

- BELOW GROUND DRAINAGE NOTES**
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 4. THE POSITIONS OF FOUL AND SURFACE WATER DRAINAGE POINTS ARE INDICATIVE ONLY. REFER TO THE ARCHITECTS AND M&E ENGINEERS DRAWINGS FOR SETTING OUT DETAILS.
 5. PRIVATE FOUL AND SURFACE WATER DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS PART H, BS EN752 AND BS EN12056.
 6. DRAINS AT BASEMENT LEVEL ARE TO BE CONSTRUCTED USING CAST IRON (EN518 OR EQUIVALENT) AND FLEXIBLY JOINTED TO BS 437.
 7. DRAINS AT GROUND LEVEL ARE TO BE CONSTRUCTED USING VITRIFIED CLAY PIPES TO BS EN 251 SUPER STRENGTH SPECIFICATION (HEPWORTH SUPERSLEVE) OR SIMILAR APPROVED.
 8. ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE 100mm DIA LAID AT A MINIMUM GRADIENT OF 1:40 UNLESS NOTED OTHERWISE.
 9. ALL SURFACE WATER CONNECTIONS TO BE 150mm DIA METER AND TO BE LAID AT A MINIMUM GRADIENT OF 1:80 UNLESS NOTED OTHERWISE.
 10. ALL SOIL CONNECTIONS AND RAINWATER PIPES SHOULD BE RODDABLE FROM GROUND LEVEL.
 11. IN CASES OF IN SITU CONCRETE FLOOR SLABS, DRAINS ARE TO BE CAST INTEGRAL WITH THE SLAB WHERE PIPE COVER TO THE CROWN IS LESS THAN 300mm - NOTE SPECIAL PROVISIONS APPLY TO BASEMENT FLOOR SLABS - SEE DETAILED DRAINAGE AND STRUCTURAL DRAWINGS. CONCRETE ENCASUREMENT TO BE REINFORCED AS PER DRAINAGE DETAIL.
 12. IN CASES OF SUSPENDED FLOORS WHERE A VOID OF 300mm OR MORE EXISTS BELOW FLOOR DRAINS ARE TO BE SUSPENDED USING A PROPRIETARY HANGER SYSTEM OR CAST INTEGRAL WITH THE FLOOR.
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 14. BACKFILLING OF DRAIN TRENCHES ADJACENT TO BUILDING OR OTHER STRUCTURES IS TO BE IN ACCORDANCE WITH DIAGRAM 8 OF THE BUILDING REGULATIONS.
 15. ANY PIPE OR GULLY OR OTHER FITTING OR DUCT PENETRATING THE BASEMENT SLAB OR WALL IS TO BE WATERPROOFED USING HYDROPHILIC STRIPS OR PUDDLE FLANGES TO ENSURE A WATER TIGHT JOINT. CONCRETE SURROUND TO DRAINAGE PIPES AND FITTINGS MAY BE REQUIRED IN CERTAIN CASES - REFER TO DETAILED DRAINAGE DRAWINGS AND RELEVANT STRUCTURAL DETAILS.
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 22. FOR DETAILS OF PERMEABLE PAVING CONSTRUCTION AND LEVELS, REFER TO ELLIOTT WOOD DOCUMENT 2180501-EWP-ZZ-XX-SH-C-0001
 - 23.

This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.

Do not scale from this drawing.

LEGEND	
	FOUL WATER MANHOLE
	SURFACE WATER MANHOLE
	KITCHEN WATER MANHOLE
	PROPOSED FOUL WATER
	PROPOSED SURFACE WATER
	PROPOSED PRIVATE SURFACE WATER
	PUMPING STATION
	PROPOSED PRIVATE FOUL WATER PUMPING STATION
	PROPOSED SURFACE WATER RISING MAIN
	PROPOSED SURFACE WATER RISING MAIN
	PROPOSED LINEAR CHANNEL WITH HEEL GUARD GRATING
	PROPOSED THRESHOLD DRAIN WITH BRICK SLOT UPSTAND
	TRAPPED ROAD GULLY
	CHUTE GULLY
	TRAPPED YARD GULLY
	FD TRAPPED FLOOR DRAIN
	FOUL DROP POINT
	GEOCELLULAR SURFACE WATER ATTENUATION (TO CONTRACTOR DESIGN)
	PERMAVOID CRATES
	PROPOSED IMPERMEABLE SURFACE WITH 420 COARSE GRADED PERMEABLE SUBBASE
	PROPOSED PERMEABLE SURFACING WITH 420 COARSE GRADED PERMEABLE SUBBASE
	EXISTING DITCH
	EXISTING DITCH TO BE REMOVED
	PROPOSED BUILDING
	SITE BOUNDARY
	NORTH PARK BOUNDARY
	MAIN RESORT BOUNDARY
	EXISTING POND
	PROPOSED POND
	PROPOSED SWALE

NOT FOR CONSTRUCTION

P3	S2	17.06.22	HHu	PDa	Planning Condition Discharge
P2	S2	30.03.22	HHu	PDa	RIBA 3 Issue
P1	S2	18.02.22	HHu	PDa	RIBA 3 Part 1 Issue
rev	sc	date	by	chk	description

Drawing title
Proposed Below Ground Drainage
 Sheet 11 of 23

scale (s) date drawn
 1:200@ A1: 1:400@A3 February 2022 HHu

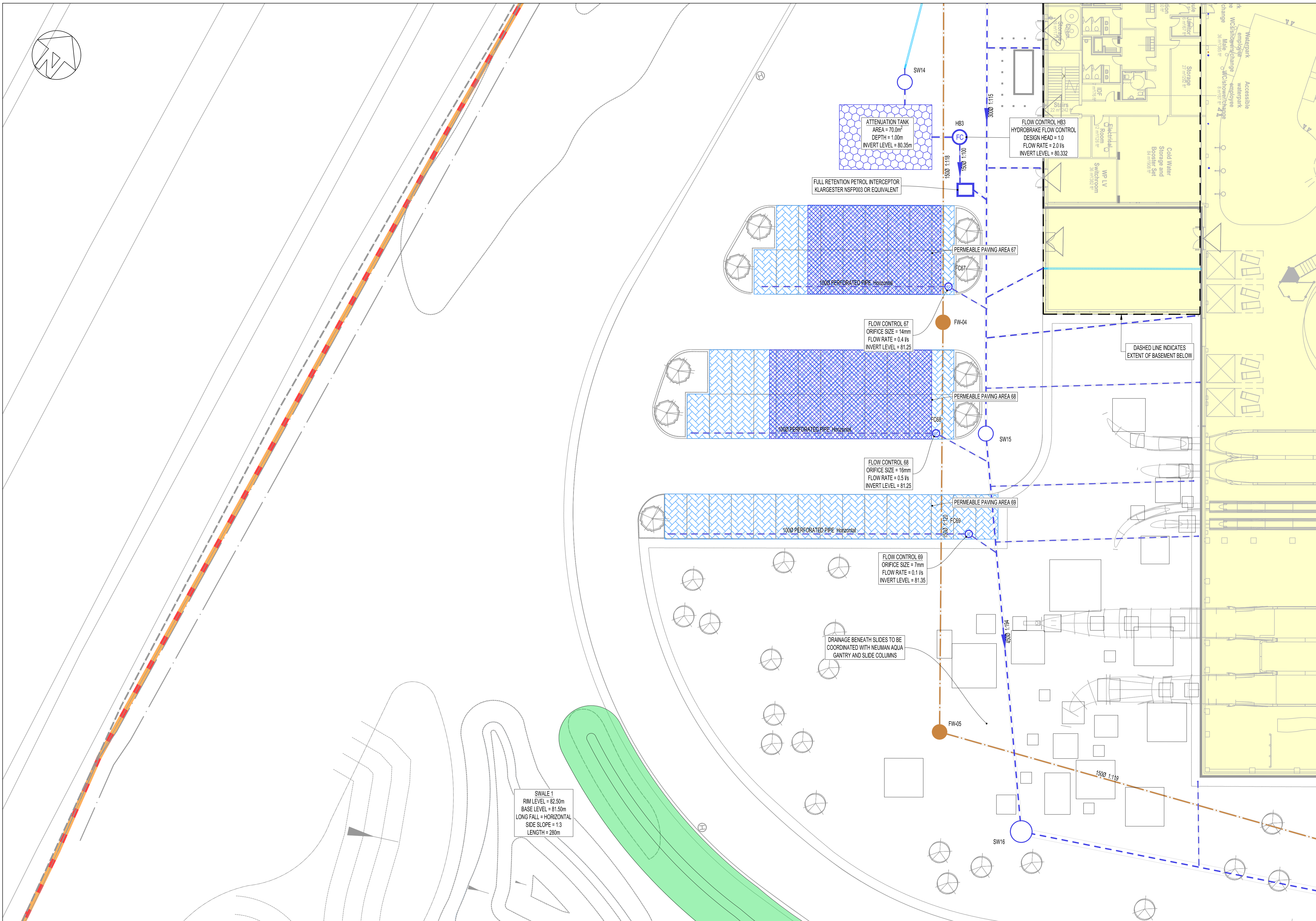
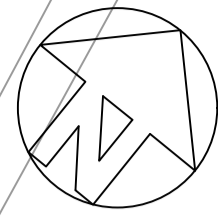
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Project
Proposed Great Wolf Lodge,
 Chesterton, Bicester,
 Oxfordshire

Drawing status Status Revision
Preliminary S2 P3

Project no. Originator Zone Level Type Role dng no.
 2180501-EWP-Z11-EX-DR-C-1010



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LEGEND

FOUL WATER MANHOLE	PROPOSED FOUL WATER RISING MAIN	FD TRAPPED FLOOR DRAIN	PROPOSED PERMEABLE SURFACING WITH 4/20 COARSE GRADED PERMEABLE SUBBASE	EXISTING POND
SURFACE WATER MANHOLE	PROPOSED SURFACE WATER RISING MAIN	FOUL DROP POINT	EXISTING DITCH	PROPOSED POND
KITCHEN WATER MANHOLE	PROPOSED LINEAR CHANNEL WITH HEELGUARD GRATING	GEOCELLULAR SURFACE WATER ATTENUATION (TO CONTRACTOR DESIGN)	EXISTING DITCH TO BE REMOVED	PROPOSED SWALE
PROPOSED FOUL WATER	PROPOSED THRESHOLD DRAIN WITH BRICK SLOT UPSTAND	PERMAVOID CRATES	PROPOSED BUILDING	
PROPOSED SURFACE WATER	PROPOSED TRAP ROAD GULLY	PROPOSED IMPERMEABLE SURFACE WITH 4/20 COARSE GRADED PERMEABLE SUBBASE	SITE BOUNDARY	
PROPOSED PRIVATE SURFACE WATER	CG TRAPPED ROAD GULLY	NORTH PARK BOUNDARY	MAIN RESORT BOUNDARY	
PROPOSED PRIVATE FOUL WATER PUMPING STATION	YG TRAPPED YARD GULLY			

NOT FOR CONSTRUCTION

rev	sc	date	by	chk	description
P3	S2	17.06.22	HHu	PDa	Planning Condition Discharge
P2	S2	30.03.22	HHu	PDa	RIBA 3 Issue
P1	S2	18.02.22	HHu	PDa	RIBA 3 Part 1 Issue

Drawing title
Proposed Below Ground Drainage
Sheet 12 of 23

scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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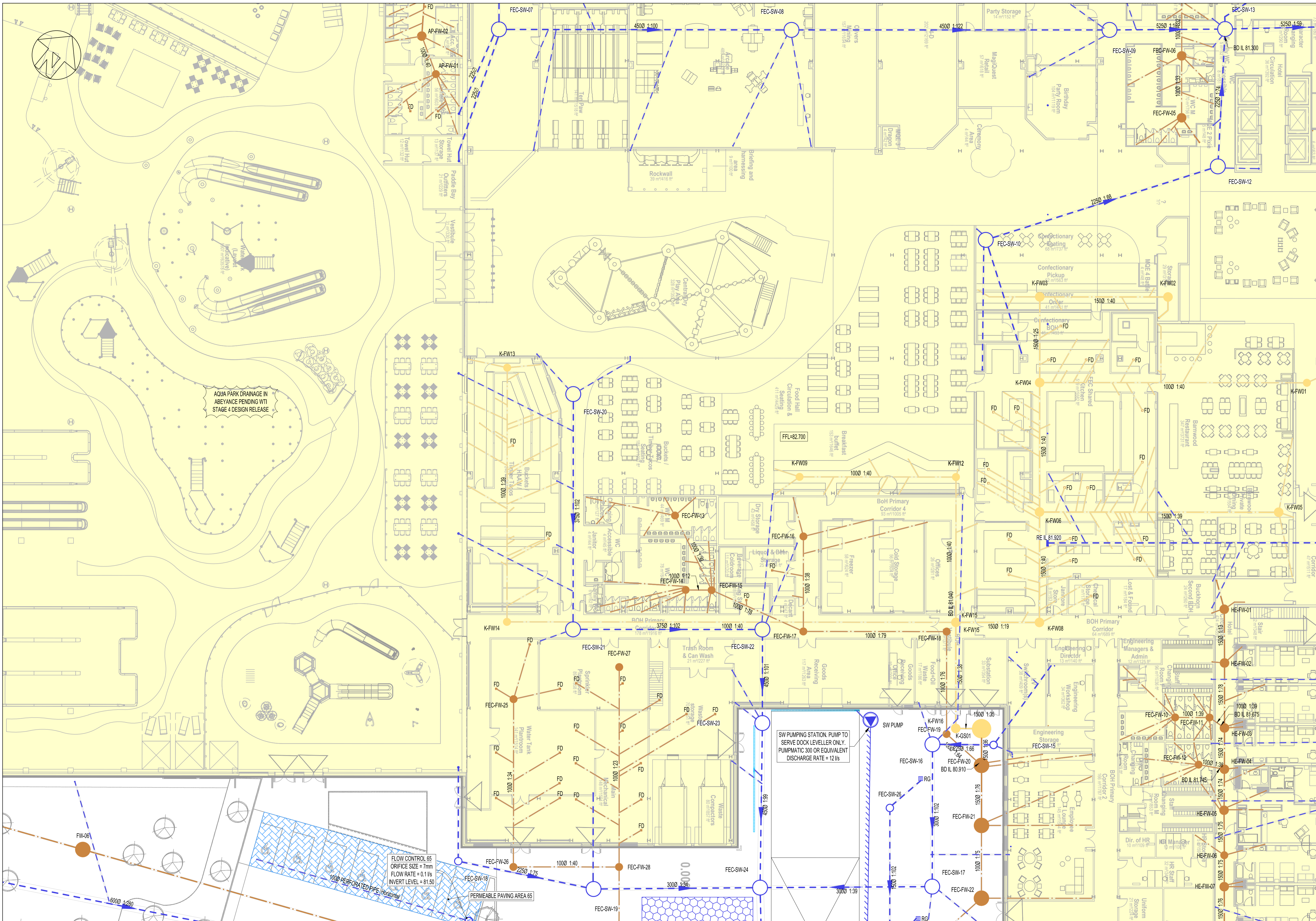
Project
Proposed Great Wolf Lodge,
Chesterton, Bicester,
Oxfordshire

Drawing status
Preliminary

Status
S2 P3

Revision

Project no. Originator Zone Level Type Role drg no.
2180501-EWP-Z12-EX-DR-C-1011



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	SURFACE WATER MANHOLE
	KITCHEN WATER MANHOLE
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	PROPOSED SURFACE WATER
	PROPOSED KITCHEN WATER
	PROPOSED PRIVATE SURFACE WATER PUMPING STATION
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	PC PERMAVOID CRATES
	IS IMPERMEABLE SURFACE WITH 420 COARSE GRADED PERMEABLE SUBBASE
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	ED EXISTING DITCH
	EDR EXISTING DITCH TO BE REMOVED
	PB PROPOSED BUILDING
	SB SITE BOUNDARY
	NPB NORTH PARK BOUNDARY
	MRB MAIN RESORT BOUNDARY
	EP EXISTING POND
	PP PROPOSED POND
	PSW PROPOSED SWALE

NOT FOR CONSTRUCTION

Drawing title
Proposed Below Ground Drainage
 Sheet 13 of 23

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Project
Proposed Great Wolf Lodge,
 Chesterton, Bicester,
 Oxfordshire

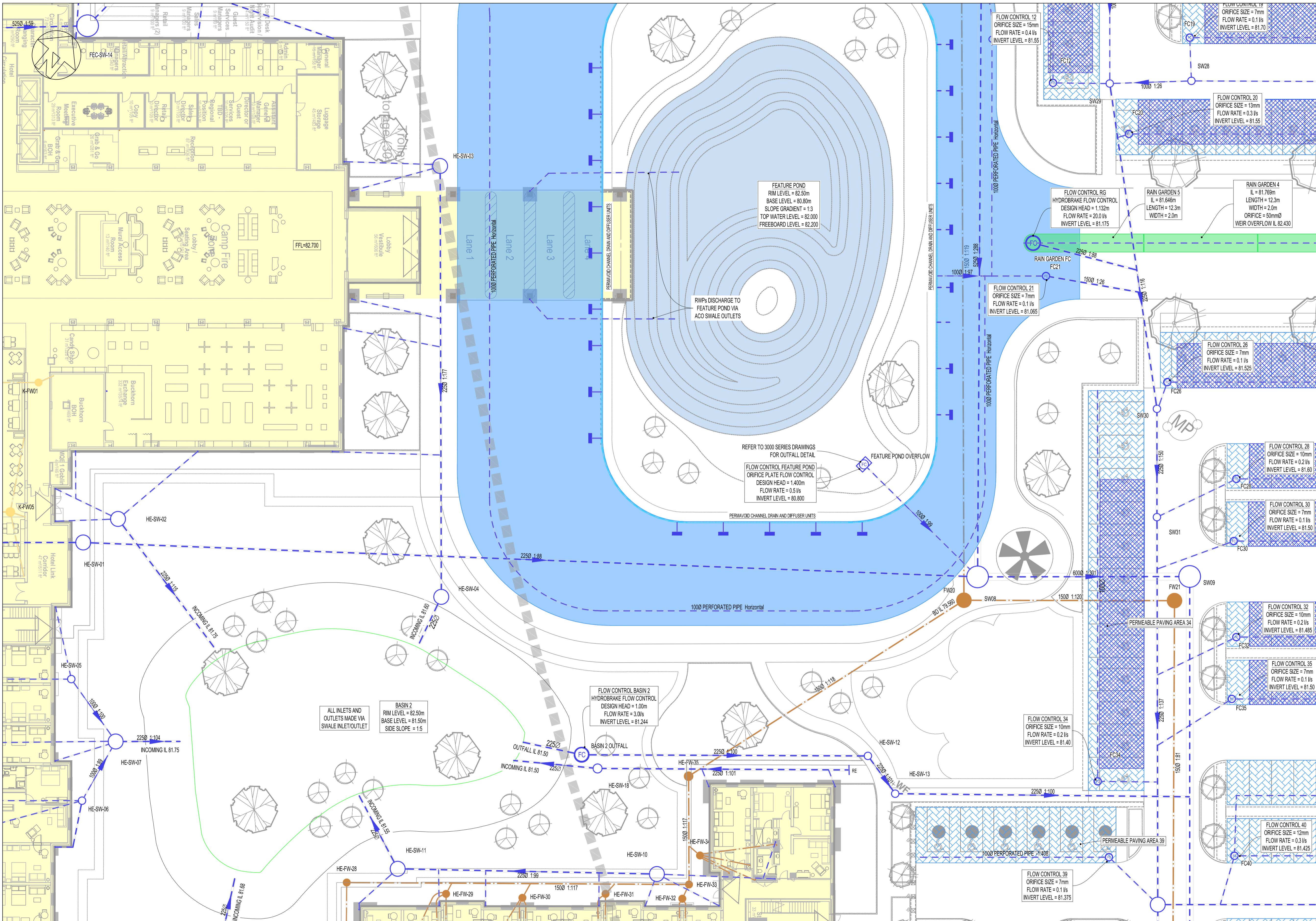
rev	sc	date	by	chk	description
P3	S2	17.06.22	HHu	PDa	Planning Condition Discharge
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scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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Drawing status	Status	Revision
Preliminary	S2	P3

Project no. Originator Zone Level Type no. dfg no.
2180501-EWP-Z13-EX-DR-C-1012



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 20. DETAILED DESIGN OF GEOCELLULAR ATTENUATION CRATES IS A CDP ITEM AND SHOULD BE BASED ON LEVEL LAYOUT AND VOLUME DETAILS SHOWN. DETAILED DESIGN INFORMATION SHOULD BE PROVIDED TO THE CIVIL ENGINEER TO PASS COMMENT.
 21. MANHOLES LOCATED WITHIN PAVED AREAS ARE TO BE FITTED WITH RECESSED FRAME AND COVERS. COVERS IN ASPHALT AND LANDSCAPED AREAS ARE TO BE FITTED WITH A SOLID FRAME AND COVER.
 22. FOR DETAILS OF PERMEABLE PAVING CONSTRUCTION AND LEVELS, REFER TO ELLIOTT WOOD DOCUMENT 2180501-EWP-ZZ-XX-SH-C-0001
 - 23.

This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
Do not scale from this drawing.

LEGEND	
	FOUL WATER MANHOLE
	SURFACE WATER MANHOLE
	KITCHEN WATER MANHOLE
	PROPOSED FOUL WATER
	PROPOSED SURFACE WATER
	PROPOSED PRIVATE SURFACE WATER PUMPING STATION
	PROPOSED PRIVATE FOUL WATER PUMPING STATION
	PROPOSED FOUL WATER RISING MAIN
	PROPOSED SURFACE WATER RISING MAIN
	PROPOSED LINEAR CHANNEL WITH HEEL GUARD GRATING
	PROPOSED THRESHOLD DRAIN WITH BRICK SLOT UPSTAND
	TRAPPED ROAD GULLY
	CHUTE GULLY
	TRAPPED YARD GULLY
	FD TRAPPED FLOOR DRAIN
	FOUL DROP POINT
	GEOCELLULAR SURFACE WATER ATTENUATION (TO CONTRACTOR DESIGN)
	PERMAVOID CRATES
	PROPOSED IMPERMEABLE SURFACE WITH 4/20 COARSE GRADED PERMEABLE SUBBASE
	PROPOSED PERMEABLE SURFACING WITH 4/20 COARSE GRADED PERMEABLE SUBBASE
	EXISTING DITCH
	EXISTING DITCH TO BE REMOVED
	PROPOSED BUILDING
	SITE BOUNDARY
	NORTH PARK BOUNDARY
	MAIN RESORT BOUNDARY
	EXISTING POND
	PROPOSED POND
	PROPOSED SWALE/RAIN GARDEN

NOT FOR CONSTRUCTION

Drawing title
Proposed Below Ground Drainage
Sheet 14 of 23

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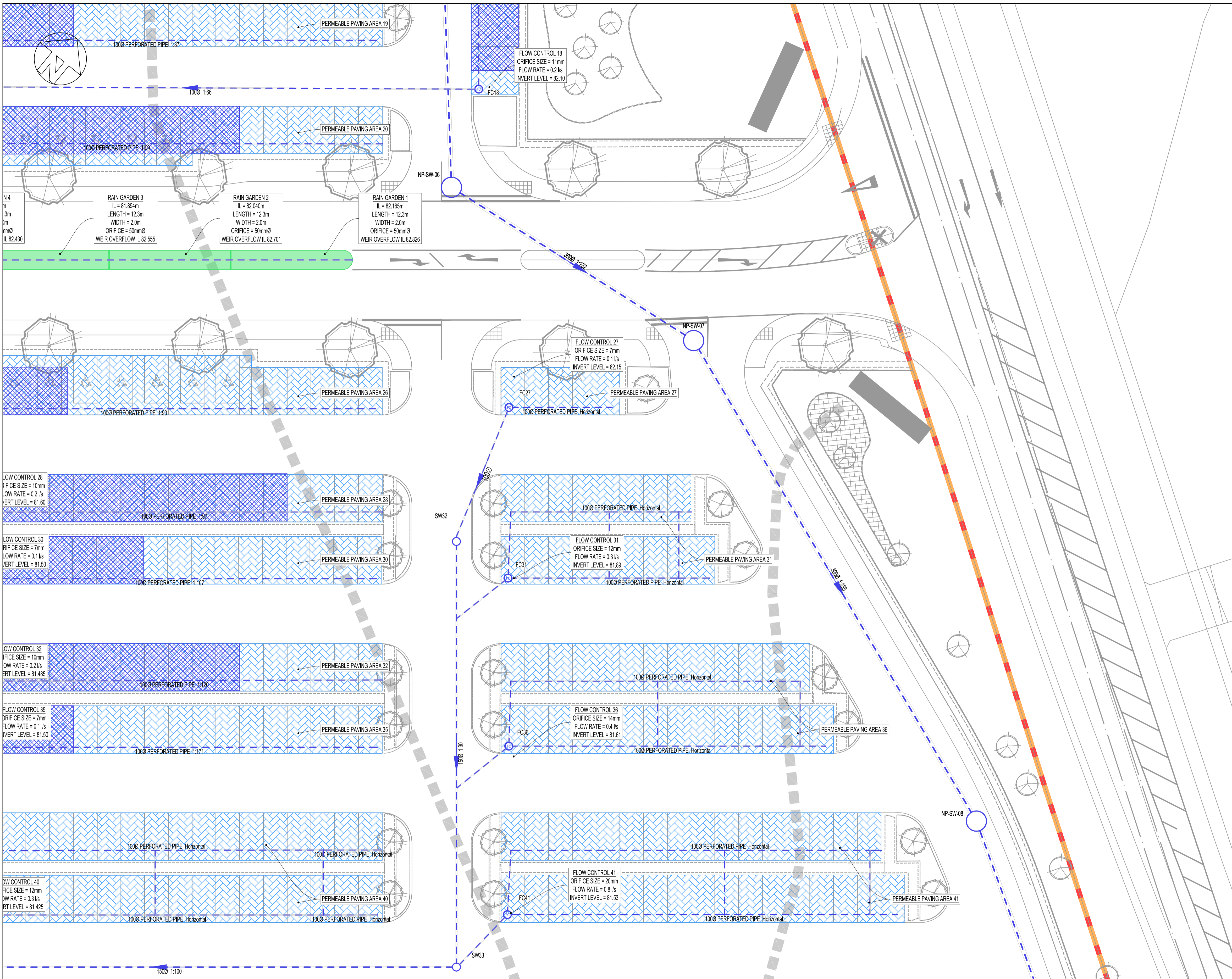
Project
Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire

rev	sc	date	by	chk	description
P3	S2	17.06.22	HHu	PDa	Planning Condition Discharge
P2	S2	30.03.22	HHu	PDa	RIBA 3 Issue
P1	S2	18.02.22	HHu	PDa	RIBA 3 Part 1 Issue

scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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Drawing status	Status	Revision				
Preliminary	S2	P3				
Project no.	Originator	Zone	Level	Type	Role	Revision
218050+EWP-Z14-EX-DR-C-1013						



- BELOW GROUND DRAINAGE NOTES**
1. THE LOCATION AND LEVEL OF EXISTING DRAINAGE CONNECTIONS AND EXISTING SERVICES IS TO BE CHECKED PRIOR TO COMMENCEMENT OF DRAINAGE WORKS. ANY VARIANCE TO THE DETAILS ON THIS DRAWING AND THE SCHEDULE IS TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
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 5. PRIVATE FOUL AND SURFACE WATER DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH BUILDING REGULATIONS PART H, BS EN752 AND BS EN12056.
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 7. DRAINS AT GROUND LEVEL ARE TO BE CONSTRUCTED USING VITRIFIED CLAY PIPES TO BS EN 251-1 SUPER STRENGTH SPECIFICATION (HEFWORTH SUPERSLEVE) OR SIMILAR APPROVED.
 8. ALL SOIL CONNECTIONS UNDER BUILDINGS TO BE 100mm DIA LAID AT A MINIMUM GRADIENT OF 1:40 UNLESS NOTED OTHERWISE.
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 10. ALL SOIL CONNECTIONS AND RAINWATER PIPES SHOULD BE RODDABLE FROM GROUND LEVEL.
 11. IN CASES OF IN SITU CONCRETE FLOOR SLABS, DRAINS ARE TO BE CAST INTEGRAL WITH THE SLAB WHERE PIPE COVER TO THE CROWN IS LESS THAN 300mm - NOTE SPECIAL PROVISIONS APPLY TO BASEMENT FLOOR SLABS - SEE DETAILED DRAINAGE AND STRUCTURAL DRAWINGS. CONCRETE ENCASUREMENT TO BE REINFORCED AS PER DRAINAGE DETAIL.
 12. IN CASES OF SUSPENDED FLOORS WHERE A VOID OF 300mm OR MORE EXISTS BELOW FLOOR DRAINS ARE TO BE SUSPENDED USING A PROPRIETARY HANGER SYSTEM OR CAST INTEGRAL WITH THE FLOOR.
 13. WHERE DRAINS PASS THROUGH FOUNDATIONS OR OTHER RIGID STRUCTURES A LINTEL OR SLEEVE IS TO BE USED AND PROVISION FOR FLEXIBILITY IS TO BE MADE USING ROCKER PIPES.
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LEGEND	
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	PROPOSED POND
	PROPOSED SWALE/RAIN GARDEN

NOT FOR CONSTRUCTION

Drawing title
Proposed Below Ground Drainage
 Sheet 15 of 23

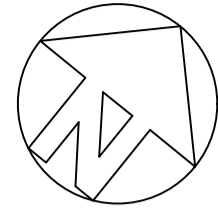
rev	sc	date	by	chk	description
P3	S2	17.06.22	HHu	PDa	Planning Condition Discharge
P2	S2	30.03.22	HHu	PDa	RIBA 3 Issue
P1	S2	18.02.22	HHu	PDa	RIBA 3 Part 1 Issue

scale (s)	date	drawn
1:200@ A1; 1:400@A3	February 2022	HHu

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Project		Status		Revision
Proposed Great Wolf Lodge, Chesterton, Bicester, Oxfordshire		Preliminary	S2	P3
Drawing status	Project no.	Originator	Zone	Level
	2180501-EWP-Z15-EX-DR-C-1014			



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LEGEND

	FOUL WATER MANHOLE		PROPOSED FOUL WATER RISING MAIN		FOUL DROP POINT		PROPOSED PERMEABLE SURFACING WITH 4/20 COARSE GRADED PERMEABLE SUBBASE		EXISTING POND
	KITCHEN WATER MANHOLE		PROPOSED SURFACE WATER RISING MAIN		GEOCELLULAR SURFACE WATER ATTENUATION (TO CONTRACTOR DESIGN)		EXISTING DITCH		PROPOSED POND
	PROPOSED FOUL WATER		PROPOSED LINEAR CHANNEL WITH HEELGUARD GRATING		PERMAVOID CRATES		EXISTING DITCH TO BE REMOVED		PROPOSED SWALE
	PROPOSED SURFACE WATER		PROPOSED THRESHOLD DRAIN WITH BRICK SLOT UPSTAND		PROPOSED IMPERMEABLE SURFACE WITH 4/20 COARSE GRADED PERMEABLE SUBBASE		PROPOSED BUILDING		
	PROPOSED PRIVATE SURFACE WATER		TRAPPED ROAD GULLY		SITE BOUNDARY		NORTH PARK BOUNDARY		
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NOT FOR CONSTRUCTION

P3	S2	17.06.22	HHu	PDa	Planning Condition Discharge
P2	S2	30.03.22	HHu	PDa	RIBA 3 Issue
P1	S2	18.02.22	HHu	PDa	RIBA 3 Part 1 Issue
rev	sc	date	by	chk	description

Drawing title
Proposed Below Ground Drainage
 Sheet 16 of 23

scale (s) 1:200@ A1; 1:400@A3
 date February 2022
 drawn HHu

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Project
Proposed Great Wolf Lodge,
 Chesterton, Bicester,
 Oxfordshire

Drawing status Preliminary Status Revision S2 P3
 Project no. Originator Zone Level Type Role drg no.
 2180501-EWP-Z16-EX-DR-C-1015