mayer brown

PERSIMMON HOMES THAMES VALLEY LAND NORTH OF TODDINGTON LANE, LITTLEHAMPTON

WATERCOURSES, WEST OF WETLANDS (DISCHARGE OF CONDITIONS REPORT. CONDITIONS 01 (11) & 12)

FEBRUARY 2019

the journey is the reward

ARUN DISTRICT COUNCIL LU/228/20/DOC

PERSIMMON HOMES THAMES VALLEY
LAND NORTH OF TODDINGTON LANE, LITTLEHAMPTON

WATERCOURSES, WEST OF WETLANDS (DISCHARGE OF CONDITIONS REPORT. CONDITIONS 01 (11) & 12)

FEBRUARY 2019

Project Code:	**A/PHDRAIN.10**
Prepared by:	**SF**
Approved by:	**AB**
Issue Date:	**15th February 2019**
Status:	**2nd Issue**

Mayer Brown Limited, Lion House, Oriental Road, Woking, Surrey GU22 8AR

[redacted]

ARUN DISTRICT COUNCIL LU/228/20/DOC

Persimmon Homes Thames Valley
Land North of Toddington Lane, Littlehampton
Watercourses, West of Wetlands
(Discharge of Conditions Report. Conditions 01 (11) & 12)

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1 Introduction

1.1 Mayer Brown Ltd (MBL) has been commissioned by Persimmon Homes Thames Valley (PHTV) to compile this report to facilitate the discharge of planning Conditions 1 (11) & 12 for their outlined approved development (**Arun DC reference LU/47/11/)** for up to 1,260 residential dwellings, B1 employment use, Class A facilities, a 100 bed hotel, 60 bed care home, primary school, plus many other facilities and improvements to the local infrastructure.

Outline Planning Consent & Variation of Conditions

1.2 Outline Planning Consent was granted in 2011, under Arun District Council planning reference LU/47/11, which includes two conditions that relate to watercourses, their associated consents and access easements. These are covered in more detail within the report but a high level description is as follows:

- ~~Condition 11 – Easements and Access to Watercourses~~ Superseded, see variation below
- Condition 12 – Consents for Works on Watercourses

1.3 An application for Variation of Conditions 11, 17, 18, 20 & 30 imposed under LU/47/11 was subsequently permitted in February 2015. This approved planning reference **LU/346/14/PL** and the revised planning condition is Condition 1.

- Condition 1 – Easements & Access to Watercourses

Purpose of this Drainage Report

1.4 This drainage report does not cover the entire area that received outline planning approval. It includes the development area of approximately 19.0 hectares to the west of the wetlands as identified Appendix B, titled "Land Uses and Drainage Areas Covered".

1.5 There are a total of 18 land parcels and associated road infrastructure identified within the west of wetlands catchment at varying states of progress. The **only** part of the west of wetlands area development effecting an existing watercourse is Phase 2, under approved planning reference LU/121/17/RES.

1.6 It is considered that this report provides a sufficient evidence base to discharge the two planning conditions referenced above

2 Condition 12: Consents for Works on Watercourses

Condition 12: Planning reference LU47/11

The development shall not commence until formal consent has been approved in writing from the Local Planning Authority for the discharge of any flows to watercourses, or the culverting, diversion, infilling or obstruction of any watercourse on the site.

Reason: To ensure that the proposed development is satisfactorily drained to prevent the increased risk of flooding, and improve and protect water quality, habitat and amenity, and ensure future maintenance of these in accordance with national guidance and policies GEN7, GEN9 of the Arun District Local Plan.

Existing Ditch, Lagoon and Headwall

2.1 There are no existing watercourses or culverts that are adversely effected by the development for most of the parcels within the 19 hectare west of wetlands catchment. Most of the individual parcels and the supporting road network will be constructed on the raised areas that previously contained the glasshouses and its supporting infrastructure.

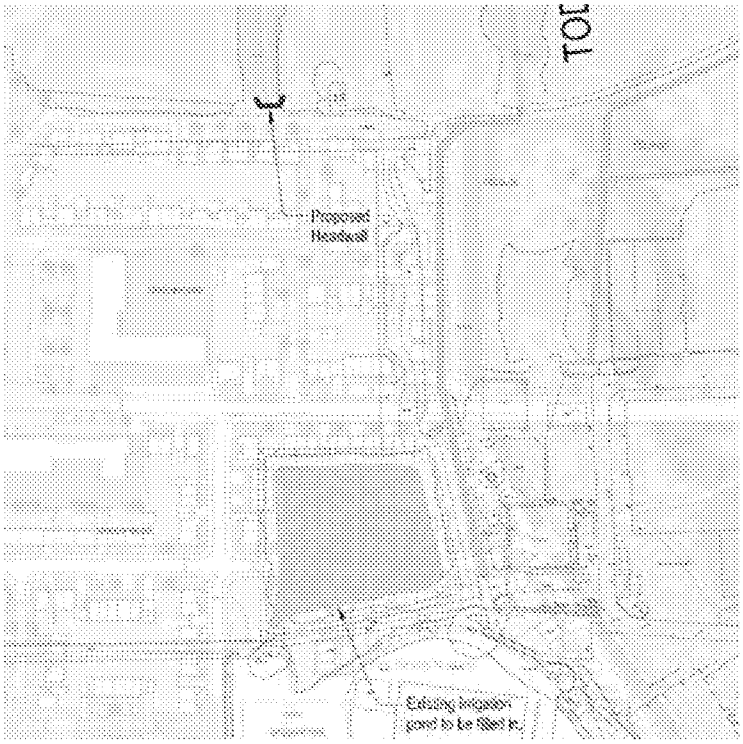


Figure 2.1 Ditch & Irrigation Lagoon (in green) to be filled in

2.2 The only exception to this are the northern and western perimeters of the catchment (C1, C2, B2 & B4) where the development platform has been extended into the wetlands. Refer to figure 2.1 above. This section (Phase 2) of the outlined approved development is permitted under the reserved matters planning reference **LU/121/17/RES**.

2.3 Implementing this approved scheme required the removal of an existing irrigation lagoon and adjacent ditch that eventually ends up connecting the Black Ditch via Toddington Ditch. A headwall at the head of the ditch also required removal. The location of the pre-demolition ditch, headwall and upstream drainage is identified in Appendix C. **This work has already been completed.**

2.4 Prior to the headwall being removed there was a 450mm diameter diversion pipe installed just upstream of the old headwall. This diversion pipe ensures any residual drainage / connections are picked up and diverted to the black ditch. This is a precautionary measure because the upstream sewers serving the old buildings and hardstanding areas have been demolished. This diversion will be a temporary arrangement until the central wetlands proposals are finalised, which will be part of a future planning submission.

2.5 An Environmental Management plan was also compiled and implemented by the Applicant prior to the ditch being filled in.

Environment Agency Liaison

2.6 The works described above have already been completed, and the watercourse affected are within the Internal Drainage Board (IDB) area where the Environment Agency (EA) have authority over and act as agent for The River Arun Drainage Board

2.7 MBL liaised with the EA (Adrian Jackson - AJ) on this matter who confirmed there is no point in submitting a Flood Defence Application to obtain a retrospective consent, on the basis the EA do not issue retrospective consents.

2.8 AJ explained that in this instance the EA's primary concern is potential flooding that could occur as a result of filling in the ditch and removing the headwall. AJ agreed to meet on site on 01st February 2019 to discuss / review the works that have been undertaken to the existing ditch and headwall.

2.9 Following the meeting on site AJ provided a response to MBL that they are satisfied there will be no increased flood risk which will impact third parties. Liaison with the EA is contained in Appendix H of this report.

Future Planning Application – Central Wetland Areas

2.10 A significant amount of offset works will be undertaken in the adjacent central wetland areas that will compensate for the alterations / removal of existing ditches across the 80 hectare outline development areas as a whole.

2.11 The relevant details for these offset works will form part of **future** planning application to discharge planning Conditions 17 and 18 of Decision Notice reference LU/346/14/PL.

2.12 Both of these conditions will essentially cover the creation of the new central wetlands. This scheme design is currently being developed by the Applicant and will be submitted to Arun Planning in the very near future. A work in progress plan is contained for the central wetland area is contained in appendix I of this report

Temporary Diversion & Future Consents

2.13 As explained in paragraph 2.4 a 450mm diameter diversion pipe was laid prior to the infilling of the existing ditch. The EA have instructed the Applicant that a Land Drainage Consent will be required for any future alterations / amendments / removal to this temporary solution.

2.14 The intention is to remove this temporary pipe when the approved works for the central wetlands are being undertaken. The anticipated timeframes associated with the removal of the pipe is 18 months, however this is subject to planning and other necessary approvals to enable the Wetlands Area to be implemented and the drainage formalised. At which point the system and pipe will be completely redundant. PHTV have agreed that the pipe will be jetted, and camera surveyed quarterly until its removal.

2.15 It is likely that a new headwall will be installed at the head of the diverted pipe and it will discharge into the central wetland areas. However, as explained above, the central wetland area is currently being developed so the exact solution of how the headwall will be incorporated into the scheme is yet to be established.

New Headwall / Outfall

2.16 It has been agreed, while discharging planning condition 10, that the proposed surface water network for the 19 hectare catchment will drain via a single outfall into the Black Ditch via an existing unnamed tributary. The proposed new outfall is identified in Appendix D and Appendix E of this report.

2.17 As required by Condition 12, a consent for this new outfall has been obtained from the Environment Agency (EA) under Consent Number SE_WS_2015_311_2 dated 30 July 2015. The Flood Defence Consent is included within Appendix G of this report.

2.18 The description of the works within the consent is as follows:

"Construction of 1 no. precast concrete surface water outfall (with railings and flap valve) to take discharge from new development through 525mm diameter pipe"

2.19 The consented headwall has been constructed and the Environment Agency inspected the works during their site visit on 01st February 2019. They are satisfied with the initial installation of the headwall, and recognise this is live building site (work in progress) and will pass their final judgement when the final landscaping works have been completed. Their response is contained in Appendix H of this report.

2.20 A short length at the head of the existing ditch was filled in to facilitate the new residential earthworks platform and headwall. It is the Applicants opinion that this work is included the within the FDC consent.

Condition 12 Conclusion

2.21 Regarding the new outfall and associated headwall, a Flood Defence Consent was obtained from the Environment Agency, contained in Appendix C, and they are satisfied with the initial installation of the works.

2.22 Regarding the removal of the existing ditch, headwall and irrigation lagoon, a consent to carry out these works has not been obtained, and the EA clarified it is not possible to issue a retrospective consent for works that have already been completed.

2.23 The EA have however visited site to review / inspect the works they are satisfied there will be no increased flood risk that will impact third parties. It is

the opinion / view of the Applicant that no further actions or measures are required, or are possible, to address the removal of these elements.

2.24 The temporary diversion pipe will be removed when the approved works for the central wetlands are being undertaken. PHTV will ensure the pipe is jetted, and camera surveyed quarterly until its removal. Land Drainage Consent will be obtained prior to the removal of the pipe.

2.25 Therefore, it is considered that this evidence provides sufficient information to discharge the outline planning Condition 12.

3 Condition 1: Easements & Access to Watercourses

Condition 1: Planning Reference LU/346/PL

(Superseded Condition 11 of outline approval LU47/11)

As relevant to any of the reserved matters applications, arrangements for future access to and maintenance of any watercourse or culvert (piped watercourse) crossing or abutting the site shall be submitted and approved in writing by the Local Planning Authority. The approved arrangements shall be implemented prior to fist occupation of that phase and thereafter permanently maintained.

Reason: To ensure that the proposed development is satisfactorily drained to prevent the increased risk of flooding, and improve and protect water quality, habitat and amenity, and ensure future maintenance of these in accordance national guidance and policies GEN7, GEN9 of the Arun District Local Plan.

3.1 There are no existing watercourses or culverts that are adversely effected by the development for most of the parcels within the 19 hectare west of wetlands catchment. Most of the individual parcels and the supporting road network will be constructed on the raised areas that previously contained the glasshouses and its supporting infrastructure.

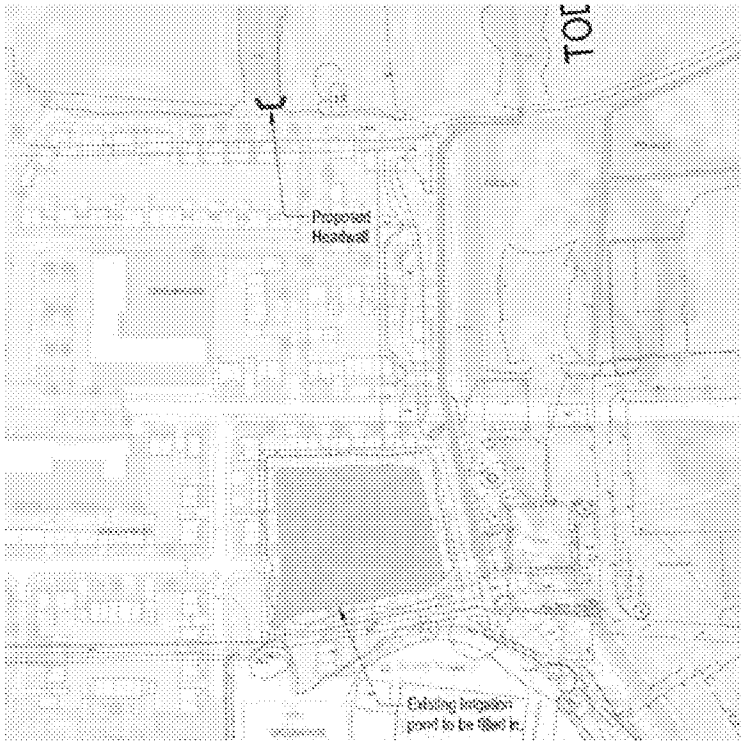


Figure 3.1 Lagoon and Ditch have been filled in / removed

3.2 The only exception to this are the northern and western perimeters of the catchment (C1, C2, B2 & B4) where the development platform has been extended into the wetlands. Refer to figure 3.1 above. This section (Phase 2) of the outlined approved development is permitted under the reserved matters planning reference **LU/121/17/RES**.

3.3 Implementing the approved scheme has resulted in the permanent removal of the irrigation lagoon and ditch identified in figure 3.1. (This is covered in more detail in section 2 of this report). With this in mind there is no requirement to provide future access or easements because there will no longer be a watercourses or ditch within this section of the development.

3.4 The nearest remaining watercourse to the west of wetlands area will be the surface water headwall at Outfall location B (covered in more detail in section 2 of this report) which discharges into the existing tributary of the Black Ditch.

3.5 The upstream surface water sewers and headwall / outfall will be adopted by Icosa Water under S104 Agreement, which will include an easement to ensure future access for maintenance will not be compromised. The headwall is also located adjacent an estate road turning head, on the edge a 1in3 embankment so will be easily accessible.

Future Planning Application – Central Wetland Areas

3.6 The creation of the new central wetland areas will result in new bodies of water / watercourses. This scheme is currently being developed by the Applicant and will be submitted to Arun Planning in the very near future. A work in progress plan is contained for the central wetland area is contained in appendix I of this report.

Temporary Diversion & Easement

3.7 As explained in paragraph 2.4 a 450mm diameter diversion pipe was laid prior to the infilling of the existing ditch. This temporary diversion is accessible from both ends of the pipe and there are currently no buildings or roads constructed over it. The pipe will be removed when the approved works for the central wetlands are being undertaken, and PHTV have confirmed the pipe will be jetted and camera surveyed quarterly until its removal. Land Drainage Consent will be obtained prior to the removal of the pipe.

3.8 With the above in mind it is not expected that an easement will be required for this temporary solution.

Condition 11 Conclusion

3.9 There is no requirement to provide future access or easements because there will no longer be a watercourses or ditches within West of Wetlands section of the development.

3.10 The nearest remaining watercourse to the west of wetlands area will be the surface water headwall at Outfall location B, which will be adopted by Icosa Water under S104 Agreement. This agreement will include an easement to ensure future access for maintenance will not be compromised.

3.11 Therefore, it is considered that this evidence base provides sufficient information to discharge planning Condition 1.

APPENDIX A: Site Location & Pre-Demolition Layout

Plan NTS

NOTES

1. This drawing is to be read in conjunction with all relevant documents and specifications.
2. Dimensions not to be scaled.

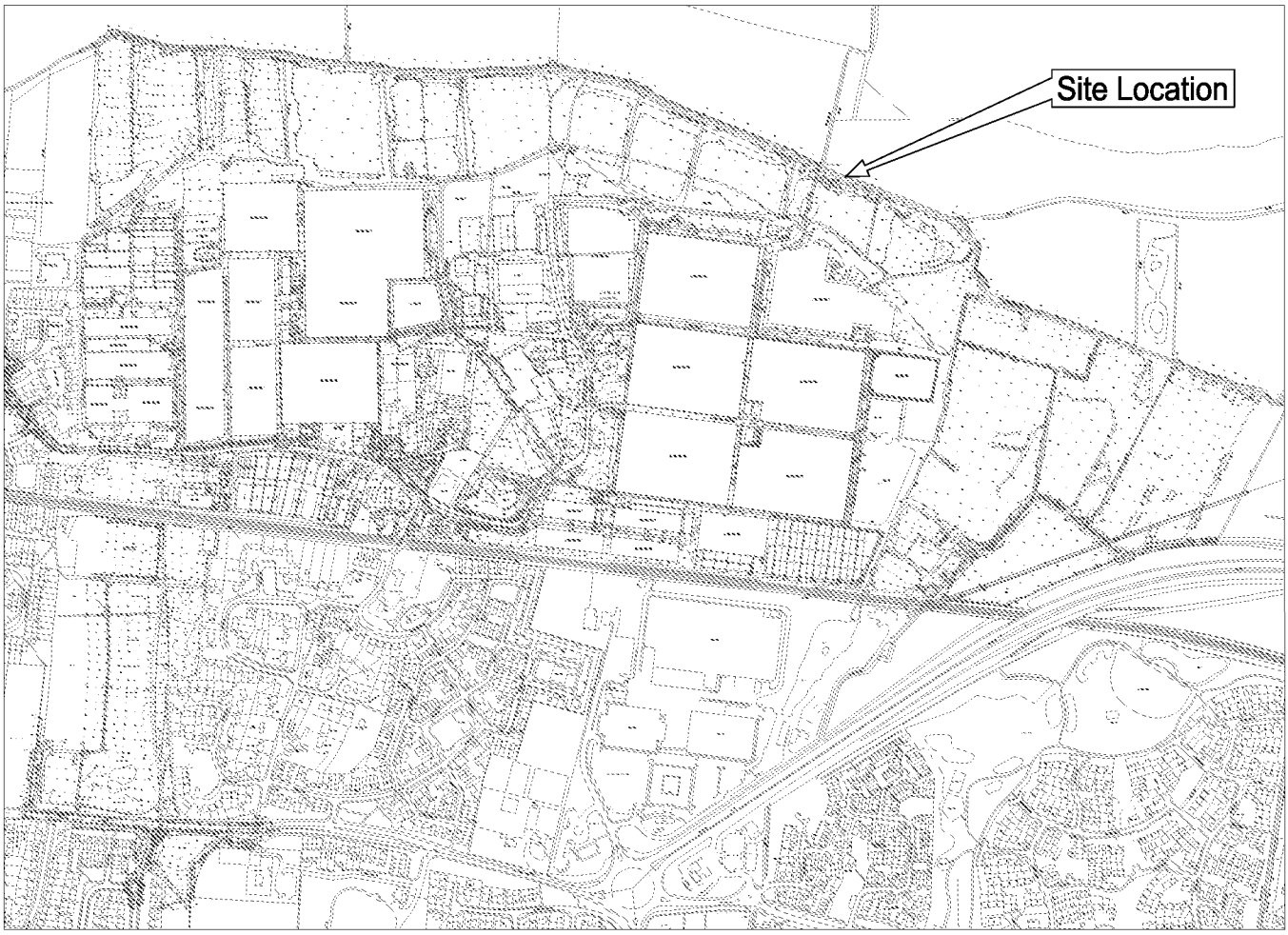
LOCATION

Address: Toddington Lane
Wick
Littlehampton
West Sussex
BN17 7PP

National Grid reference: TQ 03414 03979

N

Plan 1:10000



Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Project : Land North of Toddington Lane, Littlehampton

Title : Site Location Plan

Project Engineer :	J O'Kelly	Scale : As Shown@A4	Drawing No. N/A	Rev -
Project Director :	k Rayner	Date : December 14		

APPENDIX B: Land Uses & Drainage Areas Covered

AREA COVERED BY DRAINAGE STRATEGY REPORT
≈ 19·0 HECTARES

RESERVED MATTERS APPLICATION AREA

OUTFALL

Key:
- Public Open Space - Black Patch
- Public Open Space - Council Maintained
- Playing Fields and Changing Facilities (3G/S6 - 1.79HA)
- Allotments (S106 - 0.42HA & 0.83HA)
- SuDS
- Residential
- Education - School Site (S106 - 2.2HA)
- Community Center and Youth Facility (S106 - 0.02HA & 0.06HA)
- Non-residential Land (S106 - 2.62HA, Convenience - 2.8HA)
- Recycling Center (S106 - 0.2HA)
- Retail / residential (up to 3000SQM of Class A)
- Infrastructure
- SITS exclusion - Parcels approved under previous RM
- Core Home

C		-
B	[illegible]	19.04.17
A	[illegible]	12.09.16
Rev		Date

PERSIMMON
Together, we make a home

Persimmon Homes Thames Valley
Persimmon House, Knoll Road,
Camberley, Surrey GU17 9PQ
Tel 01276 803000

Toddington Lane
Littlehampton

Date: 27.06.16
Scale: 1:2500 @ A1
Job No: 519-GR.L_006

Drawing Title:
Parameter Plan - Land use

Drawn: KJ
Rev: B

SUBMITTED

ARUN DISTRICT COUNCIL LU/228/20/DOC

Open Space - Black Ditch
20.74 HA

C1 Parcel
2.75 HA

Hotel 100 beds
0.94 HA

0.88 HA

Nonresi Parcel
0.32 HA

Parking / Square
0.40 HA

E1 Parcel
2.43 HA

Recycling Area
0.2 HA

0.80 HA

Retail / Resi Block A Parcel
0.74 HA

B2 & B4 Parcel
1.67 HA

Central Wetland
5.25 HA

D1 Parcel
0.93 HA

E2 Parcel
1.82 HA

E3 Parcel
1.82 HA

Commercial Area up to 10000sqm Class B1
Enterprise Area up to 3000sqm

Retail / Resi Block B Parcel
0.59 HA

Parcel A1 extension
0.17 HA

Parcel A1 - RM determined
Parcel A1
0.21 HA

Parcel B1
0.59 HA

Parcel B5 - RM determined
Parcel B5
1.90 HA

D2 Parcel
2.42 HA

E4 Parcel
1.38 HA

E5 Parcel
2.17 HA

E6 Parcel
1.32 HA

Playing fields and changing facilities
3.79 HA

Parcel B5 - RM determined
Parcel B5
1.45 HA

Parcel A2
1.13 HA

Parcel B6
0.35 HA

Community Centre
0.62 HA

SUDS
0.98 HA

Education - School 2.20 HA

F2 Parcel
2.16 HA

Youth Facility
0.58 HA

Northern Allotments
0.41 HA

Southern Allotments
TBC HA

Key:

- Public Open Space - Black Ditch
- Public Open Space - Central Wetland
- Playing fields and Changing Facilities (S106 - 3.79HA)
- Allotments (S106 - 0.41HA & 0.81HA)
- SUDs
- Residential
- Education - School Site (S106 - 2.2HA)
- Community Center and Youth Facility (S106 - 0.62HA & 0.58HA)
- Non-residential Land (S106 - 2.62HA, Contract - 2.94HA)
- Recycling Center (S106 - 0.2HA)
- Retail / residential (up to 3500SQM of Class A)
- Infrastructure
- S73 exclusion - Parcels approved under previous RM

Rev		Date
-	-	-
-	-	-
A	Non-Residential land area (blue hatch) amended.	12.09.16

PERSIMMON
Together, we make a home

Persimmon Homes Thames Valley
Persimmon House, Kroll Road,
Camberley, Surrey GU15 3TQ
Tel: 01276 808080

Site:
Toddington Lane
Littlehampton

Date: 27.06.16

Scale: 1:2500 @ A1

Drg No: 519-GR.L_006

Drawing Title:
Parameter Plan - Land use

Drawing Status:
SUBMITTED

Drawn: KJ

Rev: A

APPENDIX C: Condition 12_Pre-demolition Headwall & Upstream Pipes

NOTES

1. Do not scale.

KEY

Western Area - Former Toddington Nursery. Outfalls to northern floodplain area via pipe connection and overland flow mechanisms.

Central West - former Holland Nursery, discharge to Todding ton Ditch.

Central East Area. Outfall to Toddington Ditch.

Eastern Area - Former Zuider Zee Nursery. Discharge to existing lake and Norway Ditch.

N

TODDINGTON DITCH

BLACK DITCH

NORWAY DITCH

E6 discharges to lake

LAKE

F2 Partially discharges to lake

RAILWAY

Rev.	Description	Date	Chkd

Glanville

Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 815550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Client :

Persimmon Homes

Project :

North Littlehampton

Title :

Illustrative Existing Surface Water Regime

Project Engineer :	S. Hudson	Scale :	1:2000
Project Director :	K. Rayner	Date :	September 2014
Status :	Preliminary		

Drawing No. 8140927/107 Rev

ARUN DISTRICT COUNCIL LU/228/2015

TODDINGTON LANE, LITTLEHAMPTON, WEST SUSSEX
DRAINAGE SURVEY

Date: 18th February 2014
Job No: 20644

Drainage
All drainage was lifted with pipe sizes and invert levels recorded. Wherever possible the chamber sizes have been recorded and positioned on the drawing. All connections from gullies, external rainwater pipes and external soil stacks have been proven wherever possible into manholes and sewer runs. Drains / sewers between manholes are assumed to be straight. All sub-surface drainage positions should be cross checked in critical areas by ROD or GPR survey or hand dug trial holes.

Notes :
1. DRAINAGE INFORMATION ADDED TO TOPOGRAPHICAL SURVEY PRODUCED BY MAYER BROWN LTD JOB No. APHLITTLE 209. DATE AUGUST 2014. NO SITE VERIFICATION CARRIED OUT BY MK SURVEYS UNLESS SPECIFIC TO DRAINAGE.
2. DRAINAGE INFORMATION HAS BEEN DETERMINED WITHOUT MAN ENTRY INTO CHAMBERS AND WHILST EVERY EFFORT HAS BEEN MADE TO CORRECTLY IDENTIFY THIS INFORMATION, IT SHOULD ALWAYS BE CHECKED IN AREAS THAT ARE CRITICAL TO THE FUTURE PROPOSAL.
3. ALL SEWERS ARE PRESUMED TO BE STRAIGHT BETWEEN CHAMBERS, WITH ROUTES /CONNECTIVITY OBTAINED USING ACOUSTIC METHODS ONLY. THESE ARE TO BE CONSIDERED ASSUMED AND SHOULD BE INVESTIGATED FURTHER IN CRITICAL AREAS.

DRAINAGE KEY

ABBREVIATIONS

(ACP)	ASSUMED CONNECTION POINT	LH	LAMP HOLE
(AG)	ABOVE GROUND	MH	MANHOLE
(AR)	ASSUMED ROUTE	NPV	NO PIPES VISIBLE
BD	BACK DROP	OL	OUTLET
BF	BRICK FILL	OU	OUTFALL
BL	BASE LEVEL	PP	POLYPROPYLENE
CI	CAST IRON	POW	PIPE ON WALL
CL	COVER LEVEL	PT	P-TRAP
CO	CONCRETE	PTG	PIPE TO GROUND
CU	CULVERT	PVC	POLYVINYL CHLORIDE
CP	CATCHPIT	PVCU	ULTRA RIB (PVC)
CWS	COMBINED WATER SEWER	RE	RODDING EYE
DCH	DRAINAGE CHANNEL	RMAIN	RISING MAIN
DI	DUCTILE IRON	RWP	RAINWATER PIPE
FD	FILTER DRAIN	SOFF	SOFFIT
FWS	FOUL WATER SEWER	SVP	SOIL VENT PIPE
GY	GULLY	SWS	SURFACE WATER SEWER
IC	INSPECTION COVER	UTL	UNABLE TO LIFT
IL	INVERT LEVEL	UTS	UNABLE TO SURVEY
INT	INTERCEPTOR	VC	VITRIFIED CLAY
IT	INLET	VP	VENT PIPE
KO	KERB OUTLET	WL	WATER LEVEL

LEGEND

CAUTIONARY NOTES
1. Pipe sizes are shown from visual inspection or taken from record information. Pipe sizes are recorded in millimetres and depths in metres.
2. Connectivity between Manholes has been proven using dye testing / acoustic methods. It is advised that a CCTV survey is carried out to confirm connections. Please visit for further details. If a CCTV Survey is required.

FOLIAGE
NOTE: Northern ditch in this area not shown on original topographical survey.
ASSUMED ROUTE
UNIT
OFFICES
POND
Ditch that was infilled
Headwall that was removed
NOTE: Assumed foul water is pumped from Pump house to SC7 then eventually to treatment. CCTV survey required to prove this connection.
NOTE: Ditch starts in this area flowing north. Not shown on original survey, unable to locate outfall due to dense vegetation.
NOTE: Local knowledge suggests once the pond gets full water flows out into an un-overflow 900 dia interceptor before outfalling into ditch.
ROUGH GROUND
GRASS
SERVICES
Assumed outfall into ditch. Unable to locate due to dense vegetation
Unable to locate outfall from here to ditch due to dense vegetation in this area
DRAINAGE CHANNEL
SC1 SW CL 2.73 IL 1.36 (x) 150Ø VC IL 1.44 (x,y) 150Ø VC IL 1.69 (x) 150Ø VC
SC2 SW CL 2.15 IL 1.26 (x) 225Ø VC IL 1.29 (x) 150Ø VC IL 1.44 (x) 150Ø VC
SC3 SW CL 3.55 IL 2.11 (x,o) 300Ø CO IL 2.57 (x) 150Ø VC
SC4 SW CL 3.82 OL 2.70 IL 1.83 (x,o) 300Ø PVC
SC5 INTERCEPTOR CL 3.30 IC 0.27 IL 1.91 (x,o) 150Ø VC IL 1.46 (o) 100Ø VC
SC6 SW CL 4.19 IL 2.44 IL 2.63 (x,o) 300Ø CO
SC7 SW CL 4.29 IL 2.91 (x,o) 300Ø CO
SC8 SW CL 3.26 IL 1.62 (x) 150Ø VC IL 1.70 (o,to 150Ø VC
SC9 SW CL 2.46 IL 1.91 (x,o) 100Ø PVC IL 2.10 (o) 100Ø PVC
SC10 SW CL 2.67 IL 1.47 (x,o) 100Ø PVC IL 1.55 (o) 150Ø PVC
SC11 SW CL 2.40 IL 2.00 (x,o) 100Ø PVC
SC12 SW CL 2.24 F IL 1.47 (x,o) 100Ø PVC IL 1.55 (o) 150Ø PVC
SC13 SW CL 2.24 IL 1.7% FLOODS
SC14 SW CL 2.73 IL 1.36 (x) 150Ø VC IL 1.44 (x,y) 150Ø VC IL 1.69 (x) 150Ø VC
SC15 SW CL 2.73 IL 1.26 (x,o) 150Ø VC
SC16 SW CL 2.44 IL 1.34 (x) 150Ø VC
SC17 SW CL 2.44 IL 1.34 (x) 150Ø VC
SC18 SW CL 2.26 IL 1.62 (x) 150Ø VC IL 1.70 (o,to 150Ø VC
SC19 SW CL 2.15 IL 1.26 (x) 225Ø VC IL 1.29 (x) 150Ø VC IL 1.44 (x) 150Ø VC
SC20 SW CL 2.00 IL 1.55 (x) 225Ø VC IL 1.57 (x) 150Ø VC IL 1.66 (x,o) 150Ø VC
SC21 SW CL 2.73 IL 1.26 (x,o) 150Ø VC
SC22 SW CL 2.46 IL 1.91 (x,o) 100Ø PVC IL 2.10 (o) 100Ø PVC
SC23 SW CL 2.24 F IL 1.47 (x,o) 100Ø PVC IL 1.55 (o) 150Ø PVC
SC24 SW CL 2.24 IL 1.7% FLOODS
SC25 SW CL 2.73 IL 1.36 (x) 150Ø VC IL 1.44 (x,y) 150Ø VC IL 1.69 (x) 150Ø VC
SC26 SW CL 2.73 IL 1.26 (x,o) 150Ø VC
SC27 SW CL 2.44 IL 1.34 (x) 150Ø VC
SC28 SW CL 2.44 IL 1.34 (x) 150Ø VC
SC29 SW CL 2.26 IL 1.62 (x) 150Ø VC IL 1.70 (o,to 150Ø VC
SC30 SW CL 2.15 IL 1.26 (x) 225Ø VC IL 1.29 (x) 150Ø VC IL 1.44 (x) 150Ø VC
SC31 SW CL 2.00 IL 1.55 (x) 225Ø VC IL 1.57 (x) 150Ø VC IL 1.66 (x,o) 150Ø VC
SC32 SW CL 2.73 IL 1.26 (x,o) 150Ø VC
SC33 SW CL 2.46 IL 1.91 (x,o) 100Ø PVC IL 2.10 (o) 100Ø PVC
SC34 SW CL 2.24 F IL 1.47 (x,o) 100Ø PVC IL 1.55 (o) 150Ø PVC
SC35 SW CL 2.24 IL 1.7% FLOODS
SC36 SW CL 2.73 IL 1.36 (x) 150Ø VC IL 1.44 (x,y) 150Ø VC IL 1.69 (x) 150Ø VC
SC37 SW CL 2.73 IL 1.26 (x,o) 150Ø VC
SC38 SW CL 2.44 IL 1.34 (x) 150Ø VC
SC39 SW CL 2.44 IL 1.34 (x) 150Ø VC
SC40 SW CL 2.26 IL 1.62 (x) 150Ø VC IL 1.70 (o,to 150Ø VC
SC41 SW CL 2.15 IL 1.26 (x) 225Ø VC IL 1.29 (x) 150Ø VC IL 1.44 (x) 150Ø VC
SC42 SW CL 2.00 IL 1.55 (x) 225Ø VC IL 1.57 (x) 150Ø VC IL 1.66 (x,o) 150Ø VC
SC43 SW CL 2.73 IL 1.26 (x,o) 150Ø VC
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SC45 SW CL 2.24 F IL 1.47 (x,o) 100Ø PVC IL 1.55 (o) 150Ø PVC
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TODDINGTON LANE, LITTLEHAMPTON, WEST SUSSEX
DRAINAGE SURVEY

Date: 18th February 2014
Job No: 20644

Drainage
All drainage was lifted with pipe sizes and invert levels recorded. Wherever possible the chamber sizes have been recorded and positioned on the drawing. All connection s from gullies, external rainwater pipes and external soil stacks have been proven wherever possible into manholes and sewer runs. Drains / sewers between manholes are assumed to be straight. All sub-surface drainage positions should be cross checked in critical areas by RD or CPR survey or hand dug trial holes.

Notes :

1. DRAINAGE INFORMATION ADDED TO TOPOGRAPHICAL SURVEY PRODUCED BY MAYER BROWN LTD ,JOB No. AP/HUTTLE 2009 DATE AUGUST 2014. NO SITE VERIFICATION CARRIED OUT BY MK SURVEYS UNLESS SPECIFIC TO DRAINAGE.
2. DRAINAGE INFORMATION HAS BEEN DETERMINED WITHOUT MAN ENTRY INTO CHAMBERS AND WHILST EVERY EFFORT HAS BEEN MADE TO CORRECTLY IDENTIFY THIS INFORMATION, IT SHOULD ALWAYS BE CHECKED IN AREAS THAT ARE CRITICAL TO THE FUTURE PROPOSAL.
3. ALL SEWERS ARE PRESUMED TO BE STRAIGHT BETWEEN CHAMBERS, WITH ROUTES /CONNECTIVITY OBTAINED USING ACOUSTIC METHODS ONLY. THESE ARE TO BE CONSIDERED ASSUMED AND SHOULD BE INVESTIGATED FURTHER IN CRITICAL AREAS.

DRAINAGE KEY

ABBREVIATIONS

(ACP)	ASSUMED CONNECTION POINT	LH	LAMP HOLE
(AG)	ABOVE GROUND	MH	MANHOLE
(AR)	ASSUMED ROUTE	NPI	NO PIPES VISIBLE
BD	BACK DROP	OL	OUTLET
BH	BOREHOLE	OU	OUTFALL
BL	BASE LEVEL	PP	POLYPROPYLENE
CI	CAST IRON	PSW	PIPE ON WALL
CL	COVER LEVEL	PT	P-TRAP
CO	CONCRETE	PTG	PIPE TO GROUND
CU	CULVERT	PVC	POLYVINYL CHLORIDE
GP	GATCHPIT	PVCU	ULTRA RIB (PVC)
CWS	COMBINED WATER SEWER	RE	RODDING EYE
DCH	DRAINAGE CHANNEL	RMAIN	RISING MAIN
DI	DUCTILE IRON	RWP	RAINWATER PIPE
FD	FILTER DRAIN	SOFF	SOFFIT
FWS	FOUL WATER SEWER	SVP	SOIL VENT PIPE
GY	GULLY	SWS	SURFACE WATER SEWER
IC	INSPECTION COVER	UTL	UNABLE TO LIFT
IL	INVERT LEVEL	UTS	UNABLE TO SURVEY
INT	INTERCEPTOR	VC	VITRIFIED CLAY
IT	INLET	VP	VENT PIPE
KD	KERB OUTLET	WL	WATER LEVEL

LEGEND

COMBINED SEWER — P-TRAP
FOUL WATER SEWER — BACK DROP
SURFACE WATER SEWER — SURVEY ABANDONED
CULVERTED RUN — CAPPED RUN
TRENCH RUNS — SURVEY BOUNDARY
MANHOLE
CHAMBER

CAUTIONARY NOTES

1. Pipe sizes are shown from visual inspection or taken from record information. Pipe sizes are recorded in millimetres and depths in metres.
2. Connectivity between Manholes has been proven using dye/leading / acoustic methods. It is advised that a CCTV survey is carried out to confirm connections. Please visit for further details. If a CCTV Survey is required.

OUTFALL S 5.34 300Ø PVC
OUTFALL E 2.87 300Ø PVC
RAMP
HOUSE
FC24 CW
CL 5.42
OL 5.67
IL 5.06 (x2) 2 x 300Ø PVC
IL 5.02 (x) 375Ø CO
FC23 CW
CL 5.40
IL 4.90 (x) 225Ø PVC
IL 4.90 (x) 225Ø PVC
FC22 CW
CL 5.37
IL 4.87 (x) 225Ø PVC
IL 4.87 (x) 225Ø PVC
FC21 CW
CL 5.34
IL 4.84 (x) 225Ø PVC
IL 4.84 (x) 225Ø PVC
FC20 CW
CL 5.31
IL 4.81 (x) 225Ø PVC
IL 4.81 (x) 225Ø PVC
FC19 CW
CL 5.28
IL 4.78 (x) 225Ø PVC
IL 4.78 (x) 225Ø PVC
FC18 CW
CL 5.25
IL 4.75 (x) 225Ø PVC
IL 4.75 (x) 225Ø PVC
FC17 CW
CL 5.22
IL 4.72 (x) 225Ø PVC
IL 4.72 (x) 225Ø PVC
FC16 CW
CL 5.19
IL 4.69 (x) 225Ø PVC
IL 4.69 (x) 225Ø PVC
FC15 CW
CL 5.16
IL 4.66 (x) 225Ø PVC
IL 4.66 (x) 225Ø PVC
FC14 CW
CL 5.13
IL 4.63 (x) 225Ø PVC
IL 4.63 (x) 225Ø PVC
FC13 CW
CL 5.10
IL 4.60 (x) 225Ø PVC
IL 4.60 (x) 225Ø PVC
FC12 CW
CL 5.07
IL 4.57 (x) 225Ø PVC
IL 4.57 (x) 225Ø PVC
FC11 CW
CL 5.04
IL 4.54 (x) 225Ø PVC
IL 4.54 (x) 225Ø PVC
FC10 CW
CL 5.01
IL 4.51 (x) 225Ø PVC
IL 4.51 (x) 225Ø PVC
FC9 CW
CL 4.98
IL 4.48 (x) 225Ø PVC
IL 4.48 (x) 225Ø PVC
FC8 CW
CL 4.95
IL 4.45 (x) 225Ø PVC
IL 4.45 (x) 225Ø PVC
FC7 CW
CL 4.92
IL 4.42 (x) 225Ø PVC
IL 4.42 (x) 225Ø PVC
FC6 CW
CL 4.89
IL 4.39 (x) 225Ø PVC
IL 4.39 (x) 225Ø PVC
FC5 CW
CL 4.86
IL 4.36 (x) 225Ø PVC
IL 4.36 (x) 225Ø PVC
FC4 CW
CL 4.83
IL 4.33 (x) 225Ø PVC
IL 4.33 (x) 225Ø PVC
FC3 CW
CL 4.80
IL 4.30 (x) 225Ø PVC
IL 4.30 (x) 225Ø PVC
FC2 CW
CL 4.77
IL 4.27 (x) 225Ø PVC
IL 4.27 (x) 225Ø PVC
FC1 CW
CL 4.74
IL 4.24 (x) 225Ø PVC
IL 4.24 (x) 225Ø PVC
FC0 CW
CL 4.71
IL 4.21 (x) 225Ø PVC
IL 4.21 (x) 225Ø PVC
FC25 CW
CL 5.45
IL 5.00 (x) 2 x 300Ø PVC
IL 5.02 (x) 375Ø CO
FC26 CW
CL 5.48
IL 5.03 (x) 300Ø PVC
IL 5.03 (x) 300Ø PVC
FC27 CW
CL 5.51
IL 5.06 (x) 300Ø PVC
IL 5.06 (x) 300Ø PVC
FC28 CW
CL 5.54
IL 5.09 (x) 300Ø PVC
IL 5.09 (x) 300Ø PVC
FC29 CW
CL 5.57
IL 5.12 (x) 300Ø PVC
IL 5.12 (x) 300Ø PVC
FC30 CW
CL 5.60
IL 5.15 (x) 300Ø PVC
IL 5.15 (x) 300Ø PVC
FC31 CW
CL 5.63
IL 5.18 (x) 300Ø PVC
IL 5.18 (x) 300Ø PVC
FC32 CW
CL 5.66
IL 5.21 (x) 300Ø PVC
IL 5.21 (x) 300Ø PVC
FC33 CW
CL 5.69
IL 5.24 (x) 300Ø PVC
IL 5.24 (x) 300Ø PVC
FC34 CW
CL 5.72
IL 5.27 (x) 300Ø PVC
IL 5.27 (x) 300Ø PVC
FC35 CW
CL 5.75
IL 5.30 (x) 300Ø PVC
IL 5.30 (x) 300Ø PVC
FC36 CW
CL 5.78
IL 5.33 (x) 300Ø PVC
IL 5.33 (x) 300Ø PVC
FC37 CW
CL 5.81
IL 5.36 (x) 300Ø PVC
IL 5.36 (x) 300Ø PVC
FC38 CW
CL 5.84
IL 5.39 (x) 300Ø PVC
IL 5.39 (x) 300Ø PVC
FC39 CW
CL 5.87
IL 5.42 (x) 300Ø PVC
IL 5.42 (x) 300Ø PVC
FC40 CW
CL 5.90
IL 5.45 (x) 300Ø PVC
IL 5.45 (x) 300Ø PVC
FC41 CW
CL 5.93
IL 5.48 (x) 300Ø PVC
IL 5.48 (x) 300Ø PVC
FC42 CW
CL 5.96
IL 5.51 (x) 300Ø PVC
IL 5.51 (x) 300Ø PVC
FC43 CW
CL 5.99
IL 5.54 (x) 300Ø PVC
IL 5.54 (x) 300Ø PVC
FC44 CW
CL 6.02
IL 5.57 (x) 300Ø PVC
IL 5.57 (x) 300Ø PVC
FC45 CW
CL 6.05
IL 5.60 (x) 300Ø PVC
IL 5.60 (x) 300Ø PVC
FC46 CW
CL 6.08
IL 5.63 (x) 300Ø PVC
IL 5.63 (x) 300Ø PVC
FC47 CW
CL 6.11
IL 5.66 (x) 300Ø PVC
IL 5.66 (x) 300Ø PVC
FC48 CW
CL 6.14
IL 5.69 (x) 300Ø PVC
IL 5.69 (x) 300Ø PVC
FC49 CW
CL 6.17
IL 5.72 (x) 300Ø PVC
IL 5.72 (x) 300Ø PVC
FC50 CW
CL 6.20
IL 5.75 (x) 300Ø PVC
IL 5.75 (x) 300Ø PVC
FC51
CL 6.23
IL 5.71 100Ø PVC
(Buried)
FC52 CW
CL 6.26
IL 5.77 (x) 225Ø PVC
IL 5.77 (x) 150Ø PVC
Possible culvert between FC52 and SC02. Jetting and CCTV survey required.
FC53 CW
CL 6.29
IL 5.80 (x) 150Ø PVC
IL 5.80 (x) 150Ø PVC
Pair 5 heavily silted
FC54 CW
CL 6.32
IL 5.83 (x) 150Ø PVC
IL 5.83 (x) 150Ø PVC
FC55 CW
CL 6.35
IL 5.86 (x) 150Ø PVC
IL 5.86 (x) 150Ø PVC
FC56 CW
CL 6.38
IL 5.89 (x) 150Ø PVC
IL 5.89 (x) 150Ø PVC

TODDINGTON LANE, LITTLEHAMPTON, WEST SUSSEX
DRAINAGE SURVEY

Date: 18th February 2014
Job No: 20644

Drainage
All drainage was lifted with pipe sizes and invert levels recorded. Wherever possible the chamber sizes have been recorded and positioned on the drawing. All connections from gullies, external rainwater pipes and external soil stacks have been proven wherever possible into manholes and sewer runs. Drains / sewers between manholes are assumed to be straight. All sub-surface drainage positions should be cross checked in critical areas by RD or CPR survey or hand dug trial holes.

Notes :
1. DRAINAGE INFORMATION ADDED TO TOPOGRAPHICAL SURVEY PRODUCED BY MAYER BROWN LTD JOB No. AP/HUTTLE 2009. DATE AUGUST 2014. NO SITE VERIFICATION CARRIED OUT BY MK SURVEYS UNLESS SPECIFIC TO DRAINAGE.
2. DRAINAGE INFORMATION HAS BEEN DETERMINED WITHOUT MAN ENTRY INTO CHAMBERS AND WHILST EVERY EFFORT HAS BEEN MADE TO CORRECTLY IDENTIFY THIS INFORMATION, IT SHOULD ALWAYS BE CHECKED IN AREAS THAT ARE CRITICAL TO THE FUTURE PROPOSAL.
3. ALL SEWERS ARE PRESUMED TO BE STRAIGHT BETWEEN CHAMBERS, WITH ROUTES / CONNECTIVITY OBTAINED USING ACOUSTIC METHODS ONLY. THESE ARE TO BE CONSIDERED ASSUMED AND SHOULD BE INVESTIGATED FURTHER IN CRITICAL AREAS.

DRAINAGE KEY

ABBREVIATIONS

(ACP)	ASSUMED CONNECTION POINT	LH	LAMP HOLE
(AG)	ABOVE GROUND	MH	MANHOLE
(AR)	ASSUMED ROUTE	NPI	NO PIPES VISIBLE
BC	BACK OF KERB	OL	OUTLET
BM	BENCH MARK	OU	OUTFALL
BL	BASE LEVEL	PP	POLYPROPYLENE
CI	CAST IRON	POW	PIPE ON WALL
CL	COVER LEVEL	PT	P-TRAP
CO	CONCRETE	PTG	PIPE TO GROUND
CU	CULVERT	PVC	POLYVINYL CHLORIDE
CP	CATCHPIT	PVCU	ULTRA RIB (PVC)
CWS	COMBINED WATER SEWER	RE	RODDING EYE
DCH	DRAINAGE CHANNEL	RMAIN	RISING MAIN
DI	DUCTILE IRON	RWP	RAINWATER PIPE
FD	FILTER DRAIN	SOIP	SOFFIT
FWS	FOUL WATER SEWER	SVP	SOIL VENT PIPE
GY	GULLY	SWS	SURFACE WATER SEWER
IC	INSPECTION COVER	UTL	UNABLE TO LIFT
IL	INVERT LEVEL	UTS	UNABLE TO SURVEY
INT	INTERCEPTOR	VC	VITRIFIED CLAY
IT	INLET	VP	VENT PIPE
KD	KERB OUTLET	WL	WATER LEVEL

LEGEND

COMBINED SEWER		P-TRAP	
FOUL WATER SEWER		BACK DROP	
SURFACE WATER SEWER		SURVEY ABANDONED	
TREE SYMBOL		CAPPED IN	
MANHOLE	□		
CHAMBER	◇		

CAUTIONARY NOTES
1. Pipe sizes are shown from visual inspection or taken from record information. Pipe sizes are recorded as estimates and depths in metres.
2. Connectivity between Manholes has been proven using dye testing / acoustic methods. It is advised that a CCTV survey is carried out to confirm connections. Please visit for further details. If a CCTV Survey is required.

GRAVEL
FOLIAGE
SERVICES
POND
GRASS
GREENHOUSE
GREENHO

Pre-demolition Drainage network upstream of Headwall

NOTE: CCTV survey from IC39 run t required to prove this connection. Assumed connection only.

IC36 SW
CL 2.27
IL 1.99 (-x) 225dI VC
IL 1.91 (s,E) 225dI VC
Flow control valve on run

IC57 SW
CL 2.14
IL 1.97 (-x) 225dI VC

IC55 SW
CL 2.51
IL 2.05 (-x) 225dI VC
IL 1.95 (s) 150dI VC
IL 1.94 (-y) 150dI VC
Run 2 had a strong flow of Silver all survey to dry conditions which suggests it may be pumped

IC54
CL 2.27
Fitted w

IC53
CL 1.75
IL 0.71 150dI PVC
Pumped

IC52 SW
CL 1.75
Assumed pump
Cables present in chamber
Chamber

IC51
CL 1.75

IC52
CL 1.32
IL 1.26 (-x) 150dI PVC
IL 1.22 (s,E) 150dI PVC

IC50
CL 2.00
IL 1.55 (-zh) 100dI PVC
IL 1.49 (s) 100dI PVC

IC44 SW
CL 1.53
IL 1.22 (-x) 225dI VC
IL 1.33 (s,E) 150dI VC

IC55
CL 1.62
IL 1.38 (-zh) 150dI PVC
IL 1.44 (s) 100dI PVC

IC46 SW
CL 1.79
IL 0.86 (s) 100dI PVC
IL 1.27 (e) 100dI PVC
IL 1.03 (s) 100dI PVC

IC48 SW
CL 1.28
IL 1.01 100dI PVC

IC47 SW
CL 1.44
IL 1.07 (s) 100dI PVC
IL 1.46 (s,E) 100dI PVC

IC43 S 44
CL 1.58
IL 1.53 24

IC45 SW
CL 1.15
IL 1.10
IL 1.30 (-y) 150dI PVC
IL 1.31 (s) 100dI VC
IL 1.31 (s) 150dI PVC

IC42 SW Gully Cover
CL 1.16
IL 1.09 (s,e) 150dI VC

IC42 SW
CL 1.30
IL 1.26 (s,e) 100dI VC

Interceptor

IC67 SW
CL 4.30
IL 1.15
No pipes visible
Assumed soak away
Position likely bird's eye view over concrete base
Approx chamber size only

IC62 SW
CL 3.51
IL 3.39 (s,e) 100dI VC
IL 3.34 (s,e) 100dI VC

IC63 SW
CL 3.61
IL 3.25 (s,e) 100dI VC

IC53 SW
CL 2.15
IL 1.15
IL 1.25 (-x) 150dI PVC
IL 1.25 (s,e) 150dI VC
CCTV survey required to prove connections run A & B

IC41 SW
CL 1.10
IL 1.06 150dI PVC

SHEET 9 OF 12

0m 5 10 15 20 25 30 35 40 45 50 55

mksurveys
Tel 01403 240162
Horsham
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www.mksurveys.com
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INSEWER SURVEYS
19a REVENGE ROAD
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CHATHAM
KENT
ME5 8UD
TEL: 01634 861 788
FAX: 01634 201376
WEB: www.insewer.co.uk
EMAIL: mail@insewer.co.uk

PERSIMMON

Toddington Lane
Littlehampton
West Sussex

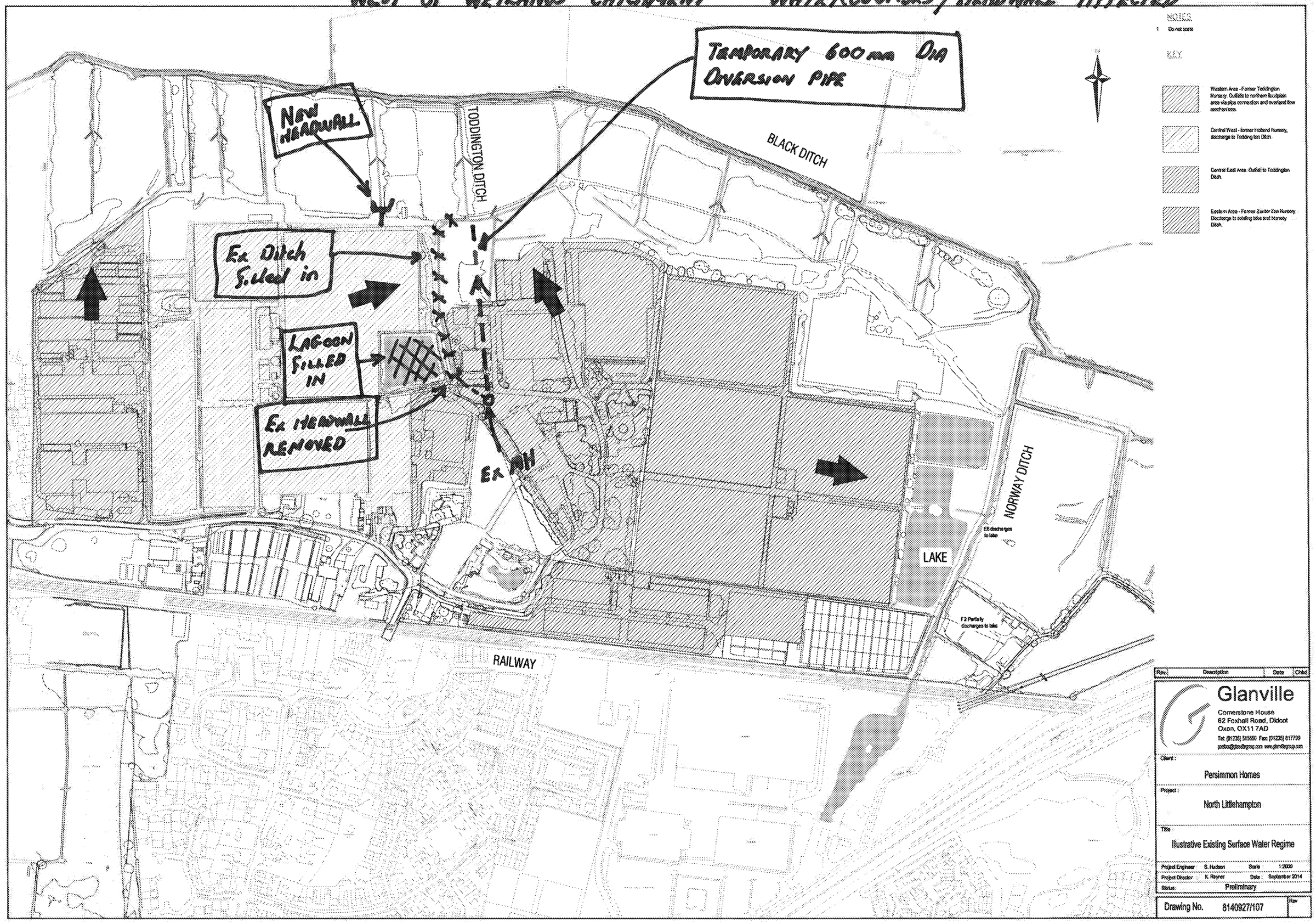
Drainage Survey

Scale	Sheet Size	Sheet Number	Date
1:250	A0	3	February 2015
Project Number	Rev.	Surveyed By	Approved By
20644	-	CP	NS

ARUN DISTRICT COUNCIL LU/228/20/DOC

APPENDIX D: Condition 12, Watercourse & Headwall Affected

WEST OF WEILANDS CATCHMENT – WATERCOURSES / HEADWALL AFFECTED



Rev.	Description	Date	Chkd

Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Client: Persimmon Homes

Project: North Littlehampton

Title: Illustrative Existing Surface Water Regime

Project Engineer	S. Hudson	Scale	1:2000
Project Director	K. Rayner	Date	September 2014
Status:	Preliminary		

Drawing No. 8140927/107 Rev

ARUN DISTRICT COUNCIL LU/228/20/DOC

APPENDIX E: Condition 12, Drainage Strategy & Proposed Outfall

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A0 ORIGINAL

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SURCHARGED OUTFALL
EA modelled flood levels adjacent flood plain (black ditch)
- 1 in 1,000yr Flood Level: 2.38M AOD
- 1 in 100yr+ 20% Flood Level: Ranges 1.72m to 1.83m AOD

Drainage Network Modelled with a constant surcharged outfall (level of 1.80m AOD (800mm surcharge) for all storm events and associated storm durations

SURFACE WATER OUTFALL
1.0m AOD

Peak Allowable Discharge = **285 litres / second**

(Catchment of 19.07 hectares with allowable discharge rate of 15 litres/sec/hectare)

Run-off restricted @ final manhole upstream of Outfall

Nonresidential Land 0.9HA

100 Bed Hotel

Residential Parcel C1

Residential Parcel C1

Residential C2

Residential C2

Residential B2

Residential B4 (Partial)

ATTENUATION Model 506m3

Allowable Discharge= **5 litres / Second**

ATTENUATION Model 126m3

Allowable Discharge= **5 litres / Second**

NO RESTRICTION REQUIRED ON MAIN ATTENUATION TANK UNDERNEATH THE CAR PARK SURFACE WATER WILL BACK UP IN THE OVERSIZED 900Ø PIPE FROM THE FINAL MANHOLE

SOFFIT/SOFFIT CONNECTIONS
Peak 1in1yr Flow= **175 l/s**

PERMEABLE PAVED CAR PARK WITH ATTENUATION VOLUME OF APPROX 260m3 IN THE PERMEABLE SUB-BASE. RESTRICTED FLOW OF 5 L/S INTO TANK UNDERNEATH CAR PARK

Parking Square

1500m3 ATTENUATION TANK (50m x 21m x 1.5m deep x 95% Void Ratio)

TOP WATER LEVEL= 3.700
SOFFIT LEVEL= 3.200
INVERT LEVEL= 1.710

CAR PARK LEVEL= 4.80m AOD

Nonresidential Land 0.32HA

Nonresidential Land 0.81HA

Commercial Area up to 10000sqm
Class B1 Enterprise Area upto 3000sqm

ATTENUATION Model 415m3

Allowable Discharge= **5 litres / Second**

ATTENUATION Model 506m3

Allowable Discharge= **5 litres / Second**

Nonresidential Land 0.91HA

Commercial Area up to 10000sqm
Class B1 Enterprise Area upto 3000sqm

ATTENUATION Model 310m3

Allowable Discharge= **5 litres / Second**

ATTENUATION Model 520m3

Allowable Discharge= **5 litres / Second**

Retail / Residential Block A Parcel 0.81HA

Retail / Residential Block B Parcel 0.56HA

Existing Discharge= **60 litres / Second**

Existing Discharge from BOVIS SITE = **120 litres / Second**

Attenuation Already incorporated into the design of Parcel

Existing Discharge= **60 litres / Second**

Combined volume - Carehome & Parcel B1

Allowable Discharge= **10 litres / Second**

ATTENUATION Model 345m3

Parcel B1 0.45HA

Care Home 0.28HA

ATTENUATION Model: 400m3

Allowable Discharge= **5 litres / Second**

ATTENUATION Model: 92m3

Allowable Discharge= **5 litres / Second**

Parcel A2 0.96HA

Parcel B6 0.31HA

UNRESTRICTED DISCHARGE
1in1yr = **5.3 l/s**
1in30yr = **15.7 l/s**
1in100yr+cc = **22.3 l/s**

UNRESTRICTED DISCHARGE
1in1yr = **6.3 l/s**
1in30yr = **18 l/s**
1in100yr+cc = **25.4 l/s**

UNRESTRICTED DISCHARGE
1in1yr = **10.5 l/s**
1in30yr = **28.6 l/s**
1in100yr+cc = **26.2 l/s**

UNRESTRICTED DISCHARGE
1in1yr = **8.4 l/s**
1in30yr = **23.2 l/s**
1in100yr+cc = **23.3 l/s**

1in1yr = **5.7 l/s**
1in30yr = **17.7 l/s**
1in100yr+cc = **32.4 l/s**

Overflow into Adjacent Network

FOR INFORMATION
NOT FOR CONSTRUCTION

rev.	amendment	checked	date
P6	B2 future attenuation tank altered at PN 3.000. (OIN)	SF	11/01/2019
P5	Sub-catchment location discharge rates added, pipe numbers updated. Attenuation Tank volumes amended for future plots and note on surcharged outfall added. (OIN)	SF	10/01/2019
P4	Drainage updated. (OIN)	SF	14/03/2018
P3	Foul drainage added. (OIN)	SF	08/03/2018
P2	Drainage layout updated. (OIN)	SF	06/02/2018

mayer brown

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Telephone 01483 750 508 Fax 01483 750 437
wokingoffice@mayerbrown.co.uk www.mayerbrown.co.uk

client
PERSIMMON HOMES THAMES VALLEY

project
NORTH LITTLEHAMPTON PHASE 2
SITE WIDE DRAINAGE STRATEGY

scale	1:500	drawn by	OIN	checked by	SF
date	NOVEMBER 2017	cad file	MASTER.DWG		

title
DRAINAGE STRATEGY DRAWING
WEST OF THE WETLANDS

drawing number
A/PHLITTLE.2/DS

rev.
P6

APPENDIX F: Condition 12, Flood Defence Consent

Flood Defence Consent

Section 23 of the Land Drainage Act 1991

Persimmons Homes Ltd
(Thames Valley)
Persimmon House
Knoll road
Camberley
Surrey
GU15 3TQ

Consent applying to the construction of 1 no. surface water outfall to take discharge from new development into Ordinary Watercourse (within the River Arun Internal Drainage District)
Land south of Black Ditch, North Littlehampton, West Sussex

NGR: 503413, 104302

Consent number
SE_WS_2015_311_2

Effective from
30th July 2015

Environment Agency West Sussex

[redacted]

ARUN DISTRICT COUNCIL LU/228/20/DOC

Disclaimer

The Environment Agency does not accept any responsibility for the design and construction of the works referred hereto and any liability for any loss or damage which may arise out of their design, construction, maintenance or use.

Our approval is given solely on river morphology, flow, ecology, and other land drainage criteria. It should not be regarded by the applicant as in any way approving the design and soundness of the proposed structure, other than in relation to its impact on flows in the watercourse and its flood plain

This Consent does not free you from the need to obtain other licences, consents, approvals (including bye-law consents) or permissions (including planning permission) which may be required in law or in order to comply with any duties or responsibilities for conservation or protection of the environment. You should ensure that the works are carried out in a proper manner so as not to adversely affect the watercourse. A copy of the Special Requirements issued by the Environment Agency is available upon request. Work should be completed as quickly as possible once started.

The works shall be carried out at your own risk and responsibility. We accept no responsibility for any loss or damage howsoever caused arising from the carrying out or construction of the works. We may occasionally make observations on health and safety aspects of the work, however this should not be taken in any way whatsoever to imply that we have a role in ensuring site safety, nor that we have approved any contractors plans.

Land ownership is not a material consideration in determining this consent. Where you are not the owner of the land (including riverbeds and other water bodies) referred to in this consent, you must obtain suitable permission from the landowner prior to the commencement of works. This Consent does not confer any rights of entry or rights over property.

If you undertake works in contravention of Section 109 of the Water Resources Act, 1991 (Restriction on erection of structures in, over or under main river), or of the terms of this consent, we may remove, alter or pull down the works and recover from you the expenses incurred in doing so.

The responsibility to ascertain the location of any services, which may be affected by the proposed works, lies solely with the Applicant/Agent.

The contents of this consent must be brought to the attention of your contractor.

If you believe that conditions have been unreasonably imposed then you have a right of appeal.

ARUN DISTRICT COUNCIL LU/228/20/DOC

Consent
Section 23 of the Land Drainage Act 1991

Flood Defence Consent

Control of works affecting watercourses and/or flood defences

Consent number **SE_WS_2015_311_2**
To Persimmon Homes Ltd (Thames Valley)
of Persimmon House, Knoll Road, Camberley, Surrey GU15 3TQ

The Environment Agency, in exercise of its powers under Section 23 of the Land Drainage Act 1991 and subject to the conditions overleaf, hereby grants its consent in relation to the works or operations described in this Consent.

Watercourse: Ordinary Watercourse within the River Arun Internal Drainage District

Location: Land south of Black Ditch, North Littlehampton, West Sussex

NGR: 503413, 104302

Description of works: Construction of 1 no. precast concrete surface water outfall (with railings and flapvalve) to take discharge from new development through 525mm diameter pipe.

For the following activities:

Construction of 1 no. surface water outfall

(1) Construction of 1 no. permanent precast concrete surface water outfall (with railings and flapvalve) to take discharge from new development through 525mm diameter pipe
As detailed on Drawings: 8140927/SK12, CV8140927/SK09 and SFA 10C Headwall Plan

The Agency does not accept any responsibility for the design and construction of the works referred hereto and any liability for any loss or damage which may arise out of their design, construction, maintenance or use.
This Consent shall come into effect on **30th July 2015**

Signed on behalf of the Environment Agency

[redacted]

Partnerships and Strategic Overview Team Leader

Date of signing

30th July 2015

ARUN DISTRICT COUNCIL LU/228/20/DOC

Conditions

This consent is granted subject to the following conditions:

1. **That the headwalls are adequately keyed into the banks and bed of the watercourse to prevent erosion.**
2. **No excavated material or debris arising from the construction of the works shall be disposed of on the site or in the floodplain without our prior agreement. Any materials, debris etc that fall into the river channel, or onto the banks of the watercourse shall be removed immediately.**
3. **There should be no storage of materials (or chemicals/fuels) within (EIGHT) metres of the watercourse.**
4. **No refuelling of any machinery shall take place within (EIGHT) metres of any watercourse**
5. **No dredging of the riverbed shall take place during the construction period.**
6. **The banks and/or bed of the watercourse where disturbed shall be restored to our reasonable satisfaction.**
7. **We shall be afforded access to the works at all reasonable times for the purpose of inspection during construction of the works and after completion of the works.**
8. **The construction of the works described in this consent must be completed within three years from the date of issue of this consent. Works not completed within this time, additional works and/or amendments will require a new consent.**

Informatives

- Although the ditches involved were dry when the water vole survey/report was carried out, there are water vole populations in close proximity to this site.
- It is recommended that an ecologist looks over the works footprint prior to starting the work, to ensure no burrows are disturbed.
- Water vole burrows can normally extend up to 5 metres into the river banks.
- It is a legal offence to disturb water vole and their burrows so you should be aware of the legal implications when undertaking your work.

Other information

This Note does not form part of the Certificate of Authorisation.

Pollution Prevention

You are reminded that it is an offence under Regulation 38 of The Environmental Permitting (England and Wales) Regulations 2010 to cause or knowingly permit a water discharge activity or ground water activity.Care must be taken to ensure that neither the watercourse nor groundwater becomes polluted, particularly by, for example diesel fuel, petrol and oil from machinery. All fuels, oils and chemicals must be stored securely and any large containers left on site must be bunded. Care should also be taken when filling machinery to ensure that diesel/petrol/oil is not spilt on the ground. Spillages must not be washed away, but absorbed by some medium and then removed from site to a suitable licensed waste facility. Any such incidents must be reported to the Environment Agency immediately (Emergency Tel No 0800 807060). Copies of the Environment Agency"s Pollution Prevention Guidelines (PPG5) and (PPG6) are either attached for your information or if not available upon request.

Disturbance of bed and bank material in watercourses should be minimised, including when carrying out excavations. An appropriate silt control system should also be considered if material is likely to be disturbed. In-river vehicle tracking should be kept to an absolute minimum.

Any waste generated in the course of the works must be disposed of in accordance with the provision of the Environmental Protection Act 1990. Persons carrying waste are required by law to register with the Environment Agency as a Waste Carrier (subject to certain exceptions). The deposit, keeping, treating or disposal of waste should only take place at premises licensed by the Environment Agency to receive the waste (subject to certain exceptions and exemptions). When you give waste to someone else, details of the transfer of waste should be described on a document called a Duty of Care Transfer Note.

If the waste contains any properties that are hazardous to health or the environment, the waste will be classed as 'Hazardous Waste' as defined in the Hazardous Waste Regulations 2005. These Regulations place specific requirements on the producer and carrier of such waste. Further information can be found on the Agency"s website (www.environment-agency.gov.uk) or by contacting the National Customer Contact Centre on 03708 506506.

The activity of importing waste into the site for use as part of the construction process, for example hardcore, must be registered by Environment Agency as an exempt activity under the Waste Management Licensing Regulations 1994.

Flood Risk Management

The structure(s) must be removed immediately, for any reason, at the request of the Area Flood Risk Manager.

ARUN DISTRICT COUNCIL LU/228/20/DOC

You must ensure that any structure is clear and free of rubbish, silt and debris at all times. Regular inspections of the structure should also be carried out and the appropriate maintenance work undertaken.

Fisheries

You are strongly advised to inform the appropriate Angling Association/Interests of your proposals (where applicable), before commencing work, since the issue of a Flood Defence Consent by this Agency will not protect you from any claim for nuisance or damage which may be attributed to your works.

The free passage of fish must be maintained at all times, unless otherwise agreed in advance with the Agency.

Under the terms of the Salmon and Freshwater Fisheries Act 1975, it is an offence to cause or knowingly permit to flow, or put, into any waters containing fish, any liquid or solid matter to such an extent as to cause the water to be poisonous or injurious to fish or the spawning grounds, spawn or food of fish.

Biodiversity

Natural environments such as watercourses are important as habitats in their own right and for the plants and animals they support .There are several Acts and Regulations that ensure these special features are protected and you should be aware of and comply with this legislation. A list of relevant legislation can be found in our working method guidance.

The list of species and actions below are not exhaustive and the applicant should consult the relevant legislation regarding other concerns.

A licence for works affecting protected species may be required from Natural England. You should consult their standing advice for more information on this.

Otters and their places of rest are protected. Otters are widespread and significant tree works or works to the banks have the risk of disturbing otters and damaging their Holts. You should make an assessment of the risk to otters and where required a survey should be undertaken by a suitably qualified ecologist. Note otters sometimes lie up in drains/small watercourses so wherever possible drain entrances should be kept clear.

Bats and their habitats are protected. Bats are often found in structures and trees on or adjacent to watercourses. If your works are likely to affect structures such as bridges, walls, culverts or buildings you must consider impacts on bats. An appropriate assessment of risk and, where required a survey should be undertaken by a suitably qualified ecologist.

Water voles and their habitat are protected. If water voles are present on your site you need to consider the impacts of your work on them and an appropriate assessment of risk and where required survey should be undertaken by a suitably qualified ecologist.

Native Crayfish are protected. When undertaking works where native crayfish are present you need to consider the impacts of your works and an appropriate assessment of risk and where required survey should be undertaken by a suitably qualified ecologist.

ARUN DISTRICT COUNCIL LU/228/20/DOC

Vegetation

No bankside vegetation within 7m of the watercourse is to be removed unless strictly necessary. In such cases, trees/shrubs should be limbed or coppiced, and the root base to be left intact. Scrub vegetation as possible should be retained, as this provides valuable wildlife habitat.

Trees should be protected from the works in accordance with British Standard 5837, "Trees in relation to construction", and contractors' working areas shall be clearly marked out and boundaries adhered to.

Any bankside trees or vegetation damaged or removed during the works should be replaced with native species of local provenance appropriate to the local habitat.

Birds

Breeding birds and their nests are protected under the Wildlife and Countryside Act 1981. If your work is taking place within or close to the main bird breeding season (1st March to 31st July) you should consider the impacts of your works and an appropriate assessment of risk should be undertaken.

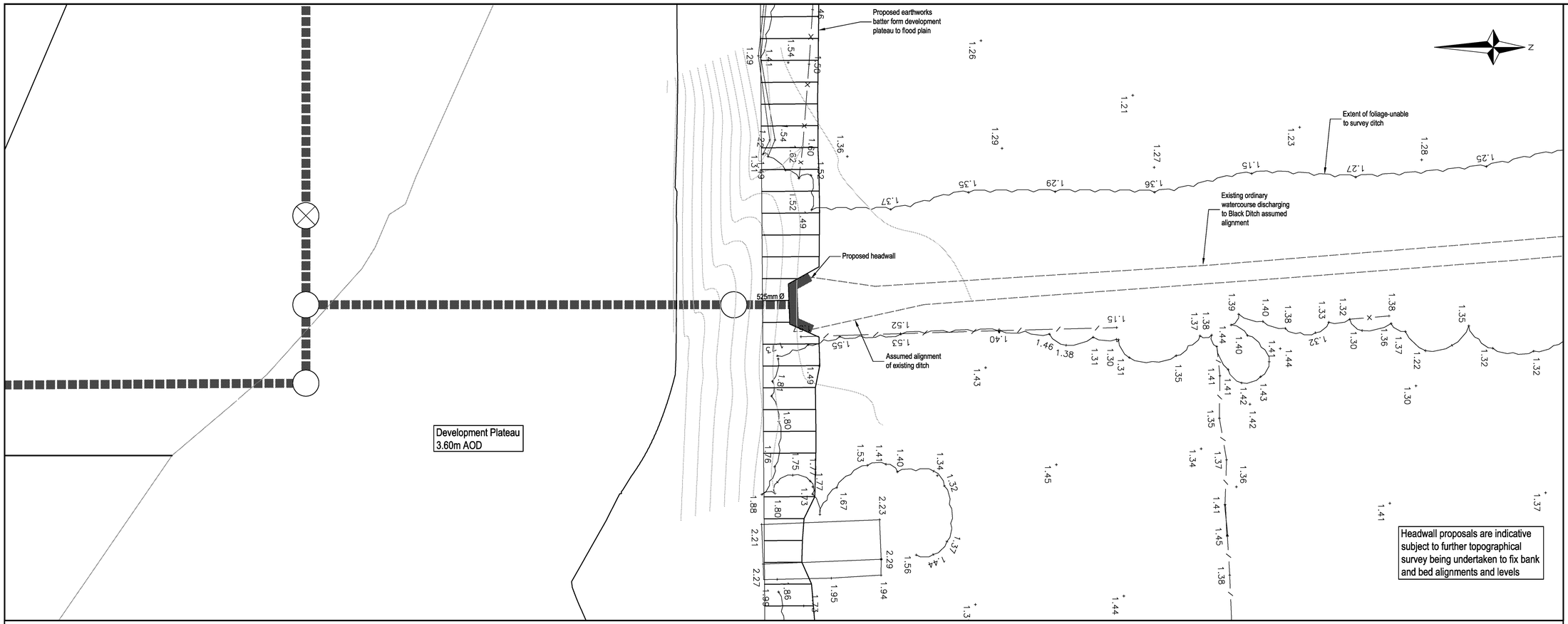
Invasive Non-native species

The Wildlife and Countryside Act makes it an offence to cause certain species to spread in the wild. If these species are present on your site you need to have a plan for how you will manage them and any waste containing them during your work.

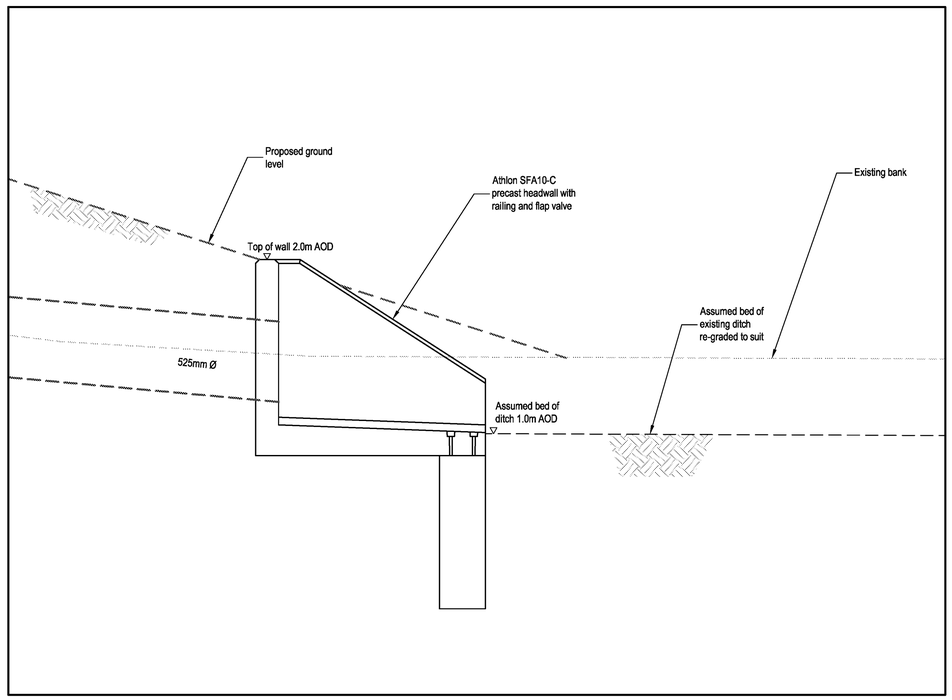
Bio security

When travelling or working between watercourses there is a high risk of transferring problem species or diseases between watercourses.

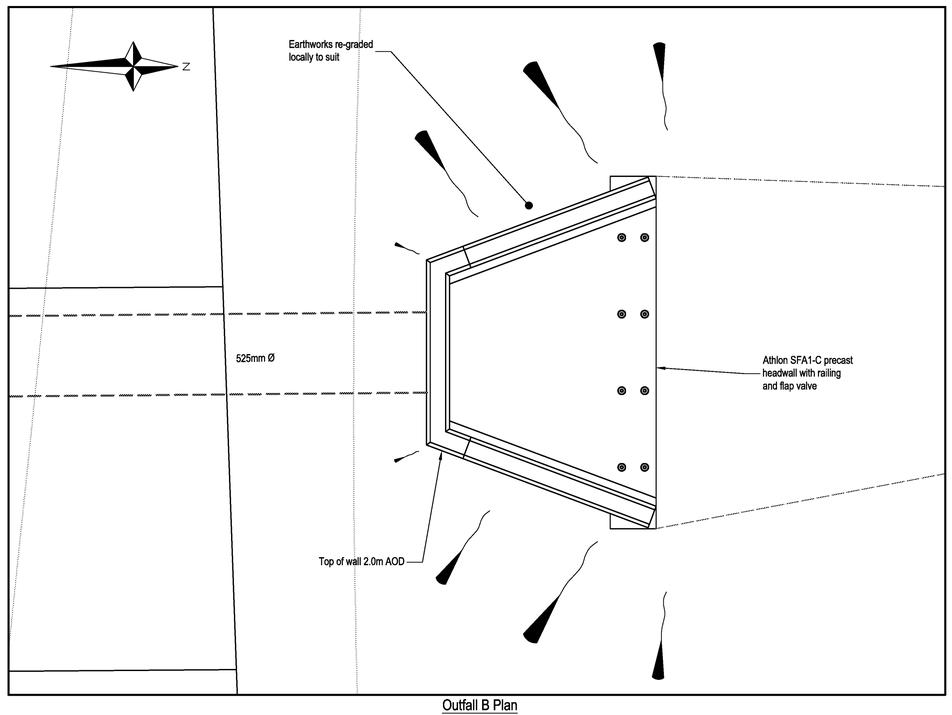
This can be avoided by following the advice of the "check, clean, dry" campaign. Simple measures such as checking for and cleaning mud and bits of vegetation from boots, equipment and machines and allowing them to dry (ideally in sunlight) can prevent the spread of problem species.



Location Plan
Scale 1:250



Outfall B Section
Scale 1:20



Outfall B Plan
Scale 1:20

NOTES

1. This drawing to be read in conjunction with all relevant documents and specifications
2. Dimensions not to be scaled

Rev.	Description	Date	Chkd

Glanville
Cornerstone House
62 Foxhall Road, Didcot
Oxon, OX11 7AD
Tel: (01235) 515550 Fax: (01235) 817799
postbox@glanvillegroup.com www.glanvillegroup.com

Client : PERSIMMON

Project :
Toddington Lane
North Littlehampton

Title :
Outfall B Headwall

Project Engineer :	S. Hudson	Scale :	As Shown @ A1
Project Director :	K. Rayner	Date :	May 2015
Status :	PRELIMINARY		

Drawing No. CV8140927/SK09 Rev -

ARUN DISTRICT COUNCIL LU/26/09/DC

APPENDIX G: Condition 12, Environment Agency Correspondence

Sean Foley

Subject: FW: Ditch Infilling - Toddington Ditch IDB

From: Jackson, Adrian
Sent: 01 February 2019 17:08
To: 'Sean Foley' [redacted]
Subject: Ditch Infilling - Toddington Ditch IDB

Dear Sirs

Further to our site meeting and inspection on 01 February 2019 (Mssrs Jackson and Moffatt [EA], Persimmon Homes and Meyer Brown Consultants), it has been acknowledged that works have been undertaken without the prior approval and consent of the River Arun Internal Drainage Board (whom the Environment Agency act as agents) It should therefore be noted that the ditch infilling and associated works are deemed to be 'unconsented'. Furthermore we do not issue or approve retrospective works.

However we recognise that the existing situation is of a temporary nature, and will be replaced by a longer term solution, and we are therefore satisfied that there will be no increased flood risk which will impact third parties. Please note on removal of the temporary works, the proposals for the drainage modifications which form the development layout will require Land Drainage consent (forms attached) from either the Environment Agency acting as the Internal Drainage Board (IDB), or if the IDB has been disbanded, the Lead Local Flood Authority (LLFA)

From an ecological perspective whilst a section of watercourse has been lost, the longer term benefit of the proposed wetland areas will compensate for the ditch loss.

With regards to the structure referred to as 'Headwall B' we are satisfied with the initial installation, but would reserve judgement,
until the final landscaping works have been complete.

I trust this email correspondence is an accurate portrayal of the site meeting discussion.

Adrian Jackson
PSO West Sussex and PDU2 Teams Senior User| Partnership & Strategic Overview | West Sussex
Environment Agency | Guildbourne House, Chatsworth Road, Worthing, West Sussex, BN11 1LD

[redacted]

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Check your flood risk today
FLOODS DESTROY

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Click here to report this email as spam

Sean Foley

From: Sean Foley
Sent: 25 January 2019 12:42
To: 'Jackson, Adrian'
Cc: 'PSO West Sussex'; 'Neil Oliver'; 'Edgley, Martin'; Adrian Barnley (abarnley@mayerbrown.co.uk); Steven Lecocq; 'Clark, Robert'; Jeff Hunt
Subject: RE: Planning Consultation on LU/345/18/DOC - Infilled Ditch & Headwall, EA Meeting
Attachments: Pre-demolition Drawings Headwall & Upstream Pipes.pdf; IMG_20180308_150029600.jpg

Importance: High

Adrian,

Thanks for your time this morning. As discussed, we've been informed the ditch has already been filled in and, as such, you believe there is no point is submitting the FDC application to obtain a retrospective consent. (On the basis the EA do not issue retrospective consents)

We understand that in this instance the EA's primary concern is potential flooding that could occur as a result of filling in the ditch and removing the headwall.

Prior to the headwall being removed there was a 450mm diameter diversion pipe installed at the old headwall location (attached is a rather basic sketch from the Contractor). This diversion pipe is to ensure any residual drainage / connections are picked up and diverted to the black ditch. This was a precautionary measure because the upstream sewers serving the old buildings and hardstanding areas have been demolished. The pre-demolition drawings are attached.

We have also learnt that an Environmental Management plan was compiled and implemented by Persimmon Homes prior to the ditch being filled in.

There was also a significant amount of offset works that will be undertaken in the adjacent central wetland areas that will compensate for the alterations / removal of existing ditches across the 80 hectare outline development areas as a whole

Way Forward

As agreed to there is no point in submitting a FDC application, but we still require formal confirmation that the EA are satisfied the works undertaken to the ditch and headwall are acceptable.

This formal confirmation should in theory provide sufficient evidence to Arun DC that the EA are satisfied and will work in lieu of a FDC consent. This should then facilitate the discharge of outline planning condition 12.

Site Meeting

With the above in mind we are very grateful that you will meet us on site next Friday morning at 11am (1st February 2019) to discuss / view the works that have been undertaken.

At the end of this meeting you will hopefully be in a position to issue a formal letter confirming the EA are satisfied with the works and sufficient measures were undertaken so the risk of flooding will not increase.

Many thanks for agreeing to meet at such short notice, which is most appreciated.

Regards,

Sean Foley
Principal Engineer
Mayer Brown Ltd
[redacted]

ARUN DISTRICT COUNCIL LU/228/20/DOC

From: Sean Foley
Sent: 23 January 2019 11:47
To: 'Jackson, Adrian' [redacted]
Cc: PSO West Sussex [redacted] Neil Oliver [redacted]; Edgley, Martin [redacted] Adrian Barnley [redacted] Steven Lecocq [redacted]; 'Clark, Robert' [redacted]
Subject: RE: Planning Consultation on LU/345/18/DOC (Application for Ordinary Watercourse) [Filed 23 Jan 2019 11:46]

Dear Adrian,

Many thanks. This all seems pretty self-explanatory.

We will fill this in and submit the information asap

I will contact you if I have any questions

Regards,

Sean Foley
[redacted]

From: Jackson, Adrian [redacted]
Sent: 23 January 2019 10:21
To: Sean Foley [redacted]
Cc: PSO West Sussex [redacted]
Subject: RE: Planning Consultation on LU/345/18/DOC (Application for Ordinary Watercourse)

Dear Sean

Please find attached the necessary forms and notices you will be required to submit for Internal Drainage Board approval. The cost of the permit will be £50.00

We will want to see, details of existing ditch profile with dimensions and length of watercourse to be infilled.

I assume that the proposed ditch infill will be piped and tied in with remainer of the previously piped systems.

Generally speaking the EA have a presumption against ditch infilling/culverting apart from that required for access, and/or offsetting can be provided elsewhere.

We would also wish to ensure that no significant flood storage will be lost.

It is possible that we may request a site inspection to view the proposal

I hope that the forms are self-explanatory, but please do not hesitate in contacting me further, should anything be unclear.

best regards -- Adrian

PSO West Sussex and PDU2 Teams
Advisor and Senior User
[redacted]

From: Sean Foley [redacted]
Sent: 17 January 2019 17:38
To: Jackson, Adrian [redacted]
Cc: Clark, Robert [redacted] Michael Eastham [redacted]

ARUN DISTRICT COUNCIL LU/228/20/DOC

[redacted] Steven Lecocq [redacted]; Fatima Evernden [redacted]; Tracey Headley-Smith [redacted]; Alex Wray [redacted] Adam Winstone [redacted]; Ivan Cosmai [redacted]

Subject: FW: Planning Consultation on LU/345/18/DOC (Application for Ordinary Watercourse)

Dear Adrian,

Introduction & Site Location
I'm contacting you in relation telephone conversation you had my colleague Ivan earlier today about the type of application to fill in an existing lagoon and associated overflow ditch. (below is the telephone record he sent to me).

The waterbodies are located north of Littlehampton, under the administration of Arun District Council. The site location is attached.

Planning History
Outline planning permission (LU/47/11) was obtained in January 2013 for a large development on the site for up to 1,260 new homes, plus employment, community and infrastructure improvements.

This is a very large scheme with the application boundary covering over 80 hectares with numerous ditches and watercourse. The outline approved scheme area been subdivided into parcels, with each parcel going forward under its own Reserved Matters (RM) Application. Each RM application needs to satisfy the relevant conditions contained in the outline permission.

Outline planning Condition 12 relates to works effecting watercourse and is as follows:

12 The development shall not commence until formal consent has been approved in writing from the Local Planning Authority for the discharge of any flows to watercourses, or the culverting, diversion, infilling or obstruction of any watercourse on the site.

Reason: To ensure that the proposed development is satisfactorily drained to prevent the increased risk of flooding, and improve and protect water quality, habitat and amenity, and ensure future maintenance of these in accordance with national guidance and policies GEN7, GEN8 of the Arun District Local Plan.

Proposed Works – Phase 2
With the above in mind we are contacting you about the **Phase 2** RM application only and the watercourses effected by this application.

They are summarised quite well in the attached extract from the Ecological Management Plan. The Ecological Constraints plan, Map 2, shows the reservoir and ditch. These are to be filled in to facilitate the Phase 2 works as shown in Appendix 1 of the same extract

The old lagoon and adjacent overflow ditch are on the attached google map link:
https://www.google.com/maps/place/Littlehampton/@50.8279782,-0.5324869,247m/data=!3m1!1e3!4m5!3m4!1s0x4875a37e0ee7c661:0x2799d679689139c!8m2!3d50.811057!4d-0.5386609

Type of Application
Both of these waterbodies should be classed / viewed as an ordinary watercourse and under normal conditions we'd submit Arun DC's Ordinary Watercourse Consent (attached) for works effecting ordinary watercourses. However, this is an abnormal condition because the River Arun Internal Drainage District (IDD) is the only remaining IDD in Sussex that has not been abolished – see link below.
https://www.gov.uk/government/publications/internal-drainage-districts-in-southern-england/internal-drainage-districts-in-southern-england

The conclusion is that The Environment Agency will continue the enforcement and consenting powers for the IDD in relation to the OWCs.

I'd be grateful if you could confirm what application we need to submit to the EA in order to gain the correct consent for filing in these waterbodies

Apologies for the rather long e-mail but we wish to ensure the correct application is submitted to the correct stakeholder.

From: Laura Gibbons [redacted]
Sent: 17 January 2019 09:47
To: Sean Foley [redacted]
Cc: Clark, Robert [redacted] Michael Eastham [redacted] Edgley, Martin [redacted] Steven Lecocq [redacted]; Fatima Evernden [redacted]; Tracey Headley-Smith [redacted]; Alex Wray [redacted] Adam Winstone [redacted]
Subject: RE: Planning Consultation on LU/345/18/DOC

Sean,

Just a quick reply regarding ordinary watercourse consent- the watercourse which is intended to be filled in is within the IDB region which the Environment Agency still have authority over. This IDB area has not been dissolved. Please speak to the Environment Agency.

I will reply about the other points in due course.

Kind Regards,

Laura Gibbons, MEng, GMICE
Engineer (Drainage & Coastal)

Laura Gibbons | Engineer (Drainage & Coastal), Engineering Services, Arun District Council | Location: First Floor, Arun Civic Centre, Maltravers Road, Littlehampton, BN17 5LF
[redacted]

From: Sean Foley [redacted]
Sent: 16 January 2019 17:50
To: Laura Gibbons
Cc: Clark, Robert; Michael Eastham; Edgley, Martin; Steven Lecocq; Fatima Evernden; Tracey Headley-Smith; Alex Wray; Adam Winstone
Subject: RE: Planning Consultation on LU/345/18/DOC
Importance: High

Laura,

Condition 10
Thanks. This is very good news that is gratefully received. We will formally submit the information on condition 10 asap.

Condition 12
Regarding the consents, for avoidance of doubt I'd be most grateful if you could confirm exactly what type of consents we require for condition 12. We believe we only need to submit an **ordinary watercourse consent** for filling in the lagoon and overflow ditch. See bullet points below.

Our understanding is as follows

- Outfall B: A nominal length of existing ditch is to be filled in to facilitate the construction of the new 525mm diameter outfall pipe and the new headwall. The 525mm diameter outfall pipe and associated headwall are described / included in the existing Flood Defence Consent for Outfall B. Therefore, we believe existing flood defence consent for Outfall B should be sufficient for works affecting this particular ditch. If not please advise.
- Lagoon and Overflow ditch: Regarding the irrigation lagoon and overflow ditch, as shown on the image 01 below, an application has not been submitted to fill these in. Neither of these are a main watercourse and, as

APPENDIX H: Condition 1, Decision Notice, Variation of Condition 11

ARUN DISTRICT COUNCIL

Town & Country Planning Act 1990 (as amended)
Town and Country Planning (Development Management Procedure) (England) Order 2010 (as amended)
Application for Planning Permission
DECISION NOTICE

Application Ref: LU/346/14/PL

1 **To Addressee**

WYG
First Floor, The Pavilion
Botleigh Grange Office Campus
Hedge End
Southampton
SO30 2AF

2 **Site Address**

Land North of Toddington Lane
Littlehampton
BN17 7PP

3 **Description of Development**

Application for variation of Conditions 11, 17, 18, 20 and 30 imposed under LU/47/11 relating to maintenance of watercourse, scheme for creation of central wetland area, scheme for details of bridges and buffer-zones to on-site watercourses, ecological management plan and scheme for hydrants.

4 In pursuance of their powers under this Act and related Orders and Regulations the Council **PERMIT** this development to be carried out in accordance with the application and plans and subject to compliance with the conditions specified below.

1 Condition 11

As relevant to any of the reserved matters applications, arrangements for future access to and maintenance of any watercourse or culvert (piped watercourse) crossing or abutting the site shall be submitted and approved in writing by the Local Planning Authority. The approved arrangements shall be implemented prior to fist occupation of that phase and thereafter permanently maintained.

Reason: To ensure that the proposed development is satisfactorily drained to prevent the increased risk of flooding, and improve and protect water quality, habitat and amenity, and ensure future maintenance of these in accordance with national guidance and policies GEN7, GEN9 of the Arun District Local Plan.

2 Condition 17

As part of the submission of the first reserved matters application for any phase of development that has a frontage onto the central wetland, a scheme shall be submitted for the creation of the proposed central wetland area and the restoration of habitat onsite and an implementation timetable. The scheme shall be submitted to and approved in writing by the Local Planning Authority. Thereafter the development shall be constructed as set out in the approved scheme and any subsequent amendments shall be agreed in writing with the Local Planning Authority.

Reason: This condition is necessary to ensure the delivery of the mitigation proposed within tables 8.10 and 8.11 of the submitted Environmental Statement as mitigation for the proposed development. This is supported by national guidance and Policies GEN23 and GEN29 of the Arun District Local Plan.

3 Condition 18

As part of the submission of the first reserved matters application for any phase of development that has a frontage onto the central wetland, a scheme, including details of bridges (including the one crossing the proposed wetland area) and buffer zones to onsite watercourses and an implementation timetable, shall be submitted to and approved in writing by the Local Planning Authority. Thereafter the development shall be constructed as set out in the approved scheme and any subsequent amendments shall be agreed in writing with the Local Planning Authority. The scheme shall include:

- Details demonstrating that bridge design will not impede flood flow routes or reduce the capacity of the flood plain.
- All bridges shall be clear spanning structures with the exception of the bridge over the central wetland area which shall be a clear span structure directly over the area containing the watercourse (with stand-off distances for bridge footings from the watercourse to be agreed as part of the detailed design) and with an embankment type structure through the remaining habitat area.
- Details of buffer zones around all wetland areas and watercourses.

Reason: To prevent flooding elsewhere by ensuring that flood flow routes and floodplain capacity is maintained and to maintain the river corridor and allow the movement of associated wildlife in accordance with national guidance, Policy GEN11 and Policy GEN23 of the Arun District Local Plan. This condition is necessary to ensure that the mitigation proposed within tables 8.10 and 8.11 of the submitted Environmental Statement is implemented.

4 Condition 20

Prior to the commencement of development on any phases of development east of the new road that spans the railway line (running north - south), details of appropriate mitigation, and a programme of implementation, in relation to water voles, bats, birds, invertebrates and reptiles shall be submitted to an approved in writing by the local planning authority.

Reason: This condition is necessary to ensure the protection of wildlife and supporting habitat and secure opportunities for the enhancement of the nature conservation value of the site in line with national guidance and Policy GEN23 and GEN29 of the Arun District Local Plan (2003). In particular this will ensure adequate protection for Water Voles and their habitat, a protected species and deliver the mitigation proposed within tables 8.10 and 8.11 of the submitted Environmental Statement is implemented.

5 Condition 30

No building hereby permitted shall be occupied until the fire hydrants required to serve that building have been installed to an approved scheme.

Reason: In order to provide adequate infrastructure for emergency services.

INFORMATIVE: Statement pursuant to Article 31 of the Town and Country Planning (Development Management Procedure)(England) (Amendment No. 2) Order 2012. The Local Planning Authority has acted positively and proactively in determining this application by identifying matters of concern within the application (as originally submitted) and negotiating, with the Applicant, acceptable amendments to the proposal to address those concerns. As a result, the Local Planning Authority has been able to grant planning permission for an acceptable proposal, in accordance with the presumption in favour of sustainable development, as set out within the National Planning Policy Framework.

Case Officer: Mr N Crowther

Date of Decision: **20 February 2015**

Karl Roberts
Assistant Director Planning & Economic Regeneration

Arun District Council
The Arun Civic Centre
Maltravers Road
Littlehampton
West Sussex BN17 5LF

IT IS IMPORTANT THAT YOU READ THE NOTES ATTACHED TO THIS DOCUMENT

NOTES RELATING TO PLANNING APPLICATION
TOWN AND COUNTRY PLANNING ACT 1990
APPEALS TO THE SECRETARY OF STATE

If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the First Secretary of State under section 78 of the Town and Country Planning Act 1990.

If this is a decision on a planning application relating to the same or substantially the same land and development as is already the subject of an enforcement notice, and you want to appeal against your local planning authority's decision on your application, then you must do so within 28 days of the date of this notice.

If an enforcement notice is served relating to the same or substantially the same land and development as in your application and you want to appeal against your local planning authority's decision on your application, then you must do so within 28 days of the date of service of the enforcement notice, or within 6 months of the date of this notice, whichever period expires earlier.

For all other cases, if you want to appeal, then you must do so within 6 months of the date of this notice using a form which you can get from the Secretary of State at the Planning Inspectorate, Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN or on line at www.planningportal.gov.uk/pcs

If this decision is a refusal relating to a minor commercial development, where the application was made on or after 1 October 2013, please note that you must appeal within 12 weeks of the date of this notice. For a definition of minor commercial development please refer to The Town and Country Planning (Appeals) (Written Representations Procedure and Advertisements) (England) (Amendment) Regulations 2013 or contact this office for clarification.

The Secretary of State can allow a longer period for giving notice of an appeal, but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The Secretary of State need not consider an appeal if it seems to him that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.

In practice, the Secretary of State does not refuse to consider appeals solely because the local planning authority based their decision on a direction given by him.

PURCHASE NOTICES

If either the local planning authority or the Secretary of State refused permission to develop land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.

In these circumstances, the owner may serve a purchase notice on the Council (that is, where the land is situated in a National Park, the National Park authority for the Park, or in any other case the district council in whose area the land is situated). This notice will require the Council to purchase the owner's interest in the land in accordance with the provisions of Chapter 1 of Part VI of the Town &

ARUN DISTRICT COUNCIL LU/226/20/PDC

Country Planning Act 1990.

Please note that this decision notice only relates to matters under the Planning Acts and does not give consent under any other legislation that may apply to the development. You will need to carry out your own checks to determine whether any other consents or permissions are required. For example, the Building Regulations are likely to apply to most developments, and a Highways Licence may be required from West Sussex County Council for any development within the public highway (including the placing of skips on highway land).

APPENDIX I: Condition 11 & 12, Central Wetlands Area (Work in progress & Future Application)

Approved Phase 2 Development

Approved Phase 2 Development

CENTRAL WETLAND AREA

CENTRAL WETLAND AREA

+ 1.60
(1.40 ex level)
(0.2 m cover)

2.24
(1.62 ex level)
(0.620 m cover)

1:3

1:3

1:3

1:3

1:3

1:3

+1.38

+1.38

+1.38

+1.38

+1.38

+1.38

+1.58
(1.38 with 0.2 m cover)

+1.58
(1.38 with 0.2 m cover)

+1.58
(1.38 with 0.2 m cover)

+1.58
(1.38 with 0.2 m cover)

+1.70

3 No. Agl

3 No. Agl

3 No. Qr

1 No. TcGS

2 No. Sa

4 No. SALFR

3 No. Ac

3 No. Ac

4 No. SALFR

3 No. Ac

3 No. BEPE

1 No. TcGS

W3
1.798m

Water main

3 No. Sa

4 No. Acl

3 No. Ac

2 No. SALFR

3 No. Sa

4.00+

1 No. TcGS

W4
1.714m

3 No. BEPE

1 No. Sau

4 No. Agl

4.00+

1.38+

3 No. Sau

5 No. Qr

5 No. TcGS

3 No. Agl

1 No. Sa

2 No. Sau

4.00+

3 No. Ac

4 No. SALFP

4 No. Ac

1 No. Agl

2 No. Qr

3 No. BEPE

4 No. BEPE

2 No. Qr

1 No. Sau

5 No. BEPE

2 No. Agl

1.38

1.38+

4 No. BEPE

3 No. BEPE

Drainage engineer to confirm ali
proposed ditch

SCALE 1/500

0m 5m 10m 15m 20m 25m

Littlehampton Phase 4				
	Ft²	NO.	BEDROOMS	STOREY
Market:				
HOUSE TYPES				
HAN / HAN.CR	761	4	3 BED	2
CLA / CLA.CR	999	4	3 BED	2
LEI	1162	2	4 BED	2½
LUM	1220	2	4 BED	2½
CHE	1222	2	4 BED	2
MAY	1401	1	4 BED	2
COR	1414	2	4 BED+Study	2
MARL	1513	3	4 BED	2
CHI	1552	2	4 BED+Study	2
MARY	1623	4	4 BED+Study	2
TOTAL		**26**		
APARTMENT BLOCKS				
BLOCK A				
FA1, 2bed, 4 person	753	3	2 BED	
FA2, 2bed, 4 person	764	3	2 BED	
FA3, 2bed, 3 person	710	3	2 BED	
BLOCK B				
FB1, 2bed, 4 person	753	3	2 BED	
FB2, 2bed, 3 person	689	3	2 BED	
FB3, 2bed, 4 person	775	3	2 BED	
TOTAL		**18**		
TOTAL ON SITE		**44**		

Rev		Date
-	-	-

PERSIMMON
Together, we make a home

Persimmon Homes Thames Valley
Persimmon House, Knoll Road,
Camberley, Surrey GU15 3TQ
Tel: 01276 808080

Site:
Phase 4
Littlehampton

Date:
Nov. 2018

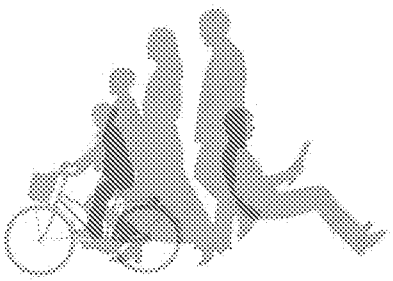
Scale:
1:500 @ A1

Drg No:
545_PL_100

Drawing Title:
Site Layout

Drawing Status:
PRELIMINARY

Drawn:
AT

Checked:
ME

Rev:
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