

DRAINAGE STRATEGY
HOYLAND, BARNSELEY
FOR
RESILIENTI
ISSUE 1



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Steve English

Also at:- Principle House, 121-123 Fleet Road, Fleet, Hampshire, GU51 3PD Tel: 01252 360580 Fax: 01252 360581

Directors: P Richardson BSc, CEng, MICE, MStructE S D Preston BEng, CEng, FICE, FStructE N J Baines BSc, CEng, MICE, MCIWEM
M J Yates BSc(Eng), ACGI, CEng, MICE, FStructE S R Ellis BEng, CEng, MStructE, AMICE K R Pursall BEng, CEng, MStructE
C A Topliss BSc, CEnv, CSci, CGeol, SiLC, AMICE, FGS S J English BEng, CEng, MStructE A R Priest BEng
Senior Associates: K Newsome BSc, CEng, MICE, MStructE S J Mitchell BSc, MSc, CEng, MEI, MCIBSE, MASHRAE A Allison BEng
A Jones BEng, CEng, MICE, MStructE M Young MA, CEng, MICE, MStructE C A Wood BSc, CEng, MStructE, AMICE
Associates: K Edwards MSc, FGS A J Kerslake BEng A G Marshall BEng, CEng, MStructE C Hodge EngTech, TMICE
P A Harrison BEng, CEng, MStructE M P Chappell BEng, IEng, AMStructE P H Halberstadt MEng, ACGI, CEng, MICE
Consultants: G M Seaman BSc, CEng, FICE, FStructE J M Wood BSc, CEng, MICE, FStructE

Resilient

Hoyland Town Centre Redevelopment

Proposed Drainage Strategy

The proposed development involves three sites as shown on the appended sheet 38538/SW1.

Also appended is a copy of the Yorkshire Water sewer record of the area.

Site A is approx. 2700 sq. m in area and is currently occupied by a health centre with car parking and also a separate car park (approx. 95% impermeable). It is proposed to demolish the building and provide new car parking over the full area.

Site B is approx. 5200 sq. m in area and is currently occupied by a former Parish Hall and market buildings with parking (approx. 95% impermeable). It is proposed to demolish the buildings and provide a new retail building with car parking.

Site C is currently occupied by the Hoyland Town Hall building, including a retail premises, and car parking. As the proposed development retains the existing building and external pavings facing High Street, the development area for Site C has been considered to be approx. 3000 sq. m (approx. 90% impermeable) it is proposed to extend the existing building, construct a new retail unit and provide new market stalls over part of the area of existing car parking.

Foul Drainage

It is assumed that existing foul discharges from the three sites are drained to the existing public combined sewers shown on the appended sewer record.

It is proposed to maintain these connections for foul discharge from the developments. No significant change in foul drainage discharge rates are envisaged for the overall development.

Surface Water

It is assumed that existing surface water discharges from the three sites are drained to the existing public surface water and/or combined sewers shown on the appended sewer record.

It is proposed to maintain these connections for surface water discharges from the three developments, as there is little or no change in impermeable area.

In accordance with the Barnsley Local Development Framework (Core Strategy Policy 4 – Flood Risk), it is proposed that the total surface water discharge rate from each of the development sites be reduced by 30%. This will be achieved by the use of three new flow control devices, sized as follows :-

Site A - $2700 \text{ sq. m} \times 0.95 \times 50\text{mm/hour rainfall} \times 70\% = \mathbf{25 \text{ litres/second.}}$

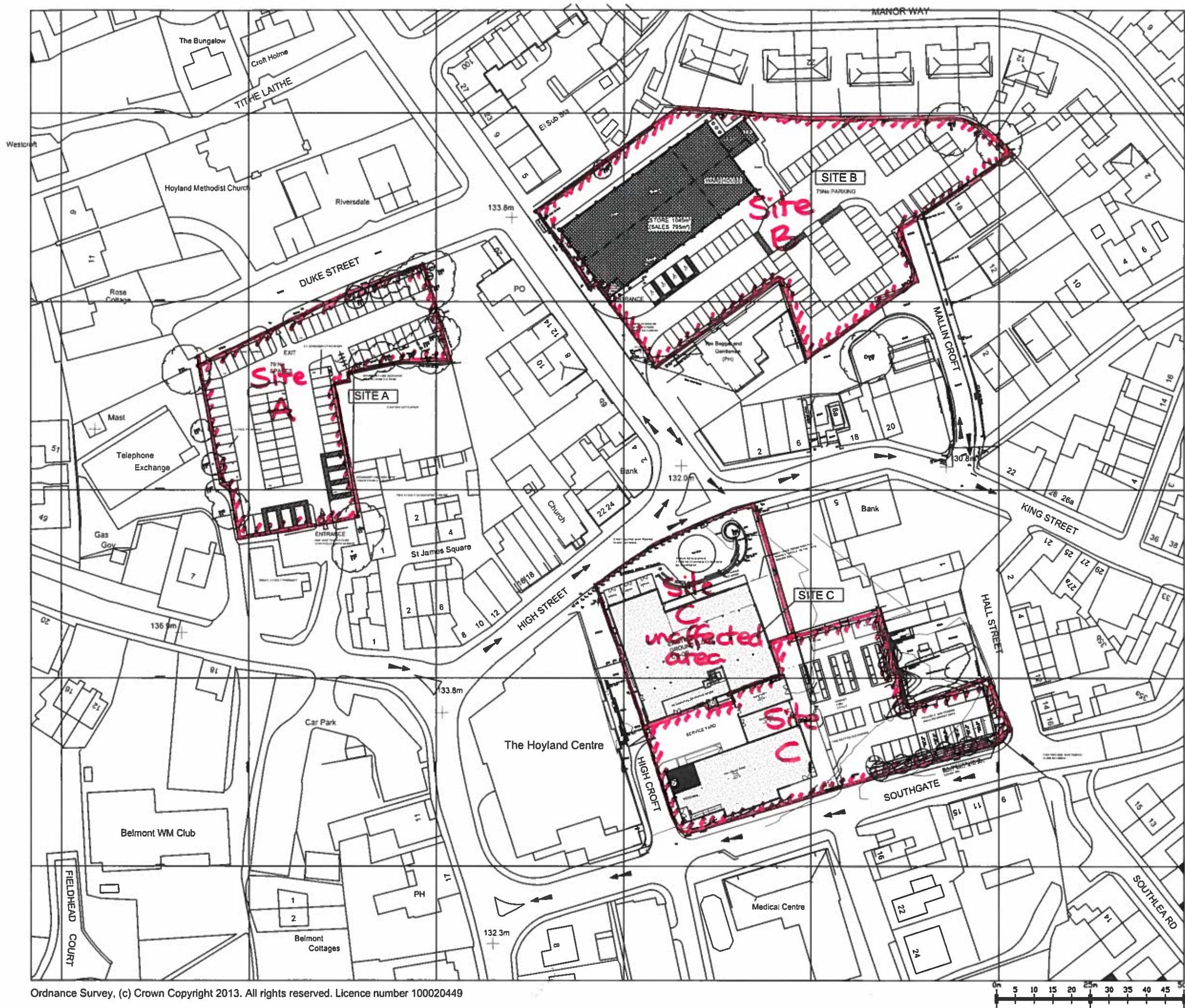
Site B - $5200 \text{ sq. m} \times 0.95 \times 50\text{mm/hour rainfall} \times 70\% = \mathbf{48 \text{ litres/second.}}$

Site C - $3000 \text{ sq. m} \times 0.95 \times 50\text{mm/hour rainfall} \times 70\% = \mathbf{26 \text{ litres/second.}}$

Each site will have proprietary below ground systems to store surface water run-off for design rainfall events up to and including a 100 year return period plus an allowance of 30% for climate change.

All surface water run-off from car parking areas will be passed through petrol interceptors sized accordingly.

38538/SW1



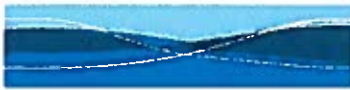
PROPOSED
DEVELOPMENT

SCALE
CA3
1:1000



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437143 : 400500	Map Name : SE3700NW	Title	Partial Key	This plan is furnished as a general guide only and no warranty as to its correctness is given or implied. This plan must not be relied upon in the event of excavations or other works made in the vicinity of public sewers. No house or property connections are shown.
 YorkshireWater	Yorkshire Water, PO Box 500, Halifax Road, Bradford BD6 2LZ Contact Name : jacklin Contact Tel :	Notes	Foul Sewer = F Combined Sewer = C Surface Water Sewer = SW Trade Sewer = TD Partially Separate = PS	
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			Date Gen : 21/05/2015, 09:18:28	