Proposed Commercial Development – Unit 5
Birdwell Commom, Rockingham, Barnsley

Drainage & Flood Risk Statement

1.0 THE SITE

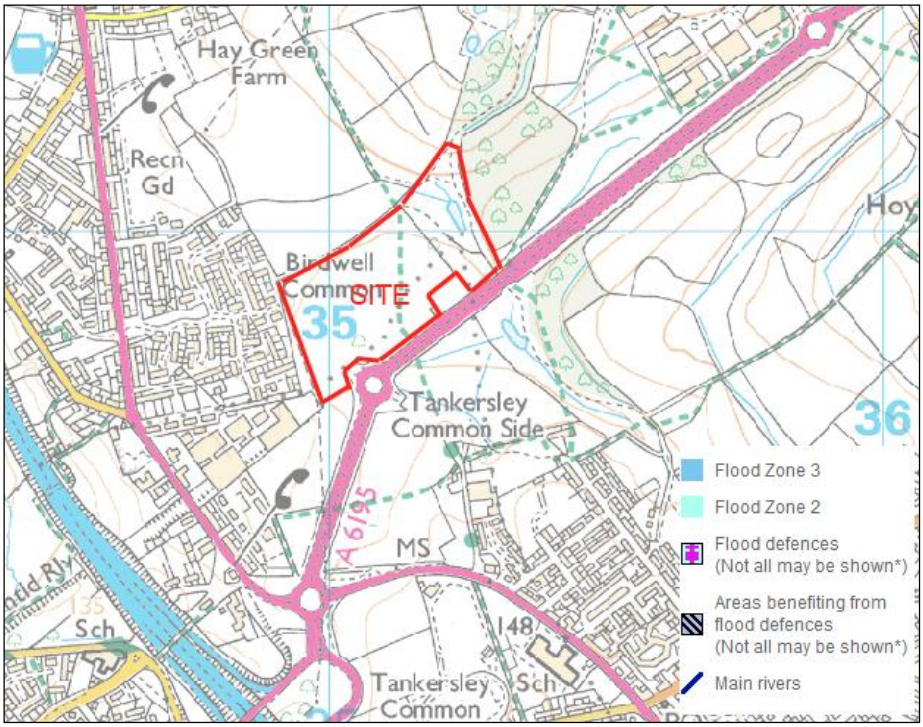
The site is located at Bridwell Common, in Birdwell approximately 5km to the south of Barnsley town centre in South Yorkshire. The approximate centre of the site is located at NGR 435047, 400874. The site is currently under development for three commercial units with associated access road and drainage infrastructure.

A site location plan attached for reference purposes.

This statement is in support of a planning application for a further commercial unit referenced as Unit 5.

2.0 FLOOD RISK ASSESSMENT

Publicly available information on flooding obtained from the Environment Agency (EA) website database is provided below:



The site is indicated to fall within Flood Zone 1 which comprises land assessed as having less than a 1:1000 annual probability of river or sea flooding.

NPPF Technical Guidance identifies it is acceptable for buildings used for commercial purposes to be located in Flood Zone 1.

3.0 EXISTING SEWER NETWORK

The current site infrastructure works include the provision of new surface and foul water sewers to serve the entire Rockingham 1 development site, including Unit 5 as proposed. The works include the enlargement of an existing pond to the east to provide surface water attenuation for the site.

The new surface and foul water sewers are subject to a Section 104 agreement and will ultimately be adopted by Yorkshire Water as public sewers.

4.0 SURFACE WATER DRAINAGE

Surface water shall discharge to the surface water drain tails provided in the access road. These are identified on the attached site infrastructure drainage layout plan. The impermeable area draining to each tail shall not exceed the figure statetd on the plan.

The downstream surface water attenuation pond has been designed to accept surface water discharge from Unit 5.

The proposed on site drainage network shall be designed in accordance with the requirements of Sewers for Adoption and shall demonstrate that:

No surcharge of pipes occurs in the 1-in-2 year rainfall event.

No surface flooding occurs in the 1-in-30 year rainfall event.

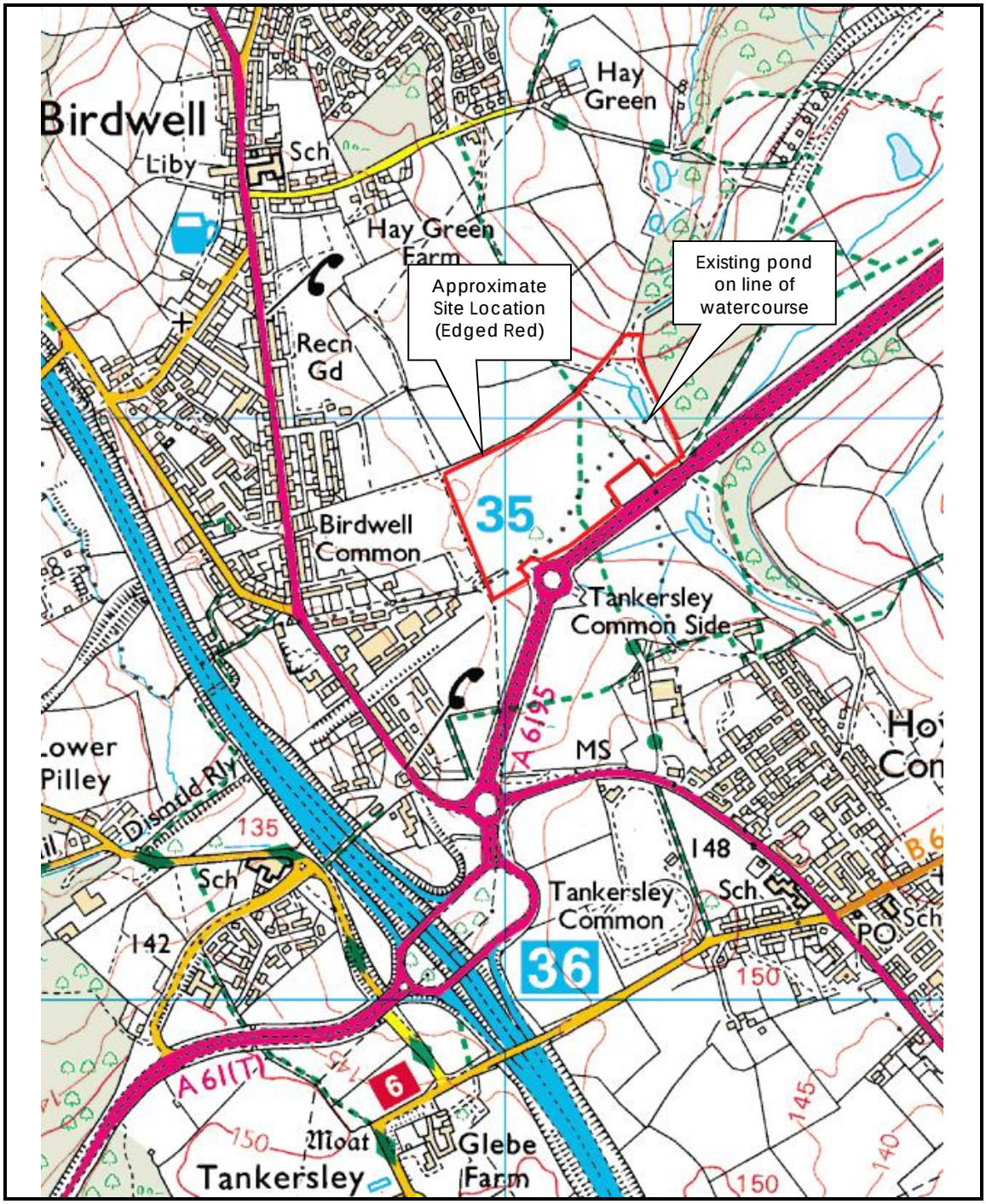
No flooding to buildings and adjacent properties occurs in the 1-in-100 year rainfall event (including an allowance of 20% for the effects of future climate change), as defined in NPPF Technical Guidance.

5.0 FOUL WATER

Domestic foul water shall discharge unrestricted to the foul water drain tails provided in the access road. These are identified on the attached site infrastructure drainage layout plan.



Andrew Fairburn
For and on behalf of JPG (Leeds) Limited
17 July 2015
AMF/DFS/4652.5.v1



Site Location Plan	
Site	Commercial Development, Birdwell Common
Client	Harworth Estates Property Group Limited
Job Number	4652
Scale	NTS

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DO NOT SCALE

NOTES

PROPOSED SECTION 104 FOUL DRAIN
PROPOSED SECTION 104 SURFACE WATER DRAIN
PIPE HATCHED THUS ON PLAN PROVIDED WITH A CONCRETE COVER SLAB (SEE DRG 4652-D3)
VC DENOTES VITRIFIED CLAY PIPE
CO DENOTES CONCRETE PIPE
FW PROPOSED FOUL MANHOLE
SW PROPOSED SURFACE WATER MANHOLE
G PROPOSED ROAD GULLY
BO PROPOSED BEANY KERB DRAIN OUTLET

DRAINAGE LAYOUT KEY.

N

EXISTING PIPE REDUCES TO 770mm DIA DOWNSTREAM AT OUTFALL TO WATERCOURSE
EX 1050Ø OUTFALL PIPE
EXISTING PIPED WATERCOURSE MAINTAINED BY RIPARIAN LAND OWNER
EX. 1500Ø PUBLIC SEWER (RETAINED)
EXISTING FOUL PUBLIC SEWER MANHOLE. IL 124.860 (TBC) MANHOLE COVER MISSING, CONCRETE BLOCK OVER MANHOLE.
EX PIPE IL=125.386
EX MANHOLE YW REF 1006
EX MANHOLE YW REF 1005
EX MANHOLE YW REF 1004
EX MANHOLE YW REF 1003
EX MANHOLE YW REF 990
EXISTING 1500Ø PUBLIC SEWER (TO BE ABANDONED)
DITCH IL=125.00
EXISTING 3750Ø PUBLIC SW SEWER
ATTENUATION POND
ATTENUATION BASIN/WATERCOURSE MAINTAINED BY RIPARIAN LAND OWNER
EXISTING 600Ø S.W. DRAIN
FOUL PUBLIC SEWER DIVERSION FROM HERE
PUBLIC SEWER EASEMENT ZONE HATCHED THUS
NO BUILDINGS TO BE LOCATED WITHIN SEWER EASEMENT ZONE (HATCHED)
SITE BOUNDARY
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 5800m2
UNIT 5 SURFACE WATER TO DISCHARGE TO THIS TAIL
UNIT 5 DEVELOPMENT PLOT
UNIT 5 FOUL WATER TO DISCHARGE TO THIS TAIL
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 5610m2
UNIT 5 SURFACE WATER TO DISCHARGE TO THIS TAIL
EXISTING 1.00mØ CULVERTED WATERCOURSE
EXISTING S.W. HIGHWAY DRAIN
UNIT 4 FFL 131.425
UNIT 3 FFL 131.725
UNIT 2 FFL 132.025
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 5115m2
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 4665m2
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 4560m2
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 3975m2
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 3321m2
STATUTORY SERVICES EQUIPMENT TO BE POSITIONED IN NEW FOOTWAYS
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 2490m2
ALLOWABLE CATCHMENT AREA TO BE CONNECTED TO THIS TAIL = 950m2
HIGHWAY DRAIN TO BE ADOPTED BY HIGHWAY AUTHORITY
EXISTING HIGHWAY ATTENUATION POND
BEANY KERB DRAIN
DEARNE VALLEY PARKWAY
EXISTING 3250Ø PUBLIC SW SEWER
EXISTING 2250Ø PUBLIC SW SEWER
Drain

REV	DESCRIPTION	DATE	BY

Job Title
PROPOSED DEVELOPMENT
ROCKINGHAM 1
DEARNE VALLEY PARKWAY
BARNSLEY

Drawing Title
INFRASTRUCTURE DRAINAGE LAYOUT

PRELIMINARY

Architect
THE HARRIS PARTNERSHIP

JPG
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Checked	Date	Scale		Drawn
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Drawing No 4652.5-SK1