will include species tolerant of both drier and damper soil conditions.

Main Considerations

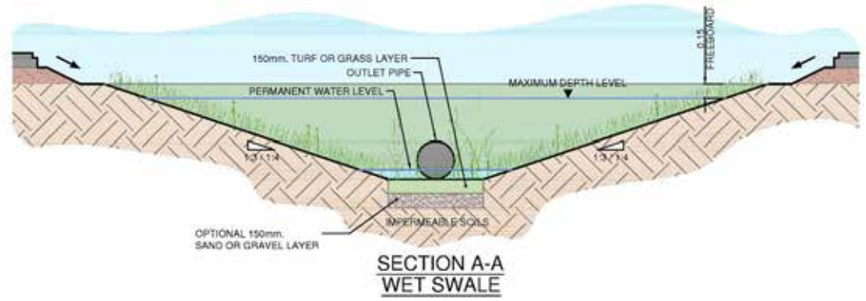
- Should enhance and integrate with site's topography
- Must be planned into layout early in design process, particularly for residential developments due to access crossings
- Relatively moderate land-take
- Checkdams may be needed for steeper sites
- Needs to be shaped to attenuate or significantly reduce peak flow or volume
- May require lining on contaminated sites

Key Benefits

- Ideal for use with linear contributing areas like roads
- Good for pre-treatment
- The land-take is usually moderate, minimum of 4m wide
- Excavation proposals must include appropriate soils' management and re-use
- Good water quality treatment
- Can be incorporated into site landscaping and alongside roads
- Can be enhanced using grass/ wildflower seed mixes
- Can be linked to create green corridors
- Can provide biodiversity enhancement
- Low/Medium cost and maintenance



SECTION A-A
DRY SWALE



SECTION A-A
WET SWALE

Technical Requirements – Swales

Configuration and Dimensions of Swales

- Swales should be used as source controls only.
- Swales should be designed to the requirements of **CIRIA C753 The SuDS Manual, the requirements of this document and Appendix D - Figure D3**.
- Swales should be:

  a. Trapezoidal or parabolic in cross section.

  b. The side slopes of a swale shall be a maximum of 1 vertically to 4 horizontally.

  c. The base of the swale shall be a minimum of 0.5 m and a maximum of 2 m wide and designed to avoid the formation of rills.

  d. The depth of the swale shall be between 400 mm to 600 mm deep and achieve a freeboard of 150 mm during design flow conditions.

  e. Swales shall be no less that 30m in length.

  f. The longitudinal slope of the swale shall not exceed 1 vertically to 40 horizontally without the use of checkdams and shall not exceed 1 vertically to 10 horizontally.

Hydraulic and Water Quality Design Criteria

- Swales should be designed so that the flow arising from a 1 in 1 year 30-minute storm event does not exceed 0.3m/s or 100mm in depth.
- The average velocity should be calculated using Manning's equation with a roughness coefficient of 0.025 for flows up to the grass height. Grass height in the channel should be assumed to be 100-150mm height. At depths of flow above the grass height the friction factor can be reduced to 0.01 for the analysis of design exceedance storm events.
- Storage volumes for the 1 in 1 year design event should dissipate within 24 hours, so that subsequent storms can be accommodated in terms of storage and treatment.
- Where practical, swales should form part of a wide blue/green network, designed for the temporary storage and conveyance of design exceedance storm events 30 to 100 year storm event. The maximum flow velocity should be below 1.0m/s. Higher velocities up to 2.0m/s may be permissible if erosion, soil stability and safety aspects can be demonstrated to the satisfaction of Council.

Selection and Siting

- Swales should be:

  a. Positioned as close to the source of receiving runoff as possible.

  b. In a location that is easily and safely accessible by maintenance machinery.
- On stable ground and where groundwater will not occur within 1 m of the base of the swale.
- Infiltration swales shall not be positioned adjacent to building foundations without a design certificate from a suitably qualified geotechnical engineer.
- Infiltration swales shall not dissipate water directly to ground without a suitable groundwater risk assessment.

Pre-treatment, inlets, and outlets

- Sheet flow is desirable to minimise erosion and increase treatment potential. Other options to provide an approximate to sheet flow, such as flush kerbs, shall be considered on a site by site basis.
- Point flow outlets such as road gullies and pipes shall flow into a flow spreader to minimise the risk of erosion and silting.
- A drop of 50 to 100mm shall be included at the edge of the hard surface to prevent the formation of a sediment lip.
- Conveyance swale discharge pipes and underdrain pipes shall be provided with a hydraulically designed outlet structure that is resistant to erosion.
- Swales shall include a suitably designed overflow to safely convey flows arising from design exceedance events. Overflows shall be incorporated within the development strategy for managing exceedance events and routed to planned temporary storage areas.

Landscaping

- Existing site subsoils and site topsoils are to be reserved and re-laid in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Should existing site soils prove unsuitable (due to contamination for example) or insufficient then any relocated or imported subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use and relocated or imported topsoils must meet BS: 3882:2015 Specification for Topsoil.
- Swales shall be overlaid with soil at depths appropriate for the proposed vegetation. Proposed vegetation shall comprise native species tolerant of the anticipated soil-types, water tolerance requirements and microclimate.
- To increase the biodiversity of swales specialist SuDS Turfs are also available which include a range of plant species to produce habitats tolerant of both drought conditions and periodic flooding.

Safety

- A risk assessment shall include all relevant safety and environmental issues associated with siting a swale

Operation and maintenance

- Access shall be provided to all areas of the swale for inspection and maintenance. All maintenance assess points shall be clearly visible and documented in the Operation and Maintenance plan.

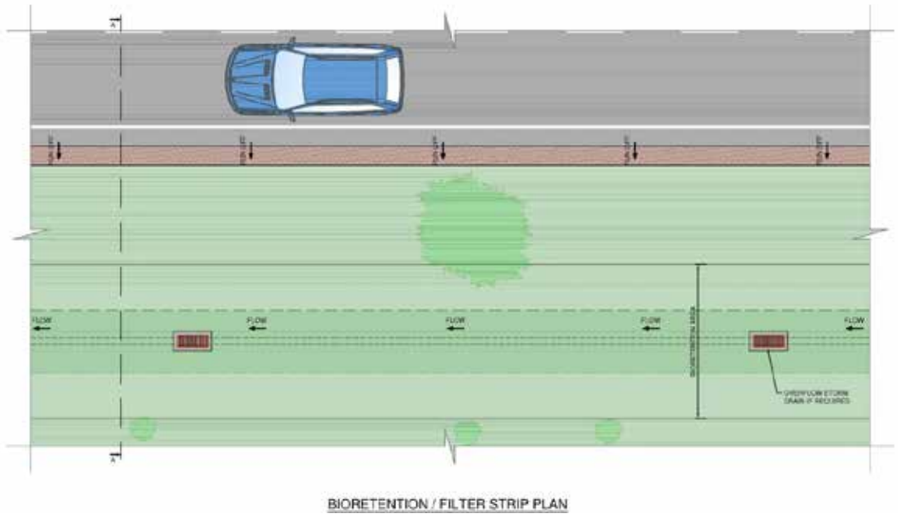
4.3.4 Site Control - Bioretention

Areas of shallow vegetated open water with specially selected plant species and varying water levels and treatment areas. Water flows horizontally and is gradually treated prior to discharge; flow control is required.

Example:Raingardens

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**
- **Design Manual for Roads and Bridges HA 103/06**



BIORETENTION / FILTER STRIP PLAN

Key Characteristics

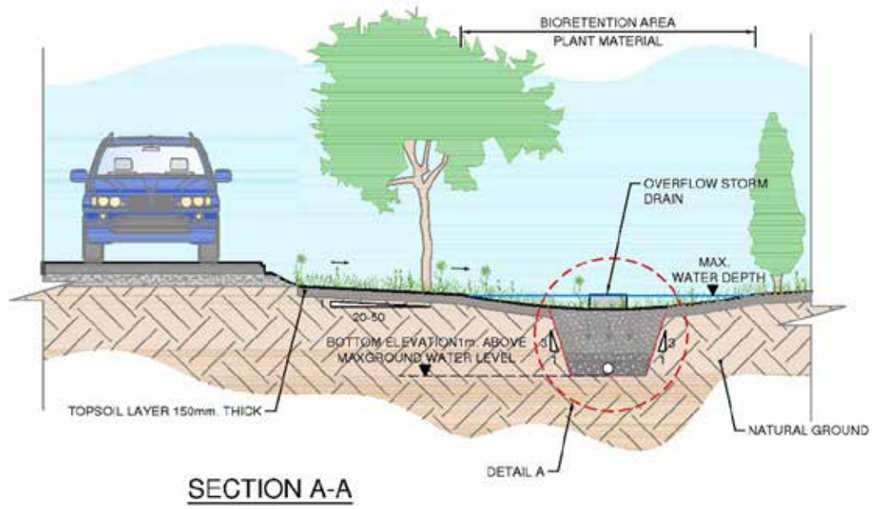
- Generally applied to small catchmnts and are typically 5%-10% of the contributing area
- Bioretention should be lined where infiltration could cause slope stability or foundation problems
- Groundwater table must be 1m below the base of the feature
- Suggested width of 3m and a 2:1 length to width ration to allow random planting of vegetation
- Standard landscape mulch should be used for the top dressing not exceeding 75mm
- Plants must be able to withstand pollution and extended dry and wet periods

Main Considerations

- Construction materials should avoid landscape impacts of quarrying virgin rock by utilising appropriate re-used or recycled materials in preference to new. Any new materials should be locally-sourced where possible
- Requires plant species with appropriate water-tolerances

Key Benefits

- Suitable for a variety of urban and rural environments
- Good retrofit solutions
- Works well in low permeability soils
- Can be very compact and used within streetscaping, or in larger landscaping areas
- Good water quality treatment and volume reduction with infiltration
- Can be adapted into a rain garden feature



SECTION A-A

4.3.5 Site Control - Bioretention Units: Rain Gardens

Rain Gardens
can offer localised strage and attenuation

For best practice refer to:
- **CIRIA C753 The SuDS Manual Part D.**

Key Characteristics

- Potential to enhance biodiversity and create more visually appealing streets
- Assists in cleansing of water of contaminants

Main Considerations

- Can be part of a SuDS train or stand alone
- Applicable to private and public land, such as driveways or highway verges
- Potentially low installation cost

Key Benefits

- Significant retrofit opportunities in urban and rural contexts, including individual householders
- Easy to retrofit to existing development
- A highly visible SuDS component that can help educate and inform
- Can be planted to reinforce local landscape character
- Reduces maintenance compared to regular mowing
- Adds water-storage capacity and filtration

Image: susdrain.org

https://www.next.cc/journey/design/rain-gardens

Cellular planting offers enhanced bioretention storage capacity

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**

Key Characteristics

- Potential to enhance biodiversity and create more visually appealing streets
- Assists in cleansing of water of contaminants

Main Considerations

- Can be part of a SuDS train or stand alone
- Applicable to private and public land, such as driveways or highway verges
- Potentially low installation cost

Key Benefits

- Significant retrofit opportunities in urban and rural contexts, including individual householders
- Easy to retrofit to existing development
- A highly visible SuDS component that can help educate and inform
- Can be planted to reinforce local landscape character
- Reduces maintenance compared to regular mowing
- Adds water-storage capacity and filtration

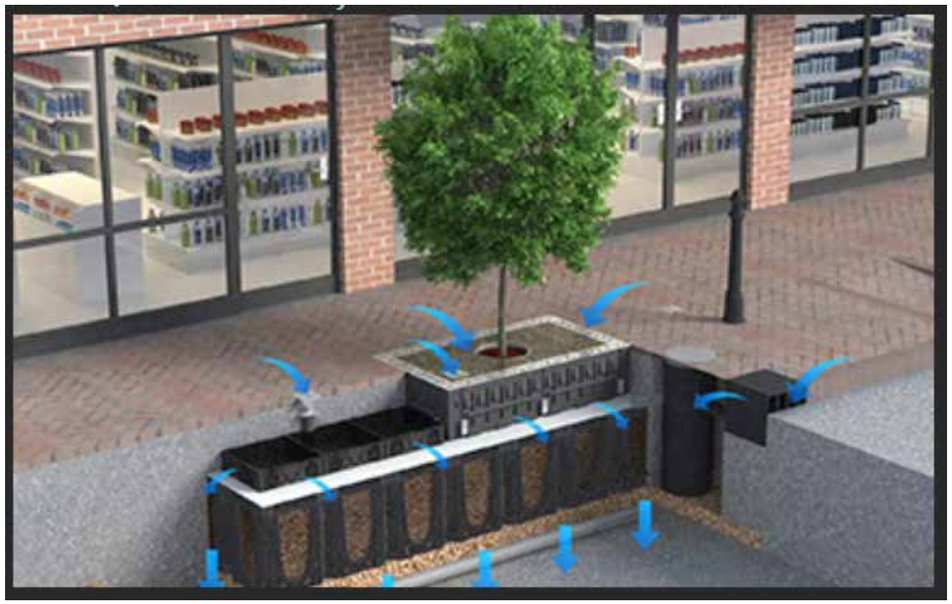


Image: GreenBlue Urban

Images: GreenBlue Urban

4.3.7 Site Control - Bioretention Units: Suspended-Pavement Tree-Trenches

Tree-trenches with suspended pavement facilities can offer water storage, water-cycling and attenuation, and help reduce pollutants through filtration, absorption, microbial action and tree uptake.

For best practice refer to:

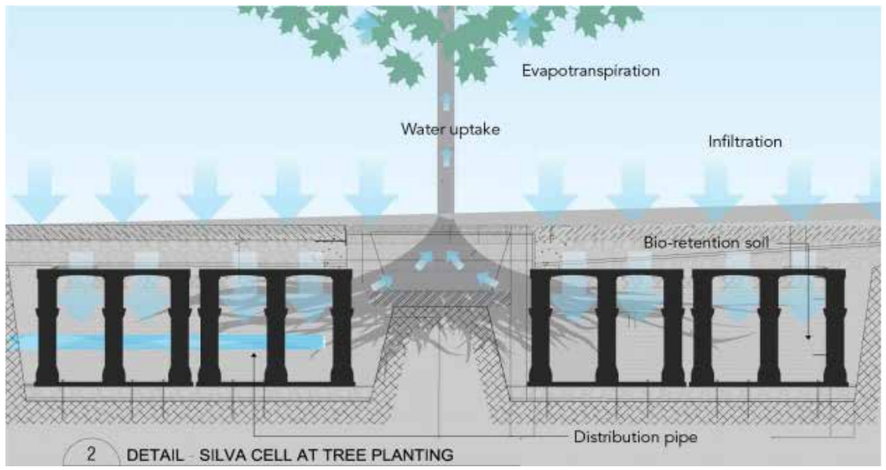
- **CIRIA C753**
- **Appendix D - Figure D4**
- **Specification for Highway Works Series 500**

Key Characteristics

- Significant retrofit opportunities in urban and rural contexts including householders
- Adaptable to different situations
- Can be installed in a variety of soil types from clay to sand
- Can be part of a SuDS train or act as a stand-alone component

Main Considerations

- Siting and trench shape should be adapted to suit existing constraints, such as underground cables etc.
- Applicable to private and public land, such as driveways of highway verges
- Tree species choice must be suited to anticipated soil, water and site conditions



Key Benefits

- Significant water-cycling through tree-growth and transpiration
- Increases water-storage capacity
- Increases attenuation periods for run-off
- Assists in cleansing water of contaminants
- Form significant landscape enhancement features
- Tree-species choices can build or reinforce local character
- Enhances biodiversity
- Creates more visually appealing places
- Helps with longer-term flood mitigation through climate change mitigation, including reducing heat-island-effect in urban areas and contributing to carbon-capture

Tree-trenches as Storage, Water-Cycling and Attenuation Components

Suspended-pavement tree-trenches were originally designed to help street-trees to thrive in urban environments by ensuring against soil compaction, but recent adaptations now offer excellent innovations for bioretention units.

Research undertaken by The University of Manchester and City of Trees for Salford City Council, the Environment Agency and United Utilities has demonstrated that street trees can have a significant positive impact on managing water.

Street-trees can be planted in specially-adapted tree-trenches which receive rainwater run-off from the adjoining road and pavement. As run-off flows along the trench, it soaks into the soil and is extracted by the trees for growth and transpiration, leaving only excess water to drain out of this SuDS component.

Results from two years' monitoring showed 3 street trees and the soil they were planted in were able to reduce the amount of water running off a street into the sewer by approximately 75%, and that remaining excess water was attenuated by up to 3 hours.

Cheshire East is looking to encourage use of multifunctional technology, such as 'box-crate' planting-pits, which could provide key components for Sustainable Drainage Systems.

'Box-crate' Tree-planting as a Storage, Water-cycling and Attenuation SuDS Component
(images courtesy: DeepRoot UK)

https://www.deeproot.com/blog/blog-entries/multi-agency-green-infrastructure-streetscape-silva-cell-case-study

Technical Requirements – Bioretention Units

Configuration and Dimensions of Bioretention

- Bioretention units should be designed to **CIRIA C753 The SuDS Manual, the requirements of this document and Appendix D - Figure D4**.
- The use of proprietary bioretention units is permitted and shall be considered on a case-by-case basis.
- Performance of the bioretention units is independent of shape. Any shape can be used successfully subject to its practicality for the proposed planting and required maintenance.
- A mulch layer shall be maintained over the planting area to reduce erosion and help retain more consistant moisture levels for plants.
- The soils shall be suitable to sustain the selected plants and to achieve a permeability of 250 to 1000mm per hour under design conditions. The depth of soil will vary depending upon the selected planting scheme, but shall be a minimum total depth of 1m deep,
- The soils, transition sand layer and coarse bedding material shall be wrapped in geotextile to avoid migration, as shown on **Appendix D, Figure D4**, with a minimum 150mm overlap at all joins. The geotextile shall meet the requirements of the **Specification for Highway Works Series 500**.

Hydraulic and Water Quality Design Criteria

- Ponding in bioretention units should not be able to exceed 150mm depth.
- The bioretention unit should be checked for design exceedance and modelled explicitly and holistically to demonstrate the impact on its downstream drainage components.
- The bioretention unit should be designed to be able to half-empty within 24 hours to allow for incoming flows from subsequent storms.
- The base of the bioretention unit shall be at least 1m above the highest seasonal or permanent groundwater table.
- The underdrain pipe design should follow standard hydraulic design methods. Bioretention units shall be provided with high level overflows and sub-surface collection pipe(s) to accommodate design exceedance.
- A maintenance pipe for cleaning the underdrain should be provided and secured against vandalism.
- The transition layer below the soil filter media shall consist of 100mm of coarse sand with a grain size of 0.5 to 1mm.
- The gravel around the perforated underdrain shall be 5 to 20mm size.

Selection and Siting

- A risk assessment shall include all relevant safety and environmental issues associated with siting bioretention units. This should be carried out by a qualified Engineer or Geologist where infiltration systems are proposed.
- The bioretention unit shall be designed for easy monitoring and maintenance.
- Bioretention units should be sited on stable ground: soil and groundwater conditions should be assessed to verify ground stability.
- Design of bioretention units must comply with groundwater protection regulations and with Environment Agency policy regarding infiltration.

Pre-treatment, inlets, and outlets

- Sheet flow is desirable to minimise erosion and increase treatment potential. Other options to provide an approximation of sheet flow, such as flush kerbs, shall be considered on a site-by-site basis.
- Point flow outlets such as road-gullies and pipes shall flow into a flow-spreader to minimise the risk of erosion and silting.
- To prevent the formation of a sediment lip around the boundary of the retention unit, a drop of 50 to 100mm shall be included at the hard-surface's edge.
- Bioretention units shall include a suitably designed overflow to safely convey flows arising from design exceedance events. Overflows shall be incorporated within the development strategy for managing exceedance events and routed to planned temporary storage areas.

Landscaping

- Existing site subsoils and site topsoils are to be reserved and re-laid in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Should existing site soils prove unsuitable (due to contamination for example) or insufficient then any relocated or imported subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use and relocated or imported topsoils must meet BS: 3882:2015 Specification for Topsoil.
- Bio-retention units shall utilise types and quantities of soils appropriate for the proposed vegetation and sufficient for plants' potential stature at maturity.
- Proposed vegetation shall comprise appropriate species suitable for the anticipated soil-types, water tolerance requirements and microclimate, and in-keeping with site character and wider landscape character.
- Confirmation of planting management responsibility, planting establishment schedule and long-term maintenance are required.
- All components should be in-keeping with local landscape character and any new stone should reflect local geology.

Health and Safety

- A risk assessment shall include all relevant safety and environmental issues associated with siting bioretention units.

Operation and maintenance

- Access, monitoring and maintenance requirements shall be incorporated into design and siting of the bioretention unit.
- All maintenance access points shall be clearly visible and documented in the Operation and Maintenance plan.

4.3.8 Site Control - Detention Basins

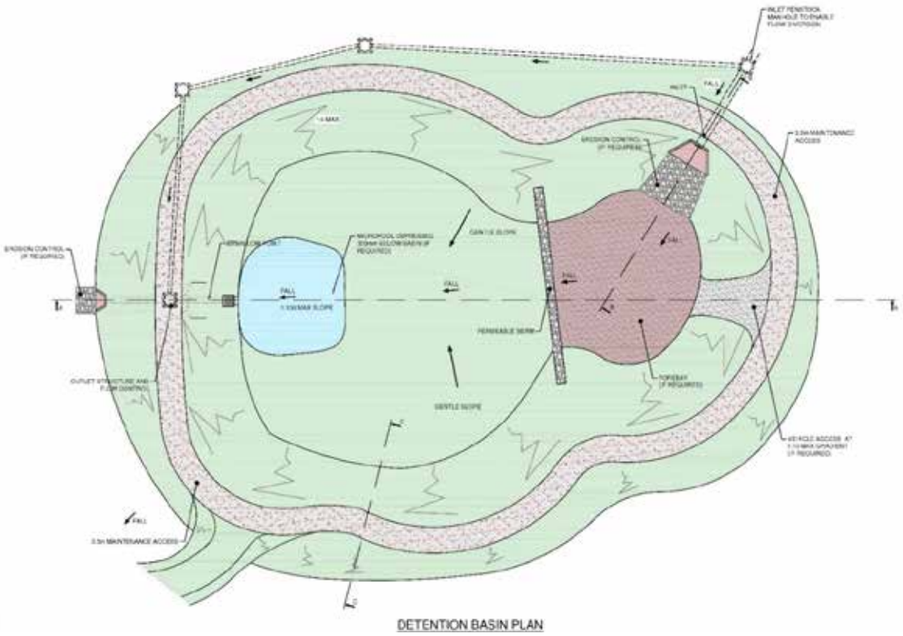
Dry vegetated depressions in the ground that have been designed to attenuate storm water flows, provide temporary storage and some pollution removal through settling of particulates. They can also be designed to function as recreational areas.

WAYMARKER

SEE MATRIX ID 20

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**
- **Design Manual for Roads and Bridges HA 103/06**



Key Characteristics

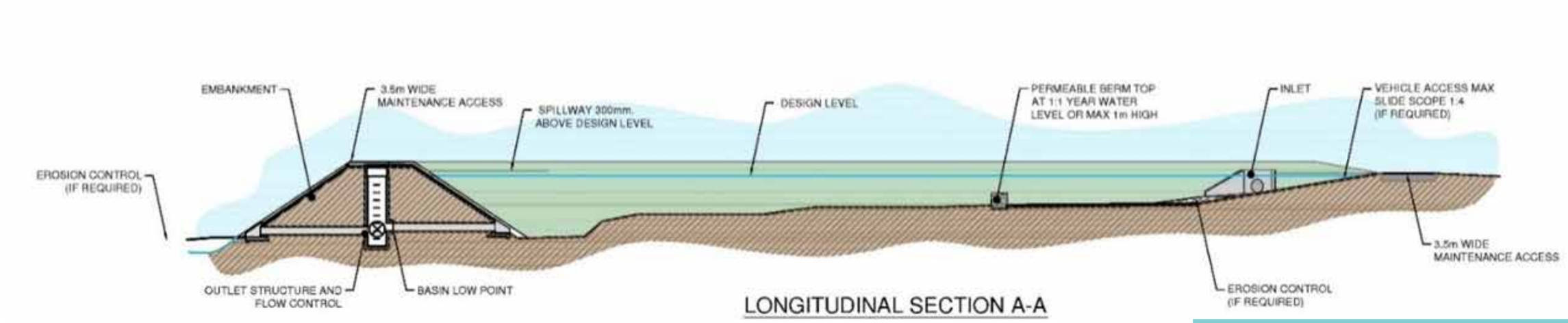
- Maximum water depth should not exceed 3m although local safety considerations may reduce this further
- Length/width ration should be between 1:2 and 5:1
- Contouring inside the basin can assist with defining areas likely to be inundated
- Maximum side slopes of 1 in 4 to allow easy access
- Sediment forebay or pre-treatment option will improve the water quality
- Surface water bypass and drawdown is required to facilitate safe maintenance
- Can be enhanced to improve ecological value
- Large outlet pipes should be screened

Main Considerations

- Low volume and pollution reduction
- Should enhance and integrate with site's topography
- Excavation proposals must include appropriate soils' management and re-use
- Requires landscaping and management
- To enhance their ecological value detention basins should be designed to retain a proportion of permanent open water habitat.

Key Benefits

- Can be applied to large contributing catchments
- Works well in low permeability soils
- Can be incorporated into larger landscaping
- Good flow control
- Easy to design, build and maintain
- Can have amenity value if designed carefully



Technical Requirements – Detention Basins

Configuration and Dimensions of Detention Basins

- Detention basins should be designed to CIRIA 753 The SuDS Manual, the requirements of this document and Appendix D - Figure D6.
- An irregular shape should be used for maximising the aesthetic aspect of the detention basins. Angular shapes should be avoided as far as practical in the design of basin elements and details.
- As a minimum detention basins should contain the following sections:
  a. The sediment forebay if expected sediment loading is significantly high
  b. The main basin
  c. A part of the main basin depressed to form a micropool
- Additional elements to be included in the design of basins should be an inflow structure, an emergency overflow structure, bypass sewer piping and outlet with flow control device. The sedimentation forebay shall be separated from the permanent pool by a permeable berm.
- Detention basin bases shall be designed with gentle inner slopes (1 to 100 maximum) towards the centre.
- Embankment inner slopes shall be less than 1 to 4.
- The maximum design water depth of the basins shall be 3m.
- The length to width ratio for online detention basins shall be between 5:1 to 2:1.
- The maximum volume of the detention basins shall be 5000m^3

Hydraulic and Water Quality Design Criteria

- The drain down time should be a minimum of 24 hours, to allow for sedimentation to take place.

Selection and Siting

- A risk assessment should include all relevant safety issues associated with siting a basin.
- Siting of detention basins should follow a multicriteria analysis to provide the widest benefits to the public.
- The 100yr +Climate Change water level in any detention basin shall be at least 600mm below the finished floor level of any adjacent properties.
- Consideration should be given to the potential failure of any embankment and the subsequent flood flows through, and downstream, of the site.
- The maximum 1-year return period event basin water level shall be higher than the appropriate return period event water level of the adjacent watercourse, as specified by the Local Authority as part of its flood prevention duties. Appropriate hydraulic checks on the implications of high watercourse levels should be made, where appropriate.
- At sites of high groundwater table, the basin bottom level shall be built 500mm above the annual maximum groundwater level.
- At sites with contaminated soil, detention basins shall be designed water tight. Unlined detention basins should not be used on brownfield sites unless it has been clearly demonstrated that there is no risk of groundwater pollution.

Pre-treatment, inlets, and outlets

- Energy dissipation and erosion protection should be provided at the basin inlets. Basin inlets to be at least 300mm higher than the base of the basin.
- Safety grilles should be provided in all pipe inlets diameter greater than 350mm. During extreme events, operatives should be able to access safely the inlet pipe for cleaning.
- Detention basins should be designed with a slight depression in the inlet structures to encourage the water quality benefits of bioretention processes.
- A manhole and a flow control device should be provided at the outlet of the basin. Discharge from the basin should be limited to the allowable Council limit. The flow conditions in the receiving stream downstream of the basin should be modelled to the satisfaction of the Council.
- An overflow structure should be provided at the outlet. A spillway shall also be provided for an emergency. The spillway should be designed as a controlled overtopping of the embankment. It should not be designed to pass through the embankment. Emergency overflows should be routed back to the receiving watercourse to protect downstream properties.
- The top of embankment at the spillway should be 300mm above the 100 year + climate change allowance storm event.
- The outlet structure should be designed to operate and discharge the design discharge flow rate up to the 1 in 100 year + climate change 24-hour storm event. Appropriate hydraulic checks on the implications of high watercourse levels shall be performed, where applicable.

Landscaping

- Existing site subsoils and site topsoils are to be reserved and re-laid in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Should existing site soils prove unsuitable (due to contamination for example) or insufficient then any relocated or imported subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use and relocated or imported topsoils must meet BS: 3882:2015 Specification for Topsoil.
- Detention basins shall be overlaid with soil at depths appropriate for the proposed vegetation. Proposed vegetation shall comprise native species tolerant of the anticipated soil-types, water tolerance requirements and microclimate.
- Consideration should be given to the suitable aesthetic design of the detention basin and its surrounds to enhance the visual amenity of the site and to reflect the landscape character of its location.
- Suitable native planting should be selected to maximise the ecological value of the detention basin and surrounds.
- To increase the biodiversity of detention basins specialist SuDS Turfs are available which include a range of plant species to produce habitats tolerant of both drought conditions and periodic flooding.

Amenity

- Suitable native planting should be selected to maximise the ecological value of the detention basin and surrounds.
- The dual use of the detention basin as passive public open space for recreation activities should be considered where the area is subject to flooding from events less frequent than the 1-year return period and where it can be clearly distinguished from the area providing flood storage for frequent events.

Safety

- A safety risk assessment shall examine all relevant safety issues for both operatives and the public.
- The maximum cross slope of the embankment shall be 1:4 to allow to provide safe working conditions for grass cutting.
- Dense vegetation around the external perimeter of the detention basin is discouraged to allow high levels of visibility of the area. Detention basins should not normally require to be fenced.

Operation and Maintenance

- Access road for maintenance of 3.5m minimum width access road shall be provided.
- Existing site subsoils and site topsoils are to be reserved and re-laid in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Should existing site soils prove unsuitable (due to contamination for example) or insufficient then any relocated or imported subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use and relocated or imported topsoils must meet BS: 3882:2015 Specification for Topsoil.
- Design should be carefully considered to ensure it:
  - is permeable,
  - incorporates reused or recycled materials in its construction
  - utilises appropriate wearing-course materials which reflect local landscape character
- A summary of the maintenance activities is provided below and shall be considered for basin accessibility design:
  a. Removal of litter, debris and grass cutting.
  b. Removal of unwanted plant species and dead plant growth.
  c. Removal of aquatic plants if present.
  d. Bank vegetation cutting and removal.
  e. Sediment removal from forebays and micropools.
  f. Reseeding of areas with poor vegetation growth.

Oil and sediment separators can be used as pre-treatment, or as a last resort, site treatment for the removal of sediment, litter, and oil from surface water run-off. These systems can be installed in a standard size manhole. Captured pollutants are retained within the separator, providing a single point of maintenance.

Key Benefits

Design Standards

- Require designing so that regular maintenance can be undertaken
- As the vortex separator requires a velocity to function, a filtration chamber or detention basin should be used for small flow events

Best Practice

- Most effective for removal of heavy particulate matter rather than solids or dissolved pollutants

Key Benefits

Design Standards

- **Must comply with BS EN standards for separating systems**
- Require maintenance to prevent re-suspension of pollution
- Should be situated close to the pollution source

Best Practice

- Depending on the location to which the water is to be drained and the type / severity of pollutants, different classes of separators should be used

Technical Requirements – Oil and Sediment Separators

Configuration and Dimensions of Oil and Sediment Separators

- Oil separators used for the removal of oil and grease present in storm waters operate on the flotation principle. Separated oils are floating on the water surface inside the unit.
- The use of proprietary units is permitted and shall be considered on a case by case basis.

Hydraulic and Water Quality Design Criteria

- Facility design shall be in accordance with BS EN 858-1:2002 Separator systems for light liquids (e.g. oil and petrol). Principles of product design, performance, and testing, marking and quality control.

Selection and Siting

- Oil separator units should be installed underground. The installation site shall be within passive open space accessible by a vacuum tanker for cleaning and maintenance.

Health and Safety

- A risk assessment shall include all relevant safety and environmental issues associated with siting the oil separators.

Operation and maintenance

- Regular inspection of the unit in accordance with the manufacturer's maintenance requirements but no longer than every six months. The volumes of bottom sludge and the floating layer shall be estimated and cleaning of the unit should be scheduled.
- Cleaning of the oil separator shall be performed by a licenced waste management company to ensure appropriate disposal of the collected oils, floatables and sediment.
- Following cleaning the separator shall be filled with clean water, ready to fully operate with the first rainfall.

4.3.10 Site Control - Underground Storage Structure

Underground structures with capacity to store water below ground.

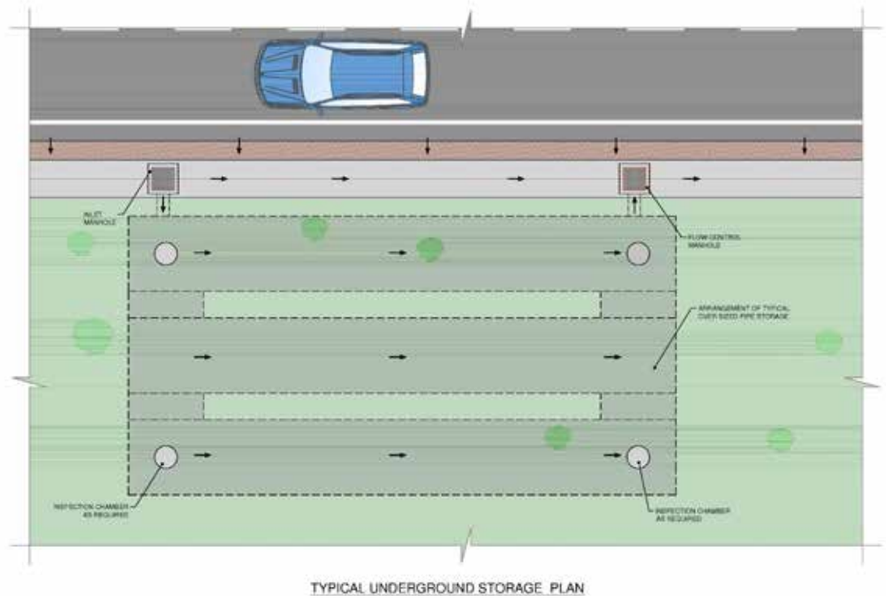
These structures only provide water-attenuation and not water-treatment therefore cleaning of the water is required prior to release.

WAYMARKER

SEE MATRIX ID 2

Refer to:

- **CIRIA C753 The SuDS Manual Part D.**
- **Design Manual for Roads and Bridges HA 103/06**



TYPICAL UNDERGROUND STORAGE PLAN

Key Characteristics

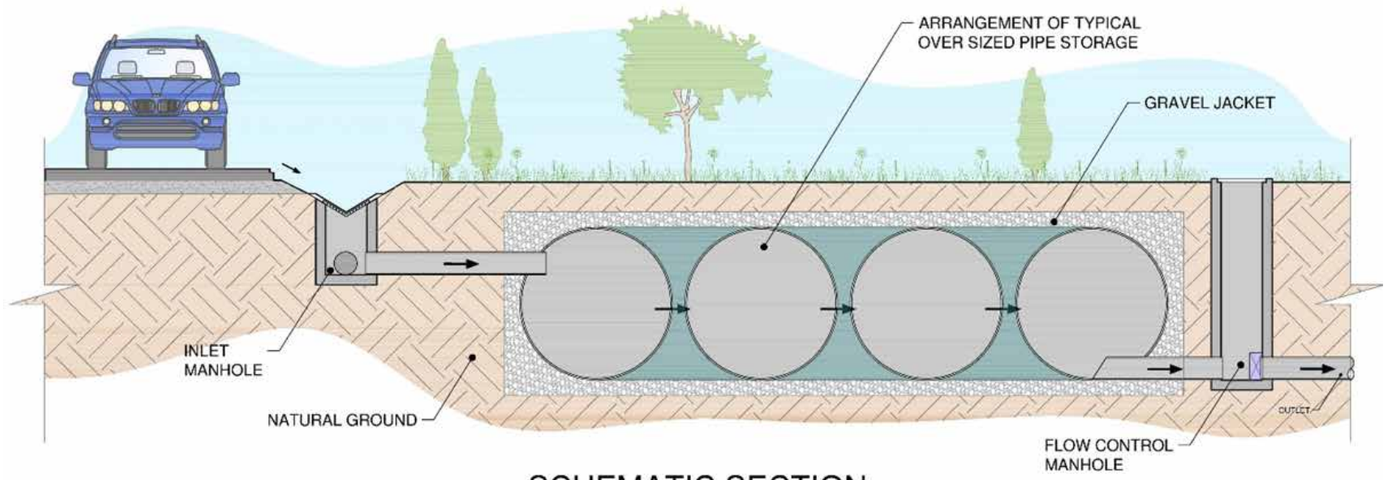
- Use underground storage structures only where above ground space is not available
- Underground storage structures must be part of a wider SuDS Management Train
- Storage requires suitable internal void ration of the structure (>90%)
- Structure requires regular silt removal
- Outflow may require pollution treatment

Main Considerations

- The storage structure must fit into a planned SuDS Management Train to provide the required silt removal and pollution treatment
- Excavation proposals must include appropriate soils' management and re-use
- Examine possibility of enabling infiltration through geotextile-lined layers
- Designs should consider expected and potential loading to ensure avoidance of structural failure and collapse
- Stable ground is required
- monitoring and maintenance of underground structures must be safe, programmed, practical and viable

Key Benefits

- Can be designed to attenuate stormwater where no surface space available



SCHEMATIC SECTION

Technical Requirements – Underground Storage

Configuration and Dimensions of Underground Storage

- The use of underground storage (which provides no surface water treatment) shall only be allowed where the use of other SuDS methods are inappropriate.
- The design of the underground storage shall aim to minimise sedimentation. Underground storage should be designed to the **CIRIA C753 The SuDS Manual Part D, the requirements of this document and Appendix D - Figure D7**.
- Existing site subsoils and site topsoils are to be reserved and re-laid in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Should existing site soils prove unsuitable (due to contamination for example) or insufficient then any relocated or imported subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use and relocated or imported topsoils must meet BS: 3882:2015 Specification for Topsoil.
- Larger underground storage structures shall permit man-entry to enable inspection and maintenance activities to be carried out within the storage chambers. This shall include suitable clear opening and internal step irons for safe access/egress. Smaller underground storage structures should have suitable access points to permit remote cleaning and inspection to be readily carried out. Covers should be large enough to allow man-entry with breathing apparatus. Entry points should be on level ground to permit the erection of man-entry safety tripods.
- Design options that shall be acceptable for public areas are pre-fabricated structures, oversized pipes or cast in-situ concrete structures.
- The maximum water level in any underground storage structure shall be at least 600mm below the lowest floor level of any adjacent premises.
- Underground storage should normally be designed as off-line storage and should be sized in accordance with the hydraulic design requirements.
- Low-flow channels should be provided.
- The minimum gradient for storage systems should be 1:100 for off-line tanks and 1:200 for on-line tanks to minimise sedimentation.

Selection and Siting

- Underground storage should not be located beneath public areas or roads.
- Existing and proposed tree root zones must be avoided or appropriately accomodated, including allowance for growth, appropriate backfill soils for local soil-type
- Ecological constraints must be accounted for such as possibility of leakage, locally-appropriate backfill soils and leaching potential
- Access route to components requires careful integration with site features

Pre-treatment, inlets, and outlets

- The outlet structure should be designed to operate and discharge the design-limiting discharge rates. Appropriate hydraulic checks on the implications of high downstream water levels should be made, where appropriate, and take account of the receiving watercourse or downstream sewer capacity.
- Flow controls shall be designed to the requirements of **Sewers for Adoption 7th Edition**. The minimum size of any orifice should be 75mm diameter.
- The outlet structure should have an overflow provided.

Safety

- A risk assessment should cover all aspects of safety, including access, for operatives during maintenance operations.
- A minimum of two access points (upstream and downstream) should be provided with maximum intervals between access points of 50m.
- Ventilation should be provided to minimise the risk of build-up of dangerous gases.

Operation and maintenance

- Operation and maintenance of underground structures must be integrated in their design.
- Monitoring and maintenance responsibility must be confirmed.
- A programme of safe, practical and viable monitoring and maintenance is required.
- All maintenance access points shall be clearly visible and documented in the Operation and Maintenance plan.

4.4 Regional Control - Retention Pond

Retention ponds are structures that provide both retention and treatment of contaminated storm water run-off. Retention ponds include a permanent pool of water into which storm water run-off is directed and outflows are controlled to reduce flow rate. A well-designed retention pond provides a community asset and opportunities for new habitats. The pond's physical, biological, and chemical processes work to remove storm water pollutants. Sedimentation processes remove particulates, organic matter and metals, while dissolved metals and nutrients are removed through biological uptake. In general a higher-level storm water quantity control can be achieved as well providing positive amenity benefits.

WAYMARKER

SEE MATRIX ID 1

For best practice refer to:

- **CIRIA C753 The SuDS Manual Part D.**
- **ROSPA Safety at Inland Water Sites - Operational Guidelines.**

Key Characteristics

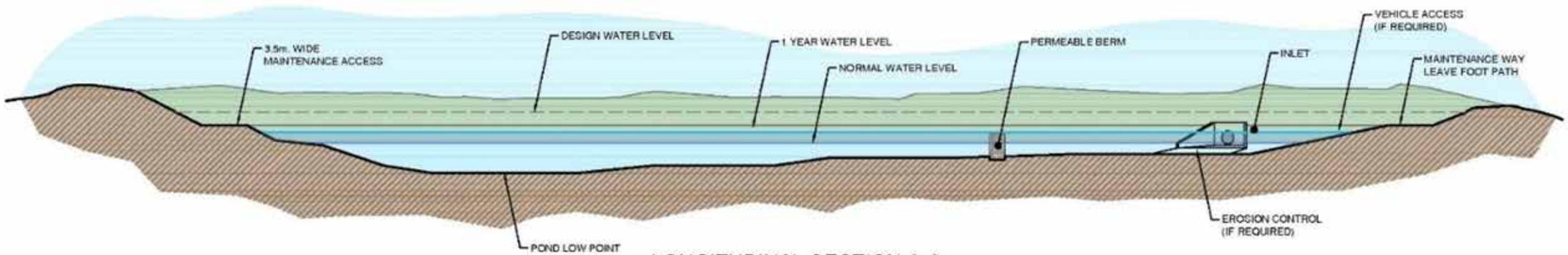
- The pond should have 4 zones - sediment forebay, permanent pool, temporary storage volume and shallow, wetland-type zone
- Located outside the floodplain
- Water quality treatment levels required should determine design
- Depth should be <2m to prevent stratification
- A liner may be required to prevent infiltration if the water is polluted or if the pond is near an aquifer
- Maintenance should account for invasive species
- Health and safety should be considered to restrict proximity of the public to the pond

Main Considerations

- Large area of land required
- Not suited to sloping sites
- Should enhance and integrate with site's topography
- Excavation proposals must include appropriate soils' management and re-use
- Perceived safety risks need to be managed
- Ecological advice must be sought regarding existing potentially high value habitats
- Whilst they have some nature conservation value, retention ponds should not be promoted as compensation for any proposed loss of existing wetlands or ponds.

Key Benefits

- Can be applied to large contributing catchments
- Works well in low permeability soils and permeable soils with a liner
- Good flow control
- Easy to design, building, maintain
- Can be used for amenity use
- Can incorporate a drawdown zone to reduce run-off volume



LONGITUDINAL SECTION A-A

Technical Requirements – Retention Ponds

Configuration and Dimensions of Retention Ponds

- Retention ponds should be designed to **CIRIA 753 The SuDS Manual and the requirements of this of this document and Appendix D - Figure D5**.
- Existing site subsoils and site topsoils are to be reserved and re-laid in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Should existing site soils prove unsuitable (due to contamination for example) or insufficient then any relocated or imported subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use and relocated or imported topsoils must meet BS: 3882:2015 Specification for Topsoil.
- The aesthetic element should prevail in the design of ponds. Angular shapes and symmetry should be avoided in the design of pond layout and details. All ponds should contain several zones:
  a. The sediment forebay
  b. The permanent pool
  c. The temporary storage volume
  d. An aquatic bench
- Additional elements to be included in the design of ponds include:
  a. A 3.5m wide maintenance route, suitable for vehicles.
  b. An inflow structure.
  c. A bypass sewer,
  d. An outlet with flow control and drain down chamber.
  e. An emergency overflow structure,
- The sedimentation forebay should be separated from the permanent pool by a permeable berm and have an average width of 5 to 10 times the inlet pipe diameter and a length of 10m or four times the width, whichever is greater.
- Inlets and outlets shall be placed at the maximum distance to maximise flow paths.
- The flow path length to width ratio shall be 3:1 minimum to avoid short circuiting.
- A maximum depth of 2m should be used for the permanent pool to prevent anoxic conditions and water stratification. The minimum water depth of the permanent water zone shall be 1.2m to prevent plant growth.
- The maximum depth of attenuation storage should not exceed 2m.
- The aquatic bench should be a minimum of 2m continuous around the pond, except at inlets and should range in depth up to 450mm below the design permanent pool level.
- The top level of the permeable berm shall be 150mm below the permanent pool water level.
- Energy dissipation should be provided at the inlet and outlet to the pond
- Ponds should be designed to hold a permanent volume of water equivalent to the treatment volume, also referred to as Vt.
- The treatment volume (Vt) should be calculated using the fixed depth method of 15mm of rainfall from impermeable (including paved and roofed) surfaces draining to the pond.
- The volume of the sediment forebay should be approximately 10% of the pond's permanent volume (Vt).
- The maximum volume of any retention pond should be 5000m3
- The Sedimentation forebay should be designed to provide efficient deposition of sediment and should be accessible for cleaning and maintenance operations in its entire area.
- The floor of the sedimentation forebay should be a minimum of 300mm above the main pond bottom
- The design should include a safe and efficient means of draining the lowest point in the detention pond.

Hydraulic and Water Quality Design Criteria

Ponds hydraulic design

- The top of the embankment should be 600mm above the maximum design water level.
- The outlet structure should be designed to operate and discharge the design discharge flow rates up to the 100yr + climate change 6-hour storm event.
- Ponds should provide a minimum permanent pool volume equal to one times the treatment volume for paved surfaces.
- Pond liners should be finished at a height 150mm below the outlet control unit, where appropriate, to encourage infiltration and to minimise discharges to the receiving water for small events. However, they should not be lower than the invert level if used on a site with a sensitive underlying groundwater zone or if used to treat runoff from a potential pollution hotspot.
- The by-pass sewer network should be designed for flows equal to the incoming flows.
- The hydraulic capacity of the draw down facility for emptying the pond should consider the geotechnical stability of the pond and associated embankments.

Selection and Siting

- The risk assessment should include all relevant safety issues associated with siting a pond.
- A detailed analysis and impact assessment of a flood exceedance event indicating flow paths shall be undertaken and submitted to Council. Where ponds are impounded behind engineered embankments, the unlikely scenario of embankment failure should be examined and potential impacts downstream of the pond assessed.
- The siting of retention ponds should follow a multicriteria analysis to provide the widest benefits to the public.
- The highest design water level in retention ponds should be at least 600mm below the floor level of any adjacent premises.
- The maximum 1-year return period event pond water level should be higher than the appropriate return period event water level of the adjacent watercourse, as specified by the Lead Local Flood Authority. Appropriate hydraulic checks on the implications of high watercourse levels should be made, where appropriate.
- In sites containing contaminated soils or contaminated groundwater, ponds should be fully contained within an impermeable liner to prevent cross contamination of surface water.

Pre-treatment, inlets, and outlets

- Bypass structures shall be provided at both the inlet and outlet chambers. The risk to the embankment stability shall be kept to a minimum.
- A man entry chamber shall be provided at the inlet of the pond.
- The invert level of the incoming sewers to the inlet structure shall be at or above the 1-year water level in the pond.
- A man entry chamber shall be provided for the pond outlet equipped with a flow control device. Minimum diameter of the control device shall be 75mm.
- Bypass structures shall be provided at both the inlet and outlet chambers. The risk to the embankment stability shall be kept to a minimum.

Landscaping

- Ponds should be designed to enhance the visual amenity of the site and to reflect the landscape character of its location.
- Existing site subsoils and site topsoils are to be reserved and re-laid in accordance with DEFRA's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Should existing site soils prove unsuitable (due to contamination for example) or insufficient then any relocated or imported subsoil must meet BS 8601:2013 Specification for Subsoil and Requirements for Use and relocated or imported topsoils must meet BS: 3882:2015 Specification for Topsoil.
- Ponds should be planted and seeded with native species to promote variation in the physical habitat value of the pond.
- Trees shall not be planted within the pond or embankments needed to retain water.

Ecology

- In order to maximise their ecological value retention ponds should be designed with scalloped sinuous edges to maximise their shore-line and a variety of depths with extensive areas of shallow water. The incorporation of gently sloping sides will ensure that shallow water in provided regardless of the depth of water retained.

Images: K.Swindells

Safety

- A safety risk assessment shall examine all relevant safety issues for both operatives and the public.
- The maximum side slope between the maintenance access path and the aquatic bench shall be 1:4 to allow easy egress from the pond.
- The aquatic bench should be planted with appropriate species to achieve a high-density barrier when they mature which effectively dissuades people from trying to get access to the open water. Dense or tall vegetation (bushes and trees) around the external perimeter of the ponds is discouraged to provide high levels of visibility of the whole pond area.
- Barrier fencing must be provided at all retention ponds. All access gates must be lockable. The locks must be childproof. The minimum height of the fence shall be 1.1m and shall be constructed in such a manner that there are no step-ups to reduce the 1.1m minimum height. The form of the fence should not detract from the aesthetic value of the local environment.
- All exposed pipe inlets or outlets, which are larger than 350mm, should normally have safety grilles. However, where grilles can be avoided by the use of appropriate design to restrict human access into the structures, this is preferred. Grille designs should be suitable to minimise the risk of blockage, have safe access for clearing during extreme events and prevent unauthorised access particularly by children and dogs. A typical outfall safety grille is illustrated in **Appendix D, Figure D6**.
- Bar spacing should not exceed 150mm and should not be less than 75mm to avoid trapping small debris.
- Consideration should be given to the potential failure of any embankment and the subsequent flood flows through, and downstream, of the site.
- Warning signs should be erected providing information on pond function, basic data, and prohibition of swimming.
- The perimeter of the pond 1m inside and outside the water's edge (water level during dry periods) should have a gradient of less than 1:10. This shall provide a margin which is attractive to flora and fauna and is a disincentive for people to enter the pond. Other areas (above and below the pond) shall have gradients of less than 1:4.

Operation and maintenance

- The pond shall be accessible to cleaning equipment by an access road 3.5m minimum width.
- A summary of the maintenance activities is given below and shall be considered for pond accessibility design.
  - a. Removal of litter, debris and grass cutting.
  - b. Removal of nuisance plant species and dead plant growth.
  - c. Removal of submerged and emergent aquatic plants if present.
  - d. Bank vegetation cutting and removal.
  - e. Sediment removal from forebays and main pond body.
  - f. Re-seeding and re-planting as required.
- Pond outlet design shall provide for removal of blockages.

4.6 Component Selection Matrix

The types of SuDS should be chosen to suit the local conditions. To assist in the selection of appropriate SuDS, the following page includes a **SuDS Suitability Selection Matrix** which identifies the various benefits and constraints of common SuDS techniques.

This matrix table compares the various SuDS techniques against the following criteria:

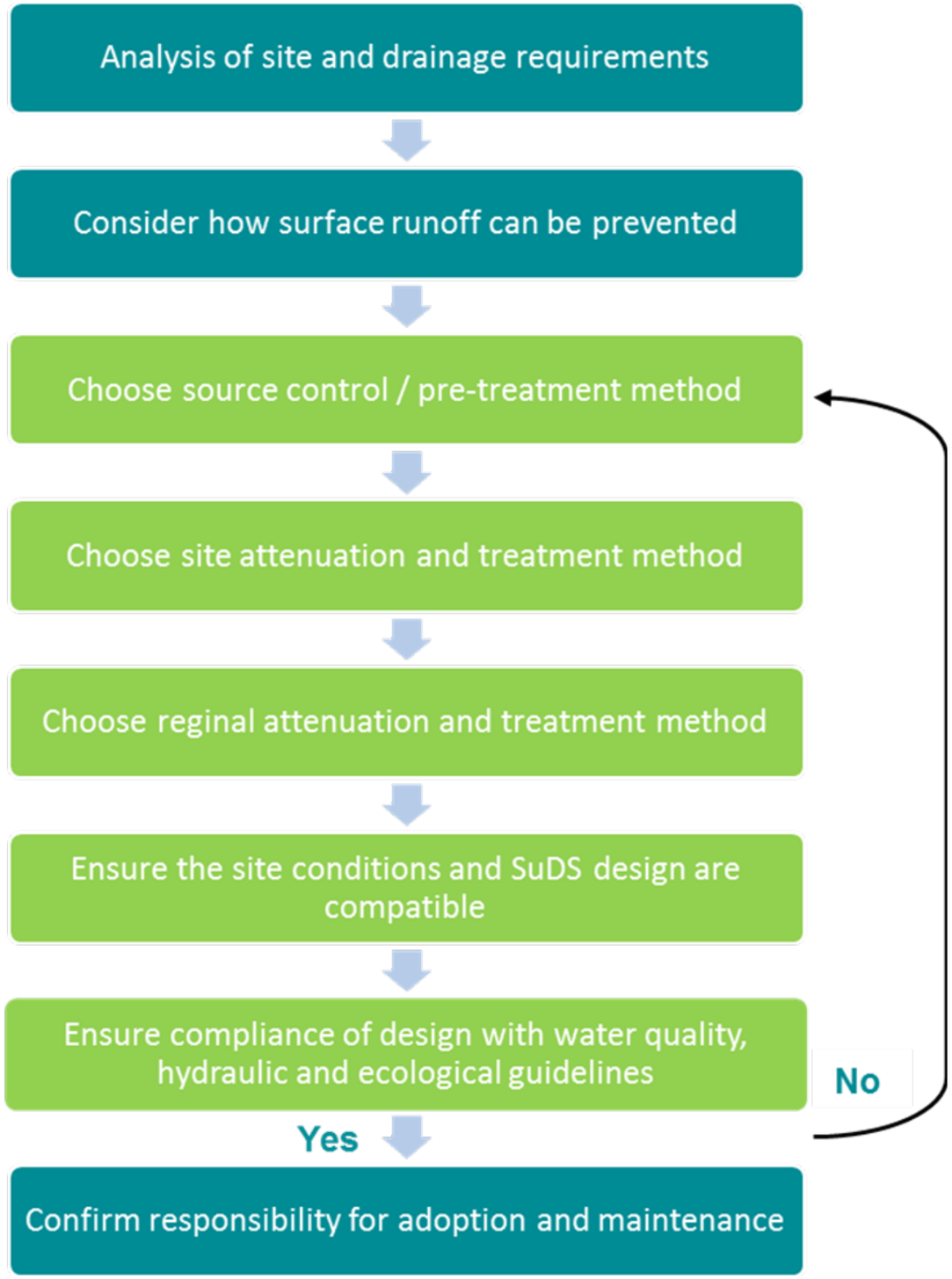
- Land use suitability
- Water quantity suitability
- Water quality suitability
- Environmental benefits
- Cost suitability

4.8 Development Tools for SuDS

Development tools can also be used to help design SuDS Trains which effectively respond to the unique characteristics of an individual site. This can be useful when considering how SuDS components work together and the impact these features can have in mitigating flood risk.

An example of such a tool is https://www.innovyze.com/en-us/products/drainage-design though there are a variety of tools available which offer the same service.

Figure 4-2: How to Select SuDS Components



SuDS Suitability Selection Matrix

General Suitability					Landuse Suitability								Water Quantity Suitability	Water Quality Suitability							Environmental Benefits		Cost Suitability	
																Removal Treatment Potential								
SUDS Group	ID	Technique	Suitability Conditions	Management Train Suitability	Low Density (1)	Residential (1 to 2)	Local Roads (2)	Commercial (2 to 3)	Industrial (2 to 3)	Construction Site (1)*	Brownfield (1)	Contaminated Land		Water Quality Removal Technique	Pollutants Removed	TSS	Heavy Metals	Nutrients	Bacteria	FSSDP	Community Appeal	Habitat Creation Potential	Maintenance	Capital
Retention	1	Retention pond	A, F	Site control, regional control	Y	Y	Y	Y	Y	Y	Y	Y	Detention, infiltration*, water harvesting	Sedimentation, filtration, adsorption, biodegradation, volatisation, precipitation, uptake by plants, de-nitrification	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	M	M	M	H	H[!]	H	M	M
	2	Subsurface storage		Conveyance, site control	Y	Y	Y[1]	Y[1]	Y[1]	Y	Y	Y[1]	Conveyance, detention	Sedimentation*, filtration*	Nutrients, sediments, metals, hydrocarbons	L	L	L	L	L	H	L	L	M
Wetland	3	Shallow wetland	B, D, F, I	Conveyance*, site control, regional control	Y	Y	Y	Y	Y	N	Y	Y	Conveyance*, detention, infiltration*, water harvesting	Sedimentation, filtration, adsorption, biodegradation, volatisation, precipitation, uptake by plants, de-nitrification	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	M	H	M	H	H[!]	H	H	H
	4	Extended detention wetland	B, D, F, I	Conveyance*, site control, regional control	Y	Y	Y	Y	Y	N	Y	Y	Conveyance*, detention, infiltration*, water harvesting	Sedimentation, filtration, adsorption, biodegradation, volatisation, precipitation, uptake by plants, de-nitrification	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	M	H	M	H	H[!]	H	H	H
	5	Pond / wetland	B, D, F, I	Conveyance*, site control, regional control	Y	Y	Y	Y	Y	N	Y	Y	Conveyance*, detention, infiltration*, water harvesting	Sedimentation, filtration, adsorption, biodegradation, volatisation, precipitation, uptake by plants, de-nitrification	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	M	H	M	H	H[!]	H	H	H
	6	Pocket wetland	B, D, H	Conveyance*, site control, regional control	Y	Y	Y	Y	Y	N	Y	Y	Conveyance*, detention, infiltration*, water harvesting	Sedimentation, filtration, adsorption, biodegradation, volatisation, precipitation, uptake by plants, de-nitrification	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	M	H	M	H	M[!]	H	H	H
	7	Submerged gravel wetland	B, D, F, I	Conveyance*, site control, regional control	Y	Y	Y	Y	Y	N	Y	Y	Conveyance*, detention, infiltration*, water harvesting	Sedimentation, filtration, adsorption, biodegradation, volatisation, precipitation, uptake by plants, de-nitrification	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	M	H	M	H	L	M	M	H
	8	Wetland channel	B, D, F, I	Conveyance*, site control, regional control	Y	Y	Y	Y	Y	N	Y	Y	Conveyance*, detention, infiltration*, water harvesting	Sedimentation, filtration, adsorption, volatisation, precipitation, uptake by plants, de-nitrification	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	M	H	M	H	H[!]	H	H	H
Source control	9	Green roof	G, H	Prevention, pre-treatment, source control	Y	Y	N	Y	Y	N	Y	Y[1]	Detention	Filtration, adsorption, volatisation, precipitation, uptake by plants, de-nitrification, biodegradation	Sediments, hydrocarbons, metals, pesticides, chlorides, cyanides, organic matter, BOD, nutrients	N/A	N/A	N/A	N/A	H	H	H	H	H
	10	Rain water harvesting	H	Prevention, conveyance*, source control	Y	Y	N	Y	N	N	Y	Y[1]	Conveyance*, detention*, infiltration, water harvesting*	Sedimentation*, filtration*, adsorption*, biodegradation*, volatisation*, precipitation*, uptake by plants*, de-nitrification*	Chlorides, sediments, hydrocarbons, metals, pesticides, chlorides, cyanides, organic matter, BOD, nutrients	M	L	L	L	N/A	M[!]	L	H	H
	11	Pervious pavement	C, D	Prevention, source control, site control*	Y	Y	N	Y	Y	N	Y	Y*	Detention, infiltration, water harvesting*	Sedimentation, filtration, adsorption, biodegradation, volatisation	Sediments, hydrocarbons, metals, pesticides, nutrients, cyanides, organic matter, BOD	H	H	H	H	H	M	L	M	M
Infiltration	12	Infiltration trench	C, H, J	Conveyance*, source control, site control	Y	Y	Y	Y	N	N	Y	Y[1]*	Conveyance*, detention, infiltration	Filtration, adsorption, biodegradation, volatisation	Sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	H	H	M	H	M	L	L	L
	13	Infiltration basin	C, F, J	Site control, regional control	Y	Y	Y	Y	N	N	Y	Y[1]*	Detention, infiltration	Filtration, adsorption, biodegradation, volatisation	Sediments, hydrocarbons, metals, pesticides, cyanides, nutrients, organic matter, BOD	H	H	H	M	H	H[!]	M	M	L
	14	Soakaway	C, H, J	Source control	Y	Y	Y	Y	N	N	Y	Y*	Infiltration	Filtration, adsorption, biodegradation	Sediments, hydrocarbons, metals, nutrients, pesticides, organic matter, BOD	H	H	H	M	H	M	L	L	M
Filtration	15	Surface sand filter	C, D, F, K	Pre-treatment, site control, regional control*	N	Y	Y	Y	Y	N	Y	Y	Detention, infiltration*	Filtration, adsorption, biodegradation, volatisation, precipitation	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	H	H	M	H	L	M	M	H
	16	Sub-surface sand filter	C, D, H, K	Pre-treatment, site control, regional control*	N	Y	Y	Y	Y	N	Y	Y	Detention, infiltration*	Filtration, adsorption, biodegradation, volatisation, precipitation	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	H	H	M	H	L	L	M	H
	17	Perimeter sand filter	C, D, H	Pre-treatment, site control, regional control*	N	N	Y	Y	Y	N	Y	Y	Detention, infiltration*	Filtration, adsorption, biodegradation, volatisation, precipitation	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	H	H	M	H	L	L	M	H
	18	Bioretention / filter strip	C, D, F, H	Pre-treatment, source control	Y	Y	Y	Y	Y	N	Y	Y	Conveyance*, detention*, infiltration*	Sedimentation, filtration, adsorption, biodegradation	Nutrients, sediments, hydrocarbons, metals, pesticides, organic matter, BOD,	H	H	H	M	H	H	H	H	M
	19	Filter trench	A, C, D, H	Conveyance, source control, site control*	Y	Y	Y	Y	Y	N	Y	Y	Conveyance, detention	Filtration, adsorption, biodegradation, volatisation	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	H	H	H	M	H	M	L	M	M
Detention	20	Detention basin	A, C, F, K	Site control, regional control	Y	Y	Y	Y	Y	Y	Y	Y	Detention	Sedimentation, filtration*, adsorption*, biodegradation, uptake by plants*	Nutrients, sediments, hydrocarbons, metals, pesticides, cyanides, organic matter, BOD	M	M	L	L	L	H[!]	M	L	L
Open channels	21	Conveyance swale	C, E, F, H, J	Conveyance, pre-treatment, site control	Y	Y	Y	Y	Y	Y	Y	Y	Conveyance*, detention*, infiltration*	Sedimentation, filtration, adsorption, uptake by plants*, biodegradation	Nutrients, sediments, hydrocarbons, metals, pesticides, organic matter, BOD	H	M	M	M	H	M[!]	M	L	L
	22	Enhanced dry swale	C, E, F,H, J	Conveyance, pre-treatment, site control	Y	Y	Y	Y	Y	Y	Y	Y	Conveyance*, detention*, infiltration*	Sedimentation, filtration, adsorption, uptake by plants*, biodegradation	Nutrients, sediments, hydrocarbons, metals, pesticides, organic matter, BOD	H	H	H	M	H	M[!]	M	L	M
	23	Enhanced wet swale	B, E, F, H, J	Conveyance, pre-treatment, site control	Y	Y	Y	Y	Y	Y	Y	Y	Conveyance*, detention*, infiltration*	Sedimentation, filtration, adsorption, uptake by plants*, biodegradation	Nutrients, sediments, hydrocarbons, metals, pesticides, organic matter, BOD	H	H	M	H	H	M[!]	H	M	M

Item	Description
Blue outline	Infiltration-dependent components; will only work with permeable soil
	Not suitable / not applicable
	Potentially suitable providing that design prevents mobilisation of contamination
	Suitable
Y	Yes
N	No
L	Low
M	Medium
H	High
A	Liner is required for permeable soil
B	Surface base flow may be required
C	Minimum depth to water table shouldn't be less than 1 m
D	Slope should not exceed 5%
E	Follows contours for slope greater than 5%
F	Only suitable for large spaces
G	A roof has to be able to support 2 KN/m2 for extensive, 7 KN/m3 for semi-intensive and 10 KN/m3 for intensive configurations.
H	Not suitable if area draining into SUDS is more than 2 ha
I	Only suitable where high flows are diverted around SUDS component for area of more than 2 ha
J	Only if available head is less than 1 m
K	Only if available head is between 1 and 2 m
1	One treatment train stage may be sufficient
*	Some opportunities, subject to design
*	Will require draw-down and rehabilitation following construction activity, prior to use as a permanent drainage system.
(...)	Number of treatment train stages required.
!	There may be some public safety concern associated with open water which needs to be addressed at the design stage.
FSSDP	Fine Suspended Sediments and Dissolved Pollutants

5
SuDS MAINTENANCE & MANAGEMENT

5 SuDS Maintenance & Management

WHAT THIS SECTION WILL COVER:

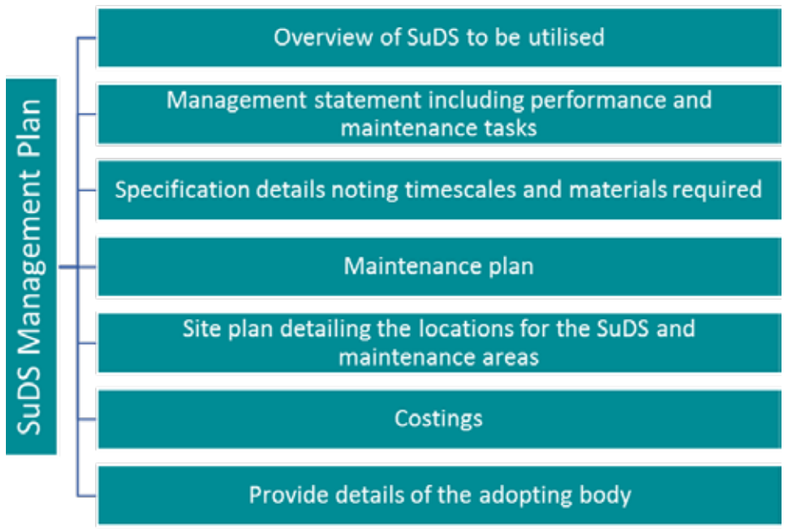
- SuDS maintenance and management plan
- Who should undertake maintenance?
- Maintenance activities and frequency

Unlike more conventional drainage systems, SuDS should be designed to be visible and function under anticipated loading conditions over the design life of the development. This will enable those who are responsible for maintenance to easily identify and remediate problems as they occur. When systems are properly designed, operated, and maintained, SuDS performance can be easily monitored against the expected performance.

5.1 SuDS Maintenance and Management Plan

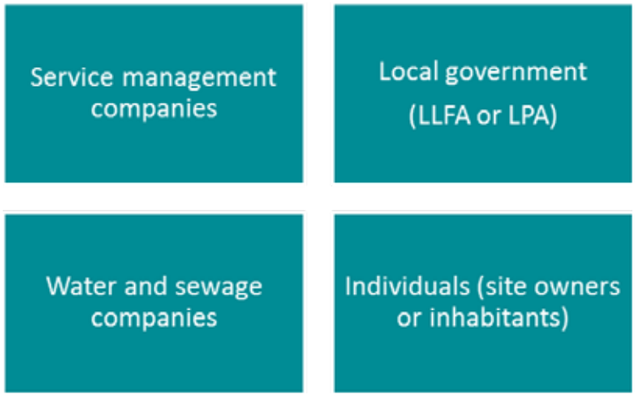
The maintenance and management of SuDS should be recorded within a SuDS Management Plan which should form part of the information submitted by the Developer at the planning application stage.

The approved Maintenance and Management plan must include information on the safe operation, design assumptions, maintenance of SuDS components and how SuDS components interact. The Maintenance and Management Plan must include an estimate of the ongoing maintenance costs. Where appropriate the management plan must make provision for a warning system and contingency arrangements. If undertaken correctly, the design of SuDS will ensure that day to day and long term maintenance is feasible, cost-efficient, and easy to undertake. Most the SuDS components are features of the landscape and so should be managed according to existing landscape practices. Maintenance fits into the management plan as follows:



5.2 Responsibility for Maintenance?

It is the responsibility of the developer to establish a maintenance agreement that ensures the drainage system is maintained and continues to function as designed in perpetuity for the lifetime of the development. National guidance indicates that this maintenance should be undertaken by any of the following bodies:

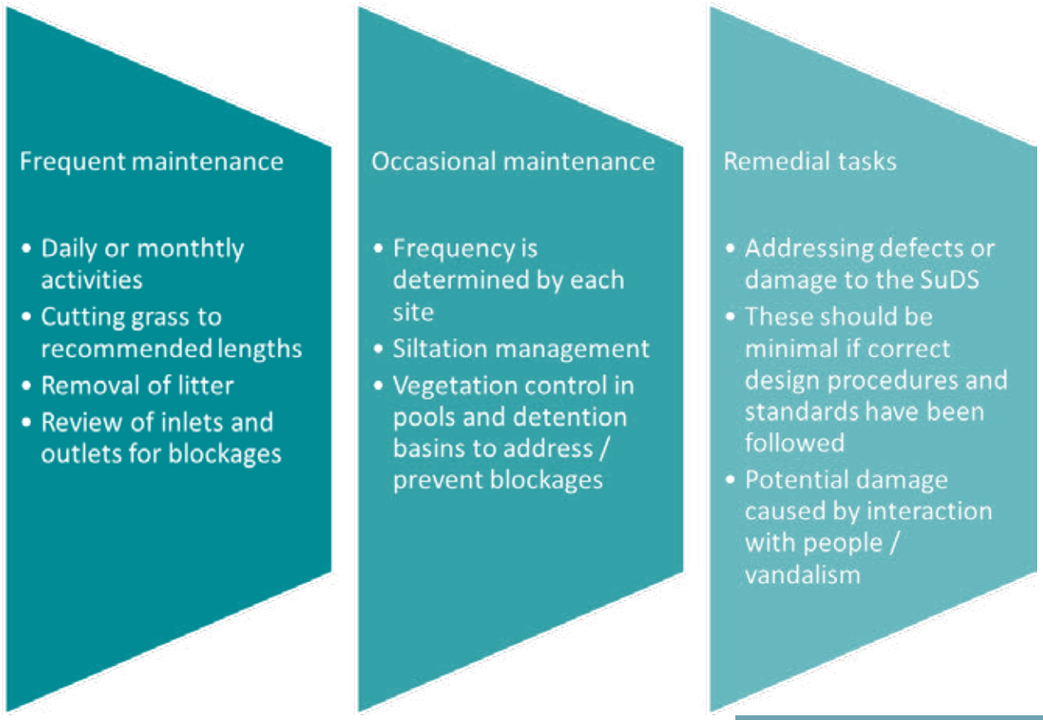


It should be noted that the Councils are currently not formally adopting or maintaining SuDS schemes but, alongside developing this strategy and in advance of having a final position in relation to the adoption and maintenance of different types of SuDS, the Council will endeavour to be flexible in the consideration of SuDS proposals provided appropriate management systems are put in place and the Council's position in terms of future management liability is protected.

In instances where the Council take on the responsibility for maintenance of SuDS, a commuted sum will be payable to the Council for maintenance and management. Commuted payments will be determined on a case by case basis based upon the nature and design of the SuDS scheme.

5.3 Maintenance of SUDS Components

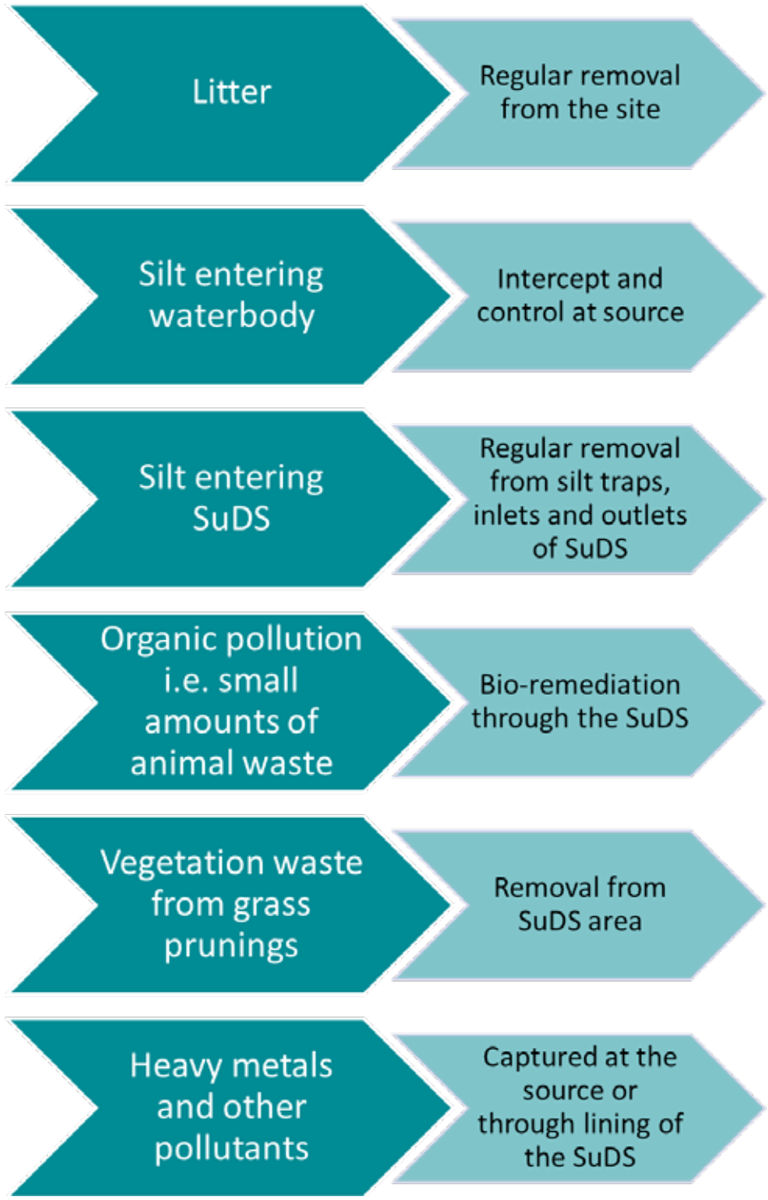
Maintenance of SuDS components is important to ensure their ongoing effectiveness. The tables below identifiy the principal "Frequent", "Occasional" and "Remedial" maintenance works for a range of SuDS components.



	Activity	Green roof / wall	Filter Drain	Filter Strips	Cannels, rills and channels	Swales	Bio Retention	Detention Basin	Underground Storage	Pond	Vortex Separator	Oil Separator
Frequent	Removal of litter / debris	•	•	•	•	•	•	•		•	•	•
	Pruning grass and SuDS vegetation	•	•	•		•	•	•		•	•	•
	Maintenance of surrounding plants				•		•	•		•		
	Clearance of inlets / outlets		•	•	•	•		•	•			
	Silt removal						•			•	•	•
	Removal of compost					•						
	Replenish mulch						•					
	Surface scarification						•					
	High powered wash / suction sweep											
Occasional	Silt removal / review of silt levels		•	•	•			•		•	•	
	Replenish mulch											
	Excess vegetation removal	•			•	•		•		•	•	•
	High powered wash / sweep of paving											
Remedial	Review of erosion				•	•						
	Review / repair of inlets and outlets		•		•	•	•	•		•	•	•
	Replace filter stones		•	•								
	Readjust retention levels						•					
	Replace geotextile layer		•	•								
	Silt removal		•	•	•	•			•		•	

5.4 Waste management for SuDS

A maintenance programme should also include plans for addressing waste produced by SuDS:



WAYMARKER

Maintenance standards required for public highways:

https://www.cheshireeast.gov.uk/pdf/highways/policies-and-standards-documents/highway-surface-water-policy.pdf

6
PLANNING APPROVAL AND ADOPTION

6 Planning Approval & Adoption

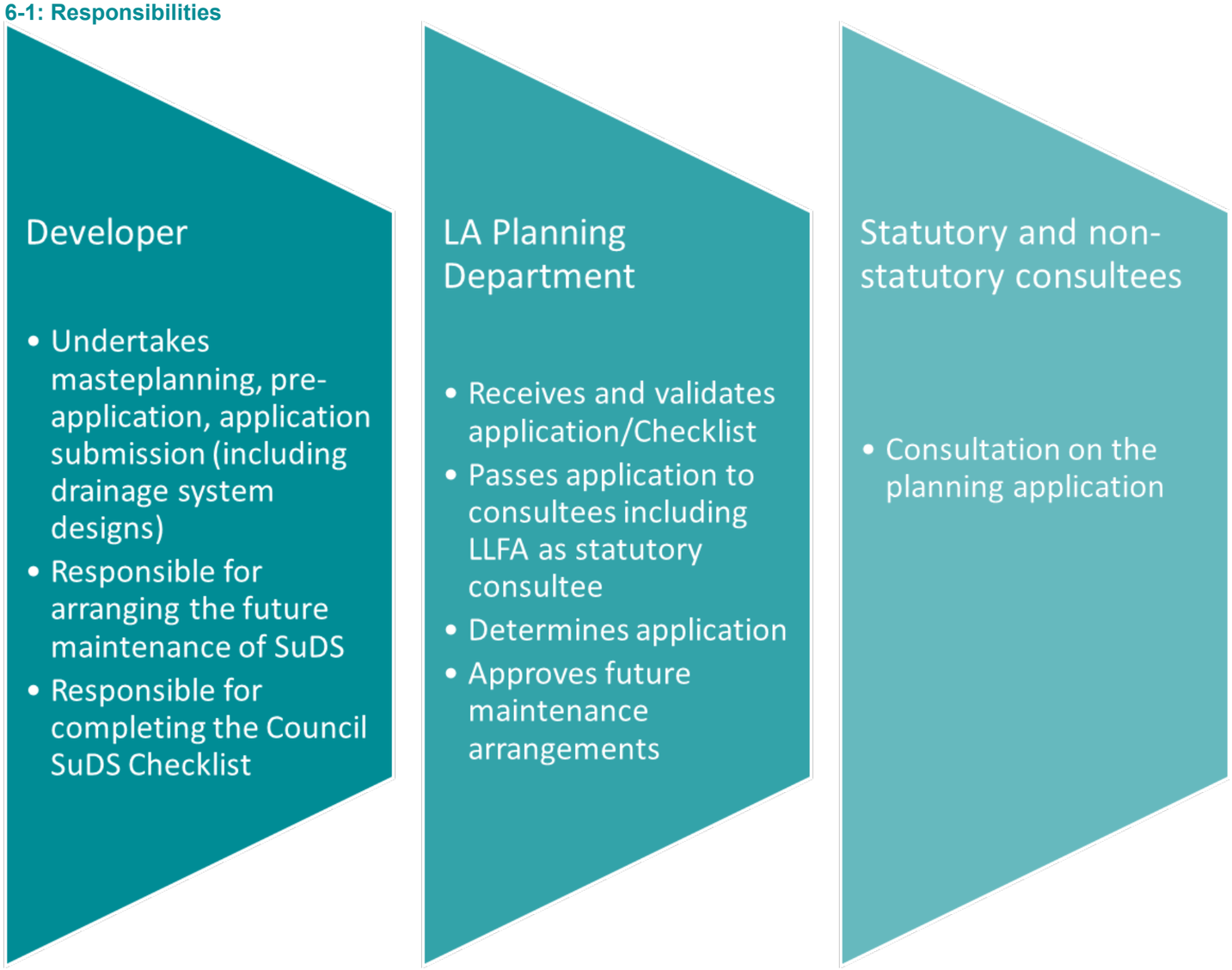
WHAT THIS SECTION WILL COVER:

- Responsibilities - who does what?
- Introduction to the planning application process
- Requirements for different types of planning applications
- Consultation requirements
- The SuDS Application Submission and Approval checklist

6.1 Responsibility Designation

This Section details the approval process for implementing SuDS. SuDS proposals form part of planning applications and should adhere to both the **National Planning Practice Guidance** and the **Defra Non-Statutory Technical Standards for SuDS**. **Figure 6-1** outlines the responsibilities of the three key groups involved in SuDS from inception to implementation. Whilst in Part 2 of this Manual, the future Technical Design Manual will explain this process in more detail as part of the detailed design guidance for SuDS.

Figure 6-1: Responsibilities

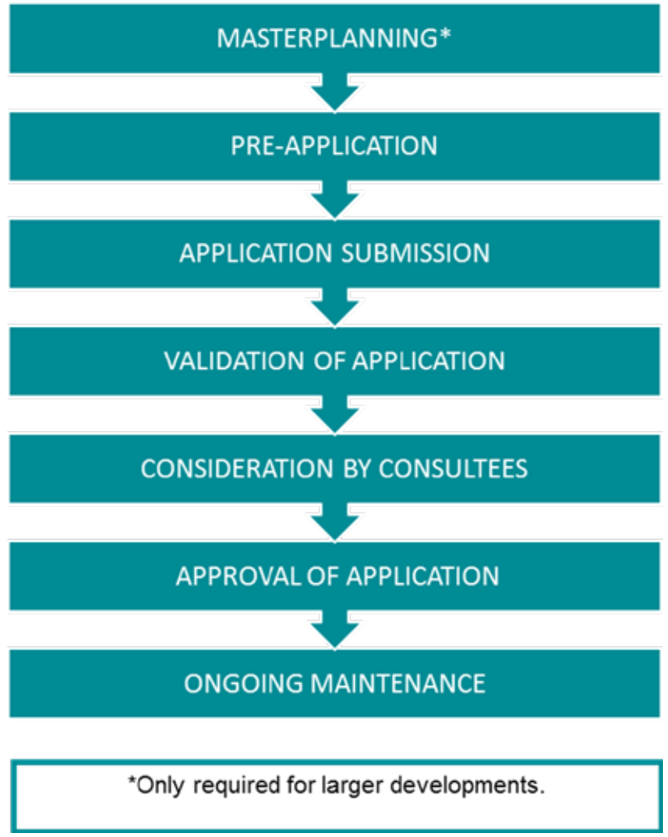


6.2 Planning Application Process

The **Figure 6-2** below illustrates the stages involved in the submission of a Planning Application.

Cheshire East Council operates a paid pre-application service and enters into Planning Performance Agreements (PPAs) to provide developers with pre-application advice and in the case of PPAs with an enhanced, managed approach to the various stages of the planning process. As stated previously, the Councils are keen to promote a collaborative approach to place design, engaging meaningfully with stakeholders and communitites, thus requiring a partnership approach to place-making from inception of the scheme to implementation. The Council is also keen to encourage design review on major schemes and therefore, in future, this should form part of the pre-application and application stages of the planning process.

Figure 6-2: The Planning Application Process



The following Sections describe the considerations and actions which should be undertaken at each stage of the SuDS submission as part of a Planning Application.

For those cases where the developer is uncertain as to whether the application should be submitted as Permitted Development Application, Outline Application or a Full Planning Application, early consultation should be undertaken with the Councils Planning Department and Lead Local Flood Authority.

6.2.1 Masterplanning

Masterplanning is necessary for larger developments, where a full planning application is required. At the masterplanning stage it is useful to establish design codes and principles and layout of development proposals.

In Cheshire East, the CEC Residential Design Guide sets out the requirements for Design Coding and design information required for different types of applications. This is summarised in figure iii/02 of the Design Guide (Figure 6-3). Coding is required for all schemes of 150 dwellings or more, including for component schemes for a site totalling 150 units and for smaller, sensitive sites.

At the outline stage, in developing illustrative masterplans, the Design Guide encourages the submission of testing layouts, as often conceptual masterplanning leads to unrealistic assumptions at the outline stage which creates issues for detailed design. This can lead to conflict between useable open space, SuDS and ecology. Moving forward, these aspects need to be planned collectively to achieve a place structure that prevents such conflicts with testing of layout at the earliest possible stage, even at outline.

Consequently, at this stage the Developer or landowner should consult with the Local Planning Authority to understand the requirements for SuDS. The Developer should plan the SuDS layout with regards to the flows, topography and geology of the area in order to mitigate flood risk, taking account of established industry standards - **CIRIA SuDS Manual C753 and BS8582:2013 Surface Water Management**. With regards to a phased development, developers should provide a coherent drainage strategy for the entire development. This stage also allows an initial costing of the process.

6.2.2 Pre-application

Undertaking early consultations with the Statutory consultees can avoid delays and misunderstandings, increasing flood risk and issues with enforcement or adoption. The management of surface water flood risk is important for SuDS planning. The Council offers a Pre-Application Advice Service involving a multi-disciplinary team advising on urban and landscape design, ecology, flood risk management delivery, asset management and planning.

6.2.3 Application Submission

Full applications and outline planning (where layout is applied for) applications, will require applicants to include a draft Section 106 agreement / or head of terms (or Community Infrastructure Levy (CIL) levy details were an adopted CIL charging scheme is adopted) to deal with future maintenance and management of SuDS as part of the management of highways and open spaces. Calculations of peak flow rates and discharge volumes should also be submitted electronically. When the application is submitted, the Council Planning Department will check to ensure that all the details have been provided (as noted in Way Marker 6.3) by reviewing the provided SuDS Checklist and associated supporting information. If all details have been provided to a satisfactory level the application will be validated. The application will then be passed to the Statutory Consultees for review.

WAY MARKER 6.1
Checklist for masterplanning:

- Requirements are identified in the **SuDS Submission Application and Approval Checklist** provided in **Section 1** Appendix XXX of this guidance.
- Review of key evidence flood risk base documents
- Pre and post developments, including any phasing
- Review of geology, hydrology, green infrastructure, flood risk
- Initial costing and maintenance

WAY MARKER 6.2
Checklist for pre-application:

- Consult with statutory and non-statutory consultees
- Seek advice from the Council via the Pre-Application Advice Service using the **SuDS Submission Application and Approval Checklist** provided in **Section 1** of this guidance to provide the relevant information to inform discussions.

WAY MARKER 6.3
Checklist for Application Submission

- The **SuDS Submission Application and Approval Checklist** is provided in **Section 1** of this guidance and is designed to be completed by developers, validated by the LPA and reviewed by the LLFA.
- For larger developments where a masterplan is required, a detailed drainage layout, post development and pre-development layouts and development phasing will be required.

Figure 6-3

Documents to be submitted with the application:	Nature of Application:					
	Outline:		Reserved Matters:		Full:	
	less than150 homes	150 homes & more	less than150 homes	150 homes & more	less than150 homes	150 homes & more
Design & Access Statement	✓	✓	✗*[1]	✗*[1]	✓	✓
Spatial Design Code	✗	✓	✗	✗	✗	✗
Detailed/Character Area Code	✗	✗	✗	✓	✗	✗
Comprehensive Design Code	✗	✗	✗	✓*[2]	✗	✓

Note:
1. *[1] Whilst a Design & Access Statement is not required, a supporting design statement is recommended, explaining how the reserved matters application accords with the D&As submitted at the outline stage.
2. *[2] A comprehensive design code or elements of a comprehensive design code may be required to accompany a reserved matters application, if a spatial code was not prepared at the outline application stage.
3. The final decision on the need for a Design Code shall be determined by the planning case officer.
4. It is recommended that the content and form of all design documents be agreed with CEC prior to submission.
5. All documentation will need to be validated by CEC, on formal submission of the application.

Figure III.02 - Planning Application Requirements for Supporting Design Documents

6.3 Submission Requirements

6.3.1 Acceptance of Design Submissions

Design Submissions will include the information identified in the **SuDS Checklist** and follow the standards as described in the following sections.

SuDS located in public areas shall be limited to infiltration/filter trenches, filter strips, swales, bio-retention, detention basins, and underground storage and retention ponds. These SUDS techniques should be appropriately considered, for the best overall performance of the drainage systems and the water quality of the receiving water body.

A Planning Application that deviates from the following design standards must include specific data and information on the proposed design to prove that it is a more appropriate solution for that site. The Council will assess the evidence and if in agreement they will confirm in writing the acceptance of the proposal. The developer may be asked to provide additional information supporting their proposal.

SuDS shall be located in passive public open space or road side verges (if highway drainage), so that SuDS can be accessed for maintenance purposes. The Developer must tell the Planning Authority who will take on future maintenance of the SuDS.

6.3.2 SuDS Design & Submissions - General Requirements

The Developer is responsible for the design of SuDS. The design shall be supported by a risk assessment to ensure risks to both the local community and operators of the drainage system are minimised. The Developer and/or his designer shall certify that their design complies with this design guide and accept liability for compliance through their professional indemnity insurance. These responsibilities/liabilities shall not be discharged to Council or their representatives through the planning consent process.

SuDS designs shall be carried out in accordance with this Guide and the best practice principles in current UK drainage guidance.

Where, as a last resort, the Water Authority permits both surface and foul water to discharge to a combined sewer system, the surface water sewer drainage shall be attenuated to the requirements of the water authority. The developer shall support their planning submission with written discharge consent from the water authority.

The developer should take cognisance of the Councils Land Drainage Byelaws and Environment Agency Main River designations paying particular attention in their masterplanning to the requirement for no obstructions typically within 8 meters of the edge of the watercourse. Flood Defence Consent and Land Drainage Consent information is required as part of the submission, including distance of construction from watercourses etc. Easements for work adjacent to watercourses and culverts, drains, private sewers should be indicated and assumed to be 8m. It is the Developers responsibility to obtain all required discharge permits and evidence of this should be provided.

SuDS are not to be located adjacent to or within the adopted highway, carriageway or footway.

Design submission requirements to the Council (calculations, drawings and construction details) for private SuDS and pipe drainage, are presented in the **SuDS Checklist** and forms part of the audit for the design of the proposed system.

The complete surface water drainage system for a development (sewers and SuDS) could be partly private, partly adopted by the relevent Water Company and partly owned and maintained by a third party but not the Local Authority.

6.3.3 Drawings, Calculations, and Manhole Records

Drawings and calculations of the complete drainage system should be supplied with the SuDS application. Separate drawings of private systems should be supplied for record purposes only.

All drawings and calculations submitted should be in metric units.

The drawings should show all the necessary detailed information required by the the **SuDS Checklist**, this Guidance and **Appendix VI of Sewers for Adoption 7th Edition**.

Location and layout plans, sections and details should show the proposed SuDS and drainage system in full, including private SuDS. Plan scales should be those in common use, i.e. 1:20, 1:50 and 1:100 as appropriate.

Longitudinal sections should generally be to an exaggerated scale, with the horizontal scale the same as the plan (but no less than 1:500) and the vertical scale 1:100.

Record drawings shall contain the "as-built" information to 300mm accuracy in the horizontal plane, with dimensions related to fixed Ordnance Survey features or Ordnance Survey co-ordinates to 1m accuracy (12-digit accuracy, e.g. 123456, 123456).

6.4 Surface Water Drainage Design

6.4.1 Hydraulic Design

The surface water drainage system shall be designed according to **Part C5 Hydraulic Design of Sewers for Adoption 7th Edition**, so that flooding does not occur in any part of the site in a 1-in-30 year return period design storm flood frequency.

Appropriate software shall be used to simulate the system and provide expected performance data. For all developments which utilise SuDS, the use of appropriate analytical tools are needed to demonstrate the required level of flood protection performance. For developments of fewer than ten houses, the procedure presented in **Part C3 Hydraulic Design of Sewers for Adoption Small Developments Version – September 2013** shall be followed.

Representation of SuDS in simulation software should be explicit, where possible. A copy of the model and results should be submitted to Council for acceptance. All hard surfaces draining to the network should be accurately allocated to the drainage network and represented in the model. All connecting manholes should be included in the model. Representation of the hard surfaces draining to the network should be accurately allocated to the drainage system and all manholes should normally be included in the model.

Surface water drainage should be designed for run-off from roofs and subject to the agreement of the Undertaker, roads (including verges) and other hard-standing areas. For these areas, an impermeability (runoff coefficient) of 100% shall be assumed.

An additional increase in the paved surface area of 10% shall be assumed for all areas to allow for future urban expansion (extensions and additional paved areas) unless this would produce a figure greater than 100% of the site.

Design event rainfall should be based on the use of the most recent version of the 'Flood Estimation Handbook' specific to the location of the development. An allowance for climate change in accordance with Environment Agency Guidance (by factoring the rainfall intensity hyetograph values) should be applied.

WAY MARKER 4.3
Climate Change & Peak Rainfall Intensity Allowance

Increased rainfall affects river levels and land and urban drainage systems. The table below shows anticipated changes in extreme rainfall intensity in small and urban catchments. For design, assess both the central and upper end allowances to understand the range of impact.

Applies across all of England	Total potential change anticipated for the '2020s' (2015 to 2039)	Total potential change anticipated for the '2050s' (2040 to 2069)	Total potential change anticipated for the '2080s' (2070 to 2115)
Upper end	10%	20%	40%
Central	5%	10%	20%

Defra Climate Change Guidance
https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

During severe wet weather, the capacity of the surface water drainage systems may be inadequate, even though they have been designed in accordance with this Guide and Sewers for Adoption 7th edition. Examples of different weather conditions which cause flooding include:

a. High-intensity rainfall events bypassing gully inlets;
b. High-intensity rainfall events resulting in sewer surcharging and surface water escaping where the ground level is below the hydraulic gradient;
c. High-intensity rainfall events on areas adjacent to the development site (urban or rural) from which overland flooding can take place;
d. Long-duration rainfall which may result in the top water level in storage systems becoming full, resulting in overflow;
e. Extended periods of wet weather which may result in high receiving watercourse water levels affecting the hydraulics of the drainage system.

Checks shall be made for the 1-in-100+ climate year return period to ensure that properties on and off site are protected against flooding for all these scenarios. The design of the site layout, or the drainage system should be modified where the required flood protection is not achieved. This is particularly relevant on undulating and steeply-sloping catchments and adjacent to watercourses. Developers should also demonstrate flow paths and the potential effects of flooding resulting from these storm events. Access roads into and through the site for emergency vehicles must be ensured for these events.

Where it is proposed to connect to an existing adopted drainage network, the developer shall consult with the Undertaker and the Lead Local Flood Authority regarding acceptable discharge criteria. Hydraulic performance modelling of the receiving drainage system may be required.

Where it is proposed to connect to other existing drainage networks (including but not limited to culverts, privately owned systems, open drainage ditches, or constrained watercourses) the developer shall consult with owner of the drainage network and the Lead Local Flood Authority to agree acceptable discharge criteria. Hydraulic and structural assessment of the receiving drainage network is likely to be required.

6.4.2 Attenuation Storage

The limiting discharge rates from the site should normally be assessed using the '**Flood Estimation for Small Catchments**' **(Institute of Hydrology 1994)**. For application sites, smaller than 50ha it should be applied for 50ha and linearly interpolated to the development area. Values should be determined for the 1-year, 1-in-30 year and 1-in-100 years as a minimum. A tool for assessing greenfield runoff rates is provided in **Appendix B** using the calculation described in **Way Marker 4.4**.

The maximum 1-year water level in attenuation storage should not cause significant backing up of flows in the incoming sewer and a 1-year, 1-hour duration event should not surcharge the drainage network.

Simulation modelling of the contributing development area considering the head-discharge relationship of the proposed SuDS discharge outlet is required to calculate the attenuation storage volume. The model may be based on either the fixed percentage run-off of 100% run-off from all impermeable surfaces, or the UK variable run-off model (see **CIRIA document 'Drainage of Development Sites – A Guide' (2004)** for the run-off from the whole site. Appropriate allowance in the reduction in run-off should be made for infiltration systems serving any impermeable areas.

WAY MARKER 4.4
Calculation for greenfield run-off peak flows (Institute of Hydrology Report 124)

$$QBAR_{rural} = 1.08(AREA/100)^{0.89} SAAR^{1.17} SOIL^{2.17}$$

$QBAR_{rural}$ = Mean annual run-off for rural (greenfield) areas (litres/second)

AREA = area of the site (hectares)
If the site is smaller than 50 hectares, the calculations should be undertaken using 50 hectares and then amended (by dividing by the actual site area) at the end of the calculation.

SAAR = Standard Average Annual Rainfall (mm)

SOIL = Predominant soil type
The most suitable soil type should be selected from the table below:

Soil Description	Soil value for calculation
Peat (waterlogged)	0.50
Clay	0.50
Clayey loam	0.45
Loam	0.40
Sandy Loam	0.30
Sand	0.15

6.4.3 Peak flow rate and volume

Peak flow rate and volume does not apply to any surface run-off that is discharged:

- By infiltration; or
- To a coastal or estuarial water body; or
- To an alternative water body where the LLFA considers it appropriate to do so.

Developers will need to demonstrate that Consent to discharge and 3rd party land ownership issues/crossing have been agreed prior to planning application and detail these in the relevent sections of the SuDS Checklist.

6.4.4 Low rainfall

There should be no discharge to a surface water-body, or sewer that results from the first 5mm of any rainfall event. In low-permeability soils where this is not achievable, the developer shall demonstrate to the Council that infiltration has been encouraged through the SuDS management train.

6.4.5 High rainfall

Either of the two approaches below must be used to manage the surface discharge:

Approach 1: Restricting both the peak flow rate and volume of runoff

The peak flow rates for the:

- 1 in 1 year rainfall event; and
- 1 in 100+ climate year rainfall event;

must not be greater than the equivalent greenfield run-off rates for these events. The critical duration rainfall event must be used to calculate the required storage volume for the 1 in 100+ climate year rainfall event.

The volume of runoff must not be greater than the greenfield run-off volume from the site for the 1 in 100+ climate year, 6-hour rainfall event.

Climate change should be considered in attenuation storage calculations by increasing the rainfall depth using a climate change factor. Current Environment Agency guidance should be referenced to apply the appropriate climate change factors relevant to the location and design life of the proposed development.

Approach 2: Restricting the peak flow rate

The critical duration rainfall event must be used to calculate the required storage volume for the 1 in 100+ climate year rainfall event. The flow rate discharged:

For the 1 in 1 year event, must not be greater than either:

- The greenfield runoff rate from the site for the 1 in 1 year event, or
- 2-5 l/s per hectare. This should be agreed with the Lead Local Flood Authority within the planning process;

And for the 1 in 100+ climate year event, must not be greater than either:

- The greenfield mean annual flood for the site, or
- 2 litres per second per hectare (l/s/ha).

6.4.6 Previously developed land

Where the site is on previously developed land and neither Approach 1 or 2 is reasonably practicable then:

a. An approach as close to Approach 1 as is reasonably practicable must be used (the Councils are seeking runoff from brownfield sites to mimic greenfield run-off rates wherever possible);

a. The flow rate discharged from the site must be reduced from that of the actual modelled pre-development rate, in accordance with the criteria set out in Section 2A-2C:

- The 1 in 1 year event; and
- The 1 in 100+ climate year event.
- The volume of run-off may only exceed that prior to the proposed development where the peak flow rate is restricted to 2 l/s/ha.

6.4.7 Exceedance

The design of the drainage system must consider the impact of rainfall falling on any part of the site and also any estimated surface run-off flowing onto the site from adjacent areas.

Drainage systems must be designed so that, unless an area is designated for flood management in the Local Flood Risk Management Strategy, flooding from the drainage system does not occur:

a. on any part of the site for a 1 in 30 year rainfall event; and

b. during a 1 in 100+ climate year rainfall event in any part of:

- a building (including a basement); or
- utility plant susceptible to water (e.g. pumping station or electricity substation); or
- on neighbouring sites during a 1 in 100+ climate year rainfall event.

Flows that exceed the design criteria (i.e. 1 in 100+ climate year rainfall event) must be managed in flood conveyance routes, preferably in green networks, that minimise the risks to people and property both on and off the site. Evidence of those conveyance routes must be submitted to the LLFA.

6.4.8 Water quality

The treatment train process described in Section 3.5, should be used to assess storm water quality requirements.

WAYMARKER

Run-off Hazard Levels

Hazard	Level of hazard
Low	Roof drainage
Medium	Residential, amenity, commercial, industrial uses. Includes car parking and roads
High	Areas used for handling and storage of chemicals and fuels, handling and storage of waste. Includes scrap yards as well as lorry, bus or coach parking or turning areas

WAYMARKER

Treatment stages for discharge to groundwater

Groundwater Discharge Location		Minimum number of treatment stages		
	Runoff Hazard Level	Low	Medium	High
G1	Source Protection Zone, within 50m of a well, spring or borehole that supplies potable water	1	3	Consult the Environment Agency
G2	Into or immediately adjacent to a sensistive receptor that could be influenced by infiltrated water. Includes designated nature conservation, heritage and landscape sites - including Biodiversity Action Plan (BAP) habitats and protected species.	1	3	
G3	Source Protection Zone II or III or Principal Aquifer	1	3	
G4	Secondary Aquifer	1	2	

Surface run-off from roof drainage must be isolated from other sources where it is discharged to G1 and G2.

Infiltration may only be used to discharge to G1 and G2 where a risk assessment has been undertaken and the SuDS design effectively addresses these risks.

Research undertaken by Portsmouth University, showing water quality improvement by vegetated SuDS components

Image:Wildflower Turf Ltd (TBC)

WAYMARKER

Treatment stages for surface water bodies

Hazard	Normal surface water	Sensitive surface water
Low	0	1
Medium	2	3
High	Consult the Environment Agency	

Where discharged to a sensitive surface water body (defined as any catchment smaller than 50km; any catchment with less than 20% urbanisation; any catchment with an environmental designation or national or international recognition, or any catchment where good ecological status is at risk), one extra treatment stage must be added.

6.4.9 Record Information for the completed Works

Upon completion, the following items should be supplied to Council.

a. Two sets of as-built record drawings in electronic format and compatible with AutoCAD Release 14 in *.DWG or *.DXF format;

b. Where appropriate, closed circuit television (CCTV) survey of underground systems by a qualified contractor in accordance with Clause E7.6 of Sewers for Adoption 7th Edition in CD or DVD format with a hard copy of the written report. CCTV at completion is at the discretion of the Developer. The Developer is responsible for checking that the CCTV survey shows no defects or debris within the infrastructure.

c. Health & Safety File prepared in accordance with the Construction (Design & Management) Regulations 2015.

6.5 Development and Flood Risk

When considering new development, Developers will need to consider flood risk and development in accordance with the requirements of the **National Planning Policy Framework (NPPF)**.

Figure 3-3 summarises the process.

Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk of flooding. Where development is necessary, it should be demonstrated to be safe and should not result in an increase in flood risk elsewhere.

The **NPPF** sets of the aims of the Sequential Test, to steer new development to areas with the lowest probability of flooding. Development should not be allocated or permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding. The **Council's Strategic Flood Risk Assessment (SFRA)** will provide the basis for applying this test although the most recent Environment Agency flood maps should also be reviewed. A sequential approach should be used in areas known to be at risk from any form of flooding.
A site-specific **Flood Risk Assessment (FRA)** will be required and this will need to demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere. Where possible overall flood risk should be reduced.

On brownfield sites the existing drainage systems should be modelled to demonstate actual pre-development surface water runoff. Appropriate consideration of the existing system operation, including number and frequency of gullies, and existing attenuation whether natural or artificial.

Appropriate reductions of surface water runoff should be achieved in accordance with Section 6.4

A site-specific flood risk assessment is required for development proposals:

- of 1 hectare or greater in Flood Zone 1;
- all proposals for new development (including minor development and change of use) in Flood Zones 2 and 3;
- or within Flood Zone 1 which has critical drainage problems (as notified to the local planning authority by the Environment Agency);
- and where proposed development or a change of use to a more vulnerable class may be subject to other sources of flooding.

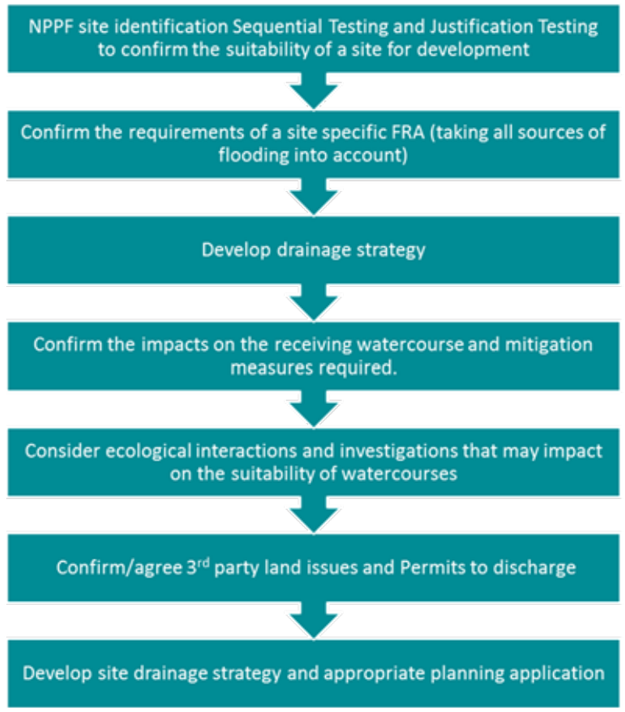
Drainage strategies will need to take local flooding into account. Interactions with receiving ditches and watercourses (including culverts) will need to be fully appraised in order to ensure that surface water runoff is effectively managed without increasing flood risk elsewhere.

Proposals will need to include assessment of surface water interactions with other sources of flooding including fluvial and tidal interactions. This will need to including consideration of, for example, climate change, blockage scenarios and hydraulic capacity of for example, bridges and culverts during design flood events.

Developers will need to demonstrate that all land ownership and long-term maintenance issues have been resolved as prior to submitting a full planning application. Developers will also need to obtain relevant Permits to discharge, and include information on pollution control measures where required.

It is recommended that Developers consult with the Local Planning Authority and the Environment Agency to determine the requirements for a site specific FRA.

Figure 5-4: Development & Flood Risk Assessment

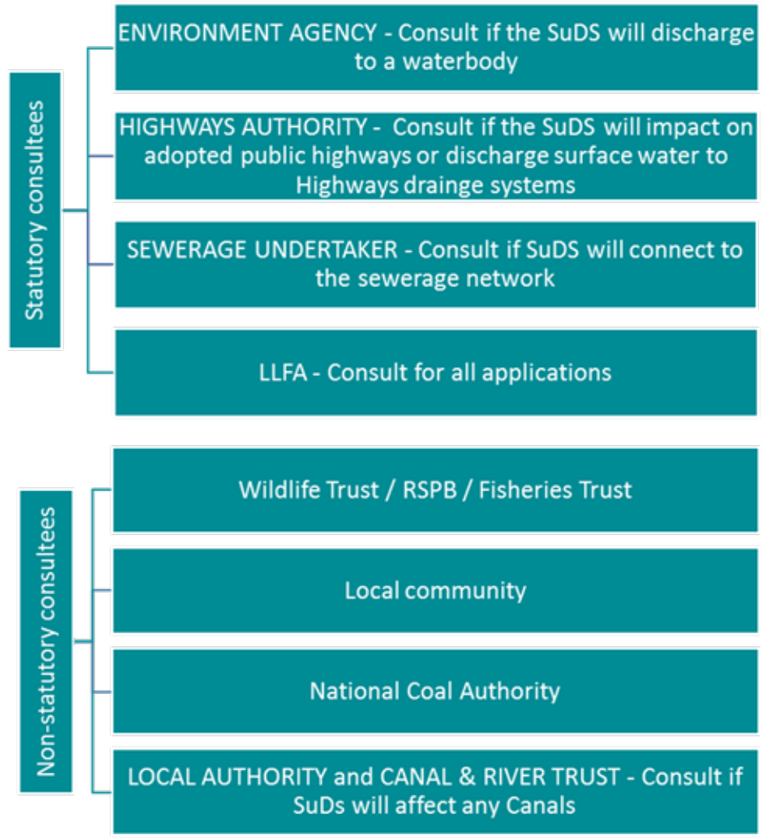


6.6 Consultation

Under the **Flood and Water Management Act 2010,** the Council are a Lead Local Flood Authority (LLFA) and according to the Defra Planning Practice Guidance, LLFA's should be consulted at the planning consultation stage to gain advice for surface water drainage. As each Council is well placed in terms of existing strategic policy and flood risk evidence base, being at the forefront of the SuDS approval process will positively affect local decisions on planning and drainage and will make a significant contribution to the vision of the local plan core strategy.

Whilst not compulsory, it is beneficial to consult to gain further understanding of the implications and considerations which should be made when planning for SuDS

Figure 5-5: Consultees



6.7 Approval

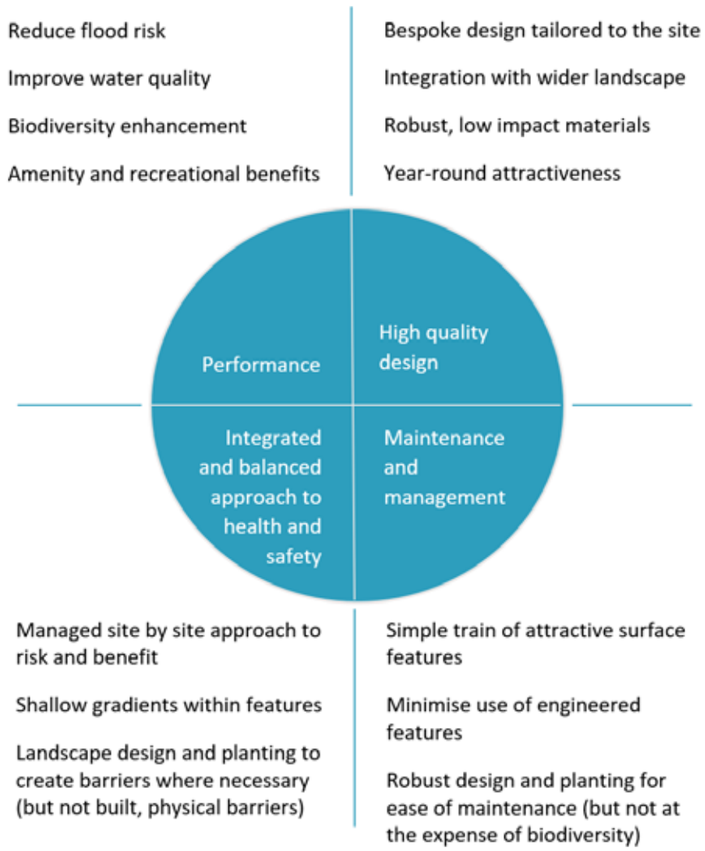
The approval of SuDS within an application will be determined by the Council Planning Department, who will base their decision on the recommendations made by the LLFA and the other consultees. This may take the form of planning conditions.

The Planning Department will also take into consideration the extent to which the proposal has complied with National Standards (general compliance will have been ensured at the Validation stage of the process through ensuring appropriate completion of the **SuDS Checklist**), the understanding of local requirements and the Local Plan. Larger developments and those which have met with objections will be determined by planning committees within the Council Planning Department.

6.8 Adoption Process

The adoption process technically begins once SuDS approval has been granted and includes the physical construction and subsequent maintenance of the SuDS.

However, to ensure that the proposed SuDS will be adopted and maintained to a high standard and ensure long term benefits, this stage of the planning application process should be considered before submission.



Adapted from the Cambridge SuDS Design and Adoption Guide

The **SuDS Checklist** has been designed for use by Planners, LLFA and Developers to ensure that the various requirements of adoption and maintenance have been carefully planned before submission. If sufficient provision has not been made, then absence of these details will be flagged and the planning application will be recommended for refusal by the LLFA.

National guidance allows the developer to arrange for the adoption and maintenance to be undertaken by any one of four bodies:

- Service management companies
- LLFA or LPA (**Note that the Councils are not currently adopting SuDS schemes**)
- Water and sewerage companies (United Utilities and Dwr Cymru Welsh Water)
- Individuals (site owners or inhabitants)

Evidence of an agreement in principle with the body who will adopt the SuDS, connecting sewer networks and storm drainage is likely to be required at the submission stage together with a plan of the maintenance schedule and the likely activities to be involved.

Further details of SuDS Maintenance and Management requirements can be found in **Section 5** of this guidance document.

This table summarises the various processes, including adoption running in parallel from inception to implementation.

Planning Stage		Development process required information (from the SuDS Guide)	Drainage design process (from the SuDS Guide)	Adoption process
Pre-application discussions and submission of FULL application	Pre-application discussions and submissions of outline application	Submission of FRA and drainage strategy in line with PPS25. Identification of likely SuDS methods to satisfy planning policy	Conceptual drainage design flow routes through the site and storage locations. Outline drainage design and drainage impact assessment. Demonstrate storage areas and volumes, conveyance routes and controls.	Initial consultation on adoption - locations and design requirements
Negotiation of Full submission and Section 106 discussions	Negotiation of Outline submission and Section 106 discussions	Submission of any amendments (if necessary)	Submission of any amendments (if necessary)	Agreement of outline drainage design and agreement to adopt in principle (or option to adopt in principle)
	Planning permission granted and Section 106 agreed			
	Design coding	Principles of the detailed design agreed site wide	Principles of the detailed design agreed site wide	Agreement that the detailed design is compliant with adoption guide and S106 agreement
	Reserved matters applications	Detailed plans in line with agreed design code	Final submitted design with location and size, depth, etc. compliant with approved detail above	Submitted design compliant with adoption guide
Full approval/ S106 approval	**Reserved matters approval**			
Construction of development	Construction of development	Discharge of any outstanding conditions	Construction of drainage system	Verification of construction to agreed design and specification
Formal adoption of SuDS and monies paid as per the trigger/amount agreed in the S106				

Adapted from the Cambridge SuDS Design and Adoption Guide

6.10 Other Consents

In addition to planning approval, developers may also need to obtain further consents to discharge. The LLFA will normally require evidence of compliance from the responsible authority, as outlined in the table below.

Consent	Responsible Authority
Land Drainage Consent (Ordinary Watercourse) (Land Drainage Act, 1991, Section 23)	LLFA
Flood Risk Activity Permits (Main River) (The Environmental Permitting (England and Wales) Regulations 2010)	Environment Agency
Environmental Permits for Waste or Emissions	Environment Agency
Adoption of a sewer (Water Industry Act, 1991, Section 104)	Water and Sewerage Companies (United Utilities or Dwr Cymru Welsh Water)
Connection to a sewer (Water Industry Act, 1991, Section 106)	Water and Sewerage Companies (United Utilities or Dwr Cymru Welsh Water)
Building over or close to a sewer (within 3m) (Building Regulations, 2015, Document H)	Water and Sewerage Companies (United Utilities or Dwr Cymru Welsh Water)
Connection to an existing highway drain or adoption of highways drainage (Highways Act, 1980, Section 38)	Highway Authority
Highways Technical Approcal Category D	Highway Authority
Third party landowner permissions	Third party landowner
Local Authority Land Drainage Byelaws	Lead Local Flood Authority

6.11 The SuDS Submission Application Process

The **SuDS Submission Application and Approval Checklist** (the **SuDS Checklist**), included as **Appendix A**, identifies the SuDS-related information which should be provided by the Developer in support of a Planning Application. The requirements, and level of detail needed, is dependent on the stage of application, as well as the scale of the proposed development.

The **SuDS Checklist** includes for:

- **Pre-Application**
- **Minor Developments**
- **Major Developments**
- **Outline Application**
- **Reserved Matters**

The Developer is required to provide all the information identified in the Checklist including specific links to key plans, calculations and supporting documents where required.

WAY MARKER
Definition of "Major Development":

"Major Development" (as set out in Article 2(1) of the Town and Country Planning (Development Management Procedure) (England) Order 2010) means development involving any one or more of the following:

α. the winning and working of minerals or the use of land for mineral-working deposits;

β. waste development;

χ. the provision of dwelling houses where:

i. the number of dwelling houses to be provided is 10 or more; or

ii. the development is to be carried out on a site having an area of 0.5 hectares or more and it is not known whether the development falls within sub-paragraph (c)(i);

δ. the provision of a building or buildings where the floor space to be created by the development is 1,000 square metres or more; or

ε. development carried out on a site having an area of 1 hectare or more.

Changes to the National Planning Policy Framework (NPPF) came into effect on 06 April 2015 which made Lead Local Flood Authorities (LLFA) statutory consultees in planning applications for "**Major Development"** in relation to SuDS and Drainage.

The Development Management Procedure Order was also amended, designating Councils as the Lead Local Flood Authority, and therefore each Council is now a statutory consultee within the planning process on the management of surface water.

The **SuDS Checklist** identifies the information required as a series of questions and includes references to this Guidance where further information can be found. The checklist is in five sections:

1. **Application Details**
2. **General Details and SuDS Proposals**
3. **Hydraulic Assessment of SuDS Proposals**
4. **SuDS Discharge Proposals and Agreements**
5. **SuDS Maintenance and Management Proposals**

WAY MARKER
How to Complete the SuDS Submission Application and Approval Checklist (the **SuDS Checklist)**

The **SuDS Checklist** is in the form of an Excel spreadsheet which is included in **Appendix A** of this guidance document and can be downloaded here. **TO BE ADDED AT LATER DATE**

The Checklist is designed for the Applicant to provide a response to each indicated questions appropriate to the stage and type of planning application.

The Applicant's response should include references to their submitted reports, drawings and calculations where information to support their answer can be found. **Developers are to submit all SuDS information as a package (hard & soft copy).**

The Applicant will be required to confirm that the SuDS documentation submitted complies with the Council's SuDS Guidance Documentation, Local Planning Policies and all relevant National Legislation, Policies and Guidance.

WAY MARKER
Defra SuDS Non Statutory Technical Standards

Non-statutory technical standards for the design, maintenance and operation of sustainable drainage systems.

https://www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards

6.11.1 Submission Validation & Assessment

Planning applications may be made either as a, **Minor Application**, an **Outline Application** (with one or more matters reserved for later determination) **or as a Full Application**. The level of information which would need to be submitted for each type of application or stage within the planning process will vary depending on the size of the development, flood risk, constraints and proposed sustainable drainage system.

The Developer shall be wholly responsible for the design and construction of SuDS systems. The Developer and/or their designer shall certify that their design complies with Council Guidance and accept liability for compliance through their professional indemnity insurance. These responsibilities/liabilities shall not be discharged to Council following a satisfactory audit of their design.

The Council will assess SuDS applications to ensure proposed minimum standards of operation are appropriate and, through the use of planning conditions or planning obligations, that there are clear arrangements in place for ongoing maintenance of SuDS over the lifetime of the development.

Sustainable drainage systems may not be practicable for some forms of development (for example mineral extraction). The decision as to whether a sustainable system would be inappropriate in relation to a particular development proposal is a matter of judgement for the Local Planning Authority. The judgement of what is reasonably practicable will be by reference to the SuDS technical standards published by the Department for Environment Food and Rural Affairs and take into account design and construction costs.

It should be noted that the Councils have no duty to adopt SuDS (**and are not currently adopting new SuDS**) and provision for the disposal and maintenance of run-off remains the responsibility of the Developer.

A satisfactory audit by a Council does not authorise any activities by the Developer which may be in contravention of any enactment or any order, regulation or other instrument made, granted, or issued under any enactment, or in contravention of any rule, byelaw or in breach of any agreement or legal rights.

APPENDICES

Appendix A SuDS Checklist

Checklist to be added

Appendix B Additional Relevant Policies

National

The National Planning Policy Framework (NPPF)

The framework presumes in favour of sustainable development, i.e. development that meets interdependent social, environmental and economic objectives, as set out in its various chapters.

Chapter 8 Promoting Healthy and Safe Communities – requires that planning processes seek to promote healthy, inclusive and safe places through a positive approach to design, including by creating the opportunity for social interaction via mixed uses and high quality public realm, making places safe and accessible for all, and supporting healthy lifestyles, including through provision of a high quality network of accessible spaces and access to sport and recreation.

Chapter 14 Conserving and enhancing the natural environment – promotes a positive approach to the management of the natural environment including valued landscapes, biodiversity, geodiversity, soils and the best quality and most versatile land, whilst recognising the intrinsic value of the countryside. It requires minimising ecological impact and promotes biodiversity net gain and ecological networks resilient to future change. A tiered approach to protection is provided, with a general presumption against ecological harm. In regard to Development Management, it sets out a process to protect important natural assets from development, including international, national and locally protected assets including ancient woodland and veteran trees. It also promotes supporting development aimed principally at conserving the natural environment or that would positively secure measurable biodiversity net gain.

The National Planning Practice Guidance (NPPG) provides guidance for implementing the NPPF (but not set out here).

Local

Cheshire East (including that part of the Peak District National Park within its area)

Cheshire East Local Plan Strategy (CELPS)

Principal Policy

SE3 Biodiversity and Geodiversity – seeks to protect nationally and locally important designated sites from inappropriate development, whilst securing appropriate mitigation in regard to non-designated assets or sites. In respect to all forms of development, the objective should be to positively contribute to the conservation and enhancement of biodiversity and geodiversity

SE 4 Landscape – requires that all development should seek to conserve the landscape character and quality of the Borough, comprising both built and natural features, that contribute to its local distinctiveness. This is to achieved by incorporating appropriate landscaping, preserving and promoting local distinctiveness, avoiding the loss of habitats of landscape importance and protecting historical and ecological character.

SE5 Trees, hedgerows and woodlands – stipulates that proposals that would threaten the heath of trees (including veteran trees), woodland or hedgerow, that provide a significant contribution to amenity, biodiversity and landscape and historic character should not be allowed unless there is a clear overriding justification. Where such development is allowed, there should be net environmental gain through mitigation, compensation or offsetting and the new development should provide for the sustainable management of woodland, tree and hedgerows as well as ensuring planting of large trees within structured landscape schemes to maintain canopy cover.

SE6 Green Infrastructure –sets out the Councils ambitions to deliver high quality, accessible and connected GI across the Borough, providing for healthy recreation and biodiversity, and building on the varied characteristics of the GI across the Borough by protecting and enhance existing GI and ensuring that new development includes high quality new green spaces that integrate with the wider GI framework.

SC3 Health and wellbeing – promotes health and wellbeing through the planning process including by ensuring that new developments provide opportunities for healthy living and to improve health by creating well connected, walkable and cyclable neighbourhoods, cohesive and inclusive communities, enabling social interaction and access to quality open space, green infrastructure and sport and recreation.

Emerging Policy

Cheshire East Site Allocations and Development Management Policies (SADPD) Draft

ENV 1 Ecological Network and ENV 2 Ecological implementation – these elaborate on policy SE3 of the CELPS in terms of setting out the approach that new development should deliver proportionate opportunities to protect, conserve, restore and enhance the ecological network including setting out the approach to ecological net gain and the need for developments to be ecologically positive, both where ecological assets are impacted and to generally improve biodiversity within new development.

ENV 3 Landscape Character, ENV 4 River Corridors and ENV 5 Landscaping – collectively these policies seek to reinforce the landscape character of the Borough by ensuring that the landscape approach within new development seeks to protect and enhance landscape character and green and blue infrastructure, the incorporation of place relevant planting, an appropriate balance between space and built form, and by providing for climate change mitigation and adaptation (including SuDS) within new development

ENV 6 Trees, hedgerows and woodland implementation – requires the retention of existing landscape features and the need to compensate for any loss. Trees, woodland and hedgerow should be sustainably integrated and new planting should be integrated into proposals as part of a comprehensive landscape scheme.

ENV 7 Climate Change - sets out a number of requirements for new development, both in the design of buildings and spaces in accommodating climate change adaptation and resilience, including within retrofit situations.

Cheshire East Design Guide SPD volumes 1 and 2 (the Design Guide)

The Design Guide includes a number of chapters that are important in considering the design of SuDS.

Volume 1 sets out in detail the local context and what makes Cheshire East distinctive, and the required approach to improving design quality, including processes such as Design Coding. Volume 2 sets out the specific considerations for designing new development and delivering place quality, sustainable design and improved health and wellbeing through high quality design. The relevant chapters are:

Chapter 1 working with the grain of the place – which aims that designers and developers establish a broad understanding of the site, its context and the opportunities to create a place specific and sustainable development based on a strong vision for the scheme.

Chapter 2 urban design – builds on chapter 1, setting out the means to create a strong structure for new development, identifying the important layers (including green and blue infrastructure at the top of the hierarchy) necessary to create a well-conceived and integrated development that responds positively to the place to ensure a sustainable, functional and attractive development.

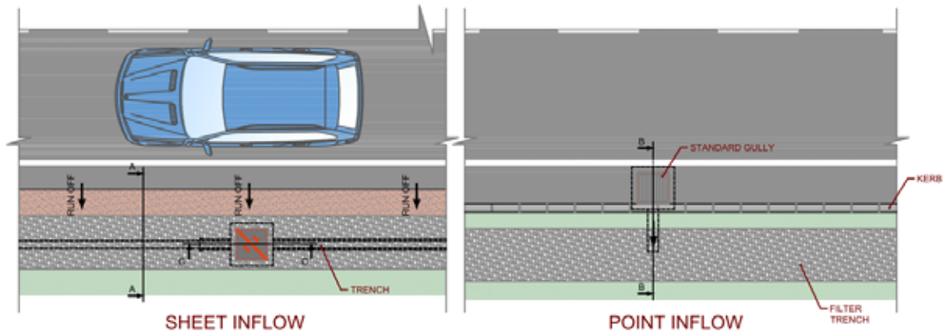
Chapter 4 Green Infrastructure and Landscape Design - provides detailed guidance relating to GI and BI, and detailed aspects of landscape design, including the importance of maintaining existing landscape features and the appropriateness of new landscape design. It also provides a concise introduction to sustainable drainage systems and their value in terms of quality of place, providing the design context for this SuDS manual.

Chapter 5 Sustainable Design Principles – identifies spatial, active and passive aspects of sustainable design of buildings and spaces, including the role of trees and landscape in terms of passive design and adaptation, as well as considering how active approaches at source can contribute to water management as part of an integrated approach to SuDS.

Chapter 6 Quality of Life – identifies the importance of good quality and attractive homes and neighbourhoods including access to high quality open and green space and public realm, the promotion of community health and wellbeing and the specific wellbeing benefits of a sense of identity derived from the local character of places (a sense of belonging).

NB there are also a number of ‘saved’ policies from the legacy Local Plans but these are intended to be superseded in the near future by the SADPD. The intention of this SPD is not to provide further guidance on these policies, and so, they are not listed here.

Appendix C SuDS Schematic Indicative Design Layouts



TRENCH PLAN
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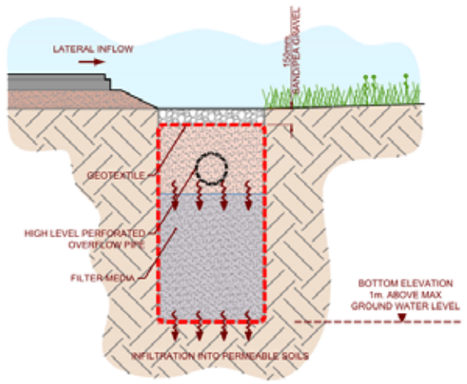

SHEET INFLOW
SECTION A-A
INFILTRATION TRENCH SCHEMATICS
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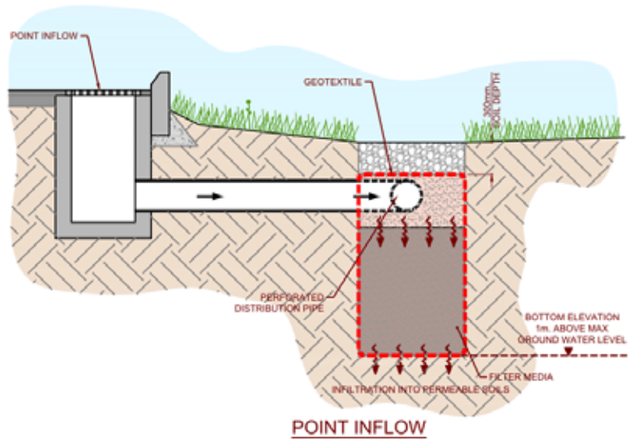
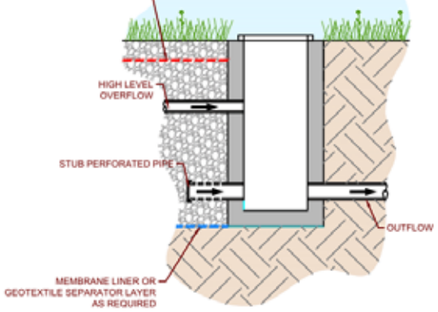
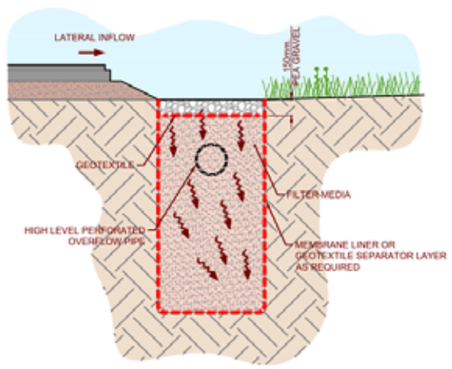


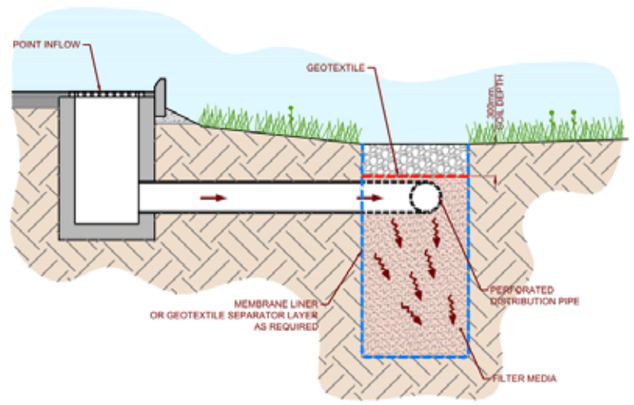
POINT INFLOW
SECTION B-B
INFILTRATION TRENCH SCHEMATICS
SCALE 1:25



POINT INFLOW
SECTION C-C
INFILTRATION TRENCH MANHOLE SCHEMATICS
SCALE 1:25



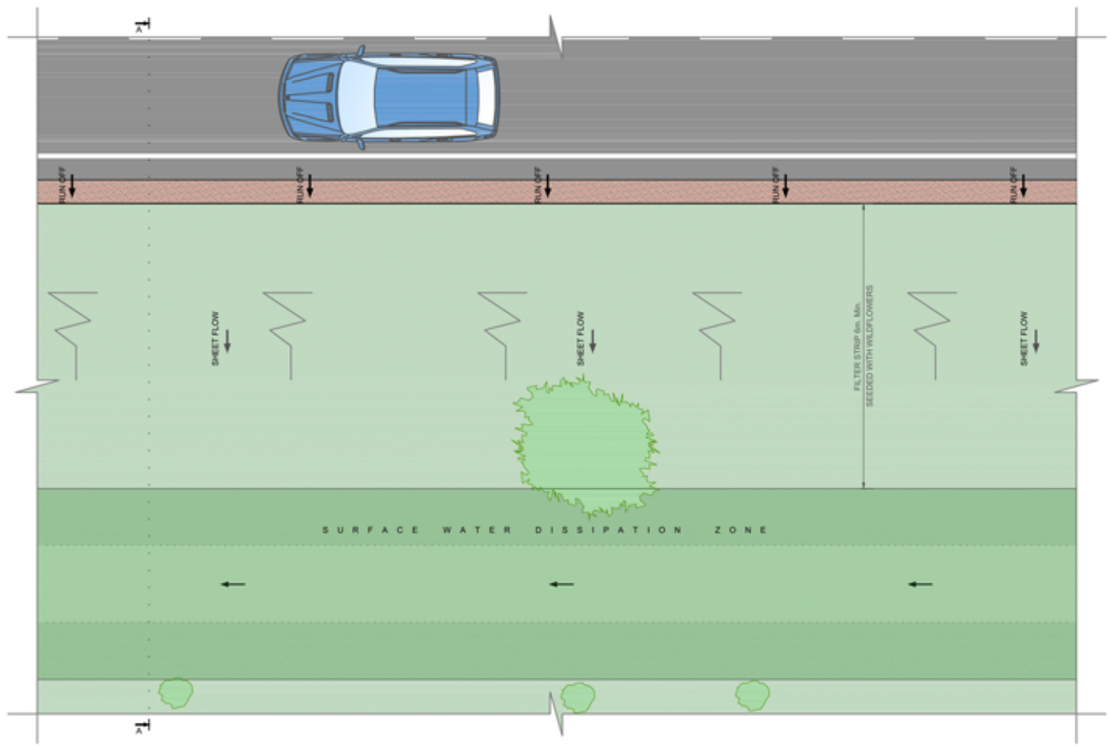
SHEET INFLOW
SECTION A-A
FILTER TRENCH SCHEMATICS
SCALE 1:25



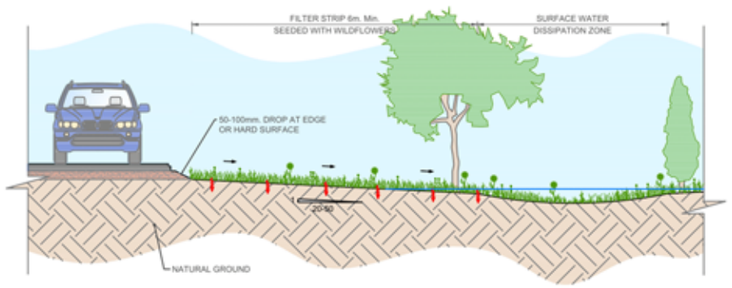
POINT INFLOW
SECTION B-B
FILTER TRENCH SCHEMATICS
SCALE 1:25

FIGURE D1

SCHEMATIC LAYOUT SHOWING TYPICAL FEATURES OF INFILTRATION FILTER TRENCH



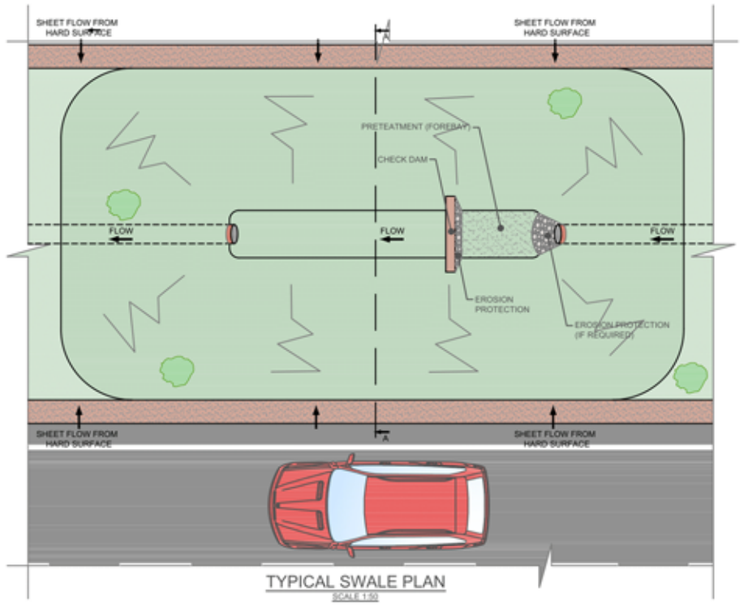
BIORETENTION / FILTER STRIP PLAN
SCALE 1:50



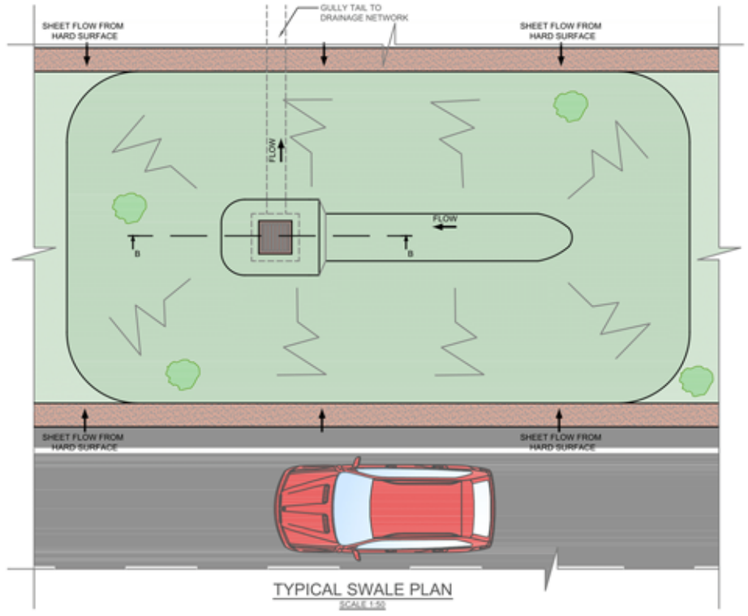
SECTION A-A
SCALE 1:50

FIGURE D2

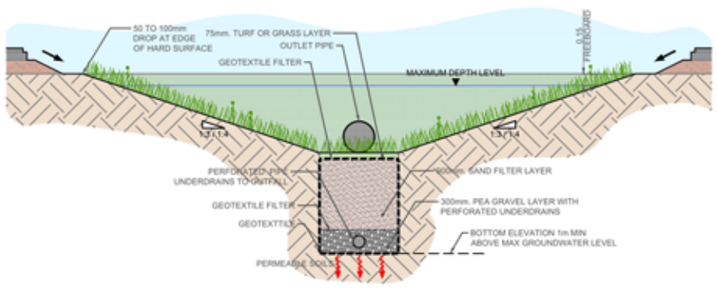
SCHEMATIC LAYOUT SHOWING TYPICAL FEATURES OF DETENTION FILTER STRIP



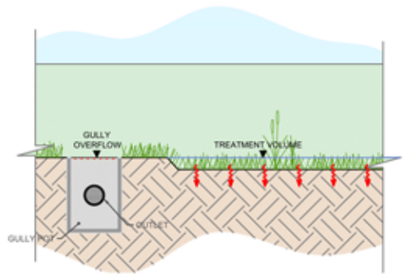
TYPICAL SWALE PLAN
SCALE 1:50



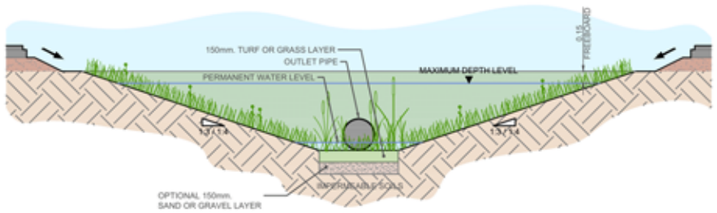
TYPICAL SWALE PLAN
SCALE 1:50



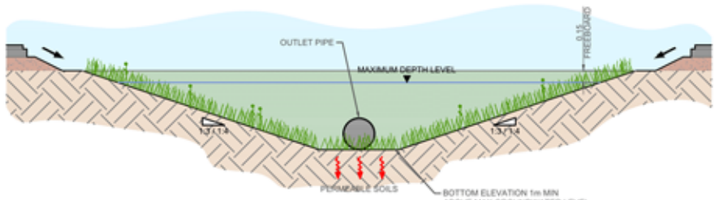
SECTION A-A
DRY SWALE
SCALE 1:30



SECTION A-A
GULLY OVERFLOW
SCALE 1:30

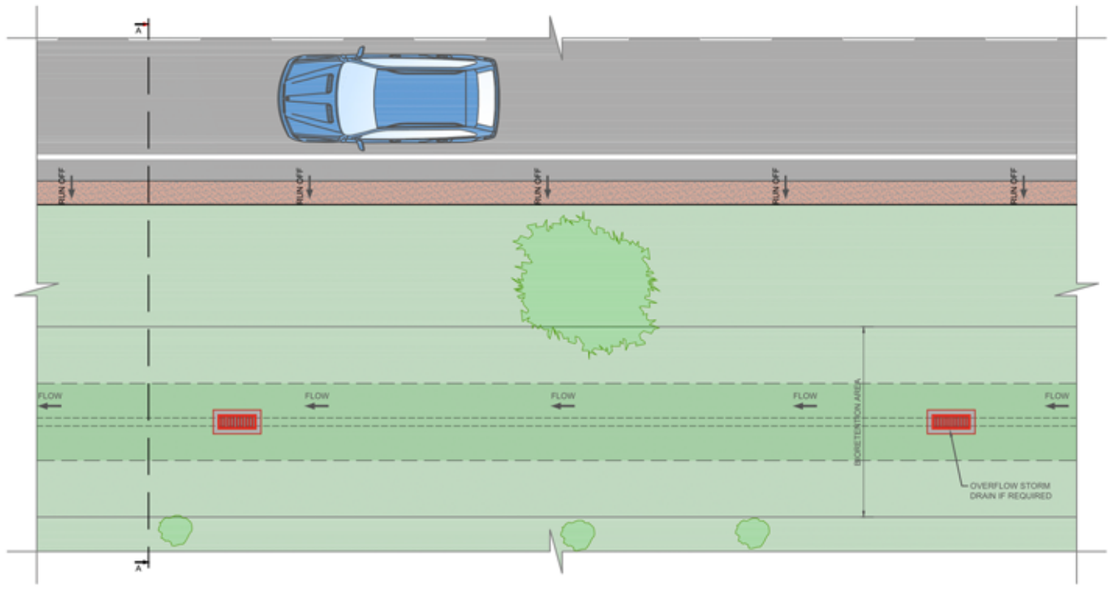


SECTION A-A
WET SWALE
SCALE 1:30

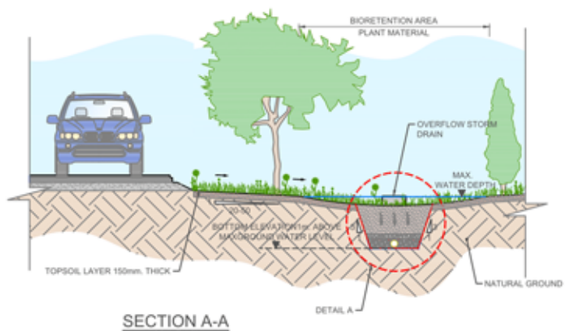


SECTION A-A
CONVEYANCE SWALE
SCALE 1:30

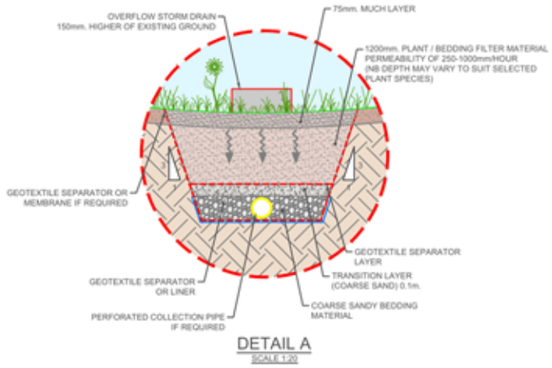
FIGURE D3
SCHEMATIC LAYOUT SHOWING TYPICAL FEATURES OF SWALES



BIORETENTION / FILTER STRIP PLAN
SCALE 1:50



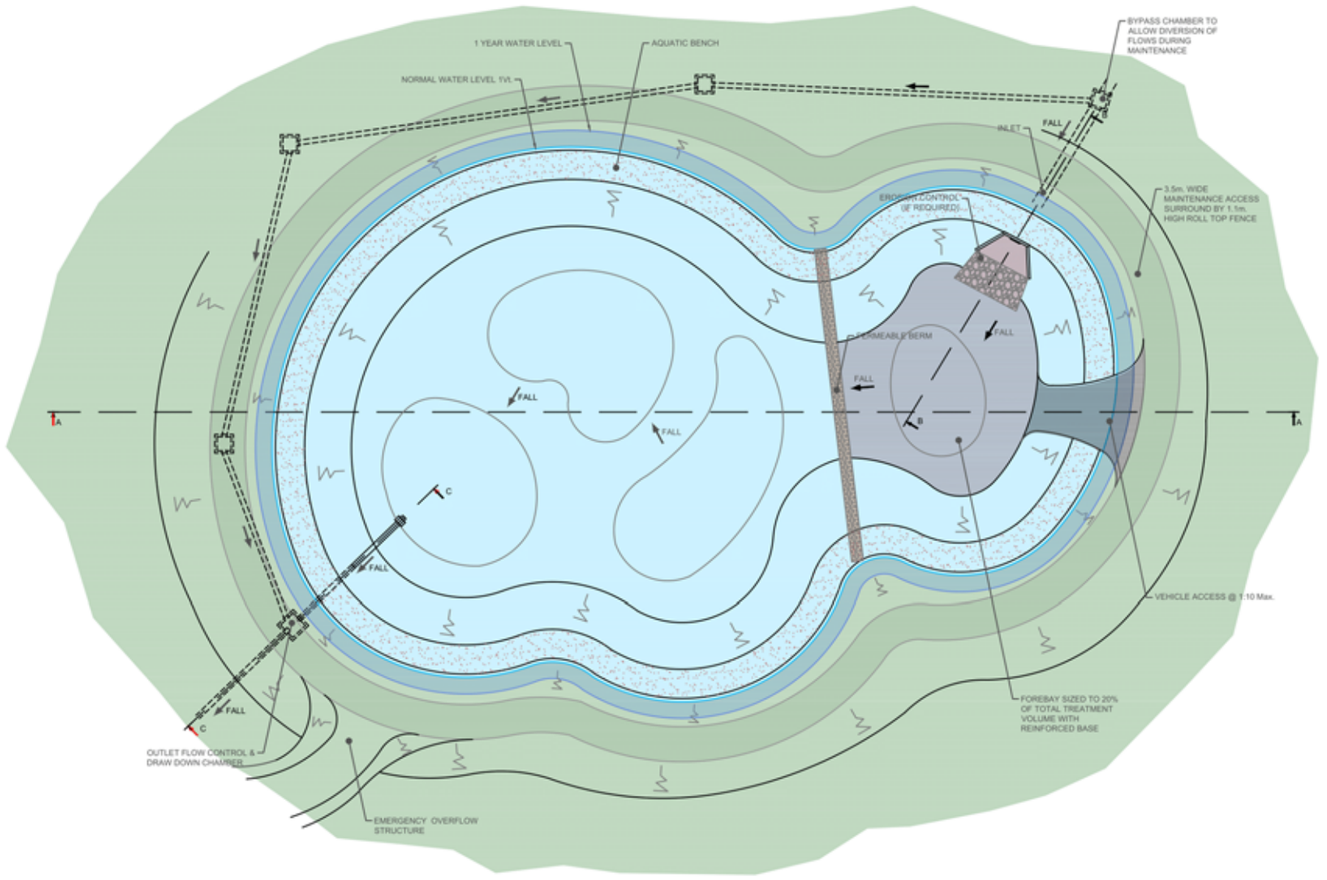
SECTION A-A
SCALE 1:50



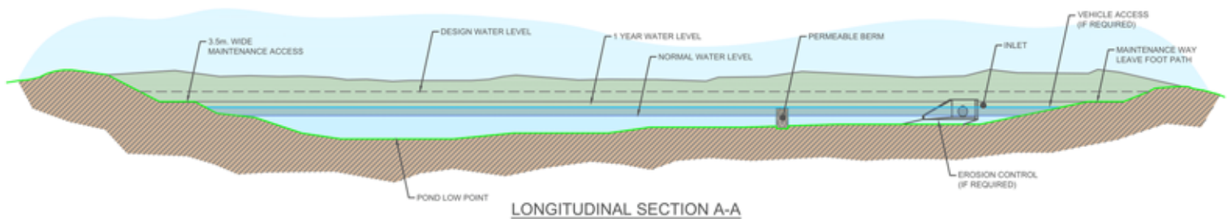
DETAIL A
SCALE 1:20

FIGURE D4

SCHEMATIC LAYOUT SHOWING TYPICAL FEATURES OF BIORETENTION



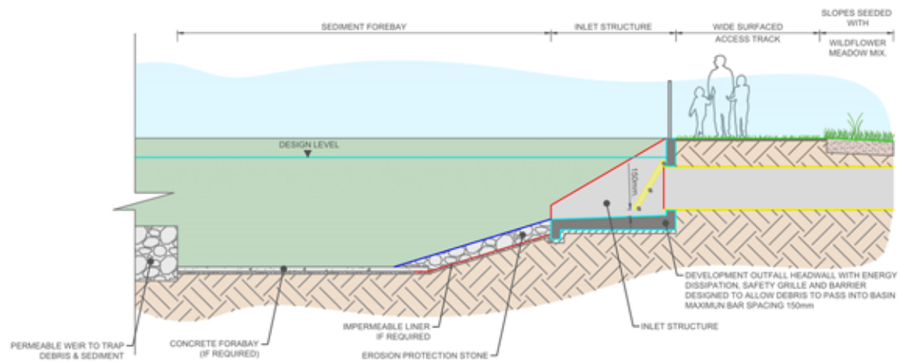
RETENTION POND PLAN
SCALE 1:200



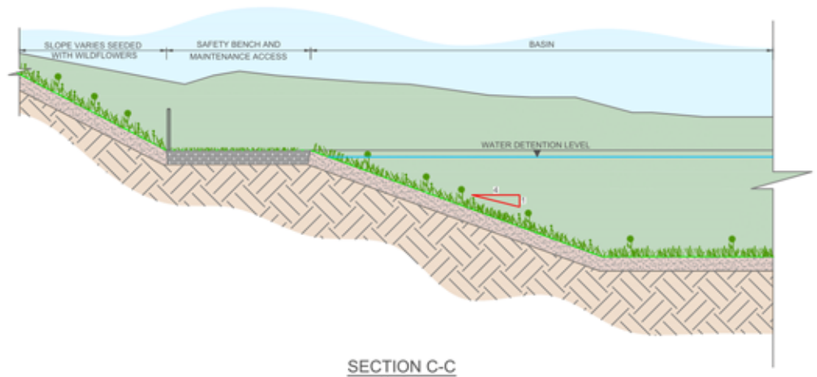
LONGITUDINAL SECTION A-A
SCALE 1:200

JBA

FIGURE D5
SCHEMATIC LAYOUT SHOWING TYPICAL FEATURES OF POND



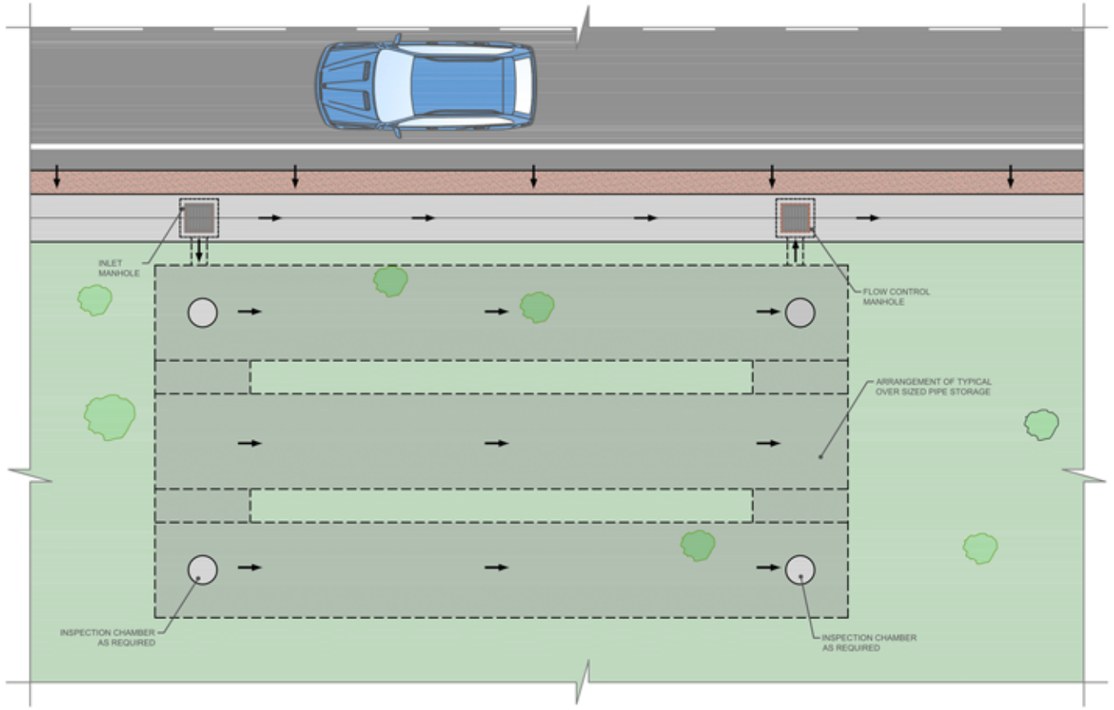
SECTION B-B
INLET DETAIL
SCALE 1:50



SECTION C-C
SCALE 1:50

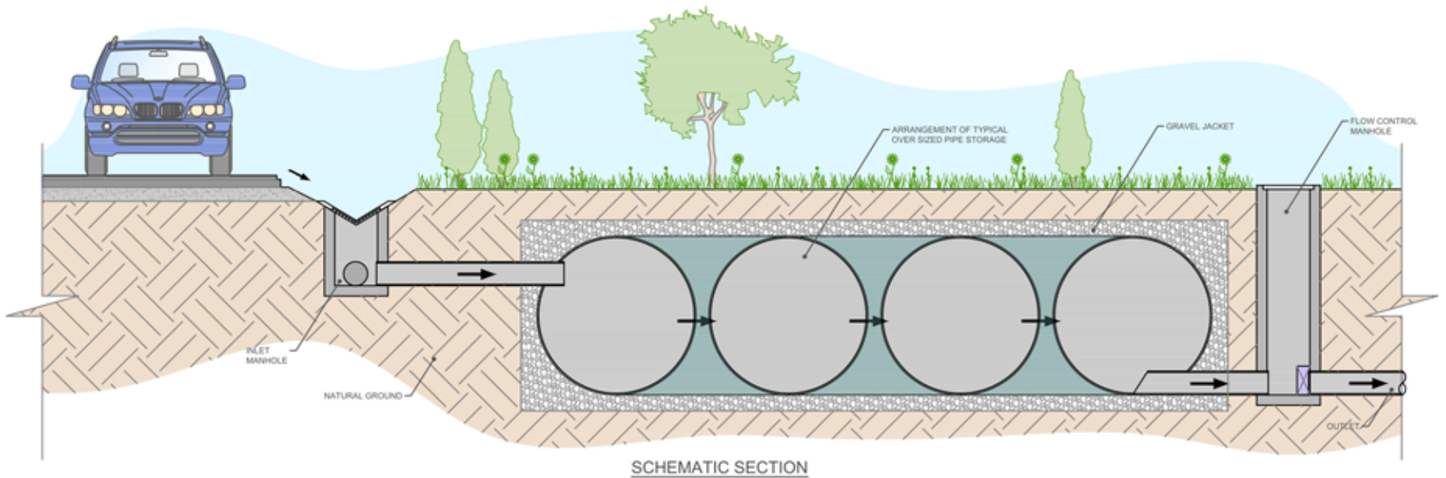
FIGURE D6

SCHEMATIC LAYOUT SHOWING TYPICAL FEATURES OF DETENTION BASIN



TYPICAL UNDERGROUND STORAGE PLAN

SCALE 1:50

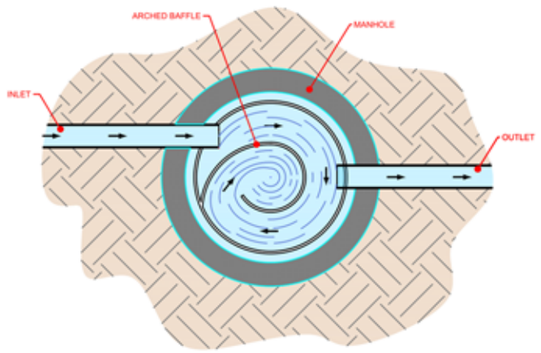


SCHEMATIC SECTION

SCALE 1:50

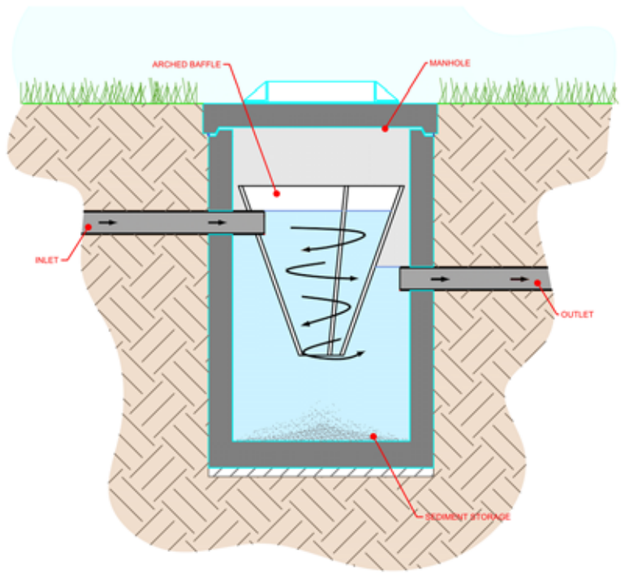
FIGURE D7

SCHEMATIC LAYOUT SHOWING TYPICAL FEATURES OF UNDERGROUND STORAGE



VORTEX SEPARATOR PLAN

SCALE 1:20



SECTION A-A
VORTEX SEPARATOR

SCALE 1:20

FIGURE D8

SCHEMATIC LAYOUT SHOWING TYPICAL FEATURES OF VORTEX SEPARATOR

Appendix D Useful Resources

Masterplanning and Concept Design

CIRIA (2010) Guidance on water cycle management for new developments (WaND) (C690)
http://www.ciria.org/ItemDetail?iProductCode=C690&Category=BOOK
CIRIA (2010) Planning for SuDS: Making it Happen (C687)
http://www.ciria.org/Resources/Free_publications/Planning_for_SuDS_ma.aspx
CIRIA (2013) Creating water sensitive places: scoping the potential for Water Sensitive Design in the UK (C724)
http://www.ciria.org/Resources/Free_publications/Creating_water_sens1.aspx
CIRIA (2013) Water sensitive urban design in the UK: Ideas for built environment practitioners.
http://www.ciria.org/Resources/Free_publications/Water_Sensitive_Urba.aspx

Outline Design

BSI Standards Publication (2013) Code of Practice for Surface Water Management for Development Sites (Section 5)
http://shop.bsigroup.com/en/ProductDetail/?pid=000000000030253266
CIRIA (2001) Rainwater and greywater use in buildings: Best practice guidance (C539)
http://www.ciria.org/ItemDetail?iProductCode=C539&Category=BOOK&WebsiteKey=3f18c87a-d62b-4eca-8ef4-9b09309c1c91
CIRIA (1996) Infiltration drainage - manual of good practice (R156)
http://www.ciria.org/ItemDetail?iProductCode=R156&Category=BOOK
CIRIA (2004) Sustainable Drainage Systems. Hydraulic, structural and water quality advice (C609B)
http://www.ciria.org/ItemDetail?iProductCode=C609D&Category=DOWNLOAD
CIRIA (2006) Designing for Exceedance in Urban Drainage: Good Practice (C635)
http://www.ciria.org/Resources/Free_publications/Designing_exceedance_drainage.aspx
CIRIA (2015) The SuDS Manual (C753) (Chapters 3, 4, 5, 6 and 25)
http://www.ciria.org/Memberships/The_SuDS_Manual_C753_Chapters.aspx
Defra (2015) Non-statutory Technical Standards for Sustainable Drainage Systems
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/415773/sustainable-drainage-technical-standards.pdf
Environment Agency (undated) Sustainable Drainage Systems: A Guide for Developers
http://www.rtpi.org.uk/media/12399/SuDS_a5_booklet_final_080408.pdf
Environment Agency (2012) Estimating flood peaks and hydrographs for small catchments: Phase 1. Project SC090031
http://nora.nerc.ac.uk/19604/4/SC090031_report.sflb.pdf
HR Wallingford (2004) The Operation and Maintenance of Sustainable Drainage Systems (and Associated Costs) (SR 626)
http://eprints.hrwallingford.co.uk/982/1/SR626-Operation-maintenance-sustainable-drainage-systems.pdf
HR Wallingford (2004) Whole Life Costing for Sustainable Drainage (SR 627)
http://eprints.hrwallingford.co.uk/983/1/SR627-Whole-life-costing-sustainable-drainage.pdf
Hydro International (2011) A guide to SuDS in the urban landscape
http://www.hydro-int.com/UserFiles/Hydro_e-guide.pdf
Local Authority SuDS Officer Organisation (living document) Non-Statutory Technical Standards for Sustainable Drainage: Best Practice Guidance
http://www.lasoo.org.uk/?publications=non-statutory-technical-standards-for-sustainable-drainage
National SuDS Working Group (2004) Interim Code of Practice for Sustainable Drainage Systems.
http://www.susdrain.org/files/resources/other-guidance/nswg_icop_for_SuDS_0704.pdf
Susdrain website
http://www.susdrain.org/
Thames Water Utilities Limited (2012) Addendum to Sewers for Adoption 7th Edition Nov 2012
http://www.thameswater.co.uk/tw/common/downloads/your-business-developer-services/tw-addendum-to-sewers-for-adoption-7th-edition.pdf

Detailed Design

Bray, B., Gedge, D. Grant, G, Leuthvilay, L. (2012) Rain Garden Guide
http://raingardens.info/wp-content/uploads/2012/07/UKRainGarden-Guide.pdf
British Water Code of Practice. Assessment of Manufactured Treatment Devices Designed to Treat Surface Water Runoff
http://www.britishwater.co.uk/Publications/manufactured-treatment-devices.aspx
CIRIA (2002) Source control using constructed pervious surfaces. Hydraulic, structural and water quality performance issues (C582)
http://www.ciria.org/ItemDetail?iProductCode=C582&Category=BOOK
CIRIA (2007) Building Greener: Guidance on the use of green roofs, green walls and complementary features on buildings (C644D)
http://www.ciria.org/ItemDetail?iProductCode=C644D&Category=DOWNLOAD
CIRIA website (live) Building Greener
http://www.ciria.com/buildinggreener/gr_introduction.htm
CIRIA (2008) Structural designs of modular geocellular drainage tanks (C680)
http://www.ciria.org/ItemDetail?iProductCode=C680&Category=BOOK
Department for Communities and Local Government (2009) Permeable surfacing of front gardens: guidance.
https://www.gov.uk/government/publications/permeable-surfacing-of-front-gardens-guidance
Greater London Authority (2008) Living Roofs and Walls Technical Report: Supporting London Plan Policy
https://www.london.gov.uk/sites/default/files/living-roofs.pdf
Green Roof Organisation (2014) The GRO Green Roof Code: Green Roof Code of Best Practice for the UK 2014.
https://livingroofs.org/wp-content/uploads/2016/03/grocode2014.pdf
Highways England (2012) Design Manual for Roads and Bridges HA 103/06
https://www.gov.uk/guidance/standards-for-highways-online-resources
Interpave (2010) Permeable paving for adoption
http://www.paving.org.uk/commercial/permeable_paving_for_adoption.php
Interpave (2012) Planning with paving
http://www.paving.org.uk/commercial/planning_with_paving.php
Interpave (2012) Understanding permeable paving: Guidance for designers, developers, planners and local authorities. Edition 4
http://www.paving.org.uk/commercial/understanding_permeable_paving.php
SEPA (2000) Ponds, pools and lochans: guidance on good practice in the management and creation of small waterbodies in Scotland
http://www.sepa.org.uk/media/151336/ponds_pools_lochans.pdf
SuDS Working Party (2009) SuDS for Roads.
http://www.scotsnet.org.uk/assets/sudsforroads.pdf
SuDS Working Party (2012) SuDS for Roads Whole Life Costs Tool.
http://www.scotsnet.org.uk/documents/sudsforroads-wlc-and-wlcarbon-toolv117.xls

Construction

CIRIA (2001) Control of water pollution from construction sites. Guidance for consultants and contractors(C532)
http://www.ciria.org/ItemDetail?iProductCode=C532
CIRIA (2002) Control of water pollution from construction sites – guide to good practice (SP156).
http://www.ciria.org/ItemDetail?iProductCode=SP156&Category=TP&WebsiteKey=3f18c87a-d62b-4eca-8ef4-9b09309c1c91
CIRIA (2006) Control of water pollution from linear construction projects. Site Guide (C649)
http://www.ciria.org/ItemDetail?iProductCode=C649&Category=BOOK&WebsiteKey=3f18c87a-d62b-4eca-8ef4-9b09309c1c91
CIRIA (2006) Control of water pollution from linear construction projects. Technical Guidance (C648)
http://www.ciria.org/ItemDetail?iProductCode=C648&Category=BOOK&WebsiteKey=3f18c87a-d62b-4eca-8ef4-9b09309c1c91
CIRIA (2007) Site handbook for the construction of SuDS (C698)
http://www.ciria.org/Resources/Free_publications/site_handbook_SuDS.aspx
CIRIA (2015) The SuDS Manual (C753): Chapter 21.
http://www.ciria.org/Memberships/The_SuDS_Manual_C753_Chapters.aspx
CIRIA (2015) The SuDS Manual C753 Update - Appendix B: Construction assessment checklist.
http://www.susdrain.org/resources/SuDS_Manual.html
CIRIA RP992 The SuDS Manual Update: Paper RP992/22 Guidance of Construction Method Statements.
http://www.susdrain.org/files/resources/SuDS_manual_output/paper_rp992_22_construction_method_statements_assessment_checklists.pdf

Adoption

CIRIA (2015) The SuDS Manual C753 Update: Appendix B: SuDS adoption handover checklist.
http://www.susdrain.org/resources/SuDS_Manual.html

Operation and Maintenance

CIRIA (2004) Model agreements for sustainable water management systems, model agreements for SuDS (C625)
http://www.ciria.org/ItemDetail?iProductCode=C625&Category=PHOTOCOPYCIRIA
(2015) The SuDS Manual (C753): Chapter 22 (and maintenance section of each SuDS component chapter).
http://www.ciria.org/Memberships/The_SuDS_Manual_C753_Chapters.aspx
CIRIA RP992 The SuDS Manual Update: Paper RP992/23 - Example of a SuDS Maintenance Plan
http://www.susdrain.org/files/resources/SuDS_manual_output/paper_rp992_23_example_suds_maintenance_plan.pdf
CIRIA RP992 The SuDS Manual Update: Paper RP992/23 - Guidance on the Maintenance Plan.
http://www.susdrain.org/files/resources/SuDS_manual_output/paper_rp992_21_maintenance_plan_checklist.pdf

Water quality

Environment Agency (2013) Water Stressed Areas - Final Classification
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/244333/water-stressed-classification-2013.pdf
Environment Agency (2017) The Environment Agency's approach to groundwater protection.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/598778/LIT_7660.pdf

Biodiversity and landscape

CIRIA (2011) Delivering biodiversity benefits through green infrastructure (C711)
http://www.ciria.org/ItemDetail?iProductCode=C711&Category=BOOK
Forestry Commission (2013) Air temperature regulation by trees and green infrastructure.
http://www.forestry.gov.uk/PDF/FCRN012.pdf/$FILE/FCRN012.pdf
Freshwater Habitats Trust (live) Pond Creation Toolkit website
http://freshwaterhabitats.org.uk/projects/million-ponds/pond-creation-toolkit/
Amenity and public engagement
CIRIA (2015) Communication and engagement in local flood risk management (C751) and companion guide (C752)
http://www.ciria.org/Resources/Free_publications/c751.aspx
Forestry Commission (undated) The Urban Forest: How trees and woodlands can improve our lives in towns and cities.
http://www.forestry.gov.uk/pdf/FCURBANFORESTA44PP.PDF/$FILE/FCURBANFORESTA44PP.PDF
London Play (2010) Play with rainwater and SuDS
http://www.londonplay.org.uk/resources/0000/1701/Sustainable_drainage_and_play_with_rainwater_low_res.pdf
RSPB/WWT (2012) Sustainable Drainage Systems: Maximising the potential for people and wildlife. A guide for local authorities and developers.
http://www.rspb.org.uk/Images/SuDS_report_final_tcm9-338064.pdf

Retro-fitting SuDS

CIRIA (2012) Retro-fitting to manage surface water (C713)
http://www.ciria.org/Resources/Free_publications/Retro-fitting_manage_surface_water.aspx

Glossary

Attenuation – The process of slowing and temporarily storing run-off to enable a more controlled rate and volume of discharge

Brownfield – Land that has been previously developed

Catchment – The area of land drained by a river and other water bodies along that river's route

Environmental Permit - A permit which allows certain activities which have the potential to impact the environment and human health, following specific restrictions.

Flood Risk Assessment (FRA) - is an assessment of the risk of flooding from all flooding mechanisms i.e. fluvial, pluvial, tidal, groundwater, sewer systems.

Greenfield – Natural or agricultural land that is vacant of existing buildings or infrastructure

Impermeable – Not allowing passage (as of a fluid) through its matter.

Impervious – A material that prevents penetration or passage of another substance

Infiltration - The process by which surface water passes through the soil.

Interception – The disruption of the movement of water by vegetation cover.

Land drainage Consent - Is a requirement of the Land Drainage Act 1991, for any developer who plans to carry out any construction work that might affect the flow of an ordinary watercourse and subsequently increase the flood risk to the surrounding area.

Main River - Usually consists of larger streams and rivers, but some of them are smaller watercourses of local significance. Main Rivers indicate those watercourses for which the Environment Agency is the relevant risk management authority.

Manning's Equation – Is an empirical equation that relates the velocity (V) of water flowing through a stream to its slope (s), the hydraulic radius of the stream (R), and its approximate bed roughness (n). V = (R⅔s½)/n..

National Planning Policy Framework (NPPF) – A strategic document which aims to address the Government's economic, environmental and social planning policies for England. The policies set out in this framework apply to the formation of local and neighbourhood plans and to decisions on planning applications.

Ordinary Watercourse – Includes every river, stream, ditch, drain, cut, dyke, sluice, sewer (other than public sewer) and passage through which water flows which does not contribute to part of a Main River. The Lead Local Flood Authority, District/Borough Council or Internal Drainage Board is the relevant risk management authority.

Outline Application - An application which allows for a decision on the general principles of how a site can be developed. Outline planning permission is granted by the Local Planning Authority on the basis that additional details of the development are conditioned to ensure they are submitted within a subsequent reserved matters application.

Permeable – A material which is able to be easily passed-through by a liquid

Porous – A material that is able to easily absorb fluids into its pores

Reserved Matters – Regards certain elements of a proposed development which an applicant can choose not to submit details of with an outline planning application, such as access details

Riparian Owner - An owner of land with a watercourse adjoining, above or running through it, who has specific rights and responsibilities, i.e. maintenance of the watercourse to prevent restrictions which have the potential to cause fluvial flooding. https://www.gov.uk/guidance/owning-a-watercourse

Strategic Flood Risk Assessment (SFRA) – Is a requirement of the local planning process, as set out in Planning Policy Statement 25, produced by the Department for Communities and Local Government. It's overall aim is to ensure that requires local authorities to demonstrate that due regard has been given to the issue of flood risk as part of the planning process. Please see Strategic Flood Risk Assessment for further details on Cheshire East Council's SFRA.

Topography – The contours, gradients, levels and features formed on a terrestrial surface

Urban heat-island effect – the effect hard-surfaces in an urban environment have in raising built-environment temperatures above those of surrounding natural land

Draft Sustainable Urban Drainage Systems Supplementary Planning Document

Strategic Environmental Assessment and Habitats Regulations Assessment Screening Report

Introduction and Purpose

1. Cheshire East Council has produced a draft Sustainable Urban Drainage Systems (SUDS) Supplementary Planning Document ("SPD"). The purpose of the SPD is to provide guidance on the implementation of SUDS in new development, adding further detail and guidance to policies contained within the Development Plan.

2. The Development Plan for Cheshire East consists of the Local Plan Strategy ("LPS") and 'saved' policies in the Crewe and Nantwich, Congleton and Macclesfield Local Plans. In addition, made Neighbourhood Plans also form part of the Development Plan.

3. The policy framework for the SPD is contained mostly in the LPS, with a particular focus on Policy SE13 Flood Risk and Water Management.

4. The Council is also in the process of preparing the second part of its Local Plan, called the Site Allocations and Development Policies Document ("SADPD"). The Revised Publication Draft SADPD (consulted on between 26 October and 23 December 2020) contains a number of emerging policies on matters including Policy ENV16 'Surface Water Management and Flood Risk' and is being prepared in conformity with the LPS and the emerging SADPD.

5. This screening report is designed to determine whether or not the contents of the draft Sustainable Urban Drainage Systems SPD require a Strategic Environmental Assessment ("SEA") in accordance with the European Directive 2001/42/EC and associated Environmental Assessment of Plans and Programmes Regulations 2004. The report also addresses whether the draft Sustainable Urban Drainage Systems SPD has a significant adverse effect upon any internationally designated site(s) of nature conservation importance and thereby subject to the requirements of the Habitats Regulations. The report contains separate sections that set out the findings of the screening assessment for these two issues.

6. This statement, alongside the draft Sustainable Urban Drainage Systems SPD, will be the subject of consultation in accordance with the relevant regulations and the Council's Statement of Community Involvement from the XXXX to XXXX. This will include consultation with the relevant statutory bodies (Natural England, Environment Agency and Historic England), and Manchester University. Comments received during the consultation on the draft Sustainable Urban Drainage Systems SPD and this statement will be reflected in future updates to this document.

Strategic Environmental Assessment Screening

Legislative Background

7. The objective of SEA is to provide for a high level of protection of the environment with a view to promoting the achievement of sustainable development. It is a requirement of European Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (also known as the SEA Directive). The Directive was transposed in UK law by the Environmental Assessment of Plans and Programmes Regulations 2004, often known as the SEA Regulations.

8. Article 3(3) and 3(4) of the regulations make clear that SEA is only required for plans and programmes when they have significant environmental effects. The 2008 Planning Act removed the requirement to undertake a full Sustainability Appraisal for a SPD although consideration remains as to whether the SPD requires SEA, in exceptional circumstances, when likely to have a significant environmental effect(s) that has not already been assessed during the preparation of a Local Plan. In addition, planning practice guidance (PPG – ref Paragraph: 008 Reference ID: 11-008-20140306) states that a SEA is unlikely to be required where an SPD deals only with a small area at local level, unless it is considered that there are likely to be significant environmental effects.

Overview of draft Sustainable Urban Drainage Systems SPD

9. The purpose of the draft Sustainable Urban Drainage Systems SPD is to provide further guidance on the implementation of LPS policy SE 13 ("Flood Risk and Water Management").

10. It is important to note that policies in the LPS were the subject of Sustainability Appraisal, which incorporated the requirements of the SEA regulations (as part of an Integrated Sustainability Appraisal). The likely significant environmental effects have already been identified and addressed – the SPD merely provides guidance on existing

policies. The LPS Integrated Sustainability Appraisal has informed this SPD screening assessment.

11. SEA has been undertaken for policy SE13 ("Flood Risk and Water Management") as part of the Integrated Sustainability Appraisal that supported the LPS. For the purposes of compliance with the UK SEA Regulations and the EU SEA directive, the following reports comprised the SA "Environmental Report":

    - SD 003 – LPS Submission Sustainability (Integrated) Appraisal (May 2014);
    - PS E042 – LPS Sustainability (Integrated) Appraisal of Planning for Growth Suggested Revisions (August 2015);
    - RE B006 – LPS Sustainability (Integrated) Appraisal Suggested Revisions to LPS Chapters 9-14 (September 2015);
    - RE F004 – Sustainability (Integrated) Appraisal – Proposed Changes (March 2016);
    - PC B029 – Sustainability (Integrated) Appraisal - Proposed Changes to Strategic and Development Management Policies (July 2016);
    - PC B030 – Sustainability (Integrated) Appraisal - Proposed Changes to Sites and Strategic Locations (July 2016);
    - MM 002 - Sustainability (Integrated) Appraisal - Main Modifications Further Addendum Report.

12. In addition, an SA adoption statement was prepared in July 2017 to support the adoption of the LPS. It should also be noted that the emerging SADPD and the policies contained in it have also been supported by a Sustainability Appraisal (incorporating the requirements for the SEA directive).

SEA Screening Process

13. The council is required to undertake a SEA screening to assess whether the draft Sustainable Urban Drainage Systems SPD is likely to have significant environmental effects. If the draft Sustainable Urban Drainage Systems SPD is considered unlikely to have significant environmental effects through the screening process, then the conclusion will be that SEA is not necessary. This is considered in Table 1 below:-

Table 1: Establishing the need for a SEA

Stage		Decision	Rationale
1.	Is the SPD subject to preparation and/or adoption by a national, regional or local authority OR prepared through a legislative procedure by Parliament or Government? (Art. 2 (a)).	Yes	The SPD will be prepared and adopted by Cheshire East Borough Council.
2.	Is the SPD required by legislation, regulatory or administrative provisions? (Article. 2 (a)).	No	The Council's Local Development Scheme (2020 – 2022) does not specifically identify the need to produce a draft Sustainable Urban Drainage Systems SPD.
3.	Is the SPD prepared for agricultural, forestry, fisheries, energy, industry, transport, waste management, telecommunications, tourism, town and country planning or land use, AND does it set a framework for future development consent of projects in Annexes I and II to the EIA Directive? (Article 3.2 (a)).	No	The SPD is being prepared for town and country planning use. It does not set a framework for future development consent of projects in Annexes I and II to the EIA Directive (Article 3.2 (a)). Whilst some developments to which the guidance in the SPD applies would fall within Annex II of the EIA Directive at a local level, the SPD does not specifically plan for or allow it.
4.	Will the SPD, in view of its likely effect on sites, require an assessment under Article 6 or 7 of the Habitats Directive? Art 3.2 (b)).	No	A Habitats Regulations Assessment has been undertaken for the LPS and emerging SADPD. The SPD does not introduce new policy or allocate sites for development. Therefore, it is not considered necessary to undertake a HRA assessment for the SPD. This conclusion has been supported by an HRA screening assessment as documented through this report.
5	Does the SPD determine the use of small areas at local level, OR is it a minor modification of a PP subject to Art. 3.2? (Art 3.3)	No	The SPD will not determine the use of small areas at a local level. The SPD provides guidance on the how applicants should demonstrate the delivery of Sustainable Urban Drainage Systems, but it does not specifically determine the use of small areas at a local level. The SPD will be a material consideration in decision taking.
6.	Does the SPD set the framework for future development consent of projects (not just projects in Annexes to the EIA Directive)? (Art. 3.4)	No	The LPS and emerging SADPD provide the framework for the future consent of projects. The SPD elaborates upon approved and emerging policies and does not introduce new policy or allocate sites for development.

14. The SPD is considered to not have a significant effect on the environment and therefore SEA is not required. However, for completeness, Table 2 assesses whether the draft SPD will have any significant environmental effects using the criteria set out

in Annex II of SEA Directive 2001/42/EC[1] and Schedule 1 of the Environmental Assessment of Plans and Programmes Regulations 2004[2].

Table 2: assessment of likely significance of effects on the environment

SEA Directive Criteria Schedule 1 of Environmental Assessment of Plans and Programmes Regulations 2004	Summary of significant effects, scope and influence of the document	Is the Plan likely to have a significant environmental effect (Yes / No)
1.Characteristics of the SPD having particular regard to:		
(a) The degree to which the SPD sets out a framework for projects and other activities, either with regard to the location, nature, size or operating conditions or by allocating resources.	Guidance is supplementary to polices contained in the LPS and emerging SADPD, both of which have been the subject of SA / SEA. The policies provide an overarching framework for development in Cheshire East. The draft Sustainable Urban Drainage Systems SPD provides further clarity and certainty to form the basis for the submission and determination of planning applications, consistent with policies in the LPS. Final decisions will be determined through the development management process. No resources are allocated.	No
(b)The degree to which the SPD influences other plans and programmes including those in a hierarchy.	The draft SPD is in general conformity with the LPS, which has been subject to a full Sustainability Appraisal (incorporating SEA). It is adding more detail to the adopted LPS and other policies in the Development Plan including the emerging SADPD, which has itself been the subject of Sustainability Appraisal. Therefore, it is not considered to have an influence on any other plans and programmes.	No
(c)The relevance of the SPD for the integration of environmental considerations in particular with a view to promoting sustainable development.	The draft SPD promotes sustainable development, in accordance with the NPPF (2019) and LPS policies. The LPS has been the subject of a full Sustainability Appraisal (incorporating SEA). The draft SPD has relevance for the integration of environmental considerations and promotes sustainable development by providing guidance on the delivery of	No

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0042&from=EN

[2] http://www.legislation.gov.uk/uksi/2004/1633/pdfs/uksi_20041633_en.pdf

SEA Directive Criteria Schedule 1 of Environmental Assessment of Plans and Programmes Regulations 2004	Summary of significant effects, scope and influence of the document	Is the Plan likely to have a significant environmental effect (Yes / No)
	Sustainable Urban Drainage Systems in the borough.	
(d)Environmental problems relevant to the SPD.	There are no significant environmental problems relevant to the SPD.	No
(e)The relevance of the SPD for the implementation of Community legislation on the environment (for example plans and programmes related to waste management or water protection).	The draft SPD will not impact on the implementation of community legislation on the environment.	No
2.Characteristics of the effects and area likely to be affected having particular regard to:		
(a)The probability, duration, frequency and reversibility of the effects.	The draft SPD adds detail to adopted LPS policy; itself the subject of SA.	No
(b)The cumulative nature of the effects of the SPD.	The draft SPD adds detail to adopted LPS policy, itself the subject of SA. The SA associated with the LPS and emerging SADPD have considered relevant plans and programmes. No other plans or programmes have emerged that alter this position.	No
(c)The trans-boundary nature of the effects of the SPD.	Trans-boundary effects will not be significant. The draft SPD will not lead to any transboundary effects as it just providing additional detail regarding the implementation of policy SE13 in the LPS and does not, in itself, influence the location of development.	No
(d)The risks to human health or the environment (e.g. due to accident).	The draft SPD will not cause risks to human health or the environment as it is adding detail to environmental policies in the Local Plan.	No
(e)The magnitude and spatial extent of the effects (geographic area and size of the population likely to be affected) by the SPD.	The draft SPD covers the Cheshire East administrative area. The draft SPD will assist those making planning applications in the borough.	No
(f)The value and vulnerability of the area likely to be affected by the SPD due to: • Special natural characteristics of cultural heritage	The draft SPD will not lead to significant effects on the value or vulnerability of the area. It is adding detail regarding the implementation of environmental policy SE13 in the LPS, and does not, in itself, influence the location of development.	No

SEA Directive Criteria Schedule 1 of Environmental Assessment of Plans and Programmes Regulations 2004	Summary of significant effects, scope and influence of the document	Is the Plan likely to have a significant environmental effect (Yes / No)
• Exceeded environmental quality standards or limit values • Intensive land use.		
(g)The effects of the SPD on areas or landscapes which have recognised national Community or international protected status.	The SPD does not influence the location of development, so will not cause effects on protected landscape sites.	No

Conclusion and SEA screening outcome

15. The SPD is not setting new policy; it is supplementing and providing further guidance on an existing LPS policy. Therefore, it is considered that an SEA is not required on the draft Sustainable Urban Drainage Systems SPD. This conclusion will be revisited following consideration of the views of the three statutory consultees (the Environment Agency, Historic England and Natural England) and if there are significant changes to the SPD following public consultation.

Habitats Regulations Assessment Statement

16. The Council has considered whether its planning documents would have a significant adverse effect upon the integrity of internationally designated sites of nature conservation importance. European Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Flora and Fauna (Habitats Directive) provides legal protection to habitats and species of European importance. The principal aim of this directive is to maintain at, and where necessary restore to, favourable conservation status of flora, fauna and habitats found at these designated sites.

17. The Directive is transposed into English legislation through the Conservation of Habitats and Species Regulations 2017 (a consolidation of the amended Conservation of Habitats and Species Regulations, 2010) published in November 2017.

18. European sites provide important habitats for rare, endangered or vulnerable natural habitats and species of exceptional importance in the European Union. These sites consist of Special Areas of Conservation (SACs, designated under the EU Directive 92/43/EEC on the conservation of natural habitats and of fauna and flora (Habitats Directive)), and Special Protection Areas (SPAs, designated under EU Directive 2009/147/EC on the conservation of wild birds (the Birds Directive)). Government policy requires that Ramsar sites (designated under the International Wetlands Convention, UNESCO, 1971) are treated as if they are fully designated European sites for the purposes of considering development proposals that may affect them.

19. Spatial planning documents may be required to undergo Habitats Regulations Screening if they are not directly connected with or necessary to the management of a European site. As the draft Sustainable Urban Drainage Systems SPD is not connected with, or necessary to, the management of European sites, the HRA implications of the SPD have been considered.

20. A judgement, published on the 13 April 2018 (People Over Wind and Sweetman v Coillte Teoranta (C-323/17) clarified that measures intended to avoid or reduce the harmful effects of a proposed project on a European site may no longer be taken into account by competent authorities at the Habitat Regulations Assessment “screening stage” when judging whether a proposed plan or project is likely to have a significant effect on the integrity of a European designated site.

21. Both the LPS and emerging SADPD have been subject to HRA.

22. The draft Sustainable Urban Drainage Systems SPD does not introduce new policy; it provides further detail to those policies contained within the LPS. The HRA concluded that policies s SE 13 “Flood Risk and Water Management” could not have a likely significant effect on a European Site. The same applies to the draft Sustainable Urban Drainage Systems SPD. The draft Sustainable Urban Drainage Systems SPD in itself, does not allocate sites and is a material consideration in decision taking, once adopted.

23. The draft Sustainable Urban Drainage Systems SPD either alone or in combination with other plans and programmes, is not likely to have a significant effect on any European site. Therefore, a full Appropriate Assessment under the requirements of the Habitats Regulations is not required.

Conclusion and HRA screening outcome

24. Subject to views of the three statutory consultees (the Environment Agency, Historic England and Natural England), this screening report indicates that an Appropriate Assessment under the Habitats Regulations is not required.

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EQUALITY IMPACT ASSESSMENT

TITLE: Draft Sustainable Urban Drainage Systems Supplementary Planning Document ("SPD")

VERSION CONTROL

Date	Version	Author	Description of Changes
24.05.2021	**1**	Tom Evans	**Initial Draft**
-	**-**	**Sarah Walker**	**EDI sign off**

CHESHIRE EAST COUNCIL - EQUALITY IMPACT ASSESSMENT

Stage 1 Description: Fact finding (about your policy / service /

Department	Strategic Planning		**Lead officer responsible for assessment**		Tom Evans, Neighbourhood Plan Manager	
Service	Environmental and Neighbourhood Services		**Other members of team undertaking assessment**		Tom Evans, Neighbourhood Plan Manager	
Date	24/05/2021		Version 1			
Type of document (mark as appropriate)	**Strategy YES**	**Plan**	**Function**	**Policy**	**Procedure**	**Service**
Is this a new/ existing/ revision of an existing document (please mark as appropriate)	**New YES**		**Existing**		**Revision**	
Title and subject of the impact assessment (include a brief description of the aims, outcomes , operational issues as appropriate and how it fits in with the wider aims of the organisation) **Please attach a copy of the strategy/ plan/ function/ policy/ procedure/ service**	**Draft Jodrell Bank Supplementary Planning Document ("SPD")** Background Supplementary Planning Documents ("SPDs") provide further detail to the policies contained in the development plan. They can be used to provide guidance for development on specific sites, or on particular issues, such as design. SPDs are capable of being a material consideration in planning decisions but are not part of the development plan. They must be consistent with national planning policy, must undergo consultation and must be in conformity with policies contained within the Local Plan. The council has prepared a draft SUDS SPD for consultation. The draft SPD provides additional guidance on the implementation of policy SE13 ("Flood Risk and Water Management"), in the council's Local Plan Strategy, adopted in July 2017. The SPD, once adopted, should assist applicants when making planning applications, and the council in determining them. The SPD provides further guidance on existing policies, rather than setting a new policy approach in relation to biodiversity and habitats. The SPD has been prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012, the National Planning Policy Framework and National Planning Practice Guidance.					

	The SPD has been prepared in accordance with the Town and Country Planning (Local Planning) (England) Regulations 2012 (as amended by the Local Planning, Development Management Procedure, Listed Buildings etc (England) (Coronavirus) (Amendment) Regulations 2020), the National Planning Policy Framework and National Planning Practice Guidance. An Equalities Impact Assessment was prepared alongside the integrated Sustainability Appraisal work which supported the Local Plan Strategy. An Equalities Impact Assessment has also been prepared to support the emerging Site Allocations and Development Policies Document. The assessment found that the LPS policies (including policies particularly relevant to the SPD) and emerging SADPD are unlikely to have negative effects on protected characteristics or persons identified under the Equality Act 2010.
Who are the main stakeholders and have they been engaged with? (e.g. general public, employees, Councillors, partners, specific audiences, residents)	Public consultation will take place on the draft SPD for four weeks in accordance with the Town and Country Planning ((Local Planning) (England) Regulations 2012) and the council's adopted Statement of Community Involvement. This will include the general public, town and parish councils, statutory consultees, elected members, consultees who have registered on the strategic planning database.
What consultation method(s) did you use?	The council prepares a Statement of Community Involvement which provides detail on how it will consult on Local Plan documents and SPDs. This includes the availability of documents, how residents and stakeholders will be notified etc. The council's Local Plan consultation database, which will be notified of the consultation, also includes a number of organisations who work alongside groups with protected characteristics in the borough. Once consultation has taken place on the draft SPD, all comments received will be reviewed before consideration is given to any amendments required. A report of consultation will be prepared alongside the final version of the SPD and this will also be subject to further consultation. This EIA will be kept updated as the draft SPD progresses.

Stage 2 Initial Screening

Who is affected and what evidence have you considered to arrive at this analysis? (This may or may not include the stakeholders listed above)	Ward councillors. Those living and working in the borough, property owners, landowners and developers, clinical commissioning group, special interest groups.

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Who is intended to benefit and how?	Local communities including landowners and developers. The SPD will provide additional guidance on the implementation of existing planning policies related to the assessment of planning applications on matters relating to managing water and flood risk providing guidance on how a developers should work with the landscape of a site to manage water (rather than introducing an engineering led approach). Building in landscape features that helps to disperse and manage surface water is beneficial to all communities through increasing the provision of natural environmental services, reducing flood risk from surface water and improve design in new development. The means through which a SUDS are achieved may also improve access to green space and recreation opportunities in new and existing development.
Could there be a different impact or outcome for some groups?	No, the SPD builds upon existing planning policy guidance and provides further information about how the council will consider planning applications. The provision of guidance on how SUDS should be implemented will assist in clarifying what types of design are acceptable in Cheshire East. The SPD, in applying additional guidance to assist in the interpretation of planning policies should be beneficial to a wide variety of groups including communities, landowners and developers.
Does it include making decisions based on individual characteristics, needs or circumstances?	No, the introduction of the SPD is not based on individual characteristics, needs or circumstances. The SPD includes information on the management of water in new development.The content of the SPD does not relate directly to the characteristics of human populations.
Are relations between different groups or communities likely to be affected? (eg will it favour one particular group or deny opportunities for others?)	No, the SPD is not intended to affect different groups or communities in this way.
Is there any specific targeted action to promote equality? Is there a history of unequal outcomes (do you have enough evidence to prove otherwise)?	No, the SPD is not intended to target any group and will be consulted upon in line with the council's Statement of Community Involvement.

Is there an actual or potential negative impact on these specific characteristics? (Please tick)

Age	**Y**	**N**	**Marriage & civil partnership**	**Y**	**N**	**Religion & belief**	**Y**	**N**
Disability	**Y**	**N**	**Pregnancy & maternity**	**Y**	**N**	**Sex**	**Y**	**N**
Gender reassignment	**Y**	**N**	**Race**	**Y**	**N**	**Sexual orientation**	**Y**	**N**

EQUALITY IMPACT ASSESSMENT

What evidence do you have to support your findings? (quantitative and qualitative) Please provide additional information that you wish to include as appendices to this document, i.e., graphs, tables, charts		Consultation/ involvement carried out	
		Yes	**No**
Age **Disability** **Gender reassignment** **Marriage & civil partnership** **Pregnancy & maternity** **Race** **Religion & belief** **Sex** **Sexual orientation**	The SPD may have an impact those living and working in the borough. The draft SUDS SPD provides further guidance on the implementation of LPS policy SE13 "Flood Risk and Water Management" to support the delivery of SUDS solutions that improve design and work with the landscape of a site. The SPD also provides guidance on policy requirements and methods that applicants can use to demonstrate compliance with relevant policies in the Development Plan. The guidance in the SPD may be beneficial as it will assist in supporting the long term ability of development to mitigate the impacts of climate change, that can support the economy, recreation and leisure opportunities for human populations. The SPD provides further guidance on the policy approach set out in the Local Plan Strategy. No negative impacts are identified at this stage in relation to any of the specific characteristics however public consultation will be undertaken and this may raise issues officers are not currently aware of. The EIA will be reviewed (and updated) once the initial consultation has taken place.		**X (to be carried out)**

Proceed to full impact assessment? (Please tick)	**Yes**	**No**	**Date: 24/05/2021**
Lead officer sign off	**Tom Evans**	**Date**	**Date: 24/05/2021**

			
Head of service sign off	**David Malcolm** 	**Date**	**Date: 2/08/2021**

If yes, please proceed to Stage 3. If no, please publish the initial screening as part of the suite of documents relating to this issue

EQUALITY IMPACT ASSESSMENT

Stage 3 Identifying impacts and evidence

This section identifies if there are impacts on equality, diversity and cohesion, what evidence there is to support the conclusion and what further action is needed

Protected characteristics	Is the policy (function etc….) likely to have an adverse impact on any of the groups? Please include evidence (qualitative & quantitative) and consultations *List what negative impacts were recorded in Stage 1 (Initial Assessment).*	Are there any positive impacts of the policy (function etc….) on any of the groups? Please include evidence (qualitative & quantitative) and consultations *List what positive impacts were recorded in **Stage 1** (Initial Assessment).*	Please rate the impact taking into account any measures already in place to reduce the impacts identified ***High:*** *Significant potential impact; history of complaints; no mitigating measures in place; need for consultation* ***Medium:*** *Some potential impact; some mitigating measures in place, lack of evidence to show effectiveness of measures* ***Low:*** *Little/no identified impacts; heavily legislation-led; limited public facing aspect*	Further action (only an outline needs to be included here. A full action plan can be included at Section 4) *Once you have assessed the impact of a policy/service, it is important to identify options and alternatives to reduce or eliminate any negative impact. Options considered could be adapting the policy or service, changing the way in which it is implemented or introducing balancing measures to reduce any negative impact. When considering each option you should think about how it will reduce any negative impact, how it might impact on other groups and how it might impact on relationships between groups and overall issues around community cohesion. You should clearly demonstrate how you have considered various options and the impact of these. You must have a detailed rationale behind decisions and a justification for those alternatives that have not been accepted.*
Age				
Disability				
Gender reassignment				
Marriage & civil partnership				

Pregnancy and maternity				
Race				
Religion & belief				
Sex				
Sexual orientation				
Is this change due to be carried out wholly or partly by other providers? If yes, please indicate how you have ensured that the partner organisation complies with equality legislation (e.g. tendering, awards process, contract, monitoring and performance measures)				

Stage 4 Review and Conclusion **ASSESSMENT**

Summary: provide a brief overview including impact, changes, improvement, any gaps in evidence and additional data that is needed			
Specific actions to be taken to reduce, justify or remove any adverse impacts	**How will this be monitored?**	**Officer responsible**	**Target date**
Please provide details and link to full action plan for actions			
When will this assessment be reviewed?			
Are there any additional assessments that need to be undertaken in relation to this assessment?			
Lead officer sign off	Tom Evans	**Date:** **23/03/21**	
Head of service sign off	David Malcolm	**Date:** **2/08/2021**	

Please publish this completed EIA form on the relevant section of the Cheshire East website