

SCHEDULE A: Applications with Recommendation

17/0906

Item No: 09

Date of Committee: 05/01/2018

Appn Ref No:
17/0906

Applicant:
Story Homes

Parish:
Wetheral

Agent:
Story Homes Limited

Ward:
Wetheral

Location: Land west of Steele's Bank, Wetheral, Carlisle

Proposal: Change In Use Of Agricultural Land To Public Open Space, Formation Of Suds Pond And Installation Of Pumping Station (In Association With Story Homes Proposed Development For 41no. Dwellings)

Date of Receipt:
24/10/2017

Statutory Expiry Date
19/12/2017

26 Week Determination

REPORT

Case Officer: Barbara Percival

1. Recommendation

1.1 It is recommended the application is approved subject to completion of a deed of variation to a Section 106 agreement. If the deed of variation is not completed within a reasonable time, then Authority to Issue is requested to Corporate Director of Economic Development to refuse the application. The deed of variation to the Section 106 agreement to consist of the following obligations:

- a) reference to this application; and
- b) inclusion of additional land, subject of this application, within the red line drawing of the Section 106 agreement.

2. Main Issues

- 2.1 Impact of the proposal on the character of the area
- 2.2 Proposed method for the disposal of surface water drainage
- 2.3 Proposed method for the disposal of foul water drainage
- 2.4. Impact of the proposal on biodiversity

3. Application Details

The Site

- 3.1 This application relates to approximately 0.23 hectares of grazing land located west of land identified under Policy HO1 of the local plan as Allocated Site R20 'Land to the west of Steele's Bank, south of Ashgate Lane, Wetheral'. Ashgate Cemetery is located adjacent to the northern boundary of the application site with agricultural fields to the west and south.
- 3.2 Mature trees, located within the adjacent cemetery, delineate the application site's northern boundary with post and wire and sporadic hedging along its southern boundary. The western and eastern boundaries of the site are devoid of boundaries. A power line crosses the northern corner of the site. The site falls within Flood Zone 1 i.e. a less than 1 in 1,000 annual probability of river or sea flooding. Approximately 210 metres to the west of the site there is a field drain which flows in a northerly direction towards the Pow Maughan.

Background

- 3.3 The section of field to the east of the application site is identified under Policy HO1 in the local plan as Allocated Site R20 'Land west of Steele's Bank, south of Ashgate Lane, Wetheral'.
- 3.4 In November 2015, Members of the Development Control Committee granted outline planning permission with all matters reserved for the development of up to 50 dwellings with associated amenity space, hardstanding and ancillary works (application reference 15/0086). The decision was subsequently issued on the 1st September 2016 following the completion of a section 106 agreement in respect of: provision of affordable housing; the management/maintenance of on site open space (inclusive of any attenuation basin); the payment of a commuted sum towards off-site recreational facilities and associated works; payment towards the provision of a footway linking to the playing fields on the opposite side of the road; and the payment of an education contribution towards expanding Cumwhinton Primary School and towards transportation of secondary school children.
- 3.5 There are two associated applications, application references 17/0907 and 17/0905 both of which precede this application within the schedule. Application reference 17/0907 seeks the variation of condition 22 (visibility splays requirement) of previously approved permission 15/0886 to be changed from 2.4 metres by 60 metres to 2.4 metres by 45 metres. Application reference 17/0905, seeks permission for the erection of 41 dwellings, including open space, landscaping, drainage and road infrastructure (reserved matters application pursuant to outline approval 15/0886).

The Proposal

- 3.6 This application seeks permission for the change of use of agricultural land

to public open space, formation of SUDs pond and installation of pumping station (in association with proposed development of 41no. dwellings).

- 3.7 The submitted drawings illustrate an 'kidney shaped' infiltration basin centrally located within the application site, the proposed pumping station is located in the south western corner with public open space and areas of landscaping to the north and south of the infiltration basin.

4. Summary of Representations

- 4.1 This application has been advertised by the direct notification of the occupiers of sixteen neighbouring properties and the posting of Site and Press Notices. No verbal or written representations have been made during the consultation period.

5. Summary of Consultation Responses

Cumbria County Council - (Highways & Lead Local Flood Authority): - no objection on highway grounds as the proposal does not affect the highway.

Within the operation and maintenance plan it is stated that all roof, parking areas, driveways and road drainage will drain via a conventional gully and pipe system, with a connection to an infiltration basin, which is to be located in the south west corner of the site. A maintenance company will be appointed for the maintenance of the infiltration basin. It is proposed that the upstream pipe network will be offered for adoption to United Utilities under a S104 Agreement who will therefore be responsible for maintaining the sewer network. Within adopted roads, gullies and their connections will be adopted by CCC under a S38 Agreement.

All drainage systems have been designed to provide sufficient storage for the critical duration, 1 in 100-year design storm event with a 30% allowance for the future effects of climate change. All pipes are designed to convey the peak flows resulting from a 30 minute 1 in 100-year duration design storm including an allowance for climate change. This is acceptable to the Lead Local Flood Authority (LLFA).

There is a requirement for the SuDS to be inspected and maintained regularly to ensure that they operate correctly and efficiently. If SuDS are not properly maintained then there is a risk that the systems will become overloaded during periods of prolonged heavy rainfall, potentially resulting in localised flooding of the development. The recommendations stated within the operation and maintenance plan are reasonable and the plan is accepted by the LLFA.

The surface water drainage for the site is to be disposed of using infiltration based SuDS. Runoff from roofs, parking bays, driveways and adopted access road will be served by an infiltration basin, located within the southwest corner of the site. The appropriateness of soakaways at this location is proven through the results of the BRE 365 soakaway tests being undertaken

and submitted. The infiltration pond has been designed so as to accommodate 1 in 100 flood events and accounts for 40% increase in climate change. The SUDS basin has suitable access for maintenance and gentle gradient to allow safe passage and exit during limited time of water fill. The majority of the time the basin shall be dry. The SUDS shall be managed by new residential management company. This is also acceptable to the LLFA.

An overflow weir is proposed for exceedance flows from the infiltration basin to the existing drainage channel located west of the site, as a safety feature for storms greater than a 100 year plus 40% climate change design event. This will ensure that flood water is directed away from dwellings and the pumping station. This exceedance route is acceptable to the LLFA.

Within the flood risk and drainage design report it is detailed that the site is located within Flood Zone 1 and has a predicted AEP of <0.1%. As such, the site is at 'Low' risk of flooding from rivers or the sea and it is also considered to be at 'Very Low' risk of flooding from surface water, groundwater, sewers, canals, reservoirs and other artificial sources. The report concludes that the development will not increase flood risk to new, or existing properties and the LLFA agree with this conclusion. Accordingly, the LLFA have no objections to the proposals.

Wetheral Parish Council: - comments; members are concerned regarding the long-term maintenance of the attenuation pond and the potential flood risk on to the road C1038 Scotby Rd to Wetheral Pasture with the run off from the site;

Environment Agency (N Area (+ Waste Disp & Planning Liaison Team)): - no requirement to consult EA;

United Utilities - (for water & wastewater comment): - no objections subject to imposition of a condition.

6. Officer's Report

Assessment

- 6.1 Section 54a of the Town and Country Planning Act 1990/ Section 38(6) of the Planning and Compulsory Purchase Act 2004, requires that an application for planning permission is determined in accordance with the provisions of the Development Plan unless material considerations indicate otherwise.
- 6.2 The relevant planning policies against which the application is required to be assessed is the National Planning Policy Framework (NPPF), the Planning Practice Guidance (PPG) and Policies SP6, IP6, CC5, GI3 and GI4 of the Carlisle District Local Plan 2015-2030 are also relevant.
- 6.3 The proposal raises the following planning issues.

1. Impact Of The Proposal On The Character Of The Area

- 6.4 The Cumbria Landscape Character Guidance and Toolkit (March 2001) identifies that the site falls within the Cumbria Landscape Character Sub-Type 5c 'Rolling Lowland'. The toolkit advises that key characteristics of

this landscape are: open undulating and rolling topography; lowland agricultural landscape dominated by pasture; hedges and hedgerows trees are common on lower ground and sparse on higher ground; and some scrub woodland.

- 6.5 The proposal seeks the change of use of part of an agricultural field to provide an area of public open space, formation of a SUDs pond and the siting of a pumping station in association with the adjacent proposed housing development to the east of the application site (planning reference/0905). Given the nature and appearance of the proposals, the topography of the land together with existing and proposed landscaping, the proposed development will not have a detrimental visual impact on the character of the area.

2. Proposed Method For the Disposal Of Surface Water Drainage

- 6.6 Policy CC5 of the local plan outlines that development proposals should prioritise the use of sustainable drainage systems managed at source, not transferred; and discharged in the following order of priority: into the ground (infiltration at source); attenuated discharge to a surface water body; attenuated discharge to surface water sewer, highway drain or another drainage system; and as a last resort attenuated discharge to a combined sewer.
- 6.7 The submitted Flood Risk Assessment and Drainage Design Report outlines that an intrusive ground investigation found that the excavations within the application site encountered fluvioglacial deposits consisting of dense, slightly cobbly, gravelly silty fine to medium grained sand to varying depths overlaying weathered sandstone. Infiltration tests was successful within the fluvioglacial deposits in the southwest quarter of the site, therefore, concluded that this area within the site would be suitable for infiltration type surface water drainage. Accordingly, in line with the surface water hierarchy the proposed development would be served by an infiltration basin on land to the west of the application site.
- 6.8 Infiltration basins are flat bottomed, landscaped depressions that are normally dry except during and immediately following storm events. They store runoff, allowing pollutants to settle and filter out, before infiltration into the subsurface soils. The bottom of any infiltration system should be flat to provide uniform ponding and infiltration of runoff across the surface and side slopes should normally be no steeper than 1 in 3 to allow for vegetative stabilisation, mowing, access and for public safety reasons.
- 6.9 All surface water runoff from dwellings, footpaths and access roads would discharge into the infiltration basin via a series of pipes within the access roads. An exceedance overflow from the basin will be provided, allowing overland flood flows to follow the natural contours of the land towards the existing drainage channel located approximately 230 metres west of the development site. The infiltration basin has been so designed in order to accommodate a 1 in 100 year flood event plus a 40% allowance for climate change. Furthermore, in line with the objectives of Policy CC5 a maintenance

company will be appointed for the maintenance of the infiltration basin.

- 6.10 Cumbria County Council, as Lead Local Flood Authority, has been consulted and raise no objections to the proposal. In overall terms, the proposals accords with the objectives of Policy CC5 of the local plan.

3. Proposed Method For the Disposal of Foul Drainage

- 6.11 In respect of foul water drainage, Policy IP6 of the local plan requires applicants to ensure that the impact of development on infrastructure has been considered in liaison with the statutory sewerage undertaker. The submitted Flood Risk Assessment and Drainage Design Report identifies that the foul water drainage from the site will connect into an existing United Utilities (UU) 150mm diameter combined sewer in Steele's Bank, via a new adopted pumping station. The report goes on to detail that due to the site topography, it will be necessary to connect 38no. dwellings within the proposed development to the foul water pumping station, located to the south of the infiltration basin, which would then connect to the mains sewer by a rising main. The remaining three dwellings, plots 1, 40 and 41, would be served by a gravity system, also connected to the main public sewer. The report details that the pumping station and the foul sewers are to be adopted by UU under a Section 104 agreement in respect of the Water Industry Act 1991.
- 6.12 The applicant has provided evidence within the aforementioned report that a pre-development enquiry has been submitted to UU who have confirmed that the proposals are acceptable and that there is sufficient capacity in the drainage network to accommodate the development. UU has also been formally consulted by the City Council in respect of this application and raise no objections to the proposed foul drainage system; however, in its general comments advise that should the applicant wish to progress a Section 104 agreement then advises that no works shall commence on site until such time that the Section 104 agreement has been completed. As the agreement is out with planning legislation, it is recommended that should Members approve the application that the advice of UU should be drawn to the attention of the applicant by way of an informative within the decision notice.

4. Impact Of The Proposal On Biodiversity

- 6.13 The Councils GIS Layer has identified that the site has the potential for several key species to be present. As the proposed development would be located on an area currently used as agricultural land, the development is unlikely to harm a protected species or their habitat. Furthermore, the proposal would incorporate a landscaping scheme which has the potential to enhance biodiversity. An Informative is recommended within the decision notice, should Members approve the application, ensuring that if a protected species is found all work must cease immediately and the Local Planning Authority informed.

Conclusion

- 6.14 The application seeks full planning permission for the change of use of

agricultural land to public open space, formation of SUDs pond, and pumping station (in association with Story Homes proposed development for 41no. dwellings).

- 6.15 Given the nature and appearance of the proposal, the topography of the land together with existing and proposed landscaping, the proposed development will not have a detrimental visual impact on the character of the area. Furthermore, the proposed landscaping scheme would enhance biodiversity.
- 6.16 Cumbria County Council, Lead Local Flood Authority, raise no objection to the proposed method for the disposal of surface water. United Utilities also raise no objections to the proposed foul drainage system.
- 6.17 In overall terms, the proposal accords with the objectives of the NPPF, PPG and relevant policies of the local plan.
- 6.18 If Members are minded to grant planning approval it is requested that “authority to issue” the approval is given subject to the completion of a deed of variation to the original Section 106 agreement to include:
 - a) the inclusion of the land subject of this application within the Section 106 agreement of application reference 15/0886; and
 - b) reference to this application within the Section 106 agreement.

7. Planning History

- 7.1 In 2015, outline planning approval was granted for the erection of up to 50no. dwellings with associated amenity space, hardstanding and ancillary works (application reference 15/0886).
- 7.2 There are two associated applications, application references 17/0907 and 17/0905 both of which precede this application within the schedule. Application reference 17/0907 seeks the variation of condition 22 (visibility splays requirement) of previously approved permission 15/0886 to be changed from 2.4 metres by 60 metres to 2.4 metres by 45 metres.
- 7.3 The remaining application, application reference 17/0905, seeks permission for the erection of 41 dwellings, including open space, landscaping, drainage and road infrastructure (reserved matters application pursuant to outline approval 15/0886).

8. Recommendation: Grant Subject to S106 Agreement

- 1. The development shall be begun not later than the expiration of 3 years beginning with the date of the grant of this permission.

Reason: In accordance with the provisions of Section 91 of the Town and Country Planning Act 1990 (as amended by Section 51 of

the Planning and Compulsory Purchase Act 2004).

2. The development shall be undertaken in strict accordance with the approved documents for this planning permission which comprise:
 1. the submitted planning application form received 20th October 2017;
 2. the Planning Statement received 20th October 2017;
 3. the Flood Risk Assessment and Drainage Design Report received 20th October 2017;
 4. the Operation & Maintenance Plan For Sustainable Drainage Systems received 20th October 2017;
 5. the site location plan associated infrastructure received 24th October 2017 (Drawing No. SL146.90.9.SL.LPAI);
 6. the boundary treatments plan received 20th October 2017 (Drawing No. 20050.90.9.BT Revision B);
 7. the general arrangements layout received 20th October 2017 (Drawing No. 20050.90.9.GA Revision A);
 8. the landscape plan received 20th October 2017 (Drawing No. SHW-WW-01 Revision B);
 9. the section through infiltration basin received 20th October 2017 (Drawing No. K34353/A1/202 C);
 10. the Notice of Decision; and
 11. any such variation as may subsequently be approved in writing by the Local Planning Authority.

Reason: To define the permission.

3. The surface water drainage scheme for the development, hereby approved, shall be carried out in strict accordance with details contained within the submitted Flood Risk Assessment and Drainage Design Report and associated Operation & Maintenance Plan For Sustainable Drainage Systems compiled by R G Parkins & Partners Limited received 20th October 2017 which illustrate surface water discharging into an infiltration basin, thereafter, the development shall be undertaken in strict accordance with the approved details. For the avoidance of doubt and unless otherwise agreed in writing by the local planning authority, no surface water will be permitted to drain directly or indirectly into the public sewer.

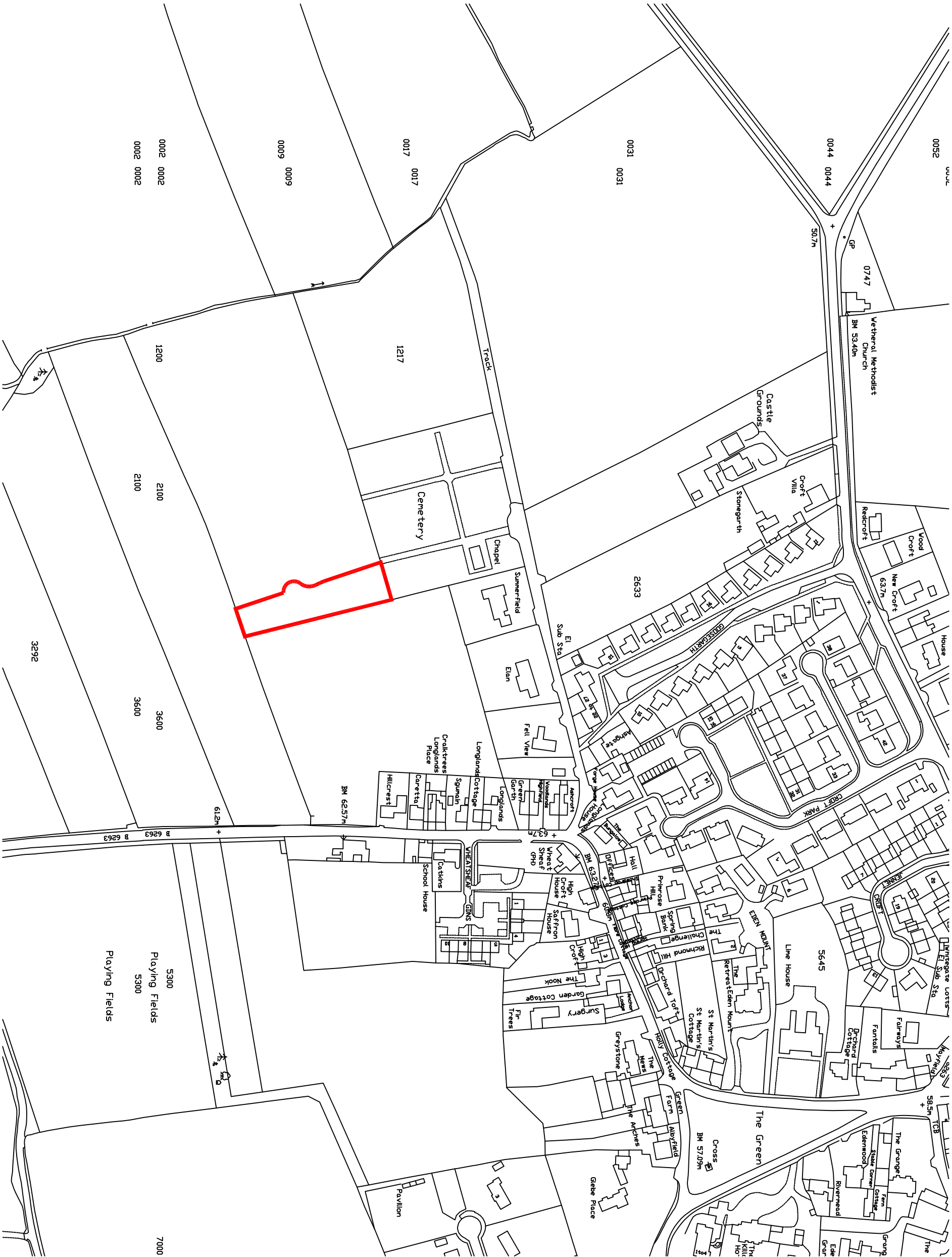
Reason: To ensure a satisfactory form of development and to prevent an undue increase in surface water run-off and to reduce the risk of flooding in accordance with Policy CC5 of the Carlisle District Local Plan 2015-2030.

4. The foul water drainage scheme for the development, hereby approved, shall be carried out in strict accordance with details contained within the submitted Flood Risk Assessment and Drainage Design Report and associated Operation & Maintenance Plan For Sustainable Drainage Systems compiled by R G Parkins & Partners Limited received 20th October 2017, thereafter, the development shall be undertaken in strict accordance with the approved details.

Reason: To ensure adequate drainage facilities are available and to ensure compliance with Policy IP6 of the Carlisle District Local Plan 2015-2030.

5. No dwelling shall be occupied until the respective foul and surface water drainage works, submitted under the above conditions 3 and 4, have been completed in accordance with the details approved by the local planning authority.

Reason: To ensure that adequate drainage facilities are available which are comprehensive in extent and follow a co-ordinated sequence in accord with Policies IP6 and CC5 of the Carlisle District Local Plan 2015-2030.



HOUSE TYPE
Land at Steeles Rd,
Wetheral

DRAWING			
Site Location Plan			
Associated Infrastructure			
DRAWN BY	JD	DATE	31/07/17
CHECKED BY	-	SCALE	1:2500 @ A3
ISSUE	DRAWING NUMBER	REVISION	-
(1)	SL146.90.9.SL.LPAI		
Revisions			

SCHEDULE OF ACCOMMODATION - OVERALL

Ref	House Name	Type No.	Version	House Type	Sq Ft Garage/Parking	RSL No	INT. No	OPEN No	Total Sq Ft.
	WELL WELLINGTON	V3		4 bed detached	1208	Int Garage	3		3714
	BOS BOSTON	V4		4 bed detached	1377	Int Garage	3		4131
	WAR WARWICK	V4		4 bed detached	1400	Int Garage	3		4200
	GSF GOSFORTH	V4		4 bed detached	1331	Int Garage	4		6124
	CAM CAMBRIDGE	V4		4 bed detached	1626	Int Garage	4		6304
	BAL BALMORAL	V4		4 bed detached	1724	Int Garage	4		6886
	HTN HAMPTON	V4		5 bed detached	1779	Int Garage	4		7116
	MAY MAYFAIR	V3		5 bed detached	1505	Int Garage	4		7620
	KIN KINGS TOWN	V1		3 bed semi / 1st 846	Parking		6		5076
	HAW HAWTHORN	V2.5		2 bed semi / 1st 697	Parking		6		4182

Total Number of Units and Square Foot	6	6	29	55653
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Gross Site Area in Metres	16510
Gross Site Area in Acres	4.08
Strategic Public open Space in M	514
Strategic Public open Space in Ac	0.13
Net Site Area in Metres	15995
Net Site Area in Acres	3.95
Net Site Area in Hectares	1.6
Density (Sq Ft per Acre)	14057
Density (Units Per Acre)	10
Density (Units Per Hectare)	25.65

R Rental unit
D Discounted unit



DEVELOPMENT

Land at Steeles Rd,
Wetheral

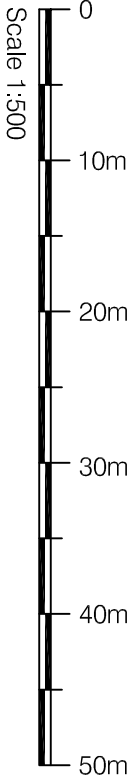
DRAWING SITE LAYOUT

General Arrangements
Layout

DRAWN BY	JB	DATE	30/06/17
CHECKED BY	-	SCALE	1:500@A2
DRAWING NUMBER	20050.90.9.GA	REVISION	-
SITE REFERENCE	20050		
Revisions			

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Tel 01228 640850 Fax 01228 640851





PLANTING SCHEDULE			
Type	Key	Specification	No/SQ.M.
TREES			
Alnus glutinosa	AG	RB, 12-14cm, 3-3.5m	N/A
Betula utilis jacquemontii	BJ	RB, 16-18cm, 4-4.5m	N/A
Betula pendula	BP	RB, 16-18cm, 4-4.5m	N/A
Crataegus x prunifolia	CP	RB, 16-18cm, 4-4.5m	N/A
Prunus Hilliers Spire	PH	RB, 14-16cm, 3.5-4m	N/A
Prunus serrulata Amanogawa	PS	RB, 14-16cm, 3.5-4m	N/A
Sorbus aucuparia Edulis	SE	RB, 14-16cm, 3.5-4m	N/A
Sorbus aucuparia	SA	RB, 14-16cm, 3.5-4m	N/A
Sorbus aria Lutescens	SL	RB, 16-18cm, 3.5-4m	N/A
Sorbus aria Majestica	SM	RB, 16-18cm, 3.5-4m	N/A
SPECIMENS			
Amelanchier lamarckii	AME	C25	N/A
Aucuba japonica Crotonifolia	AUC	C25	N/A
Eleagnus ebbingei Gilt Edge	ELE	C25	N/A
Euonymus jap. President Gauthier	EPG	C25	N/A
Juniperus scopulorum Skyrocket	JS	C45, 2-2.5m	N/A
Phormium tenax Sundowner	PS	C25	N/A
Phormium tenax Variegatum	PT	C25	N/A
Photinia Red Robin	PRR	C25	N/A
Taxus baccata (cone)	TB	C25	N/A
SHRUBS & HERBACEOUS			
Aucuba japonica Variegata	Auv	C3	3
Barberis thunbergii Atropurpurea Nana	Bna	C3	4
Ceanothus Pugel Blue	Cpb	C3	3
Chaenomoles japonica	Cja	C3	3
Choisya ternata Sundance	Csu	C5	4
Cotoneaster suecicus Coral Beauty	Ccb	C3	4
Cotoneaster lacteus	Cal	C3	3
Cornus alba elegantissima	Cae	C3	3
Cytisus praecox All Gold	Cag	C3	4
Eleagnus pungens Maculata	Epm	C3	3
Euonymus fortunei 'Emerald n Gold'	Ego	C2, 20-30cm	5
Euonymus fortunei 'Emerald Gaiety'	Eeg	C2, 20-30cm	5
Hebe Marjorie	Hma	C5	4
Hebe Autumn Glory	Hag	C5	4
Hebe Sutherlandii	Hsu	C5	4
Hebe Midsommer Beauty	Hmb	C5	4
Hydrangea petiolaris	Hpe	C3	As Shown
Hydrangea Blue Wave	Hbw	C3	3
Hypericum Ridgote	Hri	C3	3
Ilex aquifolium	Iaq	C3	3
Ligustrum ovalifolium Aureum	Loa	C3	3
Lonicera Maygreen	Lma	C3	3
Mahonia Charity	Mch	C3	3
Potentilla Kobold	Pko	C3	4
Prunus otto luykens	Pot	C3	3
Pyracantha Red Column	Prc	C3	4
Rosmarinus prostratus	Rof	C3	3
Sarcococca hookeriana var. Himilis	Sah	C3	3
Senecio sunshine	Sen	C3	4
Skimmia japonica rubella	Ski	C3	3
Spiraea japonica Goldmound	Sgo	C3	3
Spiraea Little Princess	Slp	C3	4
Viburnum davidii	Vda	C3	4
Vinca minor Atropurpurea	Vmi	C3	4
CONIFERS			
Juniper Blue Carpet	Jbc	C2, 30-45cm	4
PERENNIALS			
Bergenia cordifolia	Bco	C2, 20-30cm	6
Heuchera Palace Purple	Hpp	C2, 20-30cm	4
Pachysandra terminalis Green Carpet	Pat	C2, 20-30cm	5
NATIVE BOUNDARY HEDGE			
		5m	% MIX
Prunus spinosa	BR	45-60cm	13
Crataegus monogyna	BR	60-90cm	60
Ilex aquifolium	c3	45-60cm	10
Corylus avellana	BR	60-90cm	5
Sambucus nigra	BR	45-60cm	5
Rosa canina	BR	45-60cm	5
Lonicera periclymenum	c2	60-90cm	2

TOPSOIL CULTIVATION In accordance with BS 3882. Apply glyphosate herbicide prior cultivation and allow the recommended period before further action. Ensure ground is free draining by breaking up subsoil and installation of land drainage as required. Do not work the soil in frozen or waterlogged condition. Remove any debris and stones greater than 50mm from surface and cultivate to suitable tilth for planting. Rake surface to achieve required level flush with adjacent paving for turf and 50mm below for planting to allow for mulch layer and smooth flowing contours for open space areas without hollows or soft areas. Topsoil depths to be minimum 150mm for grass and 450mm for planting and at least 300mm of suitable subsoil beneath the topsoil layer. Site topsoil to be supplemented with imported topsoil in accordance with BS 3882. Shrub beds in grass areas to be neatly cut to layout shown.

PLANTING Plant material shall conform to the National Plant Specification and be healthy, vigorous specimens, well rooted but not pot bound, free from pests and disease, hardy and undamaged by transport operations in accordance with HTA 'handling and establishing landscape plants'. Planting and turfing to be in accordance with BS 3936 and 4428. Plant species substitutes will be permitted to accommodate availability and to include stock of particular good quality in nursery provided these are of a similar habit, size, colour, value etc and that they are approved in advance by the Landscape Architect. Native species to be local provenance. Bare root and rootballed plants to be planted between November and March. Backfill of planting holes and tree pits to be excavated topsoil with 25% by volume tree and shrub planting compost. Shrub pits to be generally 300 x 300 x 300mm or 75mm wider and deeper than the root spread. Apply slow release fertiliser (16:16:16) at rate of 100g/sq.m. to planting areas. Thoroughly water planting.

PLANTING DENSITIES/ SETTING OUT Refer to the Planting Schedule below for densities and separate spreadsheet for total numbers of each species for tender purposes. Where a bed is indicated as mixed species on plan the area shown should be divided equally between the species shown and the relevant density for that species applied to that proportion of the bed. Tallier species to rear of bed and smaller species to front planted in bold groups of single species and not mixtures unless clearly requested on the plan annotations.

MULCH Spread 50mm layer of general purpose bark mulch free from large sticks, and debris over all shrub areas, 800mm wide strips for hedging and 800mm diameter circles for tree in grass with neatly trimmed edge.

TURFING Following cultivation preparation specified above supply and lay Rolawn Medallion turf or similar approved with staggered joints close butted to uniform levels to finish 25mm above adjacent paving levels once wall tamped down. Use sharp sand spread on surface to achieve fine tuning of levels. Thoroughly soak turf on completion and ensure regular watering is arranged until the turf has rooted. Do not turf in waterlogged or frozen conditions.

SEEDING AMENITY GRASS Following cultivation preparation specified above apply Cropwise Low maintenance amenity mix or similar approved at a rate of 35gms/sq.m. and roll with quad or hand drawn ballast grass roller. Apply water with sprinkler hose in dry conditions to ensure germination. Levels to be flush with adjacent paving. Following firming and settling of topsoil, further stone picking, top-dressing and re-seeding of bare patches to ensure uniform, level grass is established. Re-roll as required at first cut stage. Seeding to progress from April to September.

WILDFLOWER SEEDING
Preparation as for grass seeding. Apply seed mix BS1 for general meadow areas and BS6 within 5m of the SUDS pond margin and within the SUDS basin for areas above the permanent water level at 5 gms/sq.m. supplied by Boston Seeds Ltd.



Westwood
landscape

CHARTERED LANDSCAPE ARCHITECTS
www.westwoodlandscape.co.uk



Story
HOMES

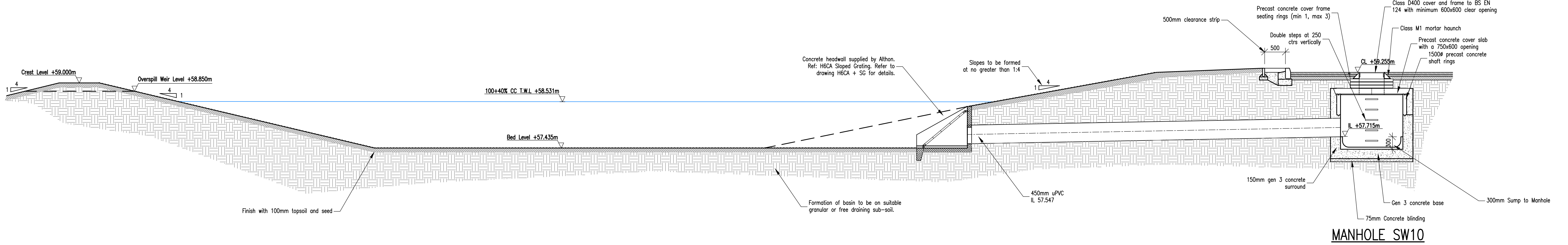
DEVELOPMENT

Land at Steeles Rd,
Wetheral

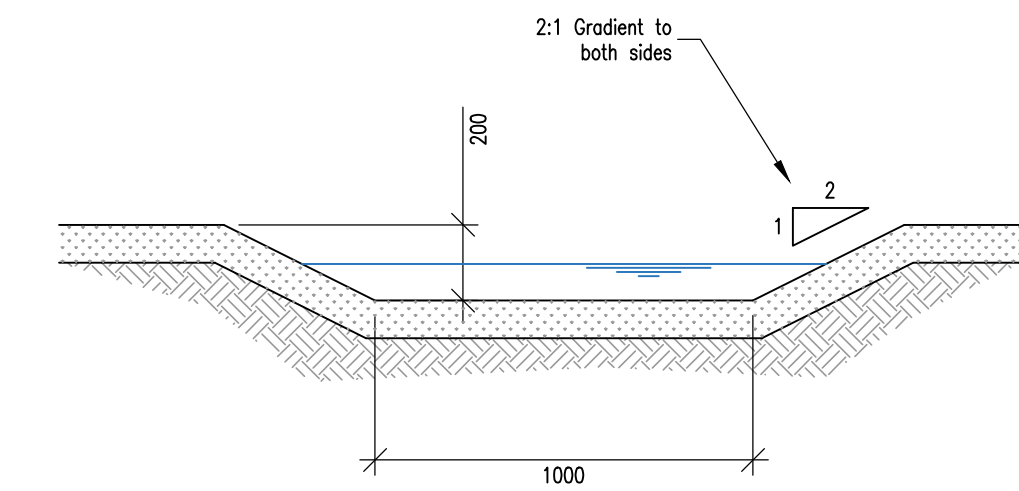
DRAWING		
Landscape Plan		
DRAWN BY	-	DATE 10/08/17
CHECKED BY	-	SCALE 1:500@A2
DRAWING NUMBER	SHW-WW-01	REVISION A
SITE REFERENCE	OL14-258	
Revisions		
A	Updates to SUDS pond layout	11/08/17

- Notes from Phase 1 Habitat Report for Outline Planning Permission ref 15/0886**
- F2. Mitigation Requirements**
- Scrub and vegetation clearance will be undertaken outside of the bird nesting season (March to August inclusive) unless a checking survey by a suitable qualified ornithologist confirms active nests to be absent.
 - Any trenches left open overnight should have a means of escape for mammal species in the form of a ramp angled no greater than 45° and at least 30cm in width.
 - Lighting post development will be kept low level and low intensity and will be directed away from the adjacent churchyard.
 - Trees adjacent to the site will be protected prior to the commencement of works through the provision of adequate root protection zones.
 - Drainage from site will be at the approved 'green field rate' (12 litres/sec) and physical barriers put in place prior to works commencing to prevent airborne pollution reaching drainage ditches and water courses.
- F3. Additional Enhancement Recommendations**
- The following mitigation measures are recommended in order to further enhance the site for biodiversity:
- Incorporation of bat, bird and hedgehog boxes in appropriate locations within the new build on site.
 - 5 x Schwegler 2F Woodcrete Bat Box positioned facing south or south-east high up on the house wall
 - 5 x Schwegler 1B Woodcrete Bird Box positioned high up on the house wall. (2 x 26mm and 3 x 32mm size)
 - 3 x Igloo Hedgehog houses positioned at base of native hedge to open space area

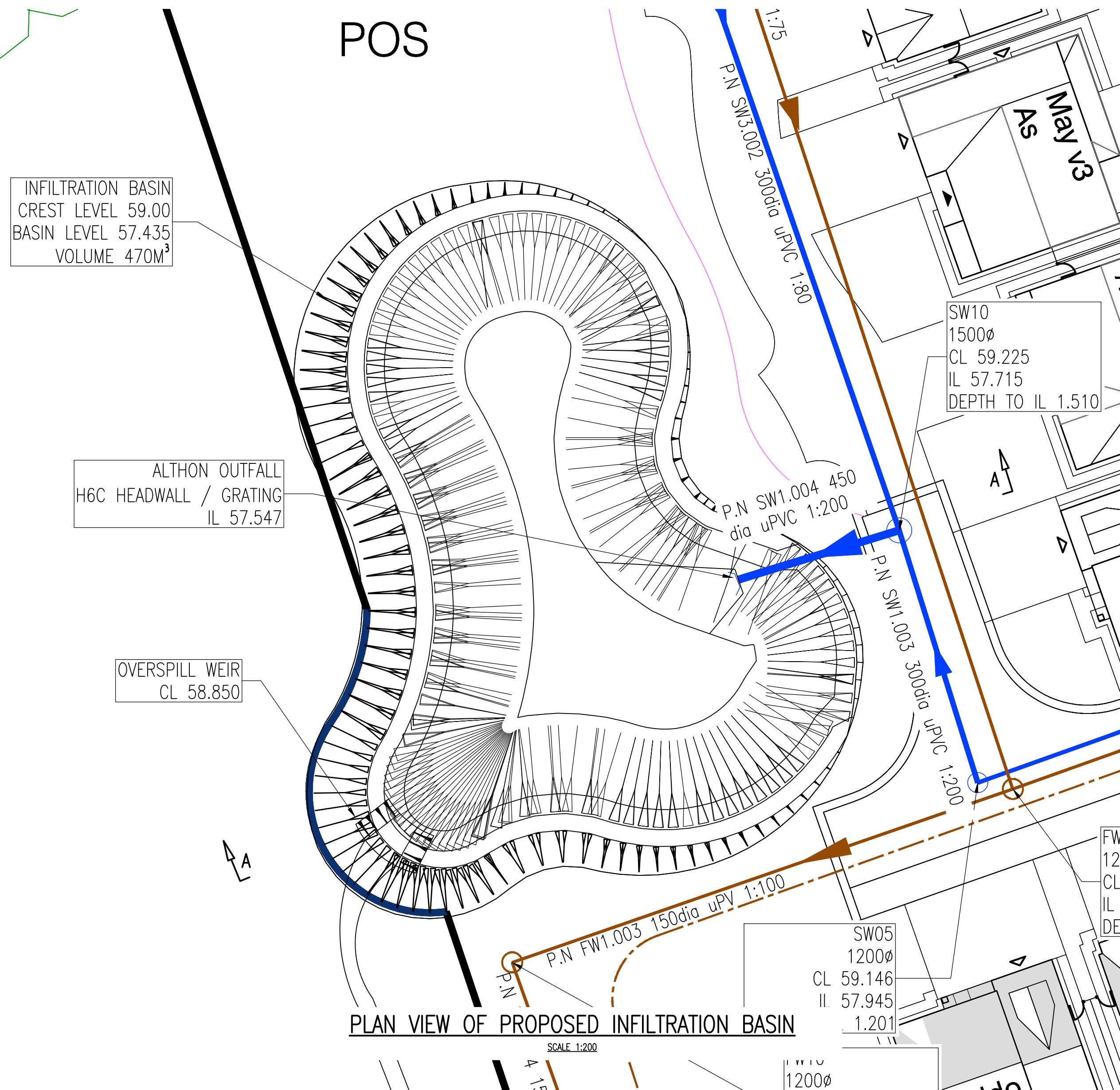
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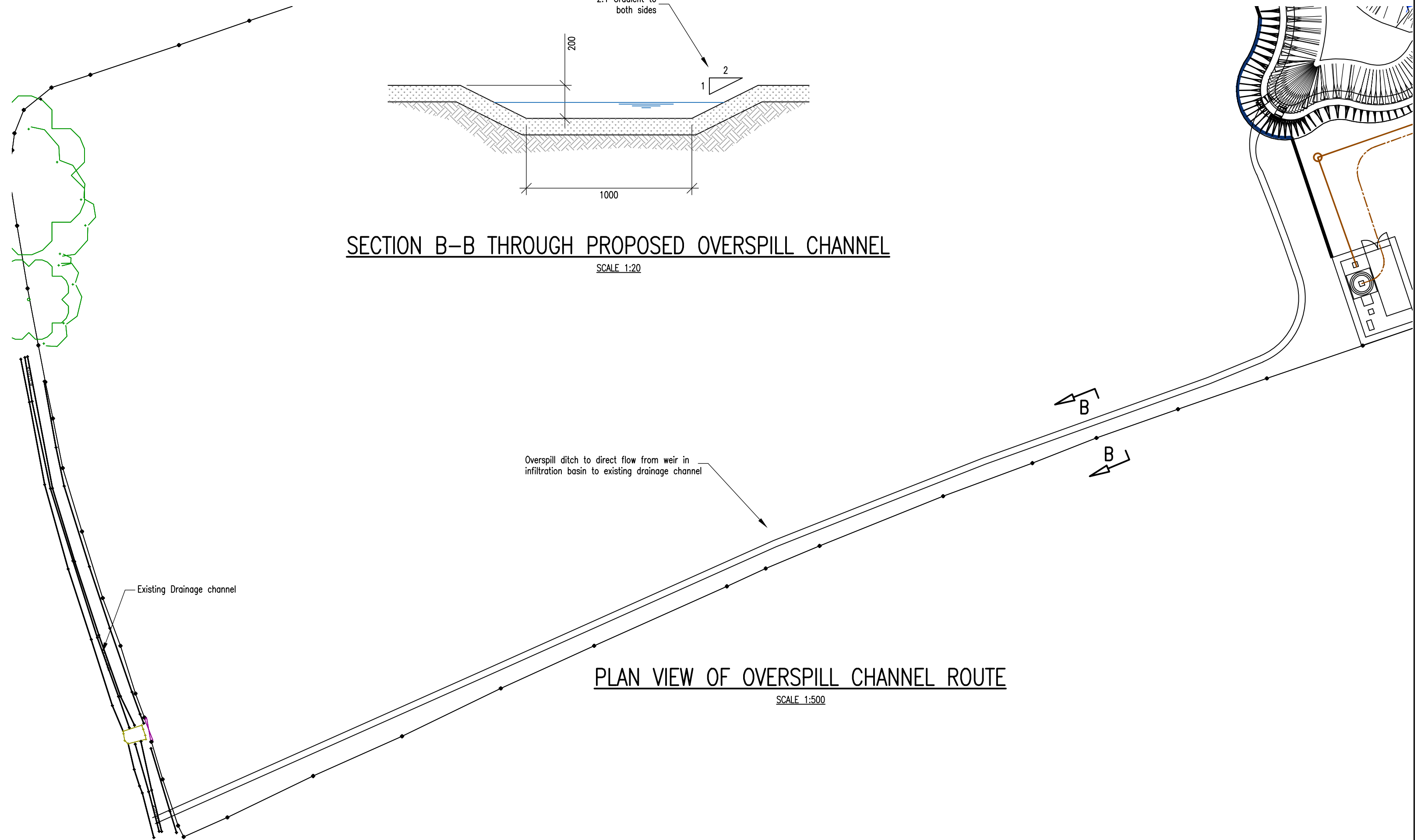
SECTION A-A THROUGH INFILTRATION BASIN
SCALE 1:50





SECTION B-B THROUGH PROPOSED OVERSPILL CHANNEL
SCALE 1:20



PLAN VIEW OF PROPOSED INFILTRATION BASIN
SCALE 1:200



PLAN VIEW OF OVERSPILL CHANNEL ROUTE
SCALE 1:500

				Client:				 R. G. PARKINS & PARTNERS LTD CONSULTING CIVIL & STRUCTURAL ENGINEERS				
				Project:		HOUSING DEVELOPMENT STEELES BANK, WETHERAL		Meadowside Kendal LA9 6NY Tel: 01539 729393 Fax: 01539 740609 Email: mail@rgparkins.com				
Drainage channel route amended.				21/08/17	DM	B	Drawing Title:		Drawn by: DM		Checked by: TM	Issue Purpose:
Pond water level amendments. Addition of overspill channel.				17/08/17	DM	A	SECTION THROUGH INFILTRATION BASIN		Scale: AS SHOWN		Issue Date: 10/08/17	INFORMATION
Revisions				Date	Initial	Suffix			Drawing Number:		K34353/A1/202	B
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