
REVISIONS

Report No	Description	Date	Approved
DS 1-1	First Issue - For Planning	07.12.23	DS

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1 Introduction

1.1 Background

- 1.1.1 IMA Transport Planning Ltd have been appointed to provide advice on the Surface Water drainage implications associated with the proposed change of use of an existing agricultural barn to a residential dwelling on land at Church Farm, Lower Seagry, Wiltshire in support of a class Q prior approval application.
- 1.1.2 This Drainage Statement relates solely to Surface Water and Flood Risk for the works associated with the proposed residential dwelling, comprising a conversion of existing barns into one detached dwelling off an existing private drive access. A copy of the layout proposals can be seen in Appendix B.

1.2 Scope of Drainage Statement

- 1.2.1 This assessment is undertaken in accordance with guidance as set out in the National Planning Policy Framework (NPPF).
- 1.2.2 Reference has also been made to Environment Agency (EA) Wiltshire Council's Flood Risk Assessment in relation ground and surface water flood risk and Wessex Water asset mapping.
- 1.2.3 The site is identified in relation to its topographical and geographical location, identifying any drainage outfalls and watercourses within the vicinity of the existing barn to be converted.
- 1.2.4 The surface water drainage mechanisms draining the existing barn and yards will be assessed. Proposals in relation to the required modifications to the existing surface water drainage system serving the existing barn and yards will also be assessed in the context of identifying any site constraints. Sustainable Drainage Systems (SuDS) will be reviewed and recommended and employed to reduce or remove any flood risks, as required and where possible.

2 Development Proposals

2.1 Existing Site Description

- 2.1.1 The existing barn is located at the end of Church Lane within the former farmstead of Church Farm within a grouping of buildings to the South of the main village setting of Lower Seagry. A site location plan can be seen in Appendix A.
- 2.1.2 The former farm stead and buildings including the barn proposed for conversion is surrounded by open countryside to the North and East with the main farmhouse around which is grouped other farm buildings to the South and West which have been developed over a period of time as part of the evolution of the functioning farm.
- 2.1.3 The farm buildings are located on a flat plateau with the agricultural land gentle sloping away from the farm buildings to the North and East with natural shallow field undulations forming land drainage channels across the open land scape. The land falls more steeply to the South away from the farm buildings to lower lying land and eventually the River Avon which is approximately 300m to the South.
- 2.1.4 The proposed redevelopment of the barn area occupies an area approximately 0.023Ha. The proposed development is centred about OS grid reference 395877E, 180837N.
- 2.1.5 With regard to existing site levels from EA mapping and OS mapping reviewed the land is generally flat around the farm buildings with levels on the approach access lane and barn of around 58.0m AOD. As indicated the land falls away from the farm to main drainage ditches to the East which is noted at 55.00m AOD and to the South 54.00m AOD with the River Avon similarly 54.00 AOD. The River Avon at the Seagry Mill and Wier to the southwest of the farmstead has a level drop from 54.00m to 51.00m AOD being a 3m drop. It is noted that the weir sluice gate is closed at periods of extreme wet weather and this creates the flooding in the lower lying land to the south and below the farm which is used as a flood plain by the EA, but is still some considerable distance and level drop below the Farm Buildings and Barn.

2.2 Site Geology

- 2.2.1 BGS Mapping (Appendix C) confirms that the bedrock geology for the site is Sandstone sedimentary bedrock formed during the Jurrassic period. The superficial deposits being River terrace deposits of sand and gravel.
- 2.2.2 Reference to the Soilsapes mapping (Appendix D) suggests that the land is “slightly acid loamy and clayey soils with impeded drainage” draining to stream network (Soilscape 8). This is borne out by the notes on levels in 2.1 above.
- 2.2.3 It is noted that the existing buildings have rainwater pipes to ground and that the existing surface water drainage of the yard and barns go to a field drainage system with sump type tank on northern field boundary (see photos Appendix I) as such no site testing has been undertaken at this stage as the intention is to utilise the existing drainage which will be retained to ground. Any damaged pipework being replaced accordingly as part of the existing surface water drainage system.

2.3 Main Rivers / Watercourses

- 2.3.1 The River Avon as noted above is the nearest main River to the farmstead being some 300m to the south and 4.00 m lower in elevation, flowing in a westerly direction.
- 2.3.2 A system of existing land drainage ditches is present to the east and south of the farmstead running to the River Avon and discharging in the location of Seagry Mill as noted above.
- 2.3.3 The agricultural land has low lying drainage fallows that fall to the main drainage ditches on the field boundaries and discharge to the River Avon

2.4 Flood Risk

- 2.4.1 With reference to the EA Flood Map for Planning, the Farm and hence barn is located within Flood Zone 1 with a low probability of flooding (an annual probability of exceedance [AEP] greater than 0.1%). A copy of the flood map can be found in Appendix E.

2.5 Surface Water

- 2.5.1 With reference to the EA surface Water Mapping for the area around the barn please refer to Appendix F where the mapping for Low to High-risk surface water mapping is detailed. Please refer to these maps but also note the photographs in Appendix H and comments in 2.5.5 below.
- 2.5.2 We have also included for clarity in Appendix G a copy of an aerial photograph taken from Goggle maps and outlining the existing drainage ditches to the East and South of the Farm and barn. It also highlights the location of the Seagry Mill and Weir on the River Avon to the South
- 2.5.3 From the surface water mapping it can be seen that the risk of flooding is low to the Barn and Farm in so far as surface water run-off in extreme event runs through the open agricultural field to the North of the barn towards the east and the drainage ditch. It then runs along the field boundary drainage ditch to the main drainage ditch which carries water to the River Avon by Weir and sluice Gate.
- 2.5.4 The lower lying land to the southern extent of the agricultural is below the level of the farmland and run-off is directly to the River Avon. The extent of surface water runoff routes and flooding is clearly shown and defined by the mapping and reference to the OS mapping.
- 2.5.5 Photographs in Appendix H taken on the 20th October 2023 during Storm Babet confirm the above, indicating that the EA flood mapping for surface water flooding is generally correct in that surface water flood route does pass to the field to the north of the barn. However, it must be noted that the surface water flows into low lying fallow land acting as a drainage cutting on the field boundary away from the barn and farm buildings. As expected, the surface water is seen to flow in an easterly direction away from the barn and farm buildings before turning South again via low lying natural fallows and drainage channels to the existing drainage ditches and the River Avon.
- 2.5.6 Given the above the Risk of Surface Water Flooding to the existing barn and farm buildings is seen to be low.

2.6 Existing Sewers

- 2.6.1 We have reviewed the online Wessex Water asset mapping, which confirms that there are no public foul or surface water sewers within the vicinity of the site.
- 2.6.2 The absence of sewers would suggest not unreasonable in this rural area that the existing housing in Lower Seagry are therefore served by individual private soakaways and septic tanks. Church Farm being similar in this regard.

2.7 Site Layout

- 2.7.1 The proposal is for the conversion of the existing barn structure into one residential unit within the constraints of the existing barns footprint. It will include for the private gravel parking and paved courtyard using permeable paving.
- 2.7.2 Within the proposals, the dwelling attracts the highest vulnerability classification, as defined in the National Planning Policy Framework Technical Guidance document.
- 2.7.3 By its nature, the site complies with the requirements of the sequential approach to development, by placing the land uses most sensitive to flood risk in areas that are at least risk of flooding, with the site being wholly located in Flood Zone 1 and some 3 - 4 m above the flood plain to the River Avon.
- 2.7.4 The impermeable surface areas for roofs, existing concrete farmyard and hardstanding for parking have been measured for the proposed development site and are indicated on the Conceptual Drainage Layout in Appendix I drawing 001 of this report and noted as 442 sqm with permeable area measuring 66 sqm.
- 2.7.5 The proposed impermeable areas of the barn conversion have been measured as the retained roof area together with the proposed permeable surface areas created by the removal of the concrete farmyard and parking areas and use of gravel and permeable paved areas and landscaping. These have also been indicated in Appendix I and noted as 230 sqm impermeable and 278 sqm permeable.
- 2.7.6 The total effective impermeable area of the proposed conversion has therefore been measured from the proposed site plan and proposed works and indicates a reduction from 442 sqm to 230 sqm which is a reduction of 52% from the existing and an improvement on the existing rainwater run-off.
- 2.7.7 The surface water system is to be constructed to the relevant guidance including the Water UK publication Design & Construction Guidance, Building Regulations Specification (Part H) and any relevant Local Authority specification, where appropriate.
- 2.7.8 Not with-standing the above notes and given the nature of the existing building and proposed development the impermeable area of the site will not be increased and as such there will be no increased risk of surface water flooding caused by the proposals to the site or downstream catchment area.
- 2.7.9 Given that the existing impermeable area of the converted barn is mainly intended to be the roof which is the same area as the existing roof being 0.023ha and in line with Building Regulations Part H3 Diagram 1 (Rainfall intensities for gutter and rainfall Pipes) an existing surface water runoff using pitched roof of 30 degrees (worse case) calculates as a runoff of $230\text{sqm} \times 1.29 \times 0.02 = 5.9\text{l/s}$ max from the barn is the current runoff to the combined sewer. This is the same as the current runoff as no difference in area from the roof but less run off from concrete yard area which is intended to be replaced by impermeable paving (If this in turn needs to be attenuated it will be to minimal discharge rate of 1l/s which will still be a significant reduction in the current discharge area and flow)
- 2.7.10 Photographs of the fields and landscape are included in Appendix I which also includes photos of the existing surface water rainwater down pipes and farm yard gullies and grates draining the existing barn to the existing underground surface water field system.

3 Surface Water Strategy

3.1 Planning Policy

- 3.1.1 The future development of this site should in no way cause a greater flood risk to the site, or the downstream catchment area than already exists and should where practicably reduce flood risk, both now and in the future.
- 3.1.2 Current policy suggests that all proposed development should be allocated a minimum 100-year design life, therefore any storm water attenuation features should be designed to meet this guidance / requirement. Obviously, if the attenuation design is based around a 1:100-year storm event, then the 1:30 year storm event would also be catered for.
- 3.1.3 There are indications that the climate in the UK is already changing. Current expert opinion suggests that higher intensity, short duration storms will occur more frequently as a result of climate change. Periods of prolonged rainfall are also likely to occur more frequently. The potential impacts of climate change on the site are likely to be caused by an increased rainfall intensity and duration.
- 3.1.4 The National Planning Policy Framework details requirements for allowances in climate change on flooding from land and River sources. Current guidance proposes that peak rainfall allowances for the 3.3% (1:30) annual exceedance rainfall event will increase by 40%, with the 1% (1:100) annual exceedance rainfall event increasing by 45% for the 2070's epoch, for development with a lifetime between 2061 and 2125.
- 3.1.5 The proposed barn conversion should be approached with a view to managing the surface water run-off, taking in to account water quantity (flooding), water quality (pollution) and amenity issues, all being collectively referred to as Sustainable Drainage Systems (SuDS).
- 3.1.6 SuDS are generally regarded as a management train, consisting of control structures and strategies that are designed to drain surface water run-off efficiently and sustainably, while minimising pollution and managing the impact on water quality of local water bodies and groundwater aquifers below.
- 3.1.7 Therefore, in the first instance and in keeping with SuDS planning hierarchy, the proposed drainage scheme for the Barn conversion should be designed with a view to utilising SuDS drainage techniques, returning as much of the surface water run-off to ground as close to the source as possible i.e. utilising infiltration.
- 3.1.8 Where this is not feasible, a discharge to a surface water body, such as a main River, ordinary watercourse or local land drainage feature is the preferred approach to surface water treatment. Where a surface water body is not available, a connection to a surface water sewer, highway drain or suitable receiving drainage system may be considered. Ultimately, although prior approval will be required, a connection to a combined sewer may be considered.
- 3.1.9 The design of all SuDS infrastructure shall be approved by the LLFA or relevant approving body at the time of design, prior to commencing construction.
- 3.1.10 The design / sizing of the SuDS features and drainage network shall be confirmed at detailed design, following intrusive ground investigation works at the site of the feature / structure and modelling of the proposed development drainage system and shall be designed to mimic, and where possible, better the current greenfield performance of the site as identified above.
- 3.1.11 Noting that the existing barn surface water drainage system is directly to ground and existing field drainage network it is proposed to continue to utilise this form of drainage which is in line with the above SuDs requirements as noted in 3.1.8 above.

3.2 Conceptual Surface Water Drainage Strategy

- 3.2.1 Further to sections 2.3 and 2.5 above, taking consideration of the existing surface water drainage field systems which are to be retained and modified for reuse and given the anticipated ground conditions with impeded infiltration, in keeping with SuDS hierarchy the proposed strategy for the development site is for all impermeable areas to be collected and discharged to ground via the existing private surface water drainage system combined with the field systems to the North, East and South of the farmstead and barn down to the River Avon which is some 4m lower than church Farm to the South.
- 3.2.2 As part of the works the exact location and depth of the existing field drainage system will be traced to confirm connections are achievable or recording any required minor amendments to the scheme which will also be recorded for future maintenance.
- 3.2.3 To assist with the provision of sufficient attenuation storage within the site, the private courtyard / driveway and rear terrace / patio areas shall be provided in a permeable pavement construction, affording infiltration to ground at source if proven to be achievable or attenuated and discharges as the existing concrete farmyard to the existing drainage system.
- 3.2.4 It is also intended that at least one of the rainwater down pipes will be connected to a rainwater butt to collect rainwater for re-use in gardening and that this will have a high level overflow to the existing drainage system. This complies with SuDS requirements.
- 3.2.5 Given the above and presence of existing surface water system to the barn and farmyard percolation testing has not been undertaken. However, infiltration testing will be undertaken during the site works to confirm that this is or is not an option due to the recorded geology.
- 3.2.6 With a view to the proposed ground levels, it is envisaged that the proposed finished levels will mimic / maintain any existing exceedance overland flow paths through the farm and to the local agricultural fields and catchment area towards the existing filed drainage ditches and features to the River Avon.
- 3.2.7 To ensure that the development surface water sewers are constructed to an appropriate standard, these should all be designed and constructed in accordance with the Water UK publication Design & Construction Guidance, Building Regulations Specification and any relevant Local Authority specification, where appropriate.
- 3.2.8 As noted in 2.7.7 above the surface water system is to be constructed to the relevant guidance including the Water UK publication Design & Construction Guidance, Building Regulations Specification (Part H) and any relevant Local Authority specification, where appropriate.

3.3 Finished Floor Levels

- 3.3.1 The existing barns floor levels are predominantly above the surrounding agricultural field levels but due to the introduction of screes and floor coverings will be as a minimum, in accordance with Building Regulations 150mm above the field ground levels.
- 3.3.2 The intended flag stone path around the perimeter of the building on the North will be angled with a level fall away from the building directing any rainwater onto grassed area.

3.4 Access & Evacuation

-
- 3.4.1 The National Planning Policy Framework requires that, where important to the overall safety of a proposed development, safe access and escape is available to and from new developments in flood risk areas.
- 3.4.2 The site and surrounding area are located within Flood Zone 1; therefore, a dry access and evacuation route is therefore deemed to be achievable for this site.

4 Future Maintenance

4.1.1 The drainage will be retained in private ownership, with the barn conversion using the existing surface water system. It is intended that the following maintenance schedule be provided for the owners use.

4.1.2 We would propose that the following information is included as a minimum:

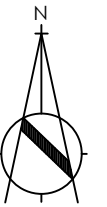
- i. Clear details of ownership and responsibilities of drainage systems across the site.
- ii. Copy of the installed as built drainage drawings.
- iii. Copies of standard product specifications used for relevant drainage elements including (*but not limited to*):
 - a. Inspection chambers/ manholes
 - b. Pipework
 - c. Access covers
 - d. Permeable Paving
 - e. Packaged Treatment Plant
 - f. Drainage field
- iv. Information relating to the SuDS features provided:
 - a. Environmental Permits / Licences
 - b. Manufacturers' details and specifications including design life.
 - c. Recommendation for inspections and cleaning out intervals/jetting.
 - d. Details of intended proper operation.
 - e. Potential safety issues.
- v. Notes on warranties offered by the developer as may be appropriate - for call out service.
- vi. Contact details for Maintenance Company in event of blockage and emergency.
- vii. Contact details for local pipe jetting / cleaning companies in event of blockage.

5 Conclusion

- 5.1.1 The barn conversion is located within Flood Zone 1 and is considered to be at a very low risk of flooding.
- 5.1.2 In keeping with SuDS hierarchy, the preferred drainage strategy for the barn conversion of the retention and connection to the existing farmstead surface water drainage system, with the courtyard area and private drive/parking spaces being utilised for infiltration and a soakaway if possible.
- 5.1.3 There is no increase in the current surface water run-off from the proposed barn conversion and the possible reduction in run off if the proposed permeable paving within the courtyard can run directly to ground.
- 5.1.4 There is no increase in flood risk to the surrounding area or downstream catchment area resulting from the barn conversion.
- 5.1.5 A dry access and evacuation route is wholly achievable within the farm boundary and beyond to the north into Lower Seagry and public highway network.
- 5.1.6 In summary, this Drainage Statement confirms that the proposed development is achievable in a sustainable manner, without increasing flood risk on Church Farm or within the greater catchment area and would be in accordance with both National Planning Policy Framework and Local Policies.

Appendix A

Site Location Plan



architecture ■ design

martin blake associates

office 184, 3 edgar buildings george street bath ba1 2fj tel 07861 734 218

e-mail mba@mba-architecture.co.uk

Project
Church Farm, Lower Seagry, SN15 5EP

Drawing Title
Location Plan

Drawn by
Date
June 2023

Scale
1:1250 @ A3

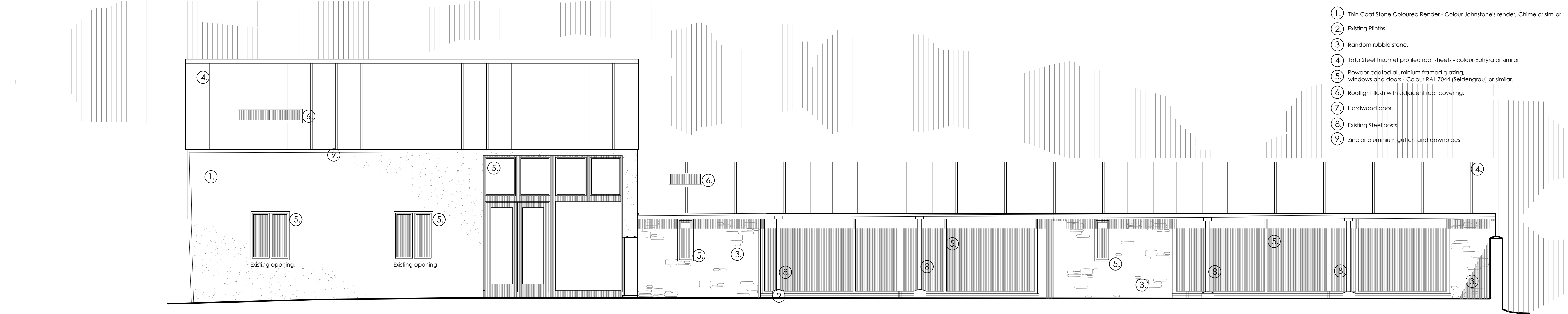
Drawing number
650/E/00

Revision

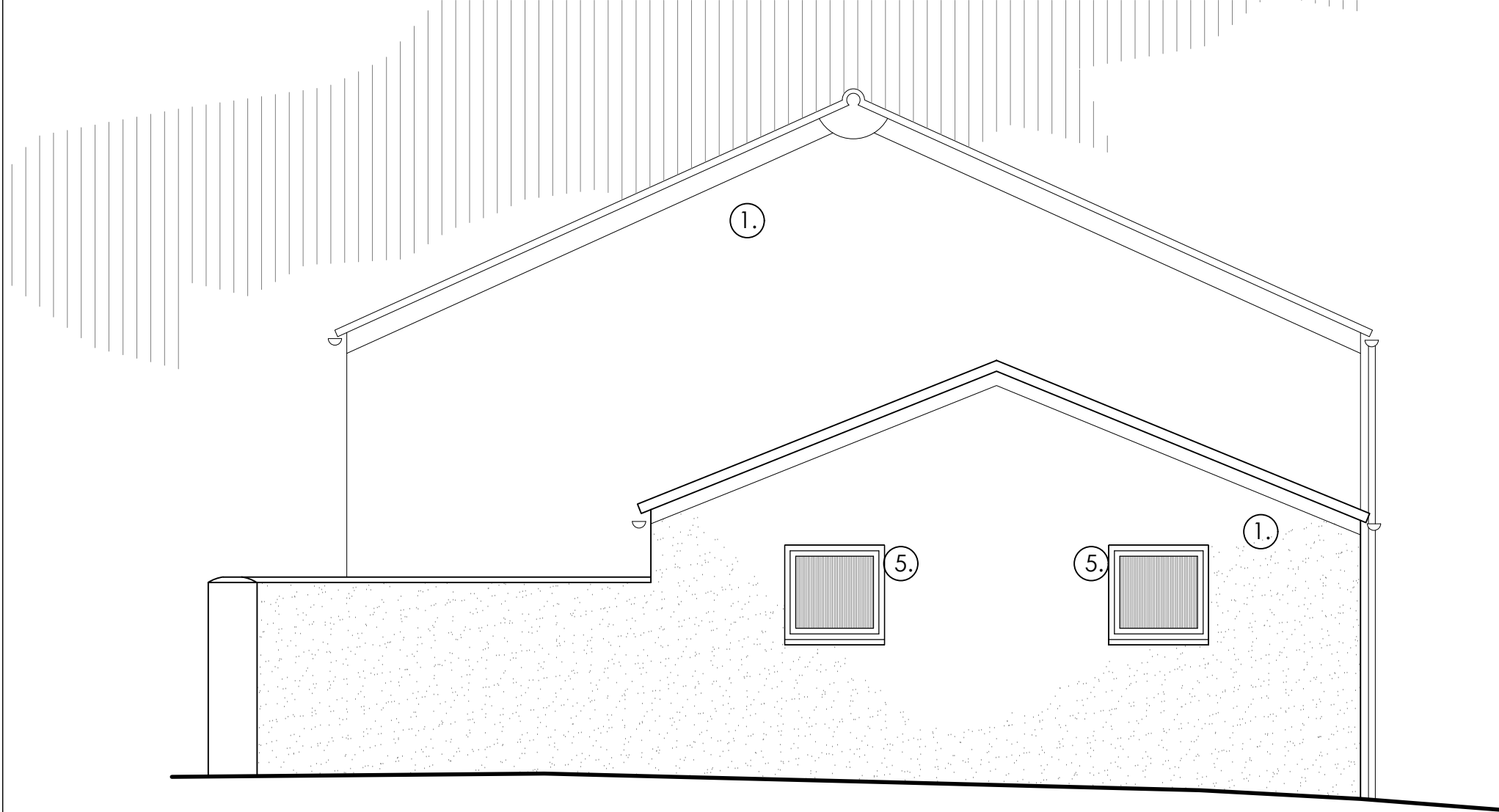
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ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE WORK COMMENCES.
ANY DISCREPANCIES TO BE REPORTED TO THE ARCHITECT IMMEDIATELY

Appendix B

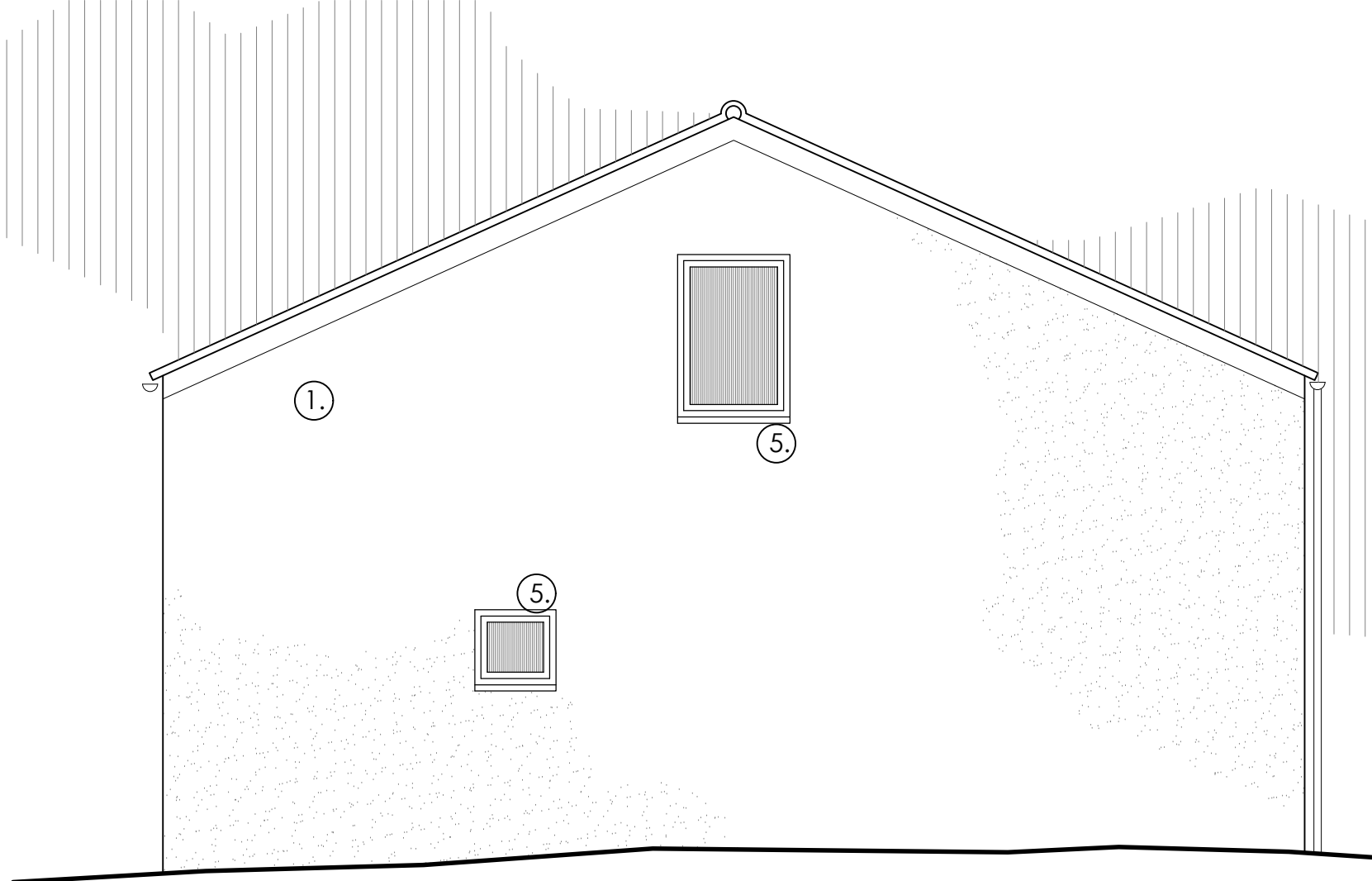
Layout and Elevations proposals



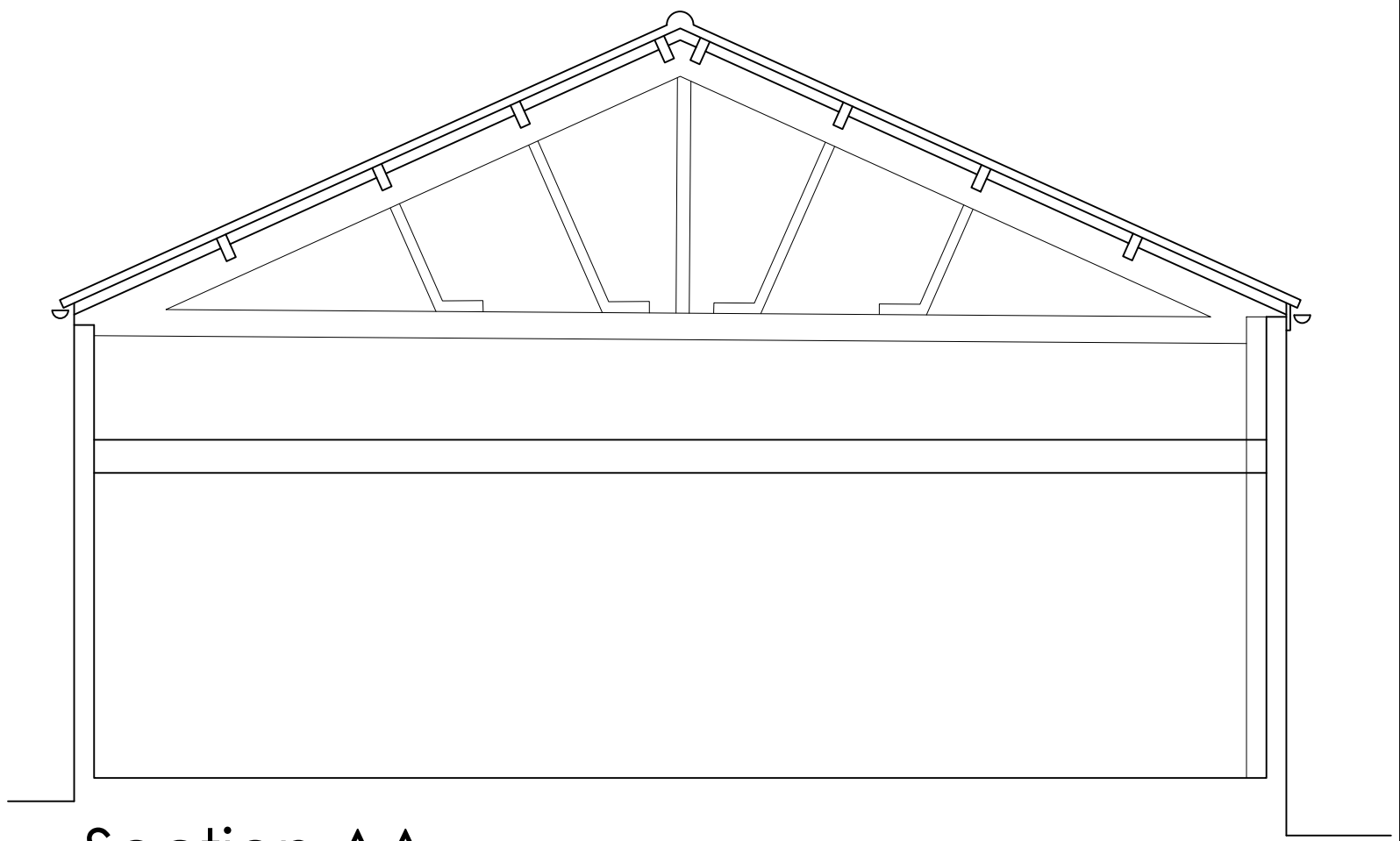
South Elevation.



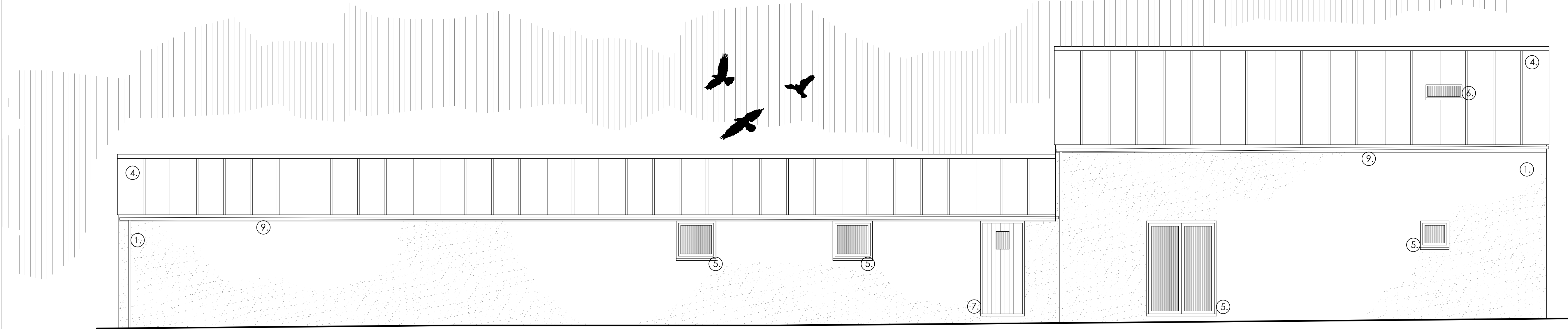
East Elevation.



West Elevation.

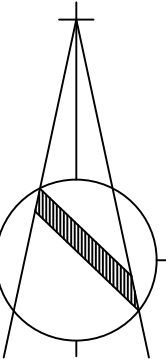


Section AA

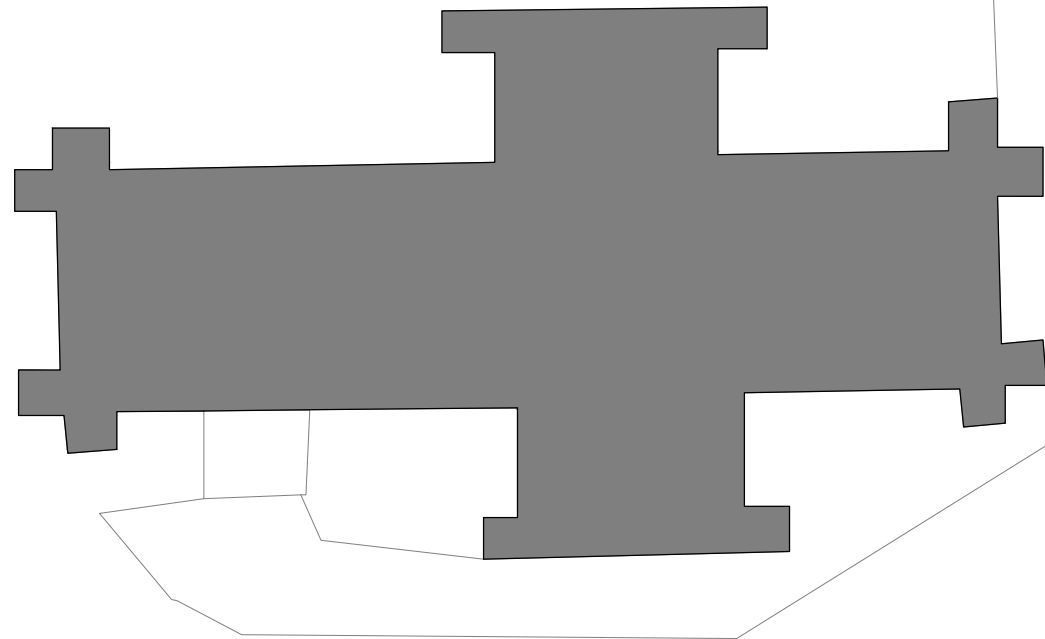


North Elevation.

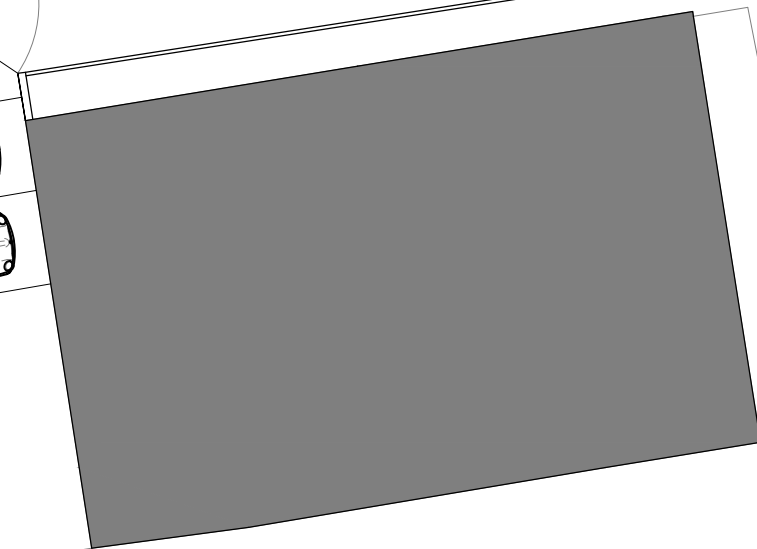
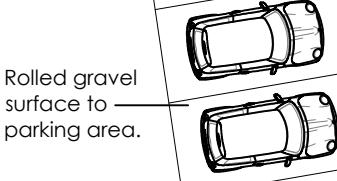
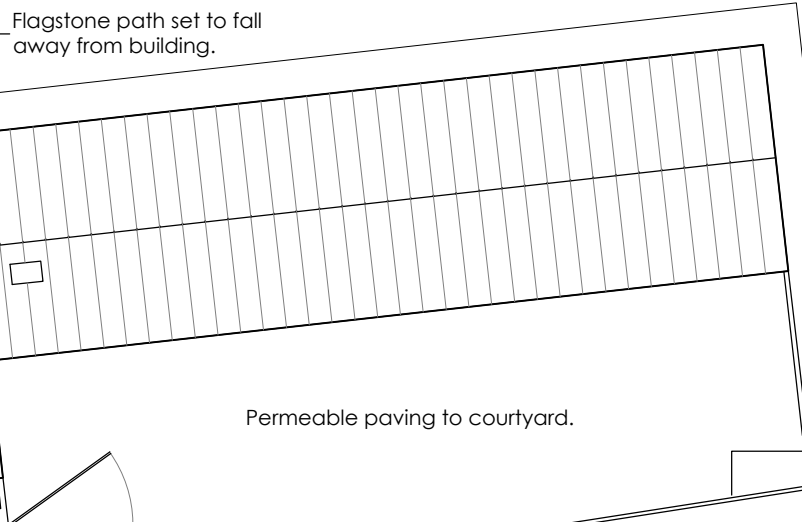
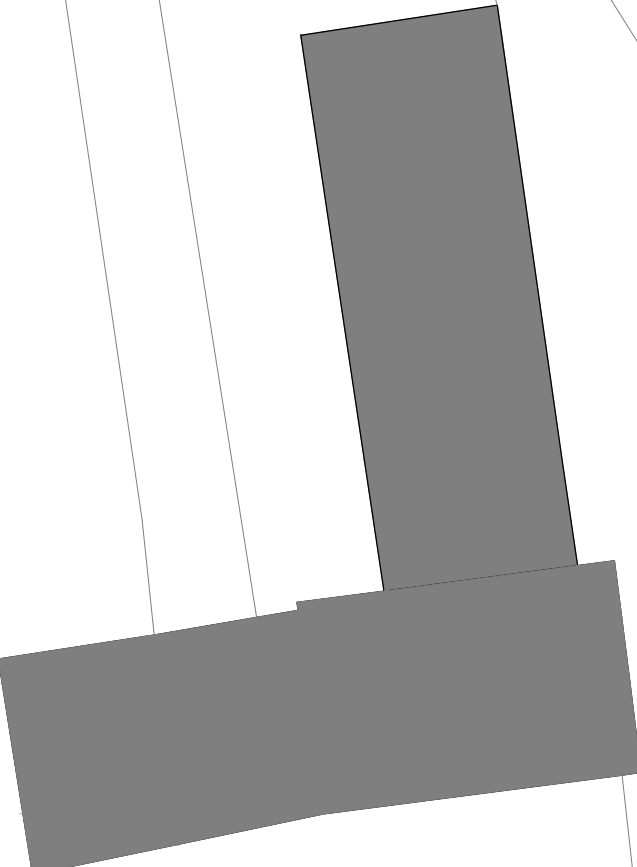
 architecture • design martin blake associates Office 184, 3 Edgar Buildings, Bath BA1 2FJ tel 01225 42 89 77 - e-mail mba@mba-architecture.co.uk	FILENAME: drawn by		checked by		Revision	0m 1 2 3 4 5m 	project title Church Farm Lower Seagry SN15 5EP	drawing title Proposed Elevations
	date May 2023							
	scale 1:50@A1	drawing no. 650-P-02		revision E				
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St Mary's Church



Tithe Barn



2000mm high stained, hit and miss timber fence providing screening between courtyard and building south of the site.

1:200 Block Plan

 architecture • design martin blake associates Office 184, 3 Edgar Buildings, Bath BA1 2FJ tel 01225 42 89 77 - e-mail mba@mba-architecture.co.uk	FILENAME:			Revision			project title			drawing title							
	drawn by		checked by		0m 10m 20m 						Church Farm Lower Seagry SN15 5EP			Proposed Block Plan			
	date		June 2023														
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Appendix C

BSG Geological Mapping



Geology Viewer



About this layer:

Combination of bedrock and superficial geology



Info



Opacity



Legend

- Alluvium - Clay, silt, sand and gravel
- River Terrace Deposits, 1 - Sand and...
- River Terrace Deposits, 2 - Sand and...
- Kellaways Clay Member - Mudstone
- Kellaways Sand Member - Sandstone
- Oxford Clay Formation - Mudstone

OPTIONS



Select Basemap



Settings



Contact BGS



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Version 0.0.53 (BETA)



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Powered by [Esri](#)

Appendix D

Soil Scape Mapping



Get Soils Data for your GIS



Soilscales map

Soil descriptions

Help

Search

Contact

About

LandIS

0.6km
0.4mi

Adjust transparency

Legend

Search

Soil information

Soilscape 8:

Slightly acid loamy and clayey soils with impeded drainage

Texture: Loamy some clayey

Coverage: England: 10.6% Wales: 1.9% England & Wales: 9.4%

Selected area: 4.9km²

Drainage: Slightly impeded drainage

Fertility: Moderate to high

Habitats: Wide range of pasture and woodland types

Landcover: Arable and grassland

Carbon: Low

Drains to:

Developed by Cranfield University and sponsored by DEFRA

For more detailed soil information visit [Soil Site Reporter](#)

For soils education visit [soil-net.com](#)

Appendix E

EA Flood Map for Planning - Seas and Rivers

Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
395877/180837

Created
5 Oct 2023 14:35

Your selected location is in flood zone 1, an area with a low probability of flooding.

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

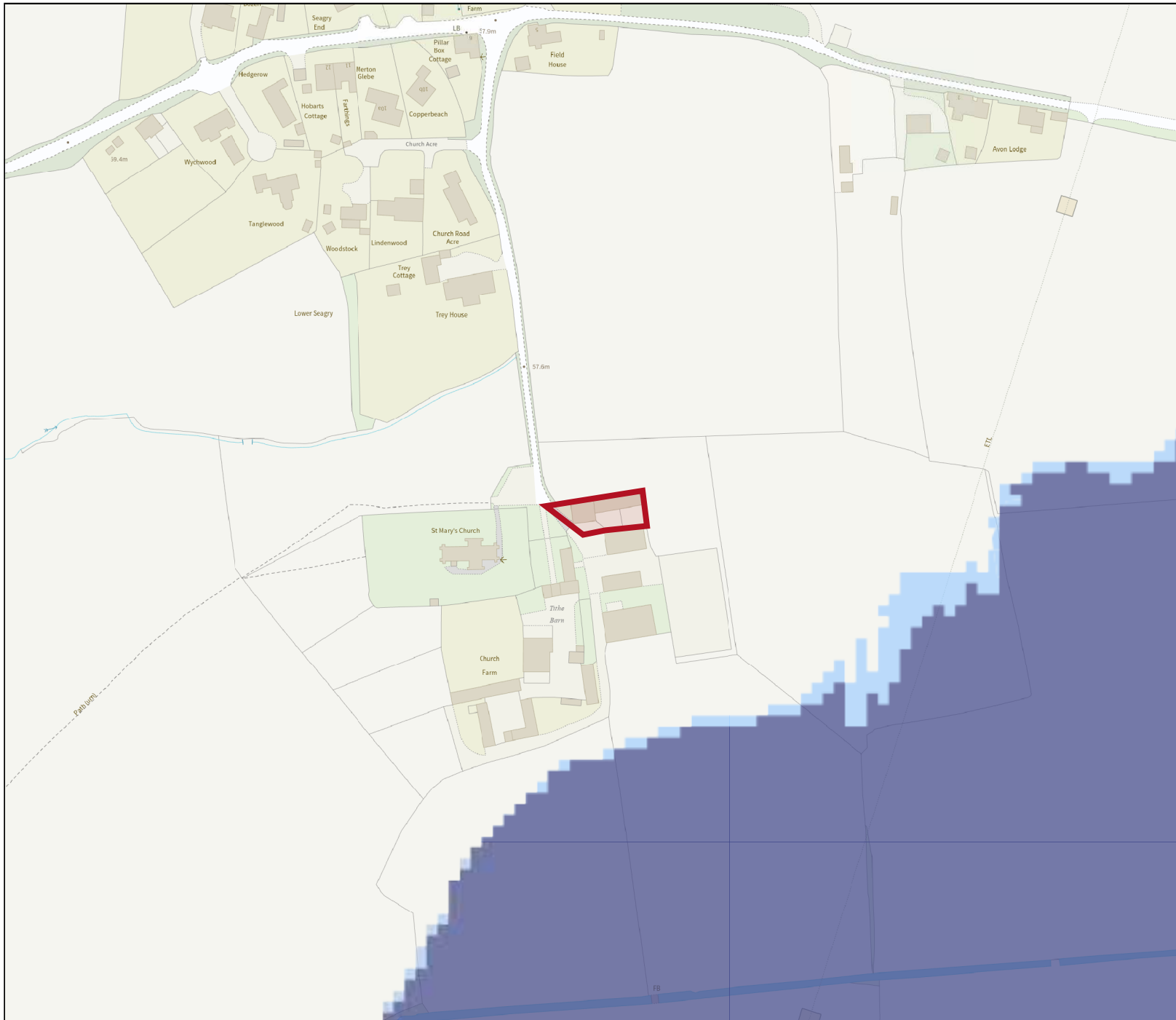
Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>



Flood map for planning

Your reference
<Unspecified>

Location (easting/northing)
395877/180837

Scale
1:2500

Created
5 Oct 2023 14:35

-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area

0 20 40 60m

Appendix F

EA Surface Water Mapping

Cookies on Check your long term flood risk

We use some essential cookies to make this service work.

We'd also like to use analytics cookies so we can understand how you use the service and make improvements.

[View cookies \(/cookies\)](/cookies)

[< Back](#)

Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

Flood risk

Extent of flooding



Location

Church Farm



Extent of flooding from surface water

[High](#)[Medium](#)[Low](#)[Very low](#)

Location you selected

Cookies on Check your long term flood risk

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Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

Flood risk

High risk: depth



Location

Church Farm



Surface water flood risk: water depth in a high risk scenario

Flood depth (millimetres)

Over 900mm

300 to 900mm

Below 300mm

Location you selected

Cookies on Check your long term flood risk

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Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

Flood risk

Low risk: depth



Location

Church Farm



Surface water flood risk: water depth in a low risk scenario

Flood depth (millimetres)

Over 900mm

300 to 900mm

Below 300mm

Location you selected

Cookies on Check your long term flood risk

We use some essential cookies to make this service work.

We'd also like to use analytics cookies so we can understand how you use the service and make improvements.

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Learn more about this area's flood risk

Select the type of flood risk information you're interested in. The map will then update.

Flood risk

Medium risk: depth



Location

Church Farm



Surface water flood risk: water depth in a medium risk scenario

Flood depth (millimetres)

Over 900mm

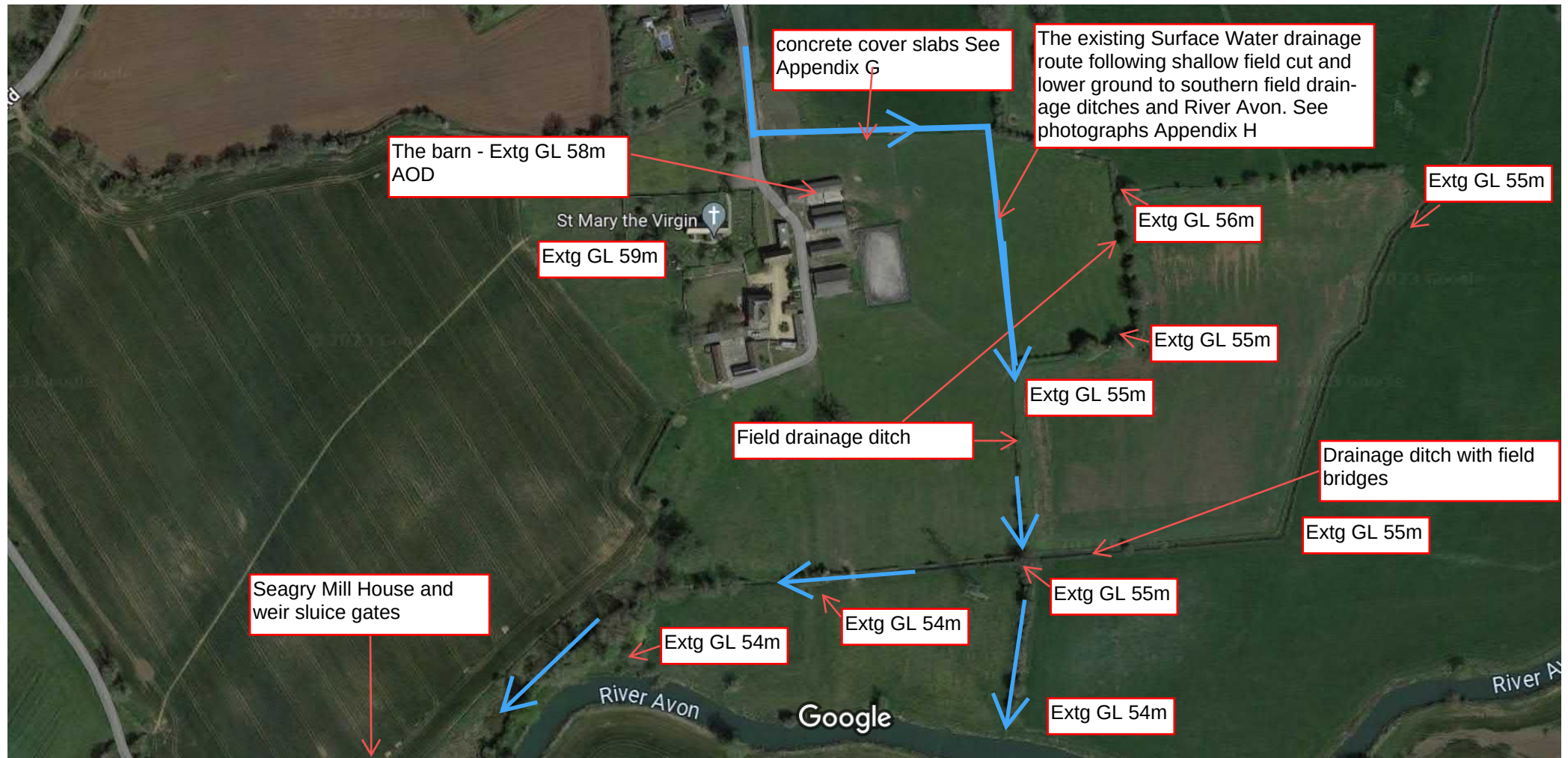
300 to 900mm

Below 300mm

Location you selected

Appendix G

Google Map arial photograph with drainage ditches and levels indicated



Imagery ©2023 Airbus, CNES / Airbus, Getmapping plc, Infoterra Ltd & Bluesky, Maxar Technologies, Map data ©2023 50 m

Appendix H

Photographs of Surface water flooding 20th October following natural field drainage shallow cuttings to main drainage ditch away from existing barn



View to the North of the Barn of Church Lane surface water run-off entering the agricultural field boundary and following field drainage shallow cut



View north from barn including what appears to be the main surface water drainage tank adjacent to low lying field drainage cut – flows to the east before turning south – well away from the barn.



View of northern drainage field cut running east away from the barn just down from the surface water tank system.



Surface water flowing to the North along field boundary away from the Barn



Surface Water flowing along eastern fields to main drainage ditches and River Avon to the south



Surface Water flowing along eastern fields to main drainage ditches and River Avon to the south

Appendix I

Existing Photographs of drainage around the barn RWP and Gullies



View on approach to barn from access road to farm – gully in middle of drive





View of barn looking north at southern elevation RWPs



View of Barn yard looking East on Southern side – note gullies and channels





View of fields to the East of barn





View of field looking North note low lying ground on field boundary



View looking East to northern side of barn within field noting gentle fall of ground away from barn to the field boundary. It is along this field Boundary that surface water flows eastwards then turning south to the River Avon – Refer to Appendix H



View of Barn northern elevation noting RWPS which drain to eastern corner field drainage system.

Appendix J

Existing drainage and areas plan together with surface water drainage layout plan



North

KEY:

Site Boundary

Building/Roof

Paved Area

Combined Grass and Paved Area

Area Sizes

Combined grass and paved area assumed 50% permeable and 50% impermeable

Building/Roof - 230m²

Paved Area - 146m²

Combined Grass/Paved - 132m²

Totals:

Impermeable - 442m²

Permeable - 66m²

Note:

Existing ground levels taken from OS mapping data

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M

A

TRANSPORT PLANNING

11 KINGSMEAD SQUARE
BATH BA1 2AB
T: 01225 444 011
www.ima-tp.com

REV	DATE	BY	DESCRIPTION	CHK	APP

NOTES:

CLIENT:
Heather Waddington

PROJECT:
Church Farm, Lower Seagry
Wiltshire, SN15 5EP

TITLE:
Existing Impermeable Areas

DRAWING STATUS:
For Information

SCALE (A1):
1:100

DRAWN BY:
DS

APPROVED BY:
DS

CAD FILE:
IMA-001.dwg

DESIGN/DRAWN:
TP

DATE:
November 2023

PROJECT NO:
IMA-23-173

DRAWING NO:
001

REV:
-

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KEY:

- Site Boundary
- Building/Roof
- Permeable Paving
- Flagstone Path (Angled to Drain Away From Building)
- Downpipe
- Sump (Stone Slab on Top)
- Stone Slab
- Gully

North

Area Sizes

Building/Roof - 230m²
Permeable Paving - 231m²
Stone Slabs - 47m²

Totals:
Impermeable - 230m²
Permeable - 278m²

I

M

A

TRANSPORT PLANNING

11 KINGSMEAD SQUARE

BATH BA1 2AB

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REV	DATE	BY	DESCRIPTION	CHK	APP

NOTES:

CLIENT: Heather Waddington

PROJECT: Church Farm, Lower Seagry
Wiltshire, SN15 5EP

TITLE: Proposed Impermeable Areas

DRAWING STATUS: For Information		
SCALE (A1): 1:100	DRAWN: DS	APPROVED: DS
CAD FILE: IMA-002.dwg	DESIGN/DRAWN: TP	DATE: November 2023
PROJECT NO: IMA-23-173	DRAWING NO: 002	REV: -

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