AGENDA ITEM NO 5

REPORT NO 237/23

ANGUS COUNCIL

DEVELOPMENT MANAGEMENT REVIEW COMMITTEE – 4 SEPTEMBER 2023

LAND AT HAWTHORN COTTAGE AT STRATHMARTINE

REPORT BY THE DIRECTOR OF LEGAL AND DEMOCRATIC SERVICES

ABSTRACT:

The Committee is asked to consider an application for a review of the decision taken by the planning authority in respect of the refusal of planning permission for erection of dwellinghouse, application No 21/00707/FULL, at Land at Hawthorn Cottage, Strathmartine.

1. RECOMMENDATIONS

It is recommended that the Committee:-

(i) review the case submitted by the Planning Authority **(Appendix 1)**; and

(ii) review the case submitted by the Applicant **(Appendix 2)**.

2. ALIGNMENT TO THE ANGUS LOCAL OUTCOMES IMPROVEMENT PLAN

This Report contributes to the following local outcomes contained within the Angus Council Plan:

- Safe, secure, vibrant and sustainable communities
- A reduced carbon footprint
- An enhanced, protected and enjoyed natural and built environment

3. CURRENT POSITION

The Development Management Review Committee is required to determine if they have sufficient information to determine the Review without further procedure. If members do not determine the review without further procedure, the Review Committee must determine the manner in which the review is to be conducted. The procedures available in terms of the regulations are: written submissions, hearing sessions or inspection of the land to which the review relates.

4. FINANCIAL IMPLICATIONS

There are no financial implications arising directly from the recommendations in the Report.

5. EQUALITY IMPACT ASSESSMENT

An equality impact assessment is not required.

6. CONSULTATION

In accordance with Standing Order 48(4), this Report falls within an approved category that has been confirmed as exempt from the consultation process.

NOTE: No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973, (other than any containing confidential or exempt information) were relied on to any material extent in preparing the above Report.

Report Author: Sarah Forsyth
E-Mail: LEGDEM@angus.gov.uk

List of Appendices:
Appendix 1 – Submission by Planning Authority
Appendix 2 – Submission by Applicant

ANGUS COUNCIL'S SUBMISSION ON GROUNDS OF REFUSAL

APPLICATION NUMBER – 21/00707/FULL

APPLICANT- MR K GRANT

PROPOSAL & ADDRESS – ERECTION OF A DWELLINGHOUSE AT LAND ADJACENT TO HAWTHORN COTTAGE BALDOVAN STRATHMARTINE

CONTENTS

AC1	**Report of Handling**	
	Policy Tests (Angus Local Development Plan 2016 & NPF4)	
	Policy DS1, DS3, DS4, TC2, PV5, PV7, PV8, PV12 & PV15 Angus Local Development Plan 2016 NPF 4 - *Policies 1,2,3,4,6,7,9,14,17,18 &22* Design Quality & Placemaking Supplementary Guidance – https://www.angus.gov.uk/media/design_quality_and_placemaking_supplementary_guidance Angus Local Development Plan https://www.angus.gov.uk/sites/default/files/Angus%20local%20development%20plan%20adopted%20September%202016.pdf Angus Local Development Plan – Proposals Map https://www.angus.gov.uk/sites/default/files/2021-09/Proposals%20Map.pdf Countryside Housing Supplementary Guidance (2016) Countryside Housing Supplementary Guidance (2016) NPF 4 https://www.gov.scot/publications/national-planning-framework-4-revised-draft/	
	Consultation Responses	
AC2	Roads Traffic – 15.04.22 & 06.05.22	

AC3	Scottish Water – 21.04.22	
AC4	SEPA - 27.04.22	
AC5	Roads Flooding – 20.05.22	
AC6	Environmental Health – Contaminated Land – 10.06.22	
	Letters of Representations	
AC7	Mr George Ross – 17.04.22	
AC8	Grant Anderson – 04.05.22	
	Application Drawings	
AC9	Refused Location Plan	
AC10	Refused Drawings	
	Further Information Relevant to Assessment	
AC11	Site Photos	
AC12	Refused Decision Notice	
AC13	20/00167/FULL – Scottish Government - Decision Letter and Report to Scottish Ministers	
	Supporting Information	
AC14	Bat Survey	
AC15	Supporting Statement	
AC16	Flood Risk Assessment	

Angus Council

Application Number:	21/00707/FULL
Description of Development:	Erection of a dwellinghouse
Site Address:	Land Adjacent To Hawthorn Cottage Baldovan Strathmartine
Grid Ref:	339006 : 734350
Applicant Name:	Mr K Grant

Report of Handling

Proposal

The application site measures approximately 2000sqm and is located to the north of the Dighty Water at Baldovan. The site lies immediately southeast and adjacent to Hawthorn Cottage at the end of a 180m long private track which serves four other existing houses. The Dundee City Council boundary is located to the south of the site beyond the watercourse. The site currently consists of a grassed area and also contains the walls of a derelict 60sqm stone building and a number of trees.

The proposal seeks planning permission to erect a two storey dwelling and detached garage. The proposed dwellinghouse would measure approx. 6.68m to its ridge. The proposed house design consists of two rectangular sections connected by a flat roof link. Information submitted in support of the application indicates that the house would be finished in a mix of stone and roughcast, timber cladding and slate on the roof. A single storey, triple garage, is proposed in the northwest corner of the site.

The application form indicates that the house would connect to the public water supply and public drainage network and that SUDS would not be provided.

The application has not been subject of variation.

Publicity

The application was subject to normal neighbour notification procedures.

The application was advertised in the Dundee Courier on 15 April 2022 for the following reasons:

- Neighbouring Land with No Premises

The nature of the proposal did not require a site notice to be posted.

Planning History

03/00776/FUL for alterations and an extension to Hawthorn Cottage and reconstruction of outhouse to sun house was approved subject to conditions on 1 August 2003. That planning permission identified the current site as being within the curtilage of Hawthorn Cottage and the planning permission provided for the alteration of the stone building within the site to form a sun house in association with Hawthorn Cottage.

19/00704/FULL for Erection of a Dwellinghouse was determined as "Application Withdrawn" on 25 October 2019.

20/00167/FULL for the Erection of new dwelling house re-application was refused planning permission on the 02 June 2020. Following this Development Management Review Committee (DMRC) resolved to grant planning permission. This decision was subject to confirmation by Scottish Ministers as a result of

the objection by SEPA. However the subsequent appeal decision by Scottish Ministers was to refuse the application. This was refused on the 20 June 2021. The decision letter from the Scottish Government states that:

'Ministers agree with the Reporter's overall conclusion that the Proposed Development does not accord with the relevant provisions of the development plan in respect of the principle of development in this countryside location. In addition the proposal, in the absence of the necessary details, does not fully address the potential for flood risk. None of the other matters raised are sufficient to justify a different conclusion.'

Applicant's Case

Bat Survey Report by GLM Ecology:
- No signs of bats were recorded and none are considered to be present in the building on site. It is considered that the proposed works pose a negligible risk of death or disturbance to European Protected Species and it is safe to proceed.

Planning Statement:
- Notes previous refusal on the site (20/00167/FULL and reasons for refusal.
- The site was formerly part of Baldovan Bleach Fields;
- Historical mapping is provided to show the former bleach fields along with photographs which the information suggests show that the site is not part of the curtilage of Hawthorn Cottage;
- Indicates that the history of the dilapidated building on site was researched and that it is not a domestic building but instead like Hawthorn Cottage formed an integral part of Baldovan Bleach Fields;
- Following the closure of the Baldovan Bleach Fields, Hawthorn Cottage was sold as a dwellinghouse with the current application site being used as grazing ground for horses;
- Planning permission was obtained in 2003 to extend Hawthorn Cottage. The site location plan for planning application ref: 03/00776/FUL included the application site for the current application within the red edge boundary. This was because this was all of the land in the ownership of the applicant, but does not mean that it formed part of its curtilage;
- Indicates that the dilapidated stone building that was formerly used as a boiler house was last known to be used for the storage of hay and feed for horses grazing on the site;
- Refers to development plan policies and indicates compliance;
- Confirms amongst other things that the proposal would now connect to the public sewer;
- Provides an evaluation of Angus Councils position / assessment of 20/00167/FULL;

Flood Risk Assessment (Millard Consulting) - February 2022
- It is concluded that the site and access road are outwith the 1 in 200 year flood extent of the Dighty Water and as such, the site is developable with respect to flood risk.
- The access road into the site is predicted to flood in the vicinity of Baldovan Road with climate change impact included, however the site is predicted to remain flood free during this event.
- It is recommended that finished ground levels around the perimeter of the proposed house are set no lower than 73.9m AOD, with an upstand above surrounding ground levels to the finished floor level, commensurate with good building practice.

Consultations

Scottish Environment Protection Agency - Offered no objection to the proposal. Reviewed the Millards Flood Risk Assessment provided in support of the planning application and have compared it to the output from the detailed Downfield & Dundee Flood Study. Confirms they both demonstrate that the proposed house location is out with the functional floodplain. SEPA therefore have no concerns in relation to flood risk. Despite the current ground level being sufficiently above the 200-year flood level, SEPA, however, agree with the suggestion within the FRA that the land around the proposed house footprint should be no lower than 73.9m AOD (this is over 2m above the flood level, so is suitably conservative and precautionary.)

Flood Prevention Authority - No objection to this proposed development. However, as stated in the FRA, it is recommended that finished ground levels around the perimeter of the proposed house are set no lower than 73.9m AOD.

Aberdeenshire Council Archaeology Service - There was no response from this consultee at the time of report preparation.

Environmental Health (Forfar) - No objections in relation to potential land contamination subject to conditions being attached.

Community Council - There was no response from this consultee at the time of report preparation.

Roads (Traffic) - No objection subject to a condition requiring a scheme of improvements to the access track.

Scottish Water - No objections. With regard to foul drainage, confirmed there is currently sufficient capacity at the local wastewater treatment works to accommodate the proposal and advise the development may impact upon existing infrastructure in proximity to the site.

Representations

Two objections were submitted in connection with the proposal. The content of these are summarised as follows:

- Development is outwith the development boundary of Strathmartine and sited on green belt land;
- The owners of Hawthorn cottage do not have legal authority to extend right of access to further properties without permission from the owners of the access lane;
- Detrimental impact on amenity (noise, traffic and privacy) of existing properties;
- Environmental pollution;
- Damage to existing boundary walls from vehicles;
- Land contamination from giant hogweed and Japanese knotweed;
- Road safety issues (inadequate access track with lack of passing places and visibility concerns at Junction);
- No evidence of housing need;
- Flood risk concerns;
- Impacts on trees and wildlife.

Development Plan Policies

NPF4 – national planning policies

Policy 1 Tackling the climate and nature crises
Policy 2 Climate mitigation and adaptation
Policy 3 Biodiversity
Policy 4 Natural places
Policy 6 Forestry, woodland and trees
Policy 7 Historic assets and places
Policy 9 Brownfield, vacant and derelict land and empty buildings
Policy 14 Design, quality and place
Policy 17 Rural homes
Policy 18 Infrastructure first
Policy 22 Flood risk and water management

Angus Local Development Plan 2016

Policy DS1 : Development Boundaries and Priorities
Policy DS3 : Design Quality and Placemaking
Policy DS4 : Amenity
Policy TC2 : Residential Development
Policy PV5 : Protected Species
Policy PV7 : Woodland, Trees and Hedges
Policy PV8 : Built and Cultural Heritage
Policy PV12 : Managing Flood Risk
Policy PV15 : Drainage Infrastructure

The full text of the relevant development plan policies can be viewed at Appendix 1 to this report.

Assessment

Sections 25 and 37(2) of the Town and Country Planning (Scotland) Act 1997 require that planning decisions be made in accordance with the development plan unless material considerations indicate otherwise.

In this case the development plan comprises: -
- National Planning Framework 4 (NPF4) (Published 2023)
- Angus Local Development Plan (ALDP) (Adopted 2016)

The development plan policies relevant to the determination of the planning application are reproduced at Appendix 1 and have been taken into account in preparing this report.

The ALDP was adopted in September 2016 while NPF4 was adopted in February 2023. Planning legislation indicates that where there is any incompatibility between the provision of the national planning framework and the provision of a local development plan, whichever of them is the later in date is to prevail.

Policy DS1 in the Angus Local Development Plan (ALDP) indicates that outwith development boundaries proposals will be supported where they are of a scale and nature appropriate to their location and where they are in accordance with relevant policies of the ALDP. It indicates that in all locations proposals that make better use of vacant, derelict or under used brownfield land or buildings will be supported where they are in accordance with relevant policies of the ALDP.

The application site is not within a development boundary and is located within a Category 1 Rural Settlement Unit (RSU1) as defined by the ALDP. The local development plan indicates that Category 1 RSU's are non-remote areas with stable or increasing populations or where there are no services or facilities in need of support. This is an area where council policy seeks to restrict new housing development in the countryside with the objective of directing new development to sustainable locations within existing settlements.

Policy TC2 of the ALDP deals specifically with proposals for new residential development. The policy identifies the circumstances where the council will support new housing in the countryside. The policy is supported by adopted Countryside Housing Supplementary Guidance.

The proposed dwelling does not comply with any of the circumstances where a new house in the countryside is permitted and is not in accordance with the Countryside Housing Supplementary Guidance.

The proposal would not involve the replacement of an existing dwelling; it would not involve the conversion of a non-residential building; it would not involve the rounding off of an established building group of 3 or more existing dwellings; it is not for an essential worker supported by appropriate evidence of need; it would not fill a gap site between the curtilages of two houses or the curtilage of one house and a metalled road, or the curtilage of one house and an existing substantial building; and it would not involve the regeneration or redevelopment of a qualifying brownfield site.

In considering the principle of the proposal it is relevant to note that the Development Management Review Committee (DMRC) resolved to approve a previous similar planning application for a new house on the same site (ref: 20/00167/FULL) following a delegated refusal. That application was subject to a SEPA objection and as such was referred to the Scottish Ministers for determination. The Scottish Ministers refused that application.

In reaching that decision the Scottish Minster appointed Reporter concluded that the application site is not clearly within the curtilage of Hawthorn Cottage and they did not share the Planning Services view (as expressed in the previous report of handling associated with application ref: 20/00167/FULL), that the development of the site would create a gap site to the west when considered in the context of Rhynefield. However the Reporter generally agreed that the proposal (which is very similar to the current proposal)

would not comply with any of the aforementioned tests of Policy TC2.

In terms of redeveloping the brownfield site, the Reporter concluded that the sites status as a brownfield site does not secure compliance with Policy TC2. This is on the basis that the Reporter had advised Hawthorn Cottage enjoys an attractive rural setting and the wooded site within which the remains of the derelict building are located are now largely obscured and contribute to that setting. The Reporter stated there is nothing to suggest that the derelict building is incompatible with the adjacent residential use, open ground and countryside or that the building is a risk to the public. In that respect the Reporter considered that whilst some improvement might be argued in terms of removal of the building, the site now has a natural appearance which would be lost were it to be redeveloped. The Reporter also states the site does not appear as one associated with dereliction or dilapidation and its development has no regeneration justification. Overall the Reporter concluded that the proposal was not in compliance with Policy TC2 and that the principle of housing in this countryside location is not supported by the local development plan.

This decision of the Scottish Ministers in relation to the principle of developing this site for a new house remains a material consideration and has significant weight in the determination of this current application, where the same policies of the ALDP remain relevant.

Furthermore, since the previous decision by the Scottish Ministers, NFP4 has been adopted and now forms part of the development plan. NPF4 Policy 9 indicates that proposals that result in the sustainable reuse of brownfield land including vacant and derelict land and buildings, whether permanent or temporary, will be supported. However in determining whether the reuse is sustainable, the biodiversity value of brownfield land which has naturalised should be taken into account. NPF4 Policy 17 'Rural Homes' states development proposals for new homes in rural areas will be supported where the development is suitably scaled, sited and designed to be in keeping with the character of the area and complies with at least one of a number of other criteria, this includes amongst other things, reuse of brownfield land where a return to a natural state has not or will not happen without intervention.

Relevant NPF4 policies would not materially change the outcome of the application but the Reporters concerns in relation to the redevelopment of site resulting in the loss of its now natural appearance, are now strengthened by the adoption of the aforementioned NPF4 policies which seek to avoid unstainable redevelopment of naturalised sites. The proposal is also contrary to Policies 9 and 17 of NPF4 as it does not sustainably reuse brownfield land as the site has naturalised and has returned to a natural state without intervention.

Overall the principle of a house on the site does not comply with Policy TC2 and the associated Countryside Housing Supplementary Guidance, and consequently Policy DS1. The proposal would also fail to comply with the relevant tests of Policies 9 and 17 of NPF4.

For completeness, the remaining policy tests are addressed below.

In considering flood risk, whilst this matter was a reason for refusal previously (as part of application 20/00167/FULL), a Flood Risk Assessment was submitted in as part of the current application. Both SEPA and the Roads – Flooding Service has considered this information and now offer no objection to the current proposal. They both note that the FRA demonstrates that the proposed house location is outwith the functional floodplain and agree with the suggestion within the FRA that the land around the proposed house footprint should be no lower than 73.9m AOD. Therefore where the principle of the development otherwise acceptable there is now no concerns with regards to flood risk, subject to suitable finished ground and floor levels.

The proposal does not give rise to significant issues in terms of remaining development plan policy and associated issues could be addressed by condition, such as the requirement for SUDS, the submission of a photographic survey and upgrades to the existing access track. However, the proposal is located in an area where the local development plan indicates new housing development outwith settlements should be restricted and the proposal would not comply with countryside housing policy. The principle of a new house on this site is contrary to development plan policy.

In relation to material considerations it is relevant to note that objections have been submitted to the proposal. The representations are material in so far as they relate to relevant planning matters and have

been taken into account in the preparation of this report.

Concerns are expressed relating to the location of the site outside the Strathmartine boundary and it being located on a green belt. The proposal has been assessed against policies relating to housing in the countryside and it is noted that the site is located outside of a development boundary but is not located within a designated green belt. In terms of impacts on amenity, the house is positioned in a manner that it would not give rise to unacceptable impacts in terms of overlooking, privacy or loss of light when assessed against Council guidance. There would be some impact associated with increased activity along the site access track but that impact is not likely to be so significant as to warrant refusal of planning permission. The Roads Service is satisfied that the access could accommodate an additional dwelling subject to improvements being made to allow space for vehicles to pass. The proposal is unlikely to result in any significant impact on wildlife. No signs of bats were recorded in the bat survey and the large open areas close to the site would be largely unaffected by the proposal. Whilst the site does contain some planting, were the proposal otherwise acceptable planning conditions could have been applied to ensure suitable planting within the site is maintained, enhanced or compensated. There is no evidence of land contamination but the contaminated land officer has requested a condition be attached requiring further investigation. There is no current requirement to assess the need for housing of this scale. Flood risk matters have now been addressed as above and there is no concern in this regard. Legal access rights over land and damage to neighbouring property are civil matters that are not controlled through the planning process.

In summary, whilst the proposal complies with some aspects of development plan policy, the site is located in an area where the local development plan indicates new housing development outwith settlements should be restricted and a house on the site would not comply with countryside housing policy. The proposal is contrary to policies of the Angus Local Development Plan and NPF 4. There are no material considerations which justify approval of planning permission contrary to the provisions of the development plan.

Human Rights Implications

The decision to refuse this application has potential implications for the applicant in terms of his entitlement to peaceful enjoyment of his possessions (First Protocol, Article 1). For the reasons referred to elsewhere in this report justifying the decision in planning terms, it is considered that any actual or apprehended infringement of such Convention Rights, is justified. Any interference with the applicant's right to peaceful enjoyment of his possessions by refusal of the present application is in compliance with the Council's legal duties to determine this planning application under the Planning Acts and such refusal constitutes a justified and proportionate control of the use of property in accordance with the general interest and is necessary in the public interest with reference to the Development Plan and other material planning considerations as referred to in the report.

Decision

The application is Refused

Reason(s) for Decision:

1. The proposal is contrary to policy TC2 of the Angus Local Development Plan and its associated, Countryside Housing Supplementary Guidance because it does not comply with any of the circumstances that would allow for the construction of a new house in a countryside location. The proposal is also contrary to Policies 9 and 17 of NPF4 as it does not sustainably reuse brownfield land as the site has naturalised and returned to a natural state without intervention.

2. The application is contrary to Policy DS1 of the Angus Local Development Plan 2016 as the proposal is not in accordance with relevant policies of the local development plan.

Notes:

Case Officer: James Wright

Date: 10 April 2023

Appendix 1 - Development Plan Policies

NPF4 – national planning policies

Policy 1 Tackling the climate and nature crises
When considering all development proposals significant weight will be given to the global climate and nature crises.

Policy 2 Climate mitigation and adaptation
a) Development proposals will be sited and designed to minimise lifecycle greenhouse gas emissions as far as possible.
b) Development proposals will be sited and designed to adapt to current and future risks from climate change.
c) Development proposals to retrofit measures to existing developments that reduce emissions or support adaptation to climate change will be supported.

Policy 3 Biodiversity
a) Development proposals will contribute to the enhancement of biodiversity, including where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them. Proposals should also integrate nature-based solutions, where possible.

b) Development proposals for national or major development, or for development that requires an Environmental Impact Assessment will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity, including nature networks so they are in a demonstrably better state than without intervention. This will include future management. To inform this, best practice assessment methods should be used. Proposals within these categories will demonstrate how they have met all of the following criteria:
i. the proposal is based on an understanding of the existing characteristics of the site and its local, regional and national ecological context prior to development, including the presence of any irreplaceable habitats;
ii. wherever feasible, nature-based solutions have been integrated and made best use of;
iii. an assessment of potential negative effects which should be fully mitigated in line with the mitigation hierarchy prior to identifying enhancements;
iv. significant biodiversity enhancements are provided, in addition to any proposed mitigation. This should include nature networks, linking to and strengthening habitat connectivity within and beyond the development, secured within a reasonable timescale and with reasonable certainty. Management arrangements for their long- term retention and monitoring should be included, wherever appropriate; and
v. local community benefits of the biodiversity and/or nature networks have been considered.

c) Proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity, in accordance with national and local guidance. Measures should be proportionate to the nature and scale of development. Applications for individual householder development, or which fall within scope of (b) above, are excluded from this requirement.

d) Any potential adverse impacts, including cumulative impacts, of development proposals on biodiversity, nature networks and the natural environment will be minimised through careful planning and design. This will take into account the need to reverse biodiversity loss, safeguard the ecosystem services that the natural environment provides, and build resilience by enhancing nature networks and maximising the potential for restoration.

Policy NPF4 : Policy 4 Natural places
a) Development proposals which by virtue of type, location or scale will have an unacceptable impact on the natural environment, will not be supported.

b) Development proposals that are likely to have a significant effect on an existing or proposed European site (Special Area of Conservation or Special Protection Areas) and are not directly connected with or necessary to their conservation management are required to be subject to an "appropriate assessment" of the implications for the conservation objectives.

c) Development proposals that will affect a National Park, National Scenic Area, Site of Special Scientific Interest or a National Nature Reserve will only be supported where:
i. The objectives of designation and the overall integrity of the areas will not be compromised; or
ii. Any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by social, environmental or economic benefits of national importance.

All Ramsar sites are also European sites and/ or Sites of Special Scientific Interest and
are extended protection under the relevant statutory regimes.

d) Development proposals that affect a site designated as a local nature conservation site or landscape area in the LDP will only be supported where:
i. Development will not have significant adverse effects on the integrity of the area or the qualities for which it has been identified; or
ii. Any significant adverse effects on the integrity of the area are clearly outweighed by social, environmental or economic benefits of at least local importance.

e) The precautionary principle will be applied in accordance with relevant legislation and Scottish Government guidance.

f) Development proposals that are likely to have an adverse effect on species protected by legislation will only be supported where the proposal meets the relevant statutory tests. If there is reasonable evidence to suggest that a protected species is present on a site or may be affected by a proposed development, steps must be taken to establish its presence. The level of protection required by legislation must be factored into the planning and design of development, and potential impacts must be fully considered prior to the determination of any application.

g) Development proposals in areas identified as wild land in the Nature Scot Wild Land Areas map will only be supported where the proposal:
i) will support meeting renewable energy targets; or,
ii) is for small scale development directly linked to a rural business or croft, or is required to support a fragile community in a rural area.

All such proposals must be accompanied by a wild land impact assessment which sets out how design, siting, or other mitigation measures have been and will be used to minimise significant impacts on the qualities of the wild land, as well as any management and monitoring arrangements where appropriate. Buffer zones around wild land will not be applied, and effects of development outwith wild land areas will not be a significant consideration.

Policy 6 Forestry, woodland and trees
a) Development proposals that enhance, expand and improve woodland and tree cover will be supported.

b) Development proposals will not be supported where they will result in:
i. Any loss of ancient woodlands, ancient and veteran trees, or adverse impact on their ecological condition;
ii. Adverse impacts on native woodlands, hedgerows and individual trees of high biodiversity value, or identified for protection in the Forestry and Woodland Strategy;
iii. Fragmenting or severing woodland habitats, unless appropriate mitigation measures are identified and implemented in line with the mitigation hierarchy;
iv. Conflict with Restocking Direction, Remedial Notice or Registered Notice to Comply issued by Scottish Forestry.

c) Development proposals involving woodland removal will only be supported where they will achieve significant and clearly defined additional public benefits in accordance with relevant Scottish Government policy on woodland removal. Where woodland is removed, compensatory planting will most likely be expected to be delivered.

d) Development proposals on sites which include an area of existing woodland or land identified in the Forestry and Woodland Strategy as being suitable for woodland creation will only be supported where

the enhancement and improvement of woodlands and the planting of new trees on the site (in accordance with the Forestry and Woodland Strategy) are integrated into the design.

Policy 7 Historic assets and places

a) Development proposals with a potentially significant impact on historic assets or places will be accompanied by an assessment which is based on an understanding of the cultural significance of the historic asset and/or place. The assessment should identify the likely visual or physical impact of any proposals for change, including cumulative effects and provide a sound basis for managing the impacts of change.

Proposals should also be informed by national policy and guidance on managing change in the historic environment, and information held within Historic Environment Records.

b) Development proposals for the demolition of listed buildings will not be supported unless it has been demonstrated that there are exceptional circumstances and that all reasonable efforts have been made to retain, reuse and/or adapt the listed building. Considerations include whether the:

i. building is no longer of special interest;

ii. building is incapable of physical repair and re-use as verified through a detailed structural condition survey report;

iii. repair of the building is not economically viable and there has been adequate marketing for existing and/or new uses at a price reflecting its location and condition for a reasonable period to attract interest from potential restoring purchasers; or

iv. demolition of the building is essential to delivering significant benefits to economic growth or the wider community.

c) Development proposals for the reuse, alteration or extension of a listed building will only be supported where they will preserve its character, special architectural or historic interest and setting. Development proposals affecting the setting of a listed building should preserve its character, and its special architectural or historic interest.

d) Development proposals in or affecting conservation areas will only be supported where the character and appearance of the conservation area and its setting is preserved or enhanced. Relevant considerations include the:

i. architectural and historic character of the area;

ii. existing density, built form and layout; and

iii. context and siting, quality of design and suitable materials.

e) Development proposals in conservation areas will ensure that existing natural and built features which contribute to the character of the conservation area and its setting, including structures, boundary walls, railings, trees and hedges, are retained.

f) Demolition of buildings in a conservation area which make a positive contribution to its character will only be supported where it has been demonstrated that:

i. reasonable efforts have been made to retain, repair and reuse the building;

ii. the building is of little townscape value;

iii. the structural condition of the building prevents its retention at a reasonable cost; or

iv. the form or location of the building makes its reuse extremely difficult.

g) Where demolition within a conservation area is to be followed by redevelopment, consent to demolish will only be supported when an acceptable design, layout and materials are being used for the replacement development.

h) Development proposals affecting scheduled monuments will only be supported where:

i. direct impacts on the scheduled monument are avoided;

ii. significant adverse impacts on the integrity of the setting of a scheduled monument are avoided; or

iii. exceptional circumstances have been demonstrated to justify the impact on a scheduled monument and its setting and impacts on the monument or its setting have been minimised.

i) Development proposals affecting nationally important Gardens and Designed Landscapes will be supported where they protect, preserve or enhance their cultural significance, character and integrity and where proposals will not significantly impact on important views to, from and within the site, or its setting.

j) Development proposals affecting nationally important Historic Battlefields will only be supported where they protect and, where appropriate, enhance their cultural significance, key landscape characteristics, physical remains and special qualities.

k) Development proposals at the coast edge or that extend offshore will only be supported where proposals do not significantly hinder the preservation objectives of Historic Marine Protected Areas.

l) Development proposals affecting a World Heritage Site or its setting will only be supported where their Outstanding Universal Value is protected and preserved.

m) Development proposals which sensitively repair, enhance and bring historic buildings, as identified as being at risk locally or on the national Buildings at Risk Register, back into beneficial use will be supported.

n) Enabling development for historic environment assets or places that would otherwise be unacceptable in planning terms, will only be supported when it has been demonstrated that the enabling development proposed is:
i. essential to secure the future of an historic environment asset or place which is at risk of serious deterioration or loss; and
ii. the minimum necessary to secure the restoration, adaptation and long-term future of the historic environment asset or place.

The beneficial outcomes for the historic environment asset or place should be secured early in the phasing of the development, and will be ensured through the use of conditions and/or legal agreements.

o) Non-designated historic environment assets, places and their setting should be protected and preserved in situ wherever feasible. Where there is potential for non-designated buried archaeological remains to exist below a site, developers will provide an evaluation of the archaeological resource at an early stage so that planning authorities can assess impacts. Historic buildings may also have archaeological significance which is not understood and may require assessment.

Where impacts cannot be avoided they should be minimised. Where it has been demonstrated that avoidance or retention is not possible, excavation, recording, analysis, archiving, publication and activities to provide public benefit may be required through the use of conditions or legal/planning obligations.

When new archaeological discoveries are made during the course of development works, they must be reported to the planning authority to enable agreement on appropriate inspection, recording and mitigation measures.

Policy 9 Brownfield, vacant and derelict land and empty buildings
a) Development proposals that will result in the sustainable reuse of brownfield land including vacant and derelict land and buildings, whether permanent or temporary, will be supported. In determining whether the reuse is sustainable, the biodiversity value of brownfield land which has naturalised should be taken into account.
b) Proposals on greenfield sites will not be supported unless the site has been allocated for development or the proposal is explicitly supported by policies in the LDP.
c) Where land is known or suspected to be unstable or contaminated, development proposals will demonstrate that the land is, or can be made, safe and suitable for the proposed new use.
d) Development proposals for the reuse of existing buildings will be supported, taking into account their suitability for conversion to other uses. Given the need to conserve
embodied energy, demolition will be regarded as the least preferred option.

Policy 14 Design, quality and place
a) Development proposals will be designed to improve the quality of an area whether in urban or

rural locations and regardless of scale.

b) Development proposals will be supported where they are consistent with the six qualities of successful places:

Healthy: Supporting the prioritisation of women's safety and improving physical and mental health.

Pleasant: Supporting attractive natural and built spaces.

Connected: Supporting well connected networks that make moving around easy and reduce car dependency

Distinctive: Supporting attention to detail of local architectural styles and natural landscapes to be interpreted, literally or creatively, into designs to reinforce identity.

Sustainable: Supporting the efficient use of resources that will allow people to live, play, work and stay in their area, ensuring climate resilience, and integrating nature positive, biodiversity solutions.

Adaptable: Supporting commitment to investing in the long-term value of buildings, streets and spaces by allowing for flexibility so that they can be changed quickly to accommodate different uses as well as maintained over time.

Further details on delivering the six qualities of successful places are set out in Annex D.

c) Development proposals that are poorly designed, detrimental to the amenity of the surrounding area or inconsistent with the six qualities of successful places, will not be supported.

Policy 17 Rural homes

a) Development proposals for new homes in rural areas will be supported where the development is suitably scaled, sited and designed to be in keeping with the character of the area and the development:

i. is on a site allocated for housing within the LDP;

ii. reuses brownfield land where a return to a natural state has not or will not happen without intervention;

iii. reuses a redundant or unused building;

iv. is an appropriate use of a historic environment asset or is appropriate enabling development to secure the future of historic environment assets;

v. is demonstrated to be necessary to support the sustainable management of a viable rural business or croft, and there is an essential need for a worker (including those taking majority control of a farm business) to live permanently at or near their place of work;

vi. is for a single home for the retirement succession of a viable farm holding;

vii. is for the subdivision of an existing residential dwelling; the scale of which is in keeping with the character and infrastructure provision in the area; or

viii. reinstates a former dwelling house or is a one-for-one replacement of an existing permanent house.

b) Development proposals for new homes in rural areas will consider how the development will contribute towards local living and take into account identified local housing needs (including affordable housing), economic considerations and the transport needs of
the development as appropriate for the rural location.

c) Development proposals for new homes in remote rural areas will be supported where the proposal:

i. supports and sustains existing fragile communities;

ii. supports identified local housing outcomes; and

iii. is suitable in terms of location, access, and environmental impact.

d) Development proposals for new homes that support the resettlement of previously
inhabited areas will be supported where the proposal:

i. is in an area identified in the LDP as suitable for resettlement;

ii. is designed to a high standard;
iii. responds to its rural location; and
iv. is designed to minimise greenhouse gas emissions as far as possible.

Policy 18 Infrastructure first
a) Development proposals which provide (or contribute to) infrastructure in line with that identified as necessary in LDPs and their delivery programmes will be supported.

b) The impacts of development proposals on infrastructure should be mitigated. Development proposals will only be supported where it can be demonstrated that provision is made to address the impacts on infrastructure. Where planning conditions, planning obligations, or other legal agreements are to be used, the relevant tests will apply.

Where planning obligations are entered into, they should meet the following tests:
- be necessary to make the proposed development acceptable in planning terms
- serve a planning purpose
- relate to the impacts of the proposed development
- fairly and reasonably relate in scale and kind to the proposed development
- be reasonable in all other respects

Planning conditions should only be imposed where they meet all of the following tests. They should be:
- necessary
- relevant to planning
- relevant to the development to be permitted
- enforceable
- precise
- reasonable in all other respects

Policy 22 Flood risk and water management
a) Development proposals at risk of flooding or in a flood risk area will only be supported if they are for:
i. essential infrastructure where the location is required for operational reasons;
ii. water compatible uses;
iii. redevelopment of an existing building or site for an equal or less vulnerable use; or.
iv. redevelopment of previously used sites in built up areas where the LDP has identified a need to bring these into positive use and where proposals demonstrate that long- term safety and resilience can be secured in accordance with relevant SEPA advice.

The protection offered by an existing formal flood protection scheme or one under construction can be taken into account when determining flood risk.

In such cases, it will be demonstrated by the applicant that:
o all risks of flooding are understood and addressed;
o there is no reduction in floodplain capacity, increased risk for others, or a need for future flood protection schemes;
o the development remains safe and operational during floods;
o flood resistant and resilient materials and construction methods are used; and
o future adaptations can be made to accommodate the effects of climate change.

Additionally, for development proposals meeting criteria part iv), where flood risk is managed at the site rather than avoided these will also require:
o the first occupied/utilised floor, and the underside of the development if relevant, to be above the flood risk level and have an additional allowance for freeboard; and
o that the proposal does not create an island of development and that safe access/ egress can be achieved.

b) Small scale extensions and alterations to existing buildings will only be supported where they will not significantly increase flood risk.

c) Development proposals will:
i. not increase the risk of surface water flooding to others, or itself be at risk.
ii. manage all rain and surface water through sustainable urban drainage systems (SUDS), which should form part of and integrate with proposed and existing blue- green infrastructure. All proposals should presume no surface water connection to the combined sewer;
iii. seek to minimise the area of impermeable surface.

d) Development proposals will be supported if they can be connected to the public water mains. If connection is not feasible, the applicant will need to demonstrate that water for drinking water purposes will be sourced from a sustainable water source that is resilient to periods of water scarcity.

e) Development proposals which create, expand or enhance opportunities for natural flood risk management, including blue and green infrastructure, will be supported.

Angus Local Development Plan 2016

Policy DS1 : Development Boundaries and Priorities
All proposals will be expected to support delivery of the Development Strategy.

The focus of development will be sites allocated or otherwise identified for development within the Angus Local Development Plan, which will be safeguarded for the use(s) set out. Proposals for alternative uses will only be acceptable if they do not undermine the provision of a range of sites to meet the development needs of the plan area.

Proposals on sites not allocated or otherwise identified for development, but within development boundaries will be supported where they are of an appropriate scale and nature and are in accordance with relevant policies of the ALDP.

Proposals for sites outwith but contiguous* with a development boundary will only be acceptable where it is in the public interest and social, economic, environmental or operational considerations confirm there is a need for the proposed development that cannot be met within a development boundary.

Outwith development boundaries proposals will be supported where they are of a scale and nature appropriate to their location and where they are in accordance with relevant policies of the ALDP.

In all locations, proposals that re-use or make better use of vacant, derelict or under-used brownfield land or buildings will be supported where they are in accordance with relevant policies of the ALDP.

Development of greenfield sites (with the exception of sites allocated, identified or considered appropriate for development by policies in the ALDP) will only be supported where there are no suitable and available brownfield sites capable of accommodating the proposed development.

Development proposals should not result in adverse impacts, either alone or in combination with other proposals or projects, on the integrity of any European designated site, in accordance with Policy PV4 Sites Designated for Natural Heritage and Biodiversity Value.

*Sharing an edge or boundary, neighbouring or adjacent

Policy DS3 : Design Quality and Placemaking
Development proposals should deliver a high design standard and draw upon those aspects of landscape or townscape that contribute positively to the character and sense of place of the area in which they are to be located. Development proposals should create buildings and places which are:

o Distinct in Character and Identity: Where development fits with the character and pattern of development in the surrounding area, provides a coherent structure of streets, spaces and buildings and retains and sensitively integrates important townscape and landscape features.
o Safe and Pleasant: Where all buildings, public spaces and routes are designed to be accessible, safe and attractive, where public and private spaces are clearly defined and appropriate new areas of

landscaping and open space are incorporated and linked to existing green space wherever possible.
o Well Connected: Where development connects pedestrians, cyclists and vehicles with the surrounding area and public transport, the access and parking requirements of the Roads Authority are met and the principles set out in 'Designing Streets' are addressed.
o Adaptable: Where development is designed to support a mix of compatible uses and accommodate changing needs.
o Resource Efficient: Where development makes good use of existing resources and is sited and designed to minimise environmental impacts and maximise the use of local climate and landform.

Supplementary guidance will set out the principles expected in all development, more detailed guidance on the design aspects of different proposals and how to achieve the qualities set out above. Further details on the type of developments requiring a design statement and the issues that should be addressed will also be set out in supplementary guidance.

Policy DS4 : Amenity
All proposed development must have full regard to opportunities for maintaining and improving environmental quality. Development will not be permitted where there is an unacceptable adverse impact on the surrounding area or the environment or amenity of existing or future occupiers of adjoining or nearby properties.
Angus Council will consider the impacts of development on:

- Air quality;
- Noise and vibration levels and times when such disturbances are likely to occur;
- Levels of light pollution;
- Levels of odours, fumes and dust;
- Suitable provision for refuse collection / storage and recycling;
- The effect and timing of traffic movement to, from and within the site, car parking and impacts on highway safety; and
- Residential amenity in relation to overlooking and loss of privacy, outlook, sunlight, daylight and overshadowing.

Angus Council may support development which is considered to have an impact on such considerations, if the use of conditions or planning obligations will ensure that appropriate mitigation and / or compensatory measures are secured.

Applicants may be required to submit detailed assessments in relation to any of the above criteria to the Council for consideration.

Where a site is known or suspected to be contaminated, applicants will be required to undertake investigation and, where appropriate, remediation measures relevant to the current or proposed use to prevent unacceptable risks to human health.

Policy TC2 : Residential Development
All proposals for new residential development*, including the conversion of non-residential buildings must:

o be compatible with current and proposed land uses in the surrounding area;
o provide a satisfactory residential environment for the proposed dwelling(s);
o not result in unacceptable impact on the built and natural environment, surrounding amenity, access and infrastructure; and
o include as appropriate a mix of house sizes, types and tenures and provision for affordable housing in accordance with Policy TC3 Affordable Housing.

Within development boundaries Angus Council will support proposals for new residential development where:

o the site is not allocated or protected for another use; and
o the proposal is consistent with the character and pattern of development in the surrounding area.

In countryside locations Angus Council will support proposals for the development of houses which fall

into at least one of the following categories:

- retention, renovation or acceptable replacement of existing houses;
- conversion of non-residential buildings;
- regeneration or redevelopment of a brownfield site that delivers significant visual or environmental improvement through the removal of derelict buildings, contamination or an incompatible land use;
- single new houses where development would:
- round off an established building group of 3 or more existing dwellings; or
- meet an essential worker requirement for the management of land or other rural business.
- in Rural Settlement Units (RSUs)**, fill a gap between the curtilages of two houses, or the curtilage of one house and a metalled road, or between the curtilage of one house and an existing substantial building such as a church, a shop or a community facility; and
- in Category 2 Rural Settlement Units (RSUs), as shown on the Proposals Map, gap sites (as defined in the Glossary) may be developed for up to two houses.

Further information and guidance on the detailed application of the policy on new residential development in countryside locations will be provided in supplementary planning guidance, and will address:

- the types of other buildings which could be considered suitable in identifying appropriate gap sites for the development of single houses in Category 1 Rural Settlement Units, or for the development of up to two houses in Category 2 Rural Settlement Units.
- the restoration or replacement of traditional buildings.
- the development of new large country houses.

*includes houses in multiple occupation, non-mainstream housing for people with particular needs, such as specialist housing for the elderly, people with disabilities, supported housing care and nursing homes.
**Rural Settlement Units are defined in the Glossary and their role is further explained on Page 9.

Policy PV5 : Protected Species
Angus Council will work with partner agencies and developers to protect and enhance all wildlife including its habitats, important roost or nesting places. Development proposals which are likely to affect protected species will be assessed to ensure compatibility with the appropriate regulatory regime.

European Protected Species
Development proposals that would, either individually or cumulatively, be likely to have an unacceptable adverse impact on European protected species as defined by Annex 1V of the Habitats Directive (Directive 92/24/EEC) will only be permitted where it can be demonstrated to the satisfaction of Angus Council as planning authority that:

- there is no satisfactory alternative; and
- there are imperative reasons of overriding public health and/or safety, nature, social or economic interest and beneficial consequences for the environment, and
- the development would not be detrimental to the maintenance of the population of a European protected species at a favourable conservation status in its natural range

.
Other Protected Species
Development proposals that would be likely to have an unacceptable adverse effect on protected species unless justified in accordance with relevant species legislation (Wildlife and Countryside Act 1981 and the Protection of Badgers Act 1992) subject to any consequent amendment or replacement.

Further information on protected sites and species and their influence on proposed development will be set out in a Planning Advice Note.

Policy PV7 : Woodland, Trees and Hedges
Ancient semi-natural woodland is an irreplaceable resource and should be protected from removal and potential adverse impacts of development. The council will identify and seek to enhance woodlands of high nature conservation value. Individual trees, especially veteran trees or small groups of trees which contribute to landscape and townscape settings may be protected through the application of Tree

Preservation Orders (TPO).

Woodland, trees and hedges that contribute to the nature conservation, heritage, amenity, townscape or landscape value of Angus will be protected and enhanced. Development and planting proposals should:

- protect and retain woodland, trees and hedges to avoid fragmentation of existing provision;
- be considered within the context of the Angus Woodland and Forestry Framework where woodland planting and management is planned;
- ensure new planting enhances biodiversity and landscape value through integration with and contribution to improving connectivity with existing and proposed green infrastructure and use appropriate species;
- ensure new woodland is established in advance of major developments;
- undertake a Tree Survey where appropriate; and
- identify and agree appropriate mitigation, implementation of an approved woodland management plan and re-instatement or alternative planting.

Angus Council will follow the Scottish Government Control of Woodland Removal Policy when considering proposals for the felling of woodland.

Policy PV8 : Built and Cultural Heritage
Angus Council will work with partner agencies and developers to protect and enhance areas designated for their built and cultural heritage value. Development proposals which are likely to affect protected sites, their setting or the integrity of their designation will be assessed within the context of the appropriate regulatory regime.

National Sites
Development proposals which affect Scheduled Monuments, Listed Buildings and Inventory Gardens and Designed Landscapes will only be supported where:

- the proposed development will not adversely affect the integrity of the site or the reasons for which it was designated;
- any significant adverse effects on the site or its setting are significantly outweighed by social, environmental and/or economic benefits; and
- appropriate measures are provided to mitigate any identified adverse impacts.

Proposals for enabling development which is necessary to secure the preservation of a listed building may be acceptable where it can be clearly shown to be the only means of preventing its loss and securing its long term future. Any development should be the minimum necessary to achieve these aims. The resultant development should be designed and sited carefully in order to preserve or enhance the character and setting of the listed building.

Regional and Local Sites
Development proposals which affect local historic environment sites as identified by Angus Council (such as Conservation Areas, sites of archaeological interest) will only be permitted where:

- supporting information commensurate with the site's status demonstrates that the integrity of the historic environment value of the site will not be compromised; or
- the economic and social benefits significantly outweigh the historic environment value of the site.

Angus Council will continue to review Conservation Area boundaries and will include Conservation Area Appraisals and further information on planning and the built and cultural heritage in a Planning Advice Note.

Policy PV12 : Managing Flood Risk
To reduce potential risk from flooding there will be a general presumption against built development proposals:

- on the functional floodplain;
- which involve land raising resulting in the loss of the functional flood plain; or
- which would materially increase the probability of flooding to existing or planned development.

Development in areas known or suspected to be at the upper end of low to medium risk or of medium to high flood risk (as defined in Scottish Planning Policy (2014), see Table 4) may be required to undertake a flood risk assessment. This should demonstrate:

- that flood risk can be adequately managed both within and outwith the site;
- that a freeboard allowance of at least 500-600mm in all circumstances can be provided;
- access and egress to the site can be provided that is free of flood risk; and
- where appropriate that water-resistant materials and construction will be utilised.

Where appropriate development proposals will be:

- assessed within the context of the Shoreline Management Plan, Strategic Flood Risk Assessments and Flood Management Plans; and
- considered within the context of SEPA flood maps to assess and mitigate surface water flood potential.

Built development should avoid areas of ground instability (landslip) coastal erosion and storm surges. In areas prone to landslip a geomorphological assessment may be requested in support of a planning application to assess degree of risk and any remediation measures if required to make the site suitable for use.

Policy PV15 : Drainage Infrastructure
Development proposals within Development Boundaries will be required to connect to the public sewer where available.

Where there is limited capacity at the treatment works Scottish Water will provide additional wastewater capacity to accommodate development if the Developer can meet the 5 Criteria*. Scottish Water will instigate a growth project upon receipt of the 5 Criteria and will work with the developer, SEPA and Angus Council to identify solutions for the development to proceed.

Outwith areas served by public sewers or where there is no viable connection for economic or technical reasons private provision of waste water treatment must meet the requirements of SEPA and/or The Building Standards (Scotland) Regulations. A private drainage system will only be considered as a means towards achieving connection to the public sewer system, and when it forms part of a specific development proposal which meets the necessary criteria to trigger a Scottish Water growth project.

All new development (except single dwelling and developments that discharge directly to coastal waters) will be required to provide Sustainable Drainage Systems (SUDs) to accommodate surface water drainage and long term maintenance must be agreed with the local authority. SUDs schemes can contribute to local green networks, biodiversity and provision of amenity open space and should form an integral part of the design process.

Drainage Impact Assessment (DIA) will be required for new development where appropriate to identify potential network issues and minimise any reduction in existing levels of service.

*Enabling Development and our 5 Criteria (http://scotland.gov.uk/Resource/0040/00409361.pdf)

AC2

ANGUS COUNCIL

PLANNING

CONSULTATION SHEET

PLANNING APPLICATION NO	**21/00707/FULL**

Tick boxes as appropriate

ROADS	No Objection		
	Interest	✓	(Comments to follow within 14 days)

Date	15	04	22

PLEASE DO NOT TAKE AWAY THE LAST SET OF PLANS WHERE POSSIBLE COPIES WILL BE PROVIDED ON REQUEST

ELECTRONIC SUBMISSION DRAWINGS TO BE VIEWED VIA IDOX

AC2

Memorandum

Infrastructure
Roads & Transportation

TO: DEVELOPMENT STANDARDS MANAGER, PLANNING

FROM: TRAFFIC MANAGER, ROADS

YOUR REF:

OUR REF: CH/AG/ TD1.3

DATE: 06 MAY 2022

SUBJECT: **PLANNING APPLICATION REF. NO. 21/00707/FULL – PROPOSED ERECTION OF A DWELLING HOUSE AT HAWTHORN COTTAGE, BALDOVAN**

I refer to the above planning application which relates to previous applications reference numbers, 19/00704FULL and 20/00167/FULL.

The National Roads Development Guide, adopted by the Council as its road standards, is relative to the consideration of the application and the following comments take due cognisance of that document.

The site is located on land, which is accessed from the classified, Dundee to Dronley road, (Craigmill Road) which is subject to a 30mph speed restriction.

The submitted drawing no. 5865-307 shows a double garage and parking area which provides adequate car parking space for the proposed development.

I have considered the application in terms of the traffic likely to be generated by it, and its impact on the public road network. As a result, I do not object to the application but would recommend that any consent granted shall be subject to the following condition:

1 Prior to the commencement of development, a scheme of improvements to the access track between Craigmill Road and the application site shall be submitted to and approved in writing by the planning authority. The scheme of improvement shall include:

(i) a drawing showing the widening of the access track and/or provision of inter-visible passing places at maximum intervals of 150 metres;

(ii) a construction specification in accordance with the council's planning advice note; PAN 17 – Miscellaneous Planning Policies;

(iii) the provision of adequate means of surface water drainage; and

(iv) an agreement for the upgrading works with any other owner(s) or person(s) with rights of access over the track, or other suitable evidence of a legal right to affect the scheme of improvements.

The scheme of improvements to the access track shall thereafter be completed prior to the commencement of any other works in connection with the planning permission hereby approved.
Reason: To provide a safe and suitable access and an adequate level of residential amenity.

I trust the above comments are of assistance but should you have any queries, please contact Adrian Gwynne on extension 2036.

pp

AC3

Thursday, 21 April 2022

Local Planner
Planning Service
Angus Council
Forfar
DD8 1AN

Development Operations
The Bridge
Buchanan Gate Business Park
Cumbernauld Road
Stepps
Glasgow
G33 6FB

Development Operations
Freephone Number - 0800 3890379
E-Mail - DevelopmentOperations@scottishwater.co.uk
www.scottishwater.co.uk
Follow Us

Dear Customer,

Land Adjacent To Hawthorn Cottage, Baldovan, Strathmartine, DD3 0PD
Planning Ref: 21/00707/FULL
Our Ref: DSCAS-0063012-26G
Proposal: Erection of a dwelling house

Please quote our reference in all future correspondence

Audit of Proposal

Scottish Water has no objection to this planning application; however, the applicant should be aware that this does not confirm that the proposed development can currently be serviced. Please read the following carefully as there may be further action required. Scottish Water would advise the following:

Water Capacity Assessment

Scottish Water has carried out a Capacity review and we can confirm the following:

- There is currently sufficient capacity in the Clatto Water Treatment Works to service your development. However, please note that further investigations may be required to be carried out once a formal application has been submitted to us.

Waste Water Capacity Assessment

- There is currently sufficient capacity for a foul only connection in the Hatton PFI Waste Water Treatment works to service your development. However, please note that further investigations may be required to be carried out once a formal application has been submitted to us.

Please Note

- The applicant should be aware that we are unable to reserve capacity at our water and/or waste water treatment works for their proposed development. Once a formal connection application is submitted to Scottish Water after full planning permission has been granted, we will review the availability of capacity at that time and advise the applicant accordingly.

Asset Impact Assessment

Scottish Water records indicate that there is live infrastructure in the proximity of your development area that may impact on existing Scottish Water assets.

- 900mm combined sewer

The applicant must identify any potential conflicts with Scottish Water assets and contact our Asset Impact Team via our Customer Portal for an appraisal of the proposals.

The applicant should be aware that any conflict with assets identified will be subject to restrictions on proximity of construction. Please note the disclaimer at the end of this response.

Written permission must be obtained before any works are started within the area of our apparatus

Surface Water

For reasons of sustainability and to protect our customers from potential future sewer flooding, Scottish Water will not accept any surface water connections into our combined sewer system.

There may be limited exceptional circumstances where we would allow such a connection for brownfield sites only, however this will require significant justification from the customer taking account of various factors including legal, physical, and technical challenges.

In order to avoid costs and delays where a surface water discharge to our combined sewer system is anticipated, the developer should contact Scottish Water at the earliest opportunity with strong evidence to support the intended drainage plan prior to making a connection request. We will assess this evidence in a robust manner and provide a decision that reflects the best option from environmental and customer perspectives.

General notes:

- Scottish Water asset plans can be obtained from our appointed asset plan providers:
    - Site Investigation Services (UK) Ltd
    - Tel: 0333 123 1223
    - Email: sw@sisplan.co.uk

- www.sisplan.co.uk

- Scottish Water's current minimum level of service for water pressure is 1.0 bar or 10m head at the customer's boundary internal outlet. Any property which cannot be adequately serviced from the available pressure may require private pumping arrangements to be installed, subject to compliance with Water Byelaws. If the developer wishes to enquire about Scottish Water's procedure for checking the water pressure in the area, then they should write to the Customer Connections department at the above address.

- If the connection to the public sewer and/or water main requires to be laid through land out-with public ownership, the developer must provide evidence of formal approval from the affected landowner(s) by way of a deed of servitude.

- Scottish Water may only vest new water or waste water infrastructure which is to be laid through land out with public ownership where a Deed of Servitude has been obtained in our favour by the developer.

- The developer should also be aware that Scottish Water requires land title to the area of land where a pumping station and/or SUDS proposed to vest in Scottish Water is constructed.

- Please find information on how to submit application to Scottish Water at our Customer Portal.

Next Steps:

All Proposed Developments

All proposed developments require to submit a Pre-Development Enquiry (PDE) Form to be submitted directly to Scottish Water via our Customer Portal prior to any formal Technical Application being submitted. This will allow us to fully appraise the proposals.

Where it is confirmed through the PDE process that mitigation works are necessary to support a development, the cost of these works is to be met by the developer, which Scottish Water can contribute towards through Reasonable Cost Contribution regulations.

Non Domestic/Commercial Property:

Since the introduction of the Water Services (Scotland) Act 2005 in April 2008 the water industry in Scotland has opened to market competition for non-domestic customers. All Non-domestic Household customers now require a Licensed Provider to act on their behalf for new water and waste water connections. Further details can be obtained at www.scotlandontap.gov.uk

Trade Effluent Discharge from Non-Domestic Property:

- Certain discharges from non-domestic premises may constitute a trade effluent in terms of the Sewerage (Scotland) Act 1968. Trade effluent arises from activities including; manufacturing, production and engineering; vehicle, plant and equipment washing, waste and leachate management. It covers both large and small premises, including activities such as car washing and launderettes. Activities not covered include hotels, caravan sites or restaurants.
- If you are in any doubt as to whether the discharge from your premises is likely to be trade effluent, please contact us on 0800 778 0778 or email TEQ@scottishwater.co.uk using the subject “Is this Trade Effluent?". Discharges that are deemed to be trade effluent need to apply separately for permission to discharge to the sewerage system. The forms and application guidance notes can be found here.
- Trade effluent must never be discharged into surface water drainage systems as these are solely for draining rainfall run off.
- For food services establishments, Scottish Water recommends a suitably sized grease trap is fitted within the food preparation areas, so the development complies with Standard 3.7 a) of the Building Standards Technical Handbook and for best management and housekeeping practices to be followed which prevent food waste, fat oil and grease from being disposed into sinks and drains.
- The Waste (Scotland) Regulations which require all non-rural food businesses, producing more than 50kg of food waste per week, to segregate that waste for separate collection. The regulations also ban the use of food waste disposal units that dispose of food waste to the public sewer. Further information can be found at www.resourceefficientscotland.com

I trust the above is acceptable however if you require any further information regarding this matter please contact me on **0800 389 0379** or via the e-mail address below or at planningconsultations@scottishwater.co.uk.

Yours sincerely,

Angela Allison
Development Services Analyst
PlanningConsultations@scottishwater.co.uk

Scottish Water Disclaimer:

“It is important to note that the information on any such plan provided on Scottish Water’s infrastructure, is for indicative purposes only and its accuracy cannot be relied upon. When the exact location and the nature of the infrastructure on the plan is a material requirement then you should undertake an appropriate site investigation to confirm its actual position in the ground and to determine if it is suitable for its intended purpose. By using the plan you agree that Scottish Water will not be liable for any loss, damage or costs caused by relying upon it or from carrying out any such site investigation."

AC4

From:	Milne, Alasdair
To:	PLNProcessing
Cc:	James Wright
Subject:	Re: Planning Application Consultation 21/00707/FULL SEPA Ref. 4956
Date:	27 April 2022 11:23:10

OFFICIAL

James,

Erection of a dwelling house
Land Adjacent To Hawthorn Cottage Baldovan Strathmartine
21/00707/FULL

I refer to the planning application detailed above and your consultation with SEPA of 11 April.

We have **no objection** to this planning application.

We have reviewed the Millards Flood Risk Assessment provided in support of the planning application and have compared it to the output from the detailed Downfield & Dundee Flood Study – they both demonstrate that the proposed house location is out with the functional floodplain.

We therefore have no concerns in relation to flood risk.
Despite the current ground level being sufficiently above the 200-year flood level, we do, however, agree with the suggestion within the FRA that the land around the proposed house footprint should be no lower than 73.9m AOD – this is over 2m above the flood level, so is suitably conservative and precautionary.

I trust these brief comments are of assistance – please do not hesitate to contact me if you require any further information.

Regards
Alasdair

Alasdair Milne
Senior Planning Officer
Scottish Environment Protection Agency
Strathallan House
Castle Business Park
Stirling
FK9 4TZ

Telephone 01786 452537
Mobile [redacted]
www.sepa.org.uk

necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our website planning pages

-----Original Message-----
From: PLNProcessing@angus.gov.uk <PLNProcessing@angus.gov.uk>
Sent: 11 April 2022 12:05
To: Planning South East <PlanningSouthEast@sepa.org.uk>
Subject: Planning Application Consultation 21/00707/FULL

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Please see attached document.

From: Georgia Kirtsi-Mathieson
Sent:20 May 2022 14:35:57 +0100
To: James Wright
Cc: Janice Corrigan
Subject: Planning Application 21/00707/FULL

Hi James

Planning Permission: 21/00707/FULL

Erection of a dwelling house

Land Adjacent To Hawthorn Cottage Baldovan Strathmartine

Further to your consultation request, I have now considered the above planning application and have the following observations with regard to flooding:

Observations

1. The planning application (21/00707/FULL) is for the erection of a dwelling house at land adjacent to Hawthorn Cottage, Baldovan in Strathmartine. Previous application on site was 20/00167/FULL.

2. A Flood Risk Assessment (FRA) by Millard Consulting, dated February 2022, as previously requested, has been submitted in support of this planning application; demonstrating that the proposed dwelling house is out with the functional floodplain.

3. SEPA has now removed their objection on the above planning application and has requested as stated in the FRA that despite the current ground level being sufficiently above the 200-year flood level, that the land around the proposed house footprint should be no lower than 73.9m AOD.

4. It is not proposed to use SUDS to deal with the surface water. SUDS is a legal requirement for new development, with the exception of runoff from a single dwelling and direct discharges to coastal waters.

Based on the above, I have no objection to this proposed development. However, as stated in the FRA, it is recommended that finished ground levels around the perimeter of the proposed house are set no lower than 73.9m AOD. Should you have any further queries please contact me.

Regards

Georgia

Georgia Kirtsi-Mathieson | Design Engineer - Flood Risk and Structures | Angus Council | 01307 492140 | kirtsi-mathiesong@angus.gov.uk | www.angus.gov.uk

MEMORANDUM

TO: James Wright, Planning Officer (Development Standards)

FROM: Alan Milne, Environmental Protection Officer

YOUR REF: 21/00707/FULL

OUR REF: Site 567

DATE: 10 June 2022

SUBJECT: Erection of a dwelling house at Land Adjacent To Hawthorn Cottage, Baldovan, Strathmartine.

With reference to the above planning application and your consultation requesting comment regarding contaminated land, I can offer the following comments.

Available information including historic mapping and aerial photography has been reviewed. It would be useful to have some further information about the previous uses of the land and studies should be directed to any potential source of contamination. There may have been storage of chemicals, vehicles or fuel tanks, as well as processes in which chemicals were used that may have resulted in contamination.

I have no objections to the above application however would recommend the undernoted suspensive conditions be placed on any consent granted;

1) That, prior to commencement of any development works, a comprehensive contaminated land investigation report shall be submitted for the written approval of the planning authority. The investigation shall be completed in accordance with a recognised code of practice such as British Standards Institution "The Investigation of Potentially Contaminated Sites – Code of Practice" (BS 10175: 2011). The report must include a site-specificrisk assessment of all relevant pollutant linkages, as required in Scottish Government Planning Advice Note 33.

2) That where the contaminated land investigation report identifies any unacceptable risk or risks as defined under Part IIA of the Environmental Protection Act 1990, a detailed remediation strategy shall be submitted for the written approval of the planning authority. No works, other than investigative, demolition or site clearance works shall be carried out on the site prior to the remediation strategy being approved by the planning authority. Prior to the occupation of the development the remediation strategy shall be fully implemented and a validation report confirming that all necessary remediation works have been undertaken shall be submitted for the written approval of the planning authority.

Comments for Planning Application 21/00707/FULL

Application Summary

Application Number: 21/00707/FULL
Address: Land Adjacent To Hawthorn Cottage Baldovan Strathmartine
Proposal: Erection of a dwelling house
Case Officer: James Wright

Customer Details

Name: Mr George Ross
Address: 2 Baldovan Nurseries Strathmartine Dundee

Comment Details

Commenter Type: Member of Public
Stance: Customer objects to the Planning Application
Comment Reasons:
Comment:Mr G W Ross
2 Baldovan Nurseries
Strathmartine
By Dundee
DD3 0PD

17/04/22

Angus Council Planning Department
Angus House
Forfar
Angus

Dear Sirs

Application number 21/00707/FULL- Erection of Dwelling House adjacent to Hawthorn Cottage.

I would like my objection to this planning application to be noted for the following reasons:

1. Local Development Plan
The area of proposed development falls outwill Angus Council's development boundary map for the Strathmartine area.
2. Green Belt Land
The proposed build is to be situated on green belt land as determined by the Scottish Office in

2021.

3. Access

Current "right of access" use of the lane is permitted to Hawthorn Cottage. The owners of Hawthorn cottage do not have legal authority to extend right of access to further properties without permission from the owners of the access lane. As a property owner with a title interest in the lane I will not be giving permission for additional properties to use the lane.

4. Impact on Adjacent Property and the Local Area

The impact of a further property in this small pocket of land will have a detrimental effect on the existing properties already sited on the access lane -

- More domestic vehicles using the single-track lane causing a noise and traffic nuisance to this quiet residential area.
- More delivery vehicles using the single-track lane, including oil tankers as there are no gas connections to the area, and sludge tankers for the emptying of the septic tank, causing a noise and environmental pollution with the exhaust fumes.
- The garden walls and fences together with the boundary wall on Baldovan Road have been regularly damaged in the past with vehicles using the lane. The most recent episode being the damage caused to the Baldovan Road boundary wall by a reversing skip lorry entering the lane.
- The proposed development site is contaminated with giant hogweed and Japanese knotweed.

5. Privacy and Amenity

The privacy of the existing dwellings will be affected b

25.04. PC AC82.

Rynfield,
Baldovan,
Strathmartine,
Dundee,
DD3 0PD
22/04/2022

Angus Council Planning Dept.
Angus House
Forfar
Angus

Dear Sirs,
Application No. 21/00707/FULL
Erection of Dwelling House adjacent to Hawthorn Cottage

I would like to object to the above for the following reasons :-

1. Local Plan

   The Development would be contrary to a range of guidance in The Plan.

2. Vehicular Access

   The access road is a long single-track road with poor visibility and no passing places. The access on to Craigmill Road may meet minimum standards but remains dangerous. The visibility is particularly poor in the Bridgefoot direction in the summer when the vegetation growth is abundant.
   The main issues are the downward slopes on the main road on both sides around bends encouraging unsafe speeds coming up to a hidden junction.

3. Housing Demand/Supply in the Vicinity

   The applicant shows no evidence of a need for additional supply in the vicinity. An idea of demand for Dighty Valley sites in the vicinity can be seen from the failure to develop the available single plot next to the old Bridgefoot cemetery which was on the market for years. The recently approved redevelopment of Strathmartine Hospital will surely take care of demand for years to come.

4. Flooding

   My concern regarding flooding was never over the Dighty River flooding. In my 20 years here, there has been flooding of the access road numerous times (up to 1 metre deep in places).
   This flooding comes from the old drainage system associated with the former Baldovan House grounds.
   I have had to put in extensive soakaway areas to alleviate this, but it remains a problem in periods of prolonged rainfall.
   The applicant is aware of this as I helped him rescue a vehicle stuck in heavy mud on the access road during one of these floods.

5. Promotion of Wildlife

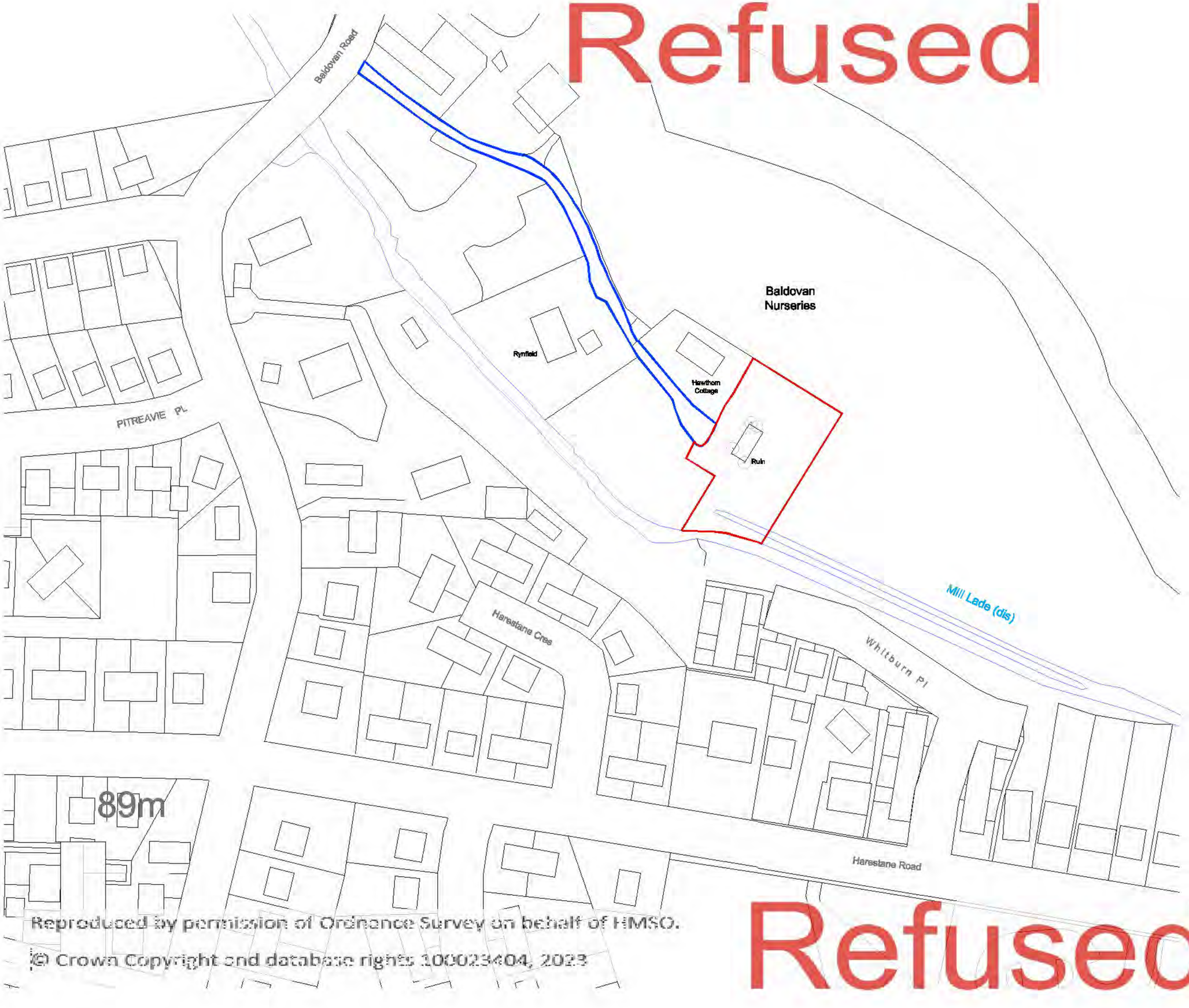
Having worked in local government in a previous lifetime, I am aware of attempts to promote the Dighty Valley as a wildlife corridor by Dundee, Angus and Tayside Councils. This has been hindered by residential housing development encroaching on parts of the corridor and fragmenting its overall potential. This proposal would add to this fragmentation. The proposed site has been in the hands of nature for more than eighty years and surely now belongs there.

As I pointed out in my objection to a previous application, there is a wealth of wildlife in this locality but it is at risk.

A single tale may give you some idea of how things can change. We had around six Roe Deer in the area during the year and I was saying this one time to a woman who had moved into the Betts housing development on the Dundee side of the Dighty over fifty years ago. She told me that when she first moved in, they regularly saw herds of up to forty Roe Deer in the area moving from Templeton Woods to the wooded areas at Baldovan House.

Yours Faithfully,
Grant Anderson

AC9



NORTH

0 10 20 30 40 50

SCALE 1:1250 (A3) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for STATUTORY purposes only. This is not a CONSTRUCTION drawing.

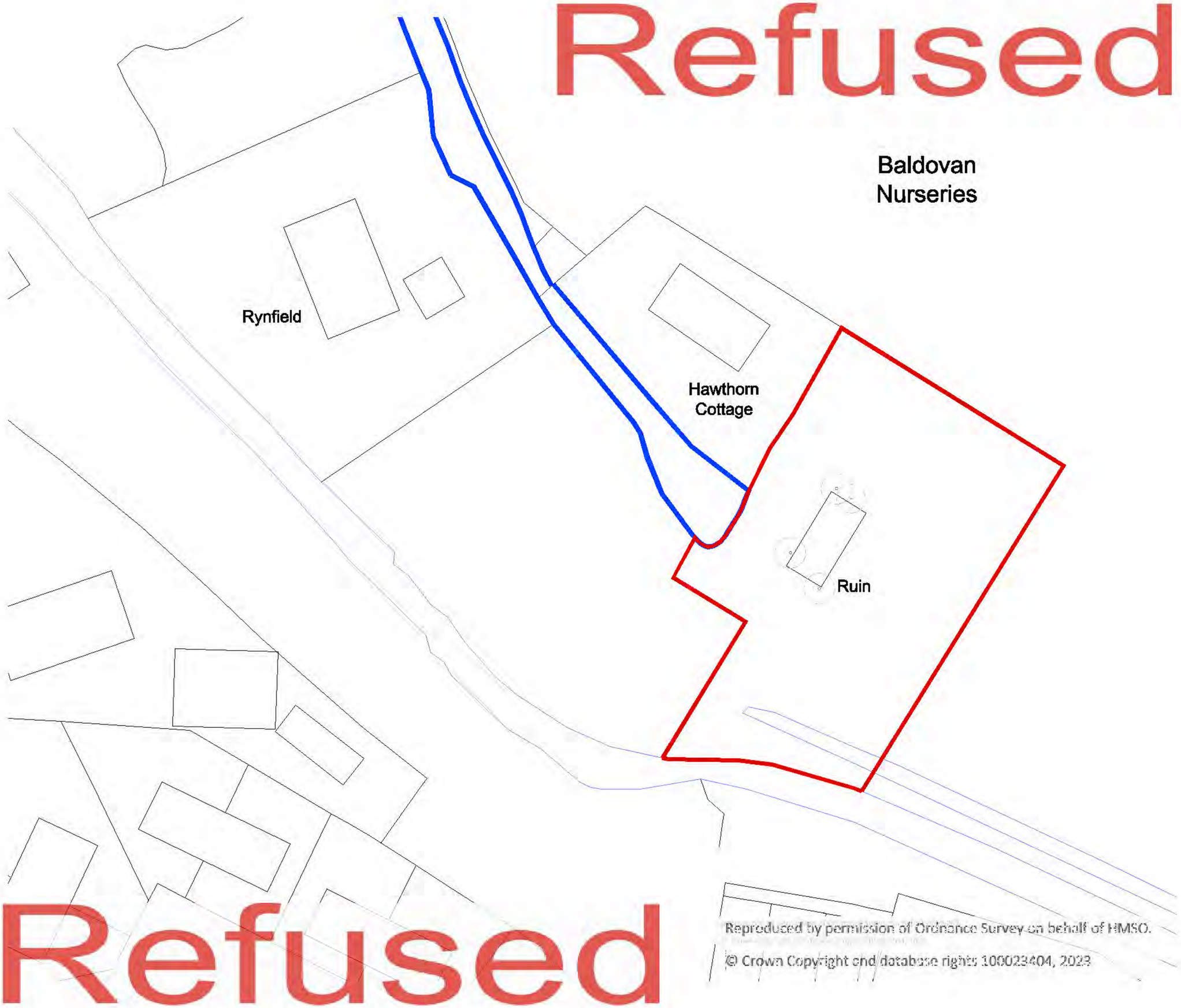
Legend:

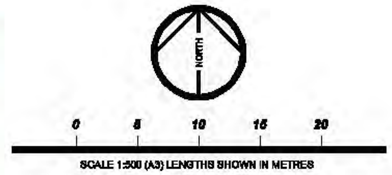
- Application Boundary
- Communal Access Road

Revisions :
A CH 09.03.20
Application Boundary Revised.

Project: New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hawthorn Cottage, Baldovan Road DD3 0PD	Drawing Title: Location Plan
	Issue Status: Planning — Drawing No.: 6885 - 301
Designer: DB — Date: July 2018 — Scale: 1:1250 @ A3 — Revision: A	

t: 01382 226828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
at: unit 5, district 10, greenmarket, dundee, dd1 4qb





SCALE 1:500 (A3) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.

Legend:

Application Boundary

Communal Access Road

Revisions :
A CH 09.03.20
Application Boundary Revised.

Project New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client Mr. Grant	
Address Land South East of Hawthorn Cottage, Baldovan Road DD3 0PD	**Drawing Title** Existing Site Plan
	Issue Status Planning / **Drawing No.** 5885 - 302
Designer DB / **Date** July 2018	**Scale** 1:500 @ A3 / **Revision** A

t: 01382 224826 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 6, district 10, greenmarket, dundee, dd1 4qb

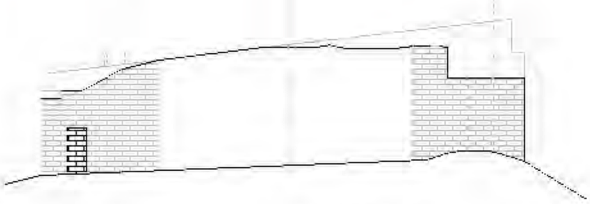
Refused

AC10

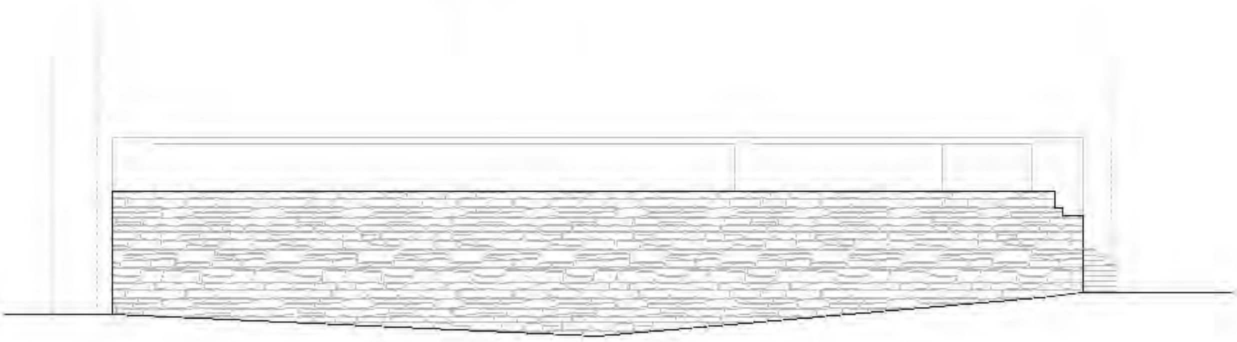
0 1 2 3 4 5

SCALE 1:100 (A4) LENGTHS SHOWN IN METRES

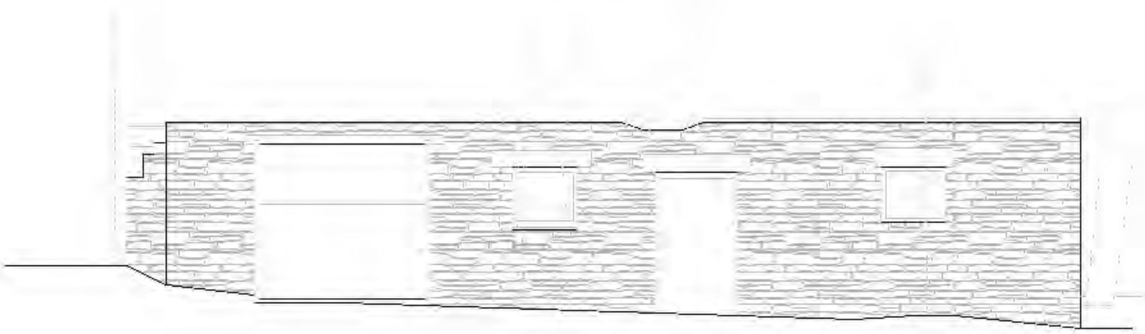
All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for STATUTORY purposes only. This is not a CONSTRUCTION drawing



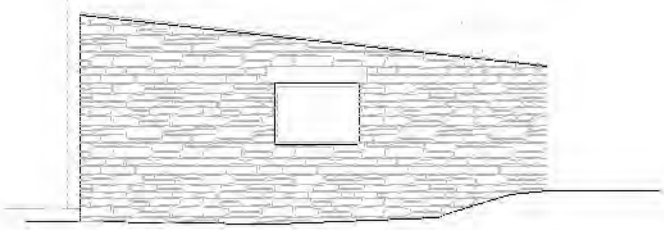
North - East Elevation



South - East Elevation



North - West Elevation



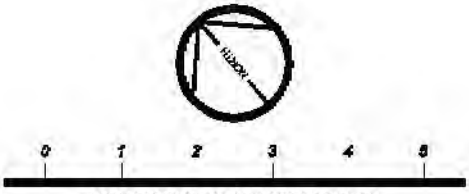
South - West Elevation

Refused

Project New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client Mr. Grant	
Address Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD	Drawing Title Existing Elevations
	Issue Status: Planning Drawing No.: 6686 - 304
Designer: DB Date: July 2018	Scale: 1:100 @ A4 Revision: A

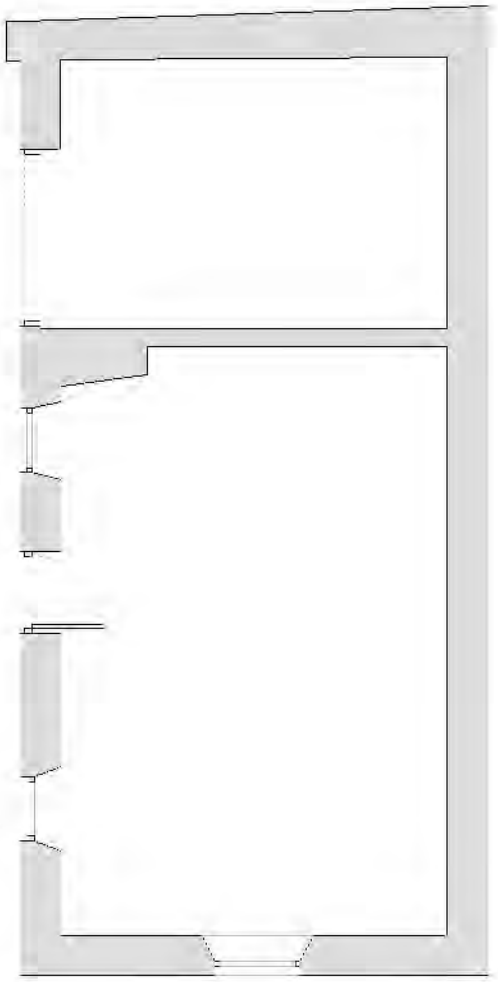
t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5 district 10 greenmarket, dundee, dd1 4qb

AC10



SCALE 1:100 (A4) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing

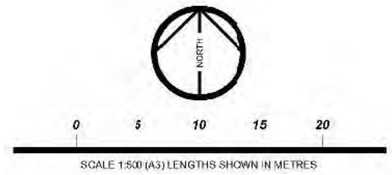


Project: New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hewnorn Cottage, Balcovan Road DD8 0PD	Drawing Title: Existing Floor Plan
	Issue Status: Planning — Drawing No.: 5606 - 903
Designer: DS — Date: July 2018	Scale: 1:100 @ A4 — Revision: -

t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: Unit 5 District 10, greenmarket, dundee, dd1 4qb

Refused

AC10



All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.

Legend:

Application Boundary

Communal Access Road

Baldovan Nurseries

Rynfield

Hawthorn Cottage

Revisions :

A CH 09.03.20
Application Boundary Revised.

B CH 27.04.20
Balcony Identified on Site Plan. Drawing Generally Updated.

Project
New Build Dwellinghouse

Client
Mr. Grant

Address
Land South East of Hawthorn Cottage, Baldovan Road
DD3 0PD

JON FRULLANI
ARCHITECT

Drawing Title
Existing Site Plan

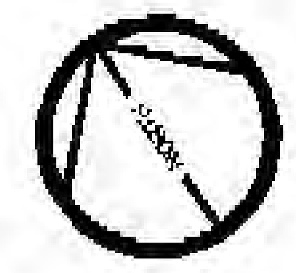
Issue Status: Planning
Drawing No: 5865 - 105

Design: DF
Date: July 2018
Scale: 1:500 @ A3
Revision: B

t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 6, district 10, greenmarket, dundee, dd1 4qb

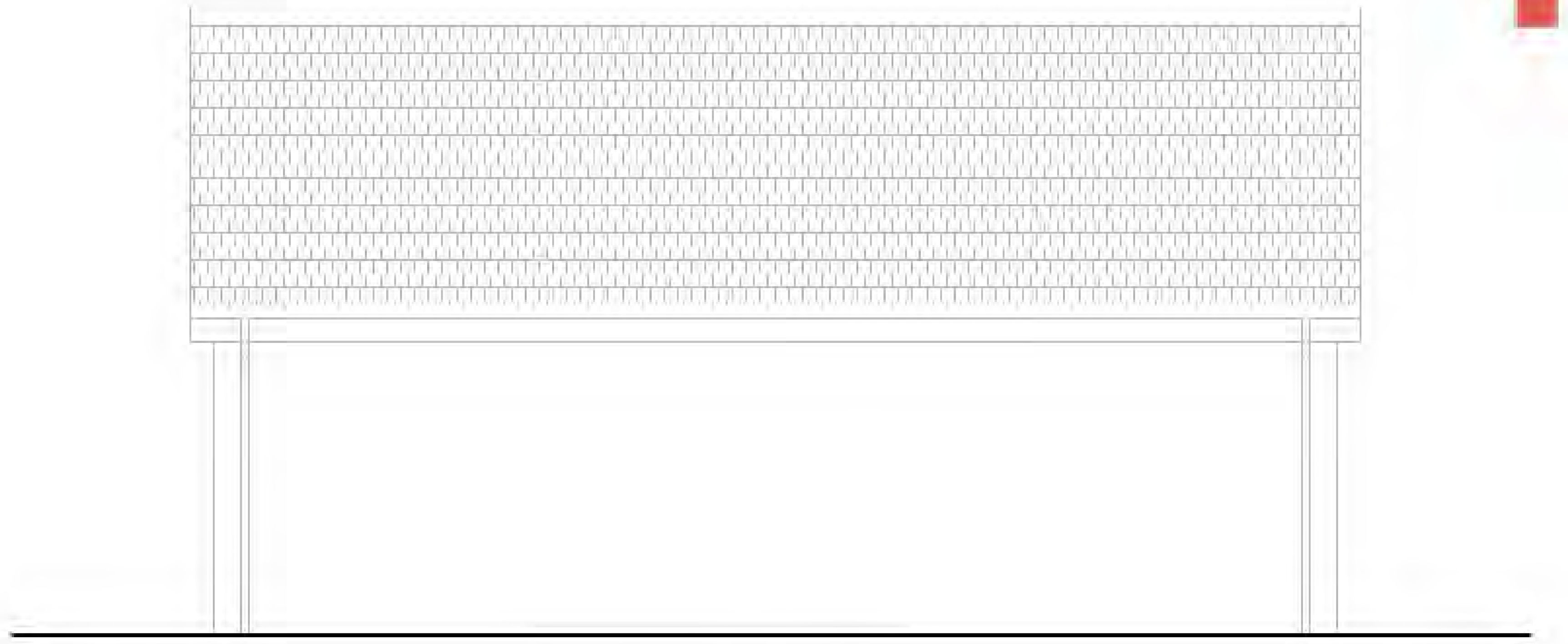
AC10

Refused

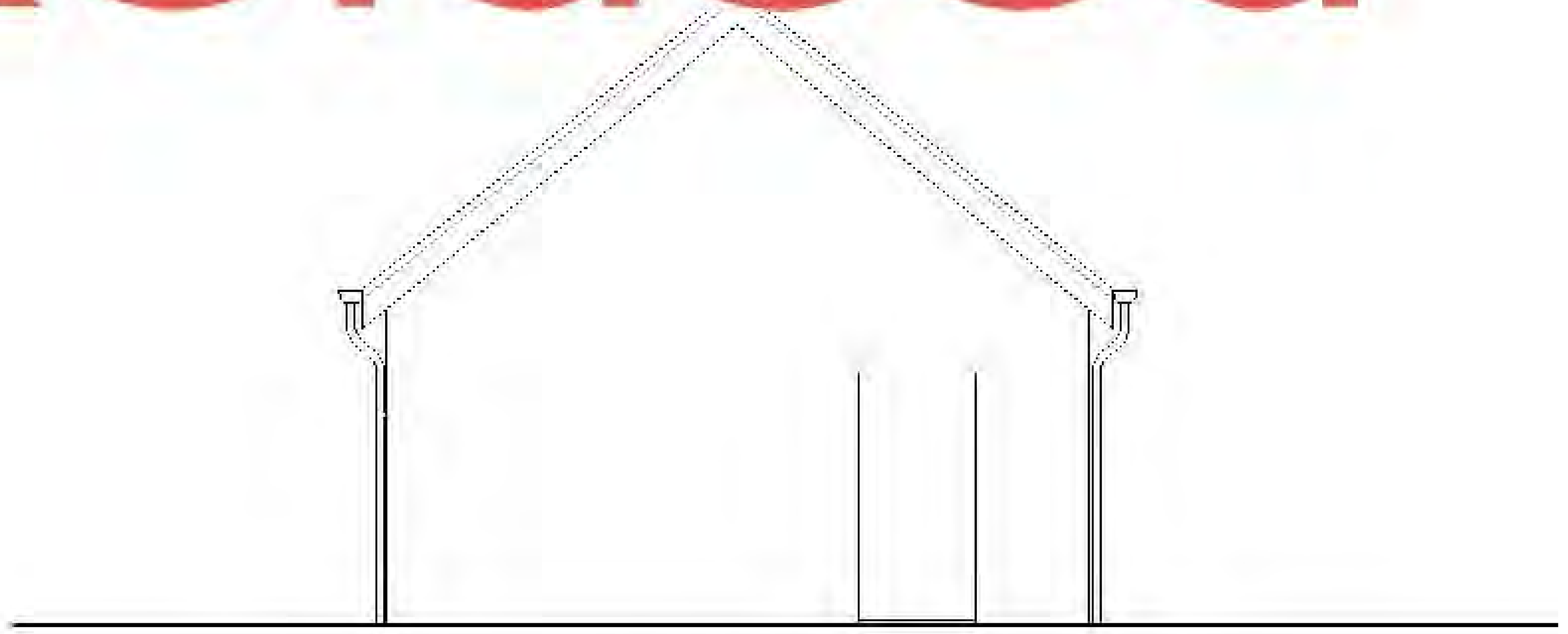


SCALE 1:100 (A3) LENGTHS SHOWN IN METRES

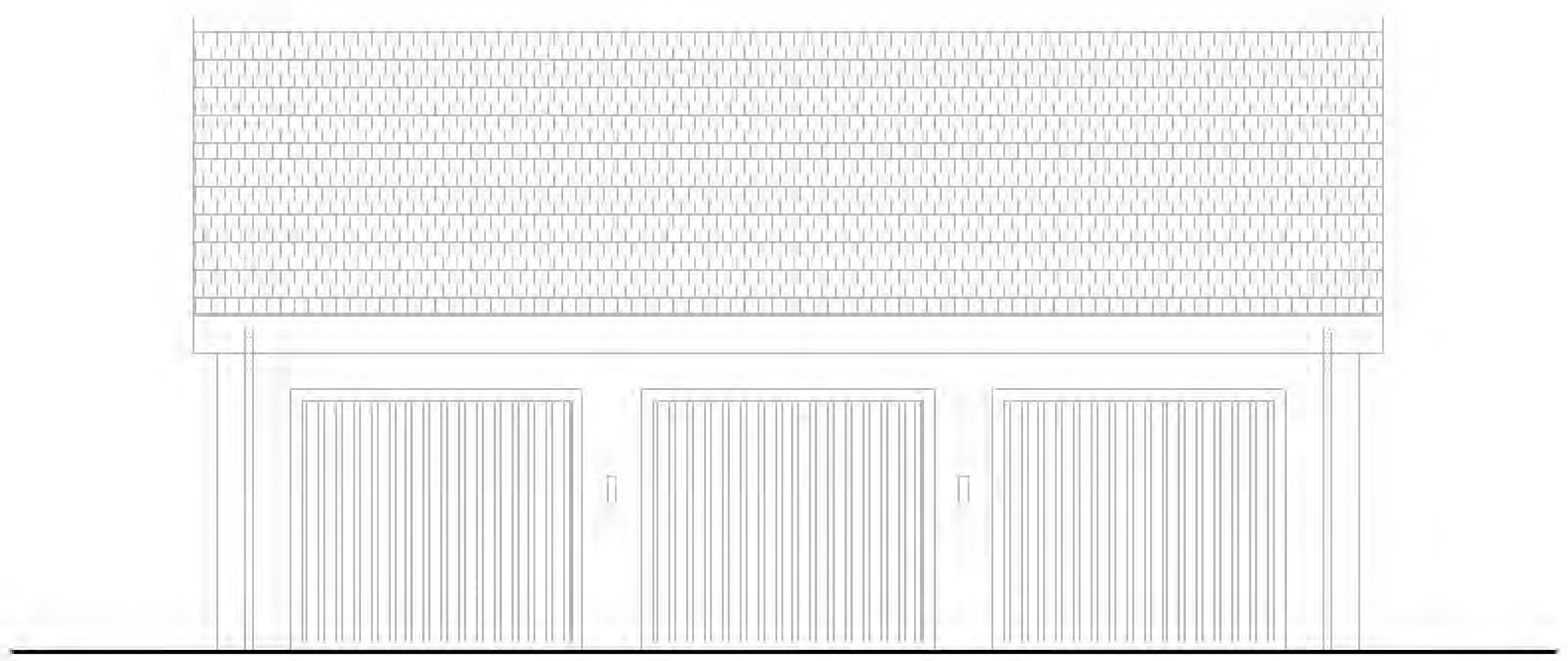
All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for STATUTORY purposes only. This is not a CONSTRUCTION drawing.



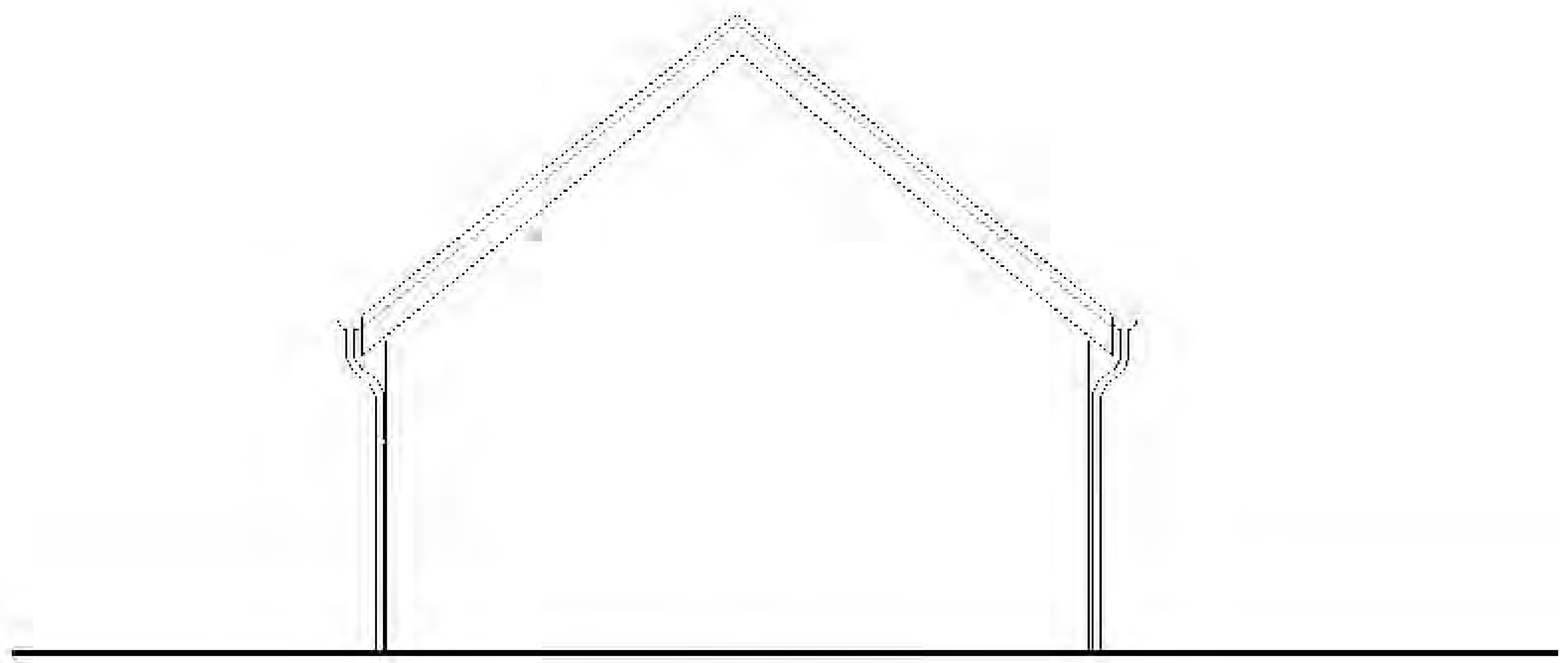
North Elevation



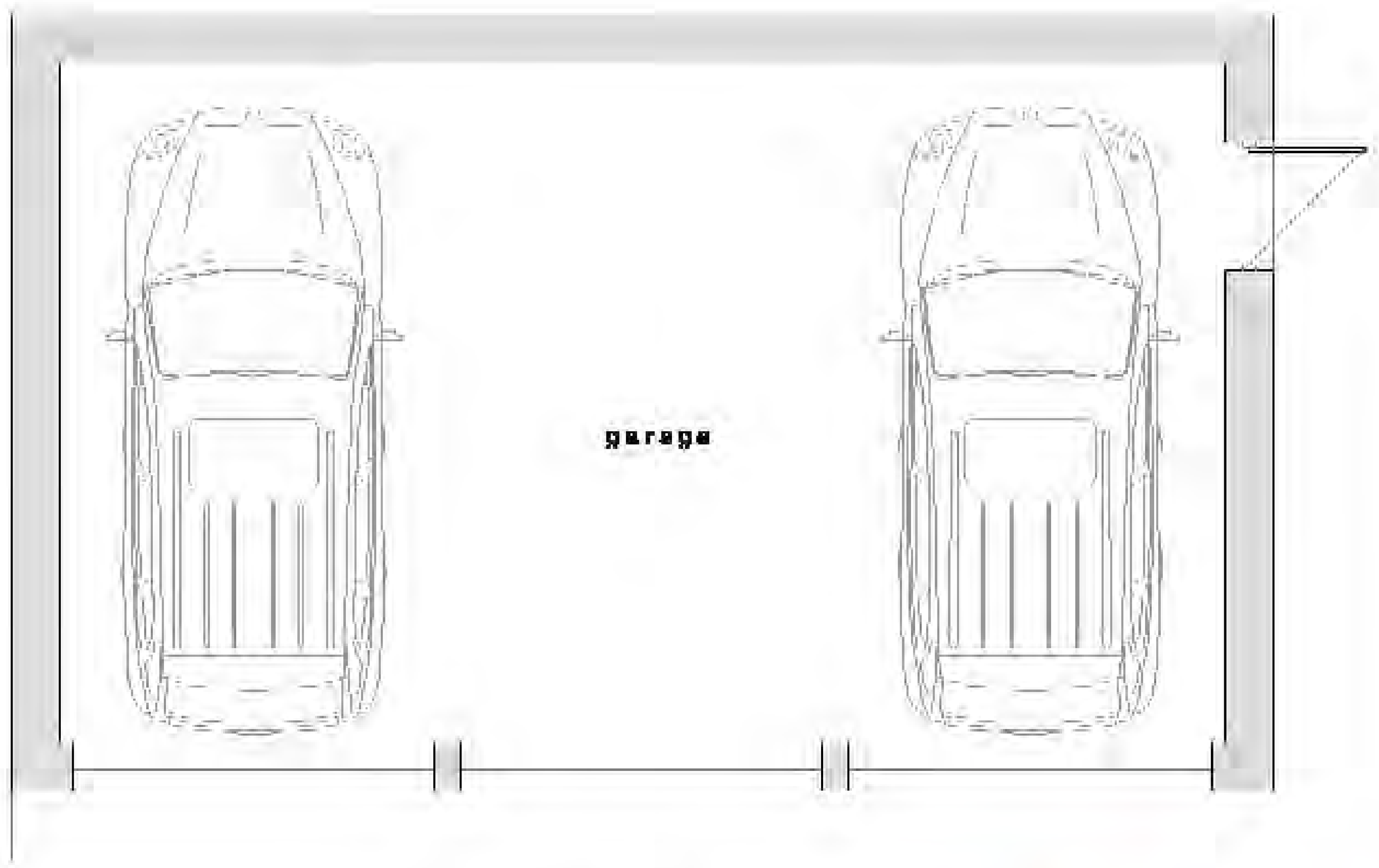
East Elevation



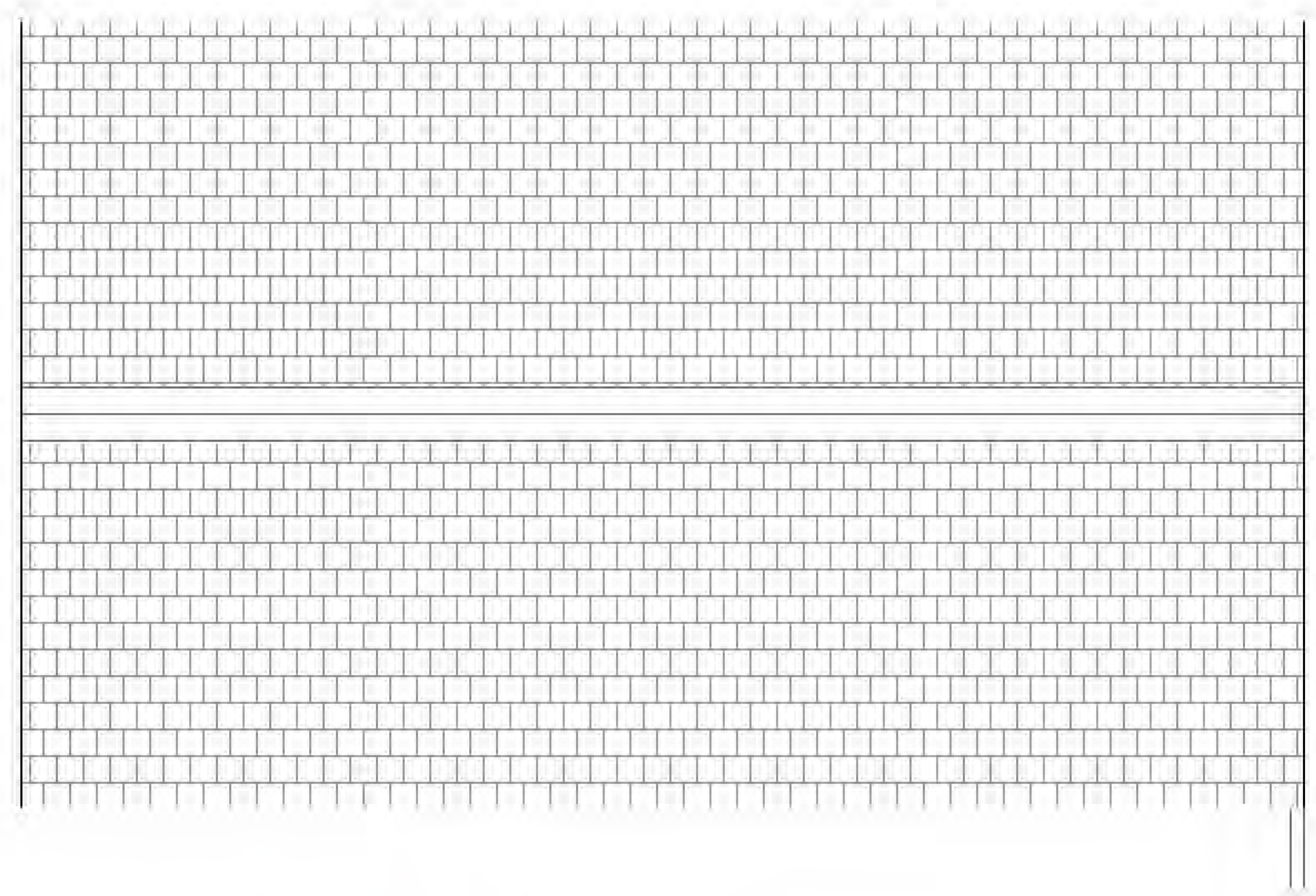
South Elevation



West Elevation



Floor Plan



Roof Plan

Refused

New Build Dwellinghouse

Mr. Grant

JON FRULLANI
ARCHITECT

Land South East of
Hawthorn Cottage, Baldovan Rd
DD3 0PD

Proposed Garage

Planning | 5866 - 307

RS	July 2019	1:100 @ A3	A

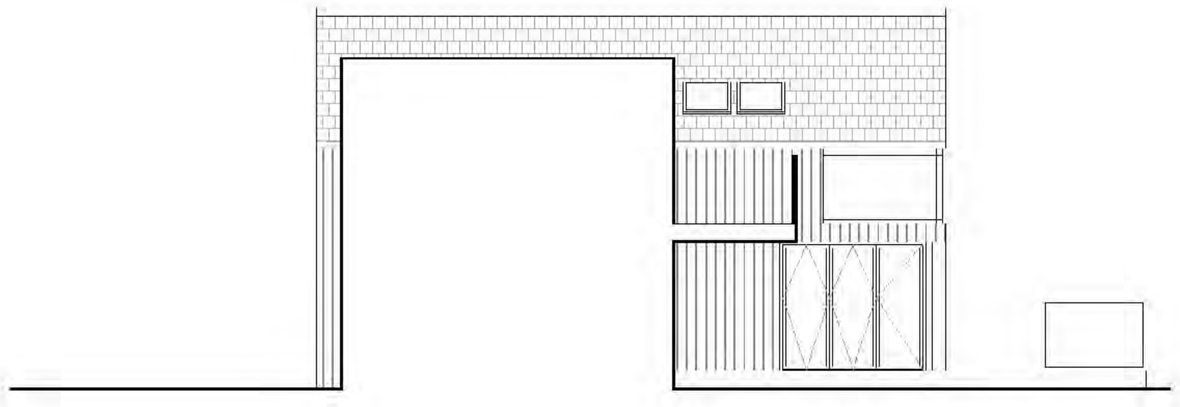
m: [redacted]

AC10

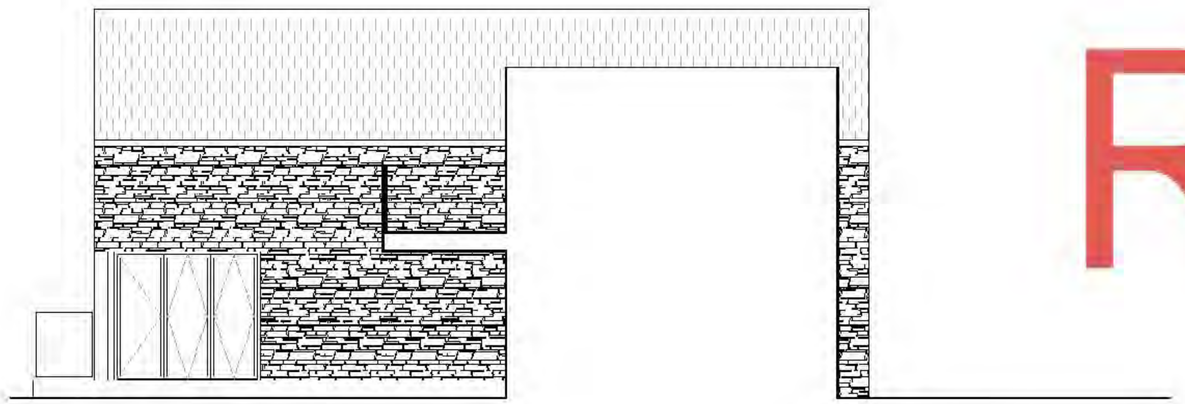
0 1 2 3 4 5

SCALE 1:100 (A3) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for STATUTORY purposes only. This is not a CONSTRUCTION drawing.



North - West Elevation - Internal

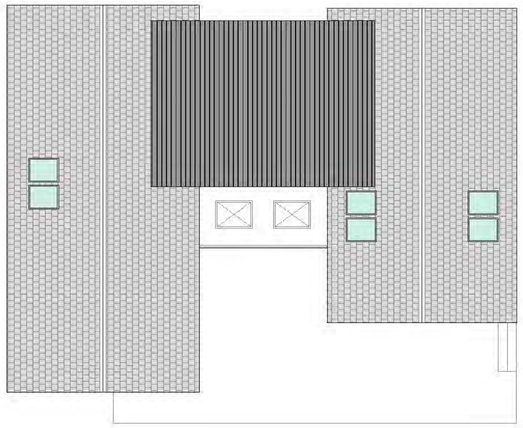


South - East Elevation - Internal

Project: New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD	Drawing title: Proposed Elevations Internal Elevations
	Issue Status: Planning
	Drawing No: 0535 - 300
Designer: CH	Date: August 2021
	Scale: 1:100 @ A3
	Revision: A

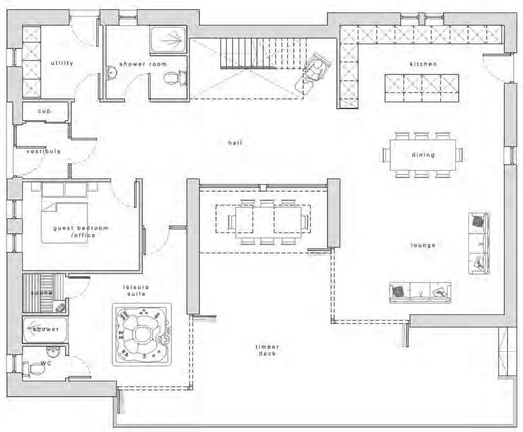
t: 01382 224525 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
ac unit 5, district 10, greenmarket, dundee, dd1 4qb

AC10

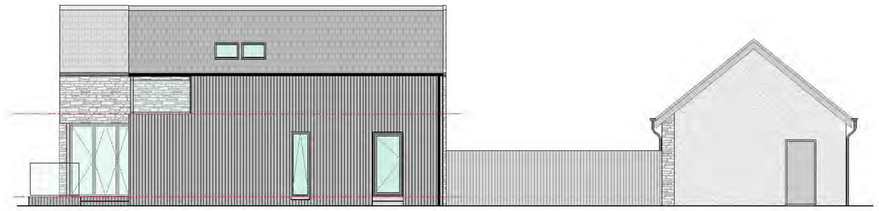


Roof Plan

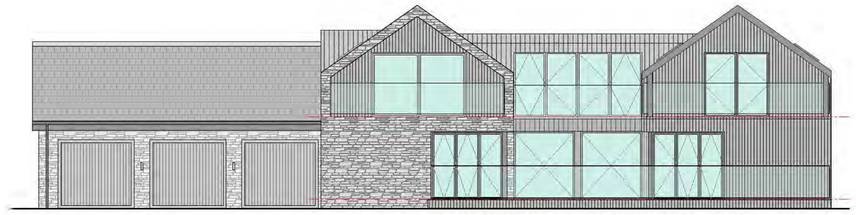
First Floor Plan



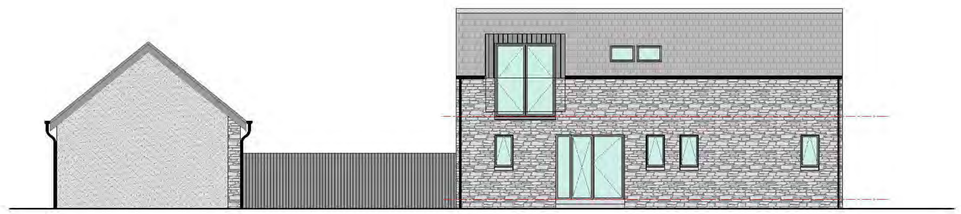
Ground Floor Plan



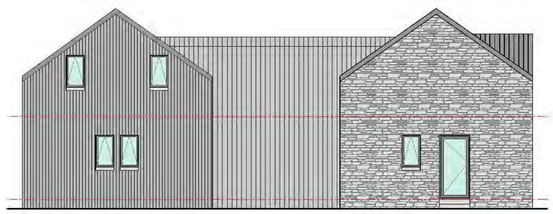
South - East Elevation



South - West Elevation



North - West Elevation



North - East Elevation

0 2 4 6 8 10

SCALE 1:100 (A1) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.

Material Schedule

Roof:
Pitched Roofs: Slate
Flat Roof: Zinc *colour: grey*

Fascias & Soffits:
uPVC.
Colour; anthracite

Rainwater Goods:
uPVC.
Colour; Black

Walls:
Wet dash white render
Anthracite composite timber cladding
Denfind Stone
Standing Seam Zinc *Colour; grey*

Windows & Doors:
High quality double glazed uPVC windows.
Colour; Grey

Project: New Build Dwelling House	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD	Drawing Title: Prp Plans + Elevations
	Issue Status: Planning / Drawing No.: 5865 - 306
Designer: RS / Date: August 2021	Scale: 1:100 @ A1 / Revision: A

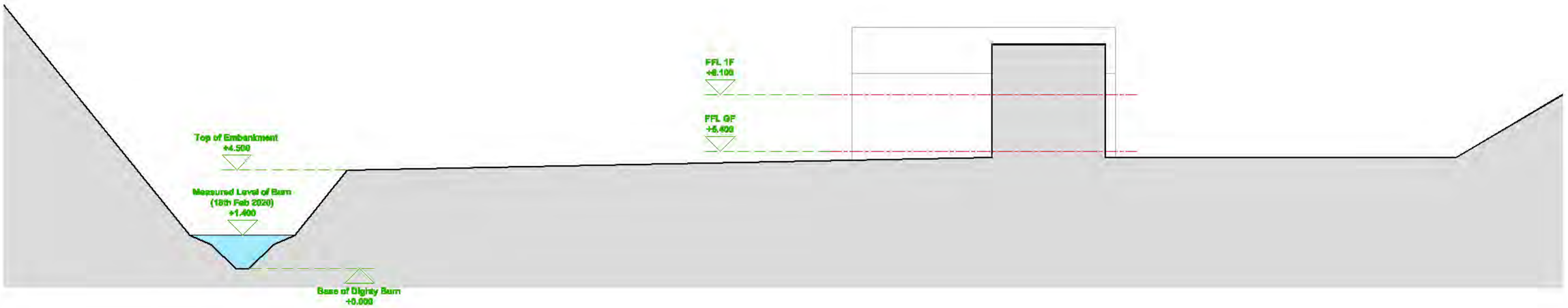
t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

AC10

0 .1 .2 .3 .4 .5

SCALE 1:1000 (A3) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for STATUTORY purposes only. This is not a CONSTRUCTION drawing.



Project: New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD	Drawing Title: Proposed Site Section
	Issue Status: Planning — Drawing No.: 5885 - 306
Designer: CH — Date: August 2021	Scale: 1:1000 @ A3 — Revision: A

t: 01382 224528 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

AC11

AC11

AC11

AC11

AC11

AC11

AC11

AC11

ANGUS COUNCIL

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997
(AS AMENDED)
TOWN AND COUNTRY PLANNING (DEVELOPMENT MANAGEMENT PROCEDURE) (SCOTLAND)
REGULATIONS 2013

PLANNING PERMISSION REFUSAL
REFERENCE : 21/00707/FULL

To **Mr K Grant**
c/o Jon Frullani
140 Perth Road
Dundee
DD1 4JW

With reference to your application dated 29 March 2022 for planning permission under the above mentioned Acts and Regulations for the following development, viz.:-

Erection of a dwellinghouse at **Land Adjacent To Hawthorn Cottage Baldovan Strathmartine** for **Mr K Grant**

The Angus Council in exercise of their powers under the above mentioned Acts and Regulations hereby **Refuse Planning Permission (Delegated Decision)** for the said development in accordance with the particulars given in the application and plans docqueted as relative hereto in paper or identified as refused on the Public Access portal.

The reasons for the Council's decision are:-

1 The proposal is contrary to policy TC2 of the Angus Local Development Plan and its associated, Countryside Housing Supplementary Guidance because it does not comply with any of the circumstances that would allow for the construction of a new house in a countryside location. The proposal is also contrary to Policies 9 and 17 of NPF4 as it does not sustainably reuse brownfield land as the site has naturalised and returned to a natural state without intervention.

2 The application is contrary to Policy DS1 of the Angus Local Development Plan 2016 as the proposal is not in accordance with relevant policies of the local development plan.

Amendments:

The application has not been subject of variation.

Dated this **21 April 2023**

Jill Paterson
Service Lead
Planning and Sustainable Growth
Angus Council
Angus House
Orchardbank Business Park
Forfar
DD8 1AN

Planning Decisions – Guidance Note

Please retain – this guidance forms part of your Decision Notice

You have now received your Decision Notice. This guidance note sets out important information regarding appealing or reviewing your decision. There are also new requirements in terms of notifications to the Planning Authority and display notices on-site for certain types of application. You will also find details on how to vary or renew your permission.

Please read the notes carefully to ensure effective compliance with the new regulations.

DURATION

The duration of any permission granted is set out in conditions attached to the permission. Where no conditions are attached the duration of the permission will be in accordance with sections 58 and 59 of the Town and Country Planning (Scotland) Act 1997 (as amended).

PLANNING DECISIONS

Decision Types and Appeal/Review Routes

The 'decision type' as specified in your decision letter determines the appeal or review route. The route to do this is dependent on the how the application was determined. Please check your decision letter and choose the appropriate appeal/review route in accordance with the table below. Details of how to do this are included in the guidance.

Determination Type	What does this mean?	Appeal/Review Route
Development Standards Committee/Full Council	National developments, major developments and local developments determined at a meeting of the Development Standards Committee or Full Council whereby relevant parties and the applicant were given the opportunity to present their cases before a decision was reached.	*DPEA (appeal to Scottish Ministers)* – *See details on attached Form 1*
Delegated Decision	Local developments determined by the Service Manager through delegated powers under the statutory scheme of delegation. These applications may have been subject to less than five representations, minor breaches of policy or may be refusals.	*Local Review Body* – *See details on attached Form 2*
Other Decision	All decisions other than planning permission or approval of matters specified in condition. These include decisions relating to Listed Building Consent, Advertisement Consent, Conservation Area Consent and Hazardous Substances Consent.	*DPEA (appeal to Scottish Ministers)* – *See details on attached Form 1*

Notification of initiation of development (NID)

Once planning permission has been granted and the applicant has decided the date they will commence that development they must inform the Planning Authority of that date. The notice must be submitted before development commences – failure to do so would be a breach of planning control. The relevant form is included with this guidance note.

Notification of completion of development (NCD)

Once a development for which planning permission has been given has been completed the applicant must, as soon as practicable, submit a notice of completion to the planning authority. Where development is carried out in phases there is a requirement for a notice to be submitted at the conclusion of each phase. The relevant form is included with this guidance note.

Display of Notice while development is carried out

For national, major or 'bad neighbour' developments (such as public houses, hot food shops or scrap yards), the developer must, for the duration of the development, display a sign or signs containing prescribed information.

The notice must be in the prescribed form and:-

- displayed in a prominent place at or in the vicinity of the site of the development;
- readily visible to the public; and
- printed on durable material.

A display notice is included with this guidance note.

Should you have any queries in relation to any of the above, please contact:

Angus Council
Angus House
Orchardbank Business Park
Forfar
DD8 1AN

Telephone 03452 777 780
E-mail: planning@angus.gov.uk
Website: www.angus.gov.uk

AC12

FORM 1

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)

The Town & Country Planning (Development Management Procedure) (Scotland) Regulations 2013 – Schedule to Form 1

Notification to be sent to applicant on refusal of planning permission or on the grant of permission subject to conditions decided by Angus Council

1. If the applicant is aggrieved by the decision of the planning authority-

a) to refuse permission for the proposed development;
b) to refuse approval, consent or agreement required by condition imposed on a grant of planning permission;
c) to grant planning permission or any approval, consent or agreement subject to conditions,

the applicant may appeal to the Scottish Ministers to review the case under section 47 of the Town and Country Planning (Scotland) Act 1997 within three months beginning with the date of this notice. The notice of appeal should be addressed to The Planning and Environmental Appeals Division, Scottish Government, Ground Floor, Hadrian House, Callendar Business Park, Callendar Road, Falkirk, FK1 1XR. Alternatively you can submit your appeal directly to DPEA using the national e-planning web site https://eplanning.scotland.gov.uk.

2. If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.

AC12
FORM 2

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997 (AS AMENDED)

The Town & Country Planning (Development Management Procedure) (Scotland) Regulations 2013 – Schedule to Form 2

Notification to be sent to applicant on refusal of planning permission or on the grant of permission subject to conditions decided through Angus Council's Scheme of Delegation

1. If the applicant is aggrieved by the decision of the planning authority-

   a) to refuse permission for the proposed development;
   b) to refuse approval, consent or agreement required by condition imposed on a grant of planning permission;
   c) to grant planning permission or any approval, consent or agreement subject to conditions,

   the applicant may require the planning authority to review the case under section 43A of the Town and Country Planning (Scotland) Act 1997 within three months beginning with the date of this notice. The notice of review should be addressed to Committee Officer, Angus Council, Resources, Legal & Democratic Services, Angus House, Orchardbank Business Park, Forfar, DD8 1AN.

   A Notice of Review Form and guidance can be found on the national e-planning website https://eplanning.scotland.gov.uk. Alternatively you can return your Notice of Review directly to the local planning authority online on the same web site.

2. If permission to develop land is refused or granted subject to conditions and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, the owner of the land may serve on the planning authority a purchase notice requiring the purchase of the owner of the land's interest in the land in accordance with Part 5 of the Town and Country Planning (Scotland) Act 1997.

PLANNING

Your experience with Planning

Please indicate whether you agree or disagree with the following statements about your most recent experience of the Council's handling of the planning application in which you had an interest.

Q.1 I was given the advice and help I needed to submit my application/representation:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
☐	☐	☐	☐	☐	☐

Q.2 The Council kept me informed about the progress of the application that I had an interest in:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
☐	☐	☐	☐	☐	☐

Q.3 The Council dealt promptly with my queries:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
☐	☐	☐	☐	☐	☐

Q.4 The Council dealt helpfully with my queries:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
☐	☐	☐	☐	☐	☐

Q.5 I understand the reasons for the decision made on the application that I had an interest in:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
☐	☐	☐	☐	☐	☐

Q.6 I feel that I was treated fairly and that my view point was listened to:-

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	It does not apply
☐	☐	☐	☐	☐	☐

OVERALL SATISFACTION: Overall satisfaction with the service: .....

Q.7 Setting aside whether your application was successful or not, and taking everything into account, how satisfied or dissatisfied are you with the service provided by the council in processing your application?

Very satisfied	Fairly satisfied	Neither Satisfied nor Dissatisfied	Fairly Dissatisfied	Very Dissatisfied
☐	☐	☐	☐	☐

OUTCOME: Outcome of the application:

Q.8 Was the application that you had an interest in:-

Granted Permission/Consent ☐ Refused Permission/Consent ☐ Withdrawn ☐

Q.9 Were you the:- Applicant ☐ Agent ☐ Third Party objector who made a representation ☐

Please complete the form and return in the pre-paid envelope provided.
Thank you for taking the time to complete this form.

Directorate for Local Government and Communities
Planning and Architecture Division :
Planning Decisions

T: 0131-244 7530
E: planning.decisions@gov.scot

Scottish Government
Riaghaltas na h-Alba
gov.scot

Jon Frullani Architect

Sent by e-mail to jon@jfarchitect.co.uk

Our ref: NA-120-001
Planning Authority ref: 20/00167/FULL

30 June 2021

Dear Mr Frullani

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997
THE TOWN AND COUNTRY PLANNING (NOTIFICATION OF APPLICATIONS) (SCOTLAND) DIRECTION 2009
ERECTION OF DWELLINGHOUSE, LAND ADJACENT TO HAWTHORN COTTAGE, BALDOVAN, STRATHMARTINE, DD3 0PD ('the Proposed Development')

1. This letter contains Scottish Ministers' decision on the above application submitted to Angus Council on behalf of the applicant Mr Kenneth Grant.

2. The application was called in for Scottish Ministers' determination on 29 January 2021. The application was considered by means of written submissions and an unaccompanied site visit which took place on 22 March 2021 by a Reporter appointed for that purpose. A copy of the Reporter's report ('the report') is enclosed.

Consideration by the Reporter

3. The Reporter's conclusions and recommendations are set out in Chapter 3 of the report. The Reporter recommended that planning permission be refused.

Scottish Ministers' Decision

4. Scottish Ministers have carefully considered all the evidence presented in the report. For the reasons summarised below, Scottish Ministers agree with the Reporter's overall conclusions and recommendation that planning permission should be refused and adopt her reasoning for the purpose of their own decision.

Summary of Reporter's findings

5. The Reporter states that the Proposed Development would not replace an existing dwelling and does not propose conversion of the existing now derelict building on the site. Neither would it round off a group of three houses, and no case is made that it is for an essential worker. The application site is clearly not a gap site given it is at the end of the private track and does not lie between Hawthorn Cottage and that road or another property. The Reporter does not consider the site's status as a brownfield site secures compliance with Policy TC2 of the adopted Angus Local Development Plan (LDP) in this case, and consequently she also finds conflict with Policy DS1 of the LDP. Ministers agree with all of these findings and with the Reporter's conclusion that the principle of (new) housing in this countryside location is not supported by the local development plan.

6. The Reporter considers, and Ministers agree, that approval of the application in the absence of further information on flood risk would run contrary to the terms of the LDP policy on Managing Flood Risk (Policy PV12) and the relevant terms of Scottish Planning Policy.

Conclusion

7. Ministers agree with the Reporter's overall conclusion that the Proposed Development does not accord with the relevant provisions of the development plan in respect of the principle of development in this countryside location. In addition the proposal, in the absence of the necessary details, does not fully address the potential for flood risk. None of the other matters raised are sufficient to justify a different conclusion.

8. Accordingly, for the reasons set out in the Reporter's report and as summarised above, Scottish Ministers hereby refuse planning permission for the erection of a dwellinghouse on land adjacent to Hawthorn Cottage, Baldovan, Strathmartine, DD3 0PD.

9. This decision of Scottish Ministers is final, subject to the right conferred by Sections 237 and 239 of the Town and Country Planning (Scotland) Act 1997 of any person aggrieved by the decision to apply to the Court of Session within 6 weeks of the date of this letter. If such an appeal is made, the Court may quash the decision if satisfied that it is not within the powers of the Act, or that the appellant's interests have been substantially prejudiced by a failure to comply with any requirements of the Act, or of the Tribunals and Inquiries Act 1992, or any orders, regulations or rules made under these Acts.

10. A copy of this letter and the report has been sent to Angus Council and SEPA.

Yours sincerely

ALEX KERR

AC13

Planning and Environmental Appeals Division

Scottish Government
Riaghaltas na h-Alba
gov.scot

Report to the Scottish Ministers

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997

Report by Allison Coard a reporter appointed by the Scottish Ministers

- Case reference: NA-120-001
- Site Address: Land adjacent to Hawthorn Cottage, Baldovan, Strathmartine, DD3 OPD
- Application for planning permission ref. 20/00167/FULL dated 2 March 2020, called-in by notice dated 29 January 2021
- The development proposed: Erection of Dwellinghouse
- Date of site visit: 22 March 2021

Date of this report: 10 June 2021
Recommendation: To refuse Planning Permission.

Scottish Government
Planning and Environmental Appeals Division
Hadrian House
Callendar Business Park
Callendar Road
Falkirk
FK1 1XR

DPEA case reference: NA-120-001

The Scottish Ministers
Edinburgh

Ministers

I conducted an unaccompanied site visit on the 22 March 2021 in connection with an application for erection of a house on land adjacent to Hawthorn Cottage, Baldovan, Strathmartine.

This followed the Scottish Ministers Direction in terms of Section 46 of the Town and Country Planning (Scotland) Act 1997, to require the application to be referred to them for determination. A direction was issued on 29 January 2021 given the lack of adequate information and justification regarding flood risk and the consequent potential conflict with national policy.

In addition to my site visit I sought further written submissions from the applicant, Angus Council and The Scottish Environment Protection agency by way of a procedure notice dated 17 March 2021. Responses were received including an offer by the applicant to now carry out a flood risk assessment. I address this matter in my report.

My report, provides a description of the proposal and its location before summarising the national and development plan context, the position of parties and the main issues arising followed by my conclusions and recommendations.

CONTENTS

CHAPTER 1 : BACKGROUND AND POLICY CONTEXT

Site location and description

1.1 The application site is at the end of a private access track serving four existing houses. It is on the eastern boundary of the garden ground of Hawthorn Cottage. It includes a grouping of trees around a derelict single storey building which is some 60 square metres in size and where some of the walls remain. A wide grassed area to the south of Hawthorn Cottage and the application site is bounded by a steep bank dropping down to the Dighty Water. The proposed house is two storey up to 7.1 metres in height to be constructed in two rectangular sections with a linked section and a detached garage.

1.2 The land is owned by the applicant Mr Kenneth Grant.

1.3 It is proposed to make private foul water drainage arrangements with sustainable drainage for the management of surface water.

Development Plan Context

Policy DS1: Development Boundaries and Priorities

1.4 This policy places focus on identified development sites or sites within development boundaries. There is more limited provision for sites outwith but contiguous with a development boundary where public interest, social, economic or operational considerations confirm there is a need for the development. For sites outwith development boundaries proposals will be supported where they are of a scale and nature appropriate to their location and where in accordance with other local development plan policies.

1.5 There is support for proposals that make re-use of vacant, derelict or under-used brownfield land again when in accordance with other development plan policies. Development of greenfield sites will only be supported where there are no suitable and available brownfield sites capable of accommodating the proposal. In addition proposals should not result in adverse impacts, either alone or in combination with other proposals or projects, on the integrity of any European designated site, in accordance with Policy PV4 Sites Designated for Natural Heritage and Biodiversity Value.

Policy DS3: Design Quality and Placemaking

1.6 This covers design and place making criteria to create buildings that are distinct in character and identity, safe and pleasant, well connected and resource efficient.

Policy DS4: Amenity

1.7 This is concerned with the impact of development including in terms of air quality, noise, light and other forms of pollution, traffic impacts, privacy, contamination, sunlight/daylight and overshadowing.

Policy TC2: Residential Development

1.8 This sets out criteria for new housing including provision of a satisfactory residential environment and avoidance of unacceptable impacts. It also provides further locational provisions. In the countryside, as applies in this case, support is limited to proposals meeting at least one of the following:

- retention, renovation or acceptable replacement of existing houses;
- conversion of non-residential buildings;
- regeneration or redevelopment of a brownfield site that delivers significant visual or environmental improvement through the removal of derelict buildings, contamination or an incompatible land use;
- single new houses where development would round off an established building group of 3 or more existing dwellings; or meet an essential worker requirement for the management of land or other rural business.

1.9 It also states that in Rural Settlement Units proposals may fill a gap between the curtilages of two houses, or the curtilage of one house and a metalled road, or between the curtilage of one house and an existing substantial building such as a church, a shop or a community facility.

1.10 In addition in Category 2 Rural Settlement Units, as shown on the Proposals Map, gap sites (as defined in the Glossary) may be developed for up to two houses. Rural Settlement Units are defined in the Glossary and their role is further explained on Page 9 of the local development plan.

Countryside Housing Supplementary Guidance 2016

1.11 This forms part of the development plan and supports Policy TC2 as described above. Of relevance is the advice it gives on brownfield. It confirms that the fact a site could be considered brownfield is not alone a sufficient reason for its redevelopment. Redevelopment will only be permitted where the development delivers significant visual or environmental improvement through the removal of derelict buildings, contamination or an incompatible land use. It also provides advice on building groups in relation to an establish group of 3 houses and gap sites and on considerations for new houses including reflecting the pattern of development, the character of the landscape and use of appropriate materials, form, scale and massing.

Policy PV7: Woodland, Trees and Hedges

1.12 This policy sets out the framework for the protection of trees that contribute to nature conservation, heritage, amenity, townscape of landscape value. It also references the need for tree surveys where appropriate and alternative planting.

Policy P2P: Managing Flood Risk

1.13 To reduce potential risk from flooding there will be a general presumption against built development proposals on the functional floodplain; which involve land raising resulting in the loss of the functional flood plain; or which would materially increase the probability of flooding to existing or planned development.

1.14 Development in areas known or suspected to be at the upper end of low to medium risk or of medium to high flood risk (as defined in Scottish Planning Policy (2014), may be required to undertake a flood risk assessment. This should demonstrate that flood risk can be adequately managed both within and outwith the site; that a freeboard allowance of at least 500-600mm in all circumstances can be provided; access and egress to the site can be provided that is free of flood risk; and where appropriate that water-resistant materials and construction will be utilised.

1.15 Where appropriate development proposals will be assessed within the context of the Strategic Flood Risk Assessments and Flood Management Plans; and considered within the context of SEPA flood maps to assess and mitigate surface water flood potential.

Policy PV15: Drainage Infrastructure

1.16 Outwith areas served by public sewers or where there is no viable connection for economic or technical reasons private provision of waste water treatment must meet the requirements of SEPA and/or The Building Standards (Scotland) Regulations. A private drainage system will only be considered as a means towards achieving connection to the public sewer system, and when it forms part of a specific development proposal which meets the necessary criteria to trigger a Scottish Water growth project.

1,17 All new development (except single dwelling and developments that discharge directly to coastal waters) will be required to provide Sustainable Drainage Systems (SUDs) to accommodate surface water drainage and long term maintenance must be agreed with the local authority. SUDs schemes can contribute to local green networks, biodiversity and provision of amenity open space and should form an integral part of the design process.

1.18 Drainage Impact Assessment (DIA) will be required for new development where appropriate to identify potential network issues and minimise any reduction in existing levels of service.

Policy PV5: Protected Species

1.19 Angus Council will work with partner agencies and developers to protect and enhance all wildlife including its habitats, important roost or nesting places. Development proposals which are likely to affect protected species will be assessed to ensure compatibility with the appropriate regulatory regime.

Other Material Considerations: Scottish Planning Policy

1.20 This advises at paragraph 255 a precautionary approach to flood risk locating development away from functional flood plains and medium to high risk areas. Paragraph 258 explains that flood risk from all sources should be taken into account when preparing development plans and determining planning applications. The calculated probability of flooding should be regarded as a best estimate and not a precise forecast. Authorities should avoid giving any indication that a grant of planning permission implies the absence of flood risk. Developers should take into account flood risk and the ability of future occupiers to insure development before committing themselves to a site or project, as applicants and occupiers have ultimate responsibility for safeguarding their property.

1.21 Paragraph 263 sets out a risk framework relative to the probability of flooding. In areas of medium to high flood risk (1:200 years) residential development may be suitable but not generally in undeveloped and sparsely developed areas unless essential for operational reasons. Infrastructure and buildings should generally be designed to be free from surface water flooding in rainfall events where the annual probability of occurrence is greater than 0.5% (1:200 years). Surface water drainage measures should have a neutral or better effect on the risk of flooding both on and off the site, taking account of rain falling on the site and run-off from adjacent areas.

1.22 In applying the risk framework to proposed development the following should be taken into account: characteristics of the site; design; the area likely to flood; the depth of flood water, likely flow rate and path, and rate of rise and duration; committed and existing flood protection methods: extent, standard and maintenance regime; the effects of climate change, including an allowance for freeboard; surface water run-off from adjoining land; culverted watercourses, drains and field drainage; cumulative effects, especially the loss of storage capacity; effects of flood on access including by emergency services; and effects of flood on proposed open spaces including gardens.

1.23 Paragraph 266-268 state that Flood Risk Assessments (FRA) should be required for development in the medium to high category of flood risk, and may be required in the low to medium category in the circumstances described in the framework above, or where other factors indicate heightened risk. FRA will generally be required for applications within areas identified at high or medium likelihood of flooding/flood risk in SEPA's flood maps. Drainage Assessments, proportionate to the development proposal and covering both surface and foul water, will be required for areas where drainage is already constrained or otherwise problematic, or if there would be off-site effects. Proposed arrangements for SuDS should be adequate for the development and appropriate long-term maintenance arrangements should be put in place.

Other Material Considerations: SEPA Technical Flood Risk Guidance May 2019

1.24 The functional floodplain is defined as land where there is a 0.5% or greater annual probability of flooding in any year. This probability is sometimes referred to as a 1 in 200-year flood. For development that falls under the 'Most Vulnerable Use' as defined by SEPA's Land Use Vulnerability Guidance, the 0.1% annual probability (1 in 1000-year flood) should be assessed and, in the case of civil infrastructure, avoided.

1.25 An FRA for a specific site should investigate what the likelihood of flooding is, and should consider flood risk from all sources. It should demonstrate if the site is out with the required flood extent for the relevant probability, or if development of the site would be, appropriate, then what acceptable mitigation measures would be required. The complexity of the flooding mechanism(s) will inform the scope of the FRA required, and the information required can take a variety of forms.

1.26 There are a number of methods, of varying complexity, that can be used to assess the flood risk for a development, and assess any impacts elsewhere. SEPA's advice will be based on the information available at the time of consultation. Therefore, in order to receive the most detailed advice, and avoid any unnecessary delays it is helpful to submit any supporting flood risk information at the application stage, although there may be cases where after review, further flood risk information is still required.

1.27 Information to be submitted for any site that requires an FRA would include: appropriate plans, photographs to include specified information, topographic information to show the existing ground levels at the site and the proposed ground levels and finished floor levels. Any land raising should be clearly identified. Other topographic information could include site cross-sections. Sections should be of an appropriate length to include the application site, the channel bed levels, and bank levels of the opposite bank. If applicable and available, details of any previous flooding at the site including the date and time of the event.

CHAPTER 2: SUMMARY OF CASE

Summary of position: applicant

2.1 Historic mapping is submitted that shows the application site does not form part of the curtilage of Hawthorn Cottage but rather was part of the Baldovan Bleach Fields. This has been verified by the consultation response in relation to application ref: 20/00167/FULL where it was confirmed that the site was occupied by a former Mill. This is consistent with the use of the site as a Bleach Field and the dilapidated building on site as a boiler house.

2.2 Furthermore, the photographs in Figures 3-6 clearly demonstrate that the application site is separated from Hawthorn Cottage by a boundary fence. Had the site formed part of the garden ground serving Hawthorn Cottage there would be no boundary treatments separating the 2 parcels of land unless they were indeed separate entities. In addition a visit to the site rather than reliance on aerial photography would clearly demonstrate that there is a marked difference in the condition of the application site in comparison to the well maintained curtilage of Hawthorn Cottage.

2.3 There would be no creation of a gap site to the west of application site and south of Hawthorn Cottage. However, for this to be the case the Council would need to approve planning permission contrary to the Development Plan to erect a house on the gap site. It would not be possible for such a development to satisfy the requirements of Policy TC2 and the Countryside Housing Supplementary Guidance due to the significant adverse impact that such a development would have on the amenity and environmental quality of Hawthorn Cottage. The proposal would provide a significant visual and environmental improvement to the area through the redevelopment of a brownfield site. In this regard the proposed development satisfies the requirements of Policy TC2 of the adopted Angus Local Development Plan.

2.4 The assessment of the qualitative aspects of the proposed development are skewed towards the refusal of planning permission. Indeed the aims and objectives of the key national policies and guidance have not been considered. No merit was given in the report of handling to the high quality design of the proposed development in relation to the objectives of the proposed development and how these reflect upon the content of Policy 4 of the Tayplan Strategic Development Plan or Policy TC2 of the adopted Local Development Plan.

2.5 Scottish Planning Policy(SPP) sets out the principal overarching policies on Sustainability and Placemaking and reaffirms that these policies should be applied to all development. Both the NPF3 and SPP stipulate the need for a coordinated approach to rural development and reference is made to the role of new development to help sustain communities. Plans and decision-making should generally promote a pattern of development that is appropriate to the character of the particular area. This should include provision for small-scale housing and other development which supports sustainable economic growth in a range of locations, taking account of environmental protection policies and addressing issues of location, access, siting, design and environmental impact.

2.6 The location of the application site accords with the broad approach of the above national policy and guidance statements to promote a pattern of development that is appropriate to the character of the particular area, together with supporting sustainable economic growth. Therefore, the proposed development is considered to positively

contribute to placemaking objectives and will provide for new housing of a high-quality design that is also deliverable in a location that is appropriate.

2.7 Flood Risk Assessment has not been provided due to the council's hostility towards development on the application site. Had it been willing to accept that the site is not part of the curtilage of Hawthorn Cottage the cost of providing a Flood Risk Assessment would have been incurred. In addition if it had been indicated that connection to the public sewer would be supported over private treatment then this would also have been agreed. The submission of a Flood Risk Assessment and connection to the public sewer could be controlled by planning conditions satisfying Policies PV12 and PV15 and addressing Reasons for Refusal 2 and 3. By addressing Reasons for Refusal 1, 2 and 3 it is demonstrated that Reason for Refusal 4 is academic in that it only exists due to Reasons for Refusal 1, 2 and 3.

2.8 In further written submissions, following the Ministers call-in direction, the applicant enclosed a response from a consultant who had undertaken a preliminary site visit. The applicant confirmed he was agreeable to instructing this work to go ahead. The letter dated 26 March 2021 states that the SEPA flood map shows floodwater gathering on Baldovan Road and flowing along the access track and through the site before returning to the Dighty Water. In addition to the Dighty Water, Ordnance Survey mapping shows part of a former lade on site.

2.9 In addition to the site visit available LiDAR data of the area was considered. Limited remnants of the former lade were seen on site and upstream during the site visit, however it is clear that the lade has been infilled. The Dighty Water is likely to remain in bank as it flows past the site, however there may be a risk of overland flow along the track towards the site. As such, a hydraulic modelling exercise is required to assess this. To assess flood risk to the site a preliminary hydraulic model would be prepared to take 3 weeks from commission. This would assess the likely extent of flooding on Baldovan Road during a 1 in 200 year flood event.

2.10 Depending on results from the preliminary model, a detailed flood risk assessment modelling the Dighty Water from upstream of Baldovan Road, to a point downstream of the site would be undertaken. The model for the full assessment would identify overland flow routes and fully assess flood risk to the proposed development, with mitigation measures proposed where required and applicable. To enable preparation of the hydraulic models, topographical survey data would be required including cross sections on the Dighty Water. A likely timescale of 10 weeks from commission of the preliminary hydraulic modelling analysis to completion of the detailed flood risk assessment.

<u>Summary of position : Angus Council</u>

2.11 The report of handling dated 4 November 2020 sets out the council planning officer's assessment of the case. It concluded the application should be refused for the following reasons:

> 1. The application is contrary to Policy TC2 of the Angus Local Development Plan 2016 and the Countryside Housing Supplementary Guidance because it does not comply with any of the circumstances that would allow for the construction of a new house in a countryside location.

2. The proposal is contrary to Policy PV12 of the Angus Local Development Plan (2016) because insufficient information has been submitted to demonstrate that the development would not be subject to an unacceptable level of flood risk and would not materially increase the probability of flooding to existing or planned development.

3. The proposal is contrary to Policy PV15 of the Angus Local Development Plan (2016) because a private drainage system is proposed and insufficient information has been submitted to demonstrate that there is no viable connection to the public sewer.

4. The application is contrary to Policy DS1 of the Angus Local Development Plan 2016 as the proposal is not in accordance with relevant policies of the local development plan, namely policies TC2, PV12 and PV15.

2.12 Subsequent to this Council members (committee dated 4 November 2020) undertook to a carry out an unaccompanied site visit. On 24 November 2020, the minute of the development Management Review Committee states that following the site visit it was agreed the proposal would provide for the regeneration or redevelopment of a brownfield site and would round off a group of housing. It noted the outstanding objection from SEPA and considered that the proposal would not materially increase the probability of flooding to existing or planned development and therefore should be approved.

2.13 The decision of the Review Committee was to grant planning permissions subject to a number of conditions (as set out in the report by the Director of Legal and Democratic Services) dated 16 December 2020. It was recognised that the decision would be referred to Scottish Ministers as there was an outstanding objection from the Scottish Environment Protection Agency.

2.14 In subsequent further written submissions the council confirmed it took the view that the impact of any flood risk was not significant enough to merit refusal nor that it would materially increase the probability of flooding to existing or planned development. In addition as a matter of clarification it advised that it did not receive further email correspondence from SEPA on 29 April 2020 confirming that their response of 17 March 2020 to the application was both an objection on the grounds of lack of information on flood risk and an objection on the grounds of proposals for a private sewage system when there is a public sewer. This email was not submitted to the Development Management Review Committee on 4 November 2020 but both grounds of objection were referred to in the Report of Handling considered by the Committee.

2.15 By subsequent letter dated 6 May 2021 the council confirmed that in light of the comments received it would have no issue with a suspensive condition on flooding. The following wording was provided:

“No development in connection with this planning permission shall take place until a flood risk assessment has been submitted to and approved in writing by the planning authority in consultation with the flood prevention authority. That assessment shall consider flood risk to the proposed development site from all sources; identify measures to reduce flood risk to the proposed dwelling and its access; and identify any further mitigation measures that are required to ensure there is no increase in flood risk outwith the development site as a consequence of the development hereby approved. In addition, the assessment shall provide a phasing plan/timescale for implementation of the required flood mitigation measures and a scheme for their retention and maintenance as necessary for the life of the

development hereby approved. The development shall be undertaken only in accordance with the approved flood risk assessment, mitigation measures, and phasing plan, and the required mitigation measures shall be retained and maintained in accordance with the approved details thereafter."

Summary of position: Scottish Environment Protection Agency (SEPA)

2.16 In response to the consultation request from Angus Council objection was confirmed by letter dated 17 March 2020 for the following reasons (in summary):

- The application site is adjacent to the medium likelihood (0.5% annual probability) flood extent of the SEPA Flood Map, and may therefore be at medium to high risk of flooding.
- The application is for the erection of a dwellinghouse which falls within the Highly Vulnerable Use category within SEPA's Land Use Vulnerability Classification for flood risk.

2.17 SEPA's Flood Map shows a flow path from the Dighty Water road bridge along the access track to Hawthorn Cottage and towards the application site. The Flood Maps indicate that the site is at risk of flooding to a depth greater than 1 metre. However, it is acknowledged that due to forestry cover there is uncertainty with LiDAR accuracy in this area and, therefore there is not full confidence in the accuracy of the flow path along the access track.

2.18 Due to the uncertainty of the flow path, insufficient information is provided with this consultation for an assessment of flood risk to this site. Therefore there is objection to this development until a Flood Risk Assessment or other appropriate information is provided in support of the application. That objection could only be removed if a Flood Risk Assessment (or other information) demonstrates that the proposed development accords with the principles of Scottish Planning Policy.

2.19 Other appropriate information might include proposed development site and finished floor levels related to nearby watercourses, appropriate photographs and/or any nearby historical flood levels. Topographic information could include cross sections across the river (including the channel bed levels and bank levels of the opposite bank), upstream, downstream and adjacent to the site. However, if this information is insufficient to provide a robust assessment of the risk of flooding to the proposed development then a detailed flood risk assessment may need to be carried out by a suitably qualified professional.

2.20 Consideration should be given to the provision of safe, flood free access and egress to and from the proposed development during the 0.5% AP flood event. SEPA's Flood Maps indicate that the access track is located within the functional floodplain of the Dighty Water and may flood to a depth greater than 1 metre. Additional information may show that this is not accurate. However, the applicant should consider alternative access and egress requirements should further information or FRA show that the access track is inundated during a 0.5% AP flood. It is for Angus Council to comment on its requirements for safe, flood free, access/egress to the proposed site.

2.21 In summary, clarification is needed on the following points before objection to the proposed development can be reviewed :

• Topographic survey information of the site should be provided as well as the proposed Finished Floor Level of the development.

• Consideration to the provision of safe, flood free access and egress up to and from the development during the 0.5% AP flood event.

2.22 By letter dated 5 May 2021 reference is made to the Technical Flood Risk Guidance referenced above. It is accepted there is a ruined building on the site but given it was industrial a change to a house site would increase vulnerability and Scottish Planning Policy does not support development that would increase risk in these areas. Ideally flood risk should not be dealt with retrospectively and the results of the assessment may have a bearing on the detailed layout and design. Attention is also drawn to the flood risk on the access road which would need to be explored in any risk assessment particularly given the implications for emergency vehicles.

2.23 It should be noted that the site could be at flood risk from three possible sources/ mechanisms – (i) direct out of bank flooding from the Dighty Water (ii) out of bank flow from the Dighty Water being backed up at the Baldovan Road bridge and flowing along the access road onto the site, and (iii) backing up of the Dighty Water along the old mill lade which lies immediately to the south of the site.

2.24 The final response dated 21 May 2021 re-iterated that flood risk should be addressed prior to the principle of development being established. However in this case "if the reporter and Angus Council consider there is sufficient space on the site to allow the house to be located outside the area of flood risk which a flood risk assessment will establish then we consider that a condition to that effect is appropriate".

Other Consultation responses.

2.25 The council's roads manager: Does not object to the application but recommends a condition requiring details of specified improvements to the access road including widening and passing places and provision of surface water drainage.

2.26 Scottish Water: confirms there is sufficient capacity in the Hatton Waste Water Treatment Works. For reasons of sustainability and to protect our customers from potential future sewer flooding, Scottish Water will **not** accept any surface water connections into our combined sewer system.

2.27 The council's Environmental Protection Officer : This confirms no objection subject to a condition to address any potential contamination issues given there may have been previous storage and use of chemicals on the site.

2.28 The council's Archaeology Officer: Identifies potential impact on the remains of a mill complex dating to the 19th Century or earlier (Referenced as NO33SE0015). A condition is requested to secure a photographic record of the site.

Other Representations.

2.29 3 letters of objection were received by the council :

- Development is outwith development boundary of Strathmartine;

- There would be a detrimental impact on amenity of existing properties;
- The proposal would result in Environmental pollution;
- There would be road safety issues due to the inadequate access track with lack of passing places and visibility concerns at junction;
- Information relating to previous uses of the site and its condition is disputed;
- There is virtually no trace of the former bleach works on the site with nature largely taken the area back.
- There would be Impacts on trees and wildlife.

CHAPTER 3: REPORTER'S CONCLUSIONS AND RECOMMENDATIONS

3.1 Whilst I appreciate the proposal was referred to Ministers as it raised issues of flood risk I must assess the application afresh in coming to my conclusions and recommendations. In doing so regard is to be had to the relevant provisions of the development plan unless material considerations indicate otherwise. In that context I find the main issues in this case to be:

- the principle of development;
- the risk of flooding;
- nature conservation and loss of trees.

Principle of Development

3.2 The site is located close to the Dundee City boundary and the associated housing area on Pitcairn Road. However it is within an area, on crossing the Dighty Burn, where I consider there is a clear distinction between the suburban area and the countryside beyond. The site sits at the end of a tree lined country lane serving 4 houses. The nearest settlement, as defined in the Angus Council Local Development Plan, is Bridgefoot and Starthmartine. The site is not within or adjacent to that settlement and is defined as within a rural settlement unit. This is a countryside area where Category 1 is applied in the context of new housing development.

3.3 TAYplan 2017 sets the strategic development plan context and whilst Policy 4 is generally supportive of housing and recognises its role in supporting economic growth the detailed policy framework is applied through the Angus Local Development Plan. In terms of Policy DS1 of the Angus Local Development Plan the proposal is outwith a development boundary and no specific need for the house is demonstrated. There is some support for the proposal given it is the site of an existing building but compliance with other local development plan polices is required. In that context Policy TC2 as supported by the council's Supplementary Guidance, relates specifically to residential development. This policy context, as summarised above, seeks to restrict new housing in the countryside except in limited circumstances.

3.4 The proposal would not replace an existing dwelling and does not propose conversion of the existing now derelict building on the site. Neither would it round off a group of three houses and no case is made that it is for an essential worker. In my opinion it is clearly not a gap site given it is at the end of the private track and does not lie between Hawthorn Cottage and that road or another property.

3.5 From my site visit I consider that the application site is not clearly within the curtilage of Hawthorn Cottage even if a wider definition of that term, beyond that of the immediate garden ground, is applied. I have considered the view that an earlier planning permission indicated the site within the grounds of the cottage and that the planning officer considered there was evidence of maintenance as part of these grounds. However on my site visit the wooded and grassed area associated with the derelict building showed no obvious sign of enclosure or maintenance, other than possibly some limited grass cutting, beyond the fence line of the adjacent cottage. The submissions indicate it was previously used for a separate non-residential use. I consider that supports the conclusion it is not associated with or within the enclosure of the house.

3.6 Consequently I do not consider the site falls to be considered as falling within the curtilage of Hawthorn Cottage. Rather I find it is a location in the countryside albeit adjacent to an existing house and garden. Consequently I do not share the planning officer's view, as expressed in the report of handling, that it would create a gap site to the west when considered in the context of Rhynefield. None of these conclusions lend support to the principle of a house in this location.

3.7 That leaves the remaining issue of whether the site is brownfield and secondly whether its redevelopment delivers significant visual or environmental improvement through the removal of derelict buildings, contamination or an incompatible land use. The policy clarifies that the mere fact that a site is brownfield is not a sufficient reason for its redevelopment. In that respect I find Hawthorn Cottage enjoys an attractive rural setting. The wooded site within which the remains of the derelict building are now largely obscured contributes to that setting. There is no evidence that there is contamination that needs to be dealt with in the current context of the site albeit I note the council's suggested condition to address any potential contamination, in the event that permission is granted for a house.

3.8 From my observations on site there is nothing to suggest that the derelict building is incompatible with the adjacent residential use, open ground and countryside or that the building is a risk to the public. In that respect I consider that whilst some improvement might be argued in terms of removal of the building the site now has a natural appearance which would be lost were it to be redeveloped. The site does not appear as one associated with dereliction or dilapidation and its development has no regeneration justification.

3.9 Paragraph 3.3 of the Countryside Housing Supplementary Guidance clarifies the size of the previously developed area of land should be considered. It may be the larger site area and substantial footprint of the proposed house relates to a previous land use and reference is made to the Baldovan Bleach fields. However the only visible evidence of this is the remains of a relatively small stone building which was formerly used as a boiler house and then for storage. For these reasons I do not consider the sites status as a brownfield site secures compliance with Policy TC2 in this case. Consequently I also find conflict with Policy DS1.

3.10 My conclusion is that the principle of housing in this countryside location is not supported by the local development plan.

3.11 The applicant seeks to draw support from the National Planning Framework and Scottish Planning Policy given the quality of the proposed design and a potential contribution to rural development. However there is nothing to suggest why this house is essential in a countryside location or why it would otherwise contribute to the rural economy or other national objectives. Its approval could encourage other such development contrary to the sustainable development principles of Scottish Planning Policy given this is a location where commuting in order to access necessary employment, schooling and other services is likely to depend on the private car.

3.12 In that respect I consider that the local development plan strategy and the objectives of its Policy TC2, to apply a restrictive approach to housing in this area, reflects the approach set out in Scottish Planning Policy. This is reflected in paragraph 76 of Scottish Planning Policy which explains that in areas easily accessible from cities and town, where there is development pressure, it is important to protect against car based commuting and the suburbanisation of the countryside. Consequently development plans should make

provision for most new urban development to take place within or in planned extensions to existing settlements.

3.13 I take no issue with the proposed layout or design of the building and I have not identified any adverse impacts on amenity. Consequently I consider that compliance with Policy DS3 on design quality and place-making and Policy DS4 of the local development plan would be achieved. However there is nothing to suggest that the proposed design quality, whilst an important consideration in both the development plan and in Scottish Planning Policy, provides sufficient justification for a house in the countryside.

Flood Risk

3.14 Turning to the other main issue of flooding, I observed on site the presence of other houses, particularly Hawthorn Cottage at a similar level and proximity to the Dighty Burn. I noted the access track is already in use to serve housing and that the Dighty Burn in this vicinity is contained by a bank within a cutting. This may provide some protection from a flood event. I have considered the applicant's level drawing which assumes the base of the Dighty Burn at zero metres and shows the water level as recorded on 18 February 2020 as 1.4 metres. From that the top of the embankment is shown at 4.5 metres with a corresponding finished floor level for the proposed house at 5.4 metres for the ground floor and 8.4 metres for the first floor.

3.15 The established flood risk mapping and the corresponding policy approach set out in Scottish Planning Policy, and in the advisory documentation of the Scottish Environment Protection Agency, clearly indicates the need for flood risk assessment to support a house in this area of potential flood risk. The applicant's flood consultant advises on the need for a preliminary assessment of that risk, followed if necessary by a full assessment. This corresponds with the advice from the Scottish Environment Protection Agency.

3.16 The council's submissions suggest a negative condition to address this matter and this is also an approach suggested by the applicant. However I am conscious that this would contradict best practice guidance as set out above and the approach to the assessment of risk as established in Scottish Planning Policy. Given this is a detailed planning permission the suggested condition would be too late to inform any changes to the design and layout which may be recommended to address any necessary mitigation. SEPA's advice clearly points to assessment to accompany the design process and I would have concerns about approving the details of the scheme in the absence of that information.

3.17 Whilst SEPA's latest submission indicates some relaxation of that position and an indication that a condition could be acceptable in this case that conclusion relies on a corresponding assessment by the decision maker that the house is located on the site to avoid the area of flood risk. In addition that conclusion also appears to set aside the previous concerns expressed as to flooding on the access road and the consequence of such risk. I have insufficient information to support such a conclusion.

3.18 The council in determining to approve the proposal contrary to the advice of its planning officer considered the risks to be minimal. However that is not yet demonstrated to be the case. The presence of an adjacent house and the use of the established access does not in my opinion present sufficient justification to perpetuate any potential risk, including for emergency vehicle access, in the absence of an appropriate flood risk assessment. The council does not specifically address any detail about the relative

positioning of the house on the site. As this application is for full planning permission such permission would apply to the house as detailed on the submitted plans including its siting and design. I find a lack of clarity as to the application of the proposed condition in circumstances where the opportunity to address any required mitigation would be limited. This adds to a general lack of clarity and certainty as to the nature of the flood risk and whether it would be addressed. Consequently I consider that approval in the absence of further information on that risk would run contrary to the terms of Local Development Plan Policy P2P: Managing Flood Risk and the relevant terms of Scottish Planning Policy.

3.19 The applicant offers the option of holding the application in abeyance until such a study has been completed. However that would then require scrutiny by the council and SEPA. I consider this would be a disproportionate response at this late stage in the planning application process in circumstances where my conclusions above show a clear lack of development plan support for a house in this location. As it stands the lack of submitted flooding information adds to the balance of considerations against the current proposal. However even if addressed I do not consider that would provide sufficient reason to justify approval.

Other Matters

3.20 In relation to Policy PV15 it is clear that where there is available connection to the public sewer this is favoured over private works. From the applicant's submission it appears that had the applicant been aware of such a possibility it would have been pursued. As it stands the application was made based on private arrangements although the area is served by a public sewer. However whilst I recognise policy conflict in this respect I consider this matter could be addressed by condition as suggested by the council. I have included this in my recommended conditions in the event that planning permission is granted.

3.21 I have concluded above that this proposal lacks any relevant policy justification to support a countryside location outwith Starthmartine. I note this concern is reflected in representation. However in terms of the other matters raised in representation and in the context of wider amenity considerations I accept the house is positioned in a manner that it would not give rise to unacceptable impacts in terms of overlooking, privacy or loss of light when assessed against the council's guidance. There would be some impact associated with the occupants and visitors to an additional house using the access track. However, the council's Roads Service is satisfied that the access could accommodate an additional dwelling subject to improvements being made to allow space for vehicles to pass and I consider this matter could be addressed by condition.

3.22 No signs of bats were recorded in the bat survey and the large open areas close to the site would be largely unaffected by the proposal. I recognise there are a number of mature trees on the site and no survey details are provided to indicate the potential for retention. In that respect and given the substantial footprint of the proposed house I consider there would be loss of established trees which contribute to amenity. The council's suggested condition could address retention of trees if possible albeit reliance on a condition to retrospectively show existing trees and those to be retained creates a degree of tension with the terms of Policy PV7. It requires trees that contribute to amenity to be protected and enhanced. Compensatory planting could go some way to remediate any loss although would take some time to establish. I agree with the council that full details, including for compensatory planting, would be required prior to the commencement of development.

Conditions

3.23 In the event that Ministers decide to approve the application the council initially suggested 5 conditions but subsequently suggested the addition of a further suspensive condition to address the issue of flood risk. I have set out my conclusions on the suitability of that approach in paragraph 3.16 above. Given the potential implications for the design of the scheme this would in my opinion be a matter to be addressed at an earlier design stage. The same concern would apply were Ministers to decide to follow the course of holding the application to await the flood risk assessment unless of course that was to demonstrate there was no unacceptable risk or need for mitigation.

3.24 However this is not my recommended course of action given my conclusions above on the principle of development. I nonetheless draw these matters to the attention of Ministers. Otherwise the council's suggested conditions reflect the consultation responses received on the matters of archaeology and contamination and the required improvement of the access. I also agree that the details of materials and landscaping would remain to be addressed to be secured by condition as suggested by the council.

Conclusion

3.25 Drawing on all of the above my conclusion is that the proposal does not accord with the relevant provisions of the development plan in respect of the principle of development in this countryside location. In addition the proposal, in the absence of the necessary details, does not fully address the potential for flood risk. I have considered all the other matters raised but find none sufficient to justify a different conclusion.

Recommendation

3.26 I recommend that planning permission be refused.

Allison Coard

Reporter

Recommended Conditions in the event that planning permission is granted.

1. No development in connection with this planning permission shall take place until a flood risk assessment has been submitted to and approved in writing by the planning authority in consultation with the flood prevention authority. That assessment shall consider flood risk to the proposed development site from all sources; identify measures to reduce flood risk to the proposed dwelling and its access; and identify any further mitigation measures that are required to ensure there is no increase in flood risk outwith the development site as a consequence of the development hereby approved. In addition, the assessment shall provide a phasing plan/timescale for implementation of the required flood

mitigation measures and a scheme for their retention and maintenance as necessary for the life of the development hereby approved. The development shall be undertaken only in accordance with the approved flood risk assessment, mitigation measures, and phasing plan, and the required mitigation measures shall be retained and maintained in accordance with the approved details thereafter."

Reason: To address flood risk on the site and secure any required mitigation.

2. No development in connection with the planning permission hereby approved shall take place until the following details have been submitted to and approved in writing by the Planning Authority:

(a) A detailed levels survey of the site. The detailed survey drawings shall show finished ground and floor levels of the proposed development relative to existing ground levels; neighbouring land/properties and a fixed ordnance datum point. Thereafter the development shall be completed in accordance with the approved levels prior to the occupation of the dwellinghouse.
(b) Precise details of all external roof and wall finishes. Thereafter the dwellinghouse and garage shall be completed in accordance with the approved external materials prior to the occupation of the dwellinghouse.
(c) A scheme for all hard and soft landscaping of the site including details of all boundary treatments. This scheme shall include an indication of all existing trees within and adjacent to the site, details of those to be retained and cleared, together with the measures for their protection in the course of development (erection of protective fencing in accordance with BS 5837: 2012) . The approved boundary enclosures shall be formed prior to occupation of the dwellinghouse. All planting indicated in the approved scheme shall be carried out in the first planting season following occupation of the house or the completion of the development, whichever occurs first, or at earlier stages and any plants or trees which within a period of five years from the commencement of the use die; are removed or become seriously damaged or diseased, shall be replaced in the next planting season with others of a similar size and species.
(d) Full details of the means for the disposal of foul water and surface water. For the avoidance of doubt, the development shall connect to the public drainage network for foul water disposal and use a SUDS system for surface water disposal. Thereafter the approved drainage scheme shall be implemented and completed prior to the occupation of the dwellinghouse hereby approved.

Reason: In order that the planning authority may control the specified details in the interests of amenity, to ensure that the drainage proposals are acceptable and to ensure the development is undertaken and maintained in accordance with the approved details.

3. Prior to the commencement of development, a scheme of improvements to the access track between Craigmill Road and the application site shall be submitted to and approved in writing by the planning authority. The scheme of improvement shall include:

(i) a drawing showing the widening of the access track and/or provision of inter-visible passing places at maximum intervals of 150 metres;
(ii) a construction specification in accordance with the council's planning advice note; PAN 17 – Miscellaneous Planning Policies;
(iii) the provision of adequate means of surface water drainage; and

(iv) an agreement for the upgrading works with any other owner(s) or person(s) with rights of access over the track, or other suitable evidence of a legal right to affect the scheme of improvements.

The scheme of improvements to the access track shall thereafter be completed prior to the commencement of any other works in connection with the planning permission hereby approved.

Reason: To provide a safe and suitable access and an adequate level of residential amenity.

4. Prior to commencement of any development works, a comprehensive contaminated land investigation report shall be submitted to and approved in writing by the planning authority. The investigation shall be completed in accordance with a recognised code of practice such as British Standards Institution “The Investigation of Potentially Contaminated Sites – Code of Practice” (BS 10175: 2011). The report must include a site specific risk assessment of all relevant pollutant linkages, as required in Scottish Government Planning Advice Note 33.

Reason: In order to ensure that the site is suitable for human habitation.

5. Where the contaminated land investigation report identifies any unacceptable risk or risks as defined under Part IIA of the Environmental Protection Act 1990, a detailed remediation strategy shall be submitted for the written approval of the planning authority. No works, other than investigative, demolition or site clearance works shall be carried out on the site prior to the remediation strategy being approved by the planning authority. Prior to the occupation of the development the remediation strategy shall be fully implemented and a validation report confirming that all necessary remediation works have been undertaken shall be submitted to and approved in writing by the planning authority.

Reason: In order to ensure that the site is suitable for human habitation.

6. No demolition or any other works in connection with the development hereby approved shall commence unless a photographic survey of the existing buildings and structures on the application site has been submitted to and approved in writing by the planning authority. All external and internal elevations of the buildings and structures together with the setting of the buildings and structures and any unusual features of the existing buildings and structures shall be photographed. The photographic viewpoints must be clearly annotated on a plan to accompany the survey. The photographs and plan must be in a digital format and must be clearly marked with the planning reference number.

Reason: To ensure that a historic record of the building is made for inclusion in the National Monuments Record for Scotland and in the local Sites and Monuments Record

AC14

Bat Survey Report

Ruined Steading
Baldovan Nursery
Baldovan Road
Dundee

August 2019 & August 2021

11 Victoria Street, Newport on Tay, Fife. DD6 8DJ

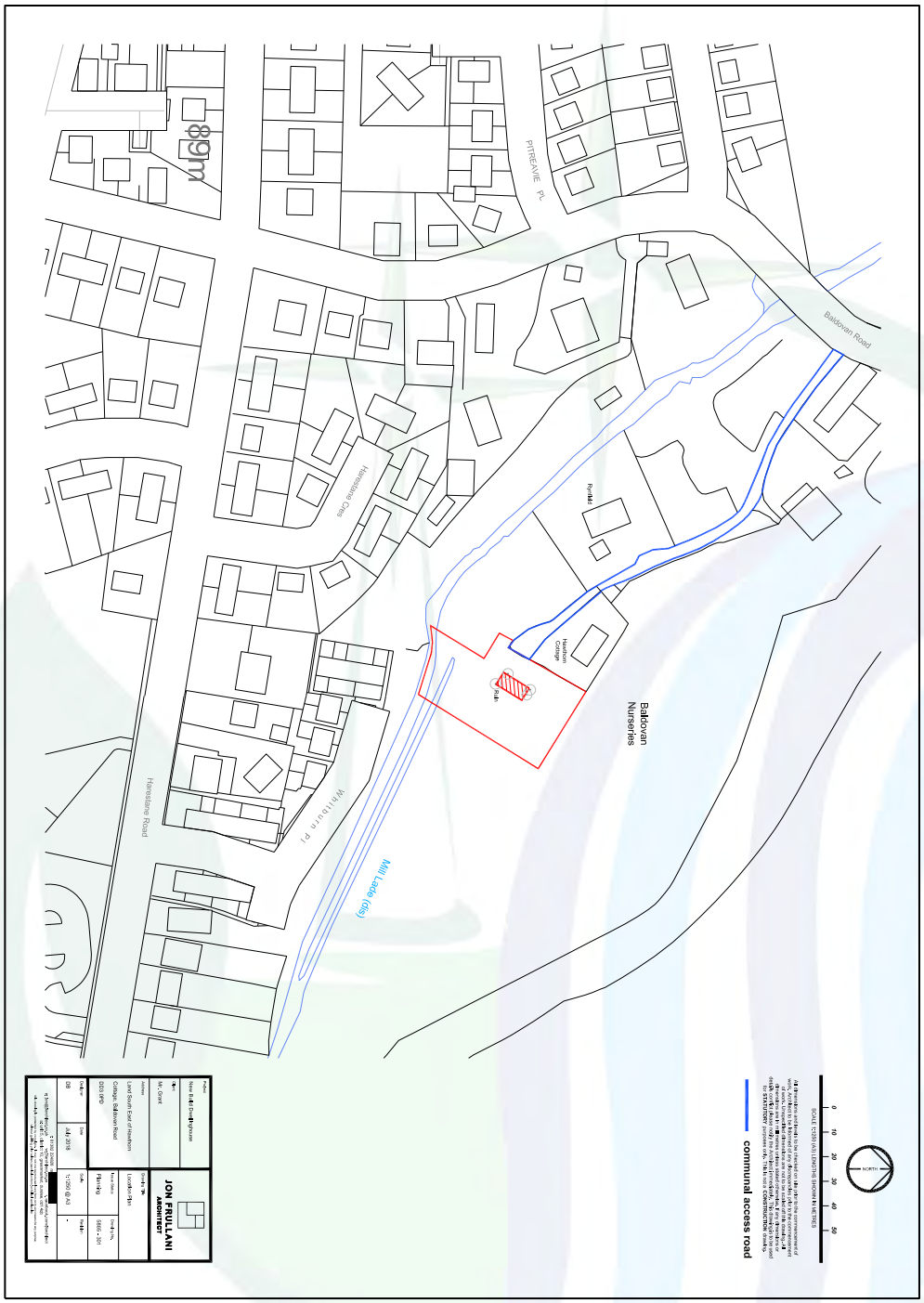


Figure 1. Site location in red.

Introduction

1.1 Licensed bat worker Dr Garry Mortimer was commissioned to carry out bat surveys for the proposed demolition of a small ruined steading situated near Baldovan Nursery just off Baldovan Road, Dundee. This Stage 1 Preliminary Roost Assessment (PRA) survey is as required by Council in regards to a potential planning application. A survey was carried out in August 2019 and no bats were present. Due to time constraints the original survey needed updating and another survey was carried out in August 2021.

1.2 Aims and Objectives

To determine if any bat species are present and roosting in the steading.

1.3 Species Protection Status

Bats are protected under Annex IIa and IVa of the EC Habitats Directive (92/43/EC) as applied in Scotland under the Conservation (Natural Habitats &c.) Regulations 1994, as amended by the Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations of 2004, 2007 and 2009. This creates a series of criminal offences that can result in substantial fines and/or imprisonment. These offences are listed below and make it illegal;

- To deliberately or recklessly capture, injure or kill bats
- To deliberately or recklessly harass a bat or group of bats
- To deliberately or recklessly disturb a bat wherever they occur in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young
- To deliberately or recklessly disturb a bat while it is hibernating or migrating
- To deliberately or recklessly disturb a bat in a manner that is, or is likely to significantly affect the local distribution or abundance of the species to which it belongs
- To deliberately or recklessly disturb a bat while it is rearing or otherwise caring for its young
- To deliberately or recklessly disturb a bat while it is occupying a structure or place which it used for shelter or protection
- To deliberately or recklessly obstruct access to a breeding site or resting place

of a bat, or otherwise deny the animal use of the breeding site or resting place (note that this protection exists even when the bat is not in occupation)

- To damage or destroy a breeding site or resting place (Note this is a strict liability offence and the prosecution do not have to prove deliberate or reckless intent, merely that the roost was damaged or destroyed)
- To possess or control or transport any live or dead bat which has been taken from the wild or anything derived from a bat or any such part of a bat
- In addition to the above offences it is an offence to knowingly cause or permit such offences to be committed.

Site Description

1.4 The ruined building is a small single storey stone building with only partial collapsed corrugated sheeting present on the roof situated near Baldovan Road Dundee in a rural wooded setting (Figures 2-4).

Figure 2. Front of building with stonework in good condition.

Figure 3. Shell of building with no roof present

Figure 4. Corrugated sheeting onto wooden joists

1.5 Standards and Guidance Followed for Bat Surveys

On August 28th 2019 and August 29th 2021 roost inspection bat surveys (Preliminary Roost Assessment) by Dr. G Mortimer was carried out in accordance with guidance from the BCT.

1.6 Buildings Inspections

The outside and inside of the building was inspected using ladders, endoscope and 10 x 40 binoculars where possible. The building were checked for any potential bat access points, droppings on walls or windows, urine stains, grease marks or other indications that a roost was present.

1.7 Trees

Several semi-mature self-sown sycamore and ash trees are present next to the building. No trees have bat roost potential.

Figure 5. Trees with no bat roost potential.

Results

1.8 Outside Structure of Buildings

Whilst in a ruined condition the standing stonework was of good condition and no potential bat access points available.

1.8 No signs of bats were recorded inside the interior and no bat roost potential was available.

Discussion of Survey Results

1.9 The bat surveys in 2019 & 2021 were undertaken to assess whether there were roosting bats present in the ruined building at Baldovan Road.

1.10 Following BCT Guidance the building was assessed as having negligible potential for roosting bats, that no signs of bats were recorded and that no further survey work will be required.

Conclusion

1.11 No signs of bats were recorded and none are considered to be present. It is considered that the proposed works poses a negligible risk of death or disturbance to European Protected Species and it is safe to proceed.

DISCLAIMER

This report has been prepared by Dr Garry Mortimer of GLM Ecology, with all reasonable skill and care within the terms of the agreement with the client. Dr Mortimer disclaims any responsibility to any parties in respect of matters outside this scope.

Best efforts were made to meet the objectives of this study through desktop study and field survey.

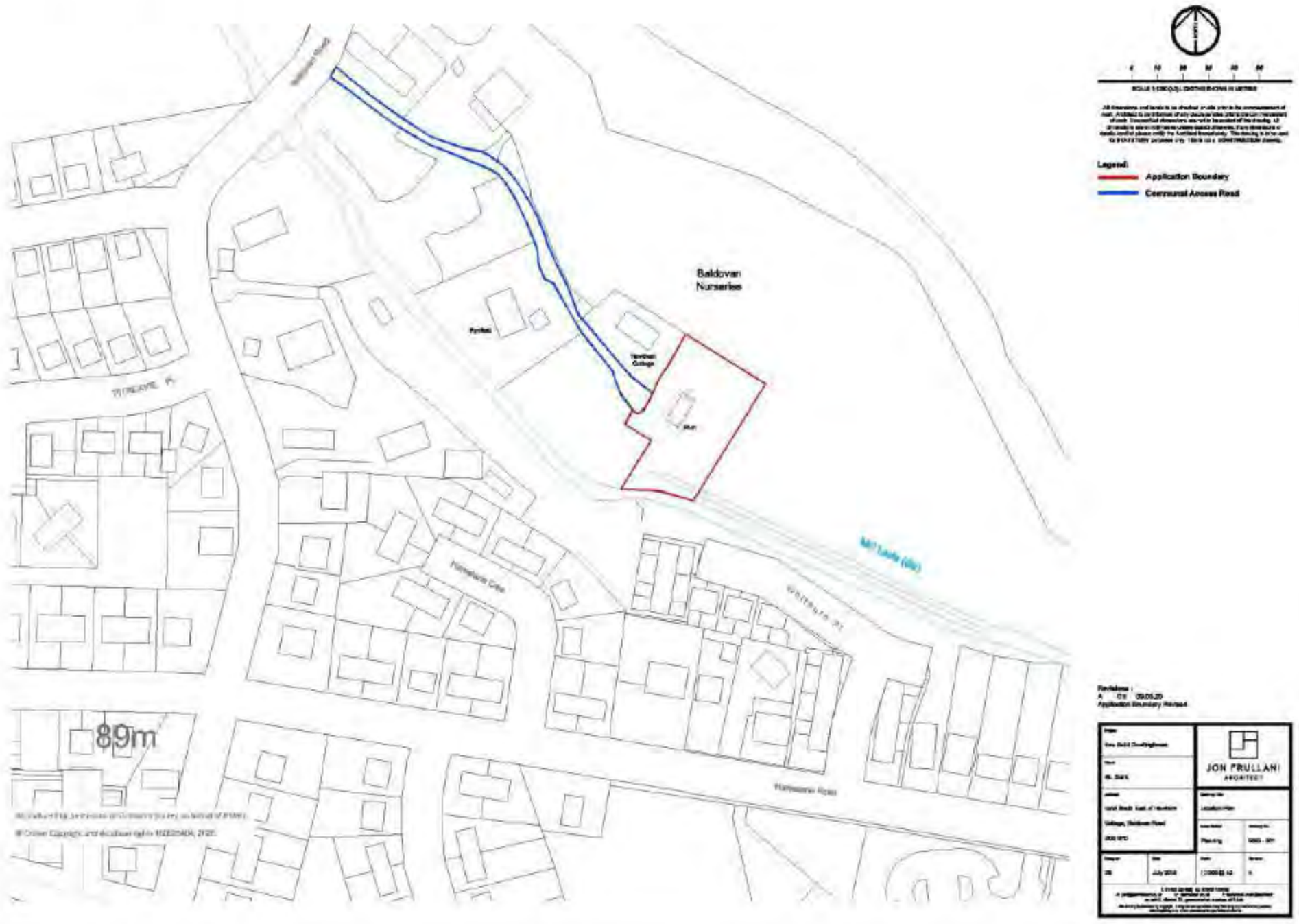
Information supplied by the client or any other parties and used in this report is assumed to be correct and GLM Ecology accepts no responsibility for inaccuracies in the data supplied.

It should be noted, that whilst every endeavour is made to meet the client's brief, no site investigation can guarantee absolute assessment or prediction of the natural environment. Numerous species are extremely mobile or only evident at certain times of year and habitats are subject to seasonal and temporal change.

GLM Ecology accepts no responsibility to third parties who duplicate, use, or disclose this report in whole or in part. Such third parties rely upon this report at their own risk.

Document Prepared By
Dr Garry Mortimer
GLM Ecology

ERECTION OF NEW DWELLINGHOUSE AT LAND ADJACENT TO HAWTHORN COTTAGE BALDOVAN STRATHMARTINE



Supporting Statement
Town and Country Planning(Scotland) Act 1997 as amended
Planning Application Ref: 20/00167/FULL
Applicant: Mr Kenneth Grant
Date: August 2021
Contents

1.0 INTRODUCTION

This Planning Application has been submitted on behalf of Mr Kenneth Grant and relates to the erection of a new dwelling house at land adjacent to Hawthorn Cottage, Baldovan, Strathmartine.

A previous application was submitted. Angus Council registered the application on 10 March 2020 under planning application reference: 20/00167/FULL.

The previous planning application was validated on 10 March 2020 and determined on 2 June 2020. The Planning Decision Notice cites the following reasons for refusal of planning permission:

1. *The application is contrary to Policy TC2 of the Angus Local Development Plan 2016 and the Countryside Housing Supplementary Guidance because it does not comply with any of the circumstances that would allow for the construction of a new house in a countryside location.*

2. The proposal is contrary to Policy PV12 of the Angus Local Development Plan (2016) because insufficient information has been submitted to demonstrate that the development would not be subject to an unacceptable level of flood risk and would not materially increase the probability of flooding to existing or planned development.

3. The proposal is contrary to Policy PV15 of the Angus Local Development Plan (2016) because a private drainage system is proposed, and insufficient information has been submitted to demonstrate that there is no viable connection to the public sewer.

4.The application is contrary to Policy DS1 of the Angus Local Development Plan 2016 as the proposal is not in accordance with relevant policies of the local development plan, namely policies TC2, PV12 and PV15.

In determining the planning application, the Planning Authority is required, under Section 25 of the Town and Country Planning (Scotland) Act, 1997 (as amended) (the "Act") to determine the application in accordance with the Development Plan unless material considerations indicate otherwise. The applicant disagrees with the Case Officer's decision and respectfully requests that this new application is considered in light of the material considerations detailed within this statement which we believe to justify approval of the proposal having regard to the requirements of Section 25 of the Act.

It is respectfully requested that this application is supported, and planning permission granted for the reasons provided in this statement.

2.0 APPLICATION SITE AND CONTEXT

The site is located to the east of Hawthorn Cottage and extends to 2050sqm in area as illustrated by Figure 1: Site Location Plan.

To the west the site is bound by the curtilage of Hawthorn Cottage and to the east and north by Baldovan Nurseries. To the south the site is bound by the Dighty Burn. The site was formerly part of Baldovan Bleach Fields and passing through the southern sector of the site is the laid that served the former Bleach Fields.

The site is accessed from the private road serving Rhynfield Cottage and Hawthorn Cottage.

Occupying the site is a dilapidated stone building complete to wall head height. The building formed part of the bleach works as demonstrated by Figure 2: Historic Map of Baldovan. The map extract in Figure 2 is from Forfarshire Sheet 050.13.

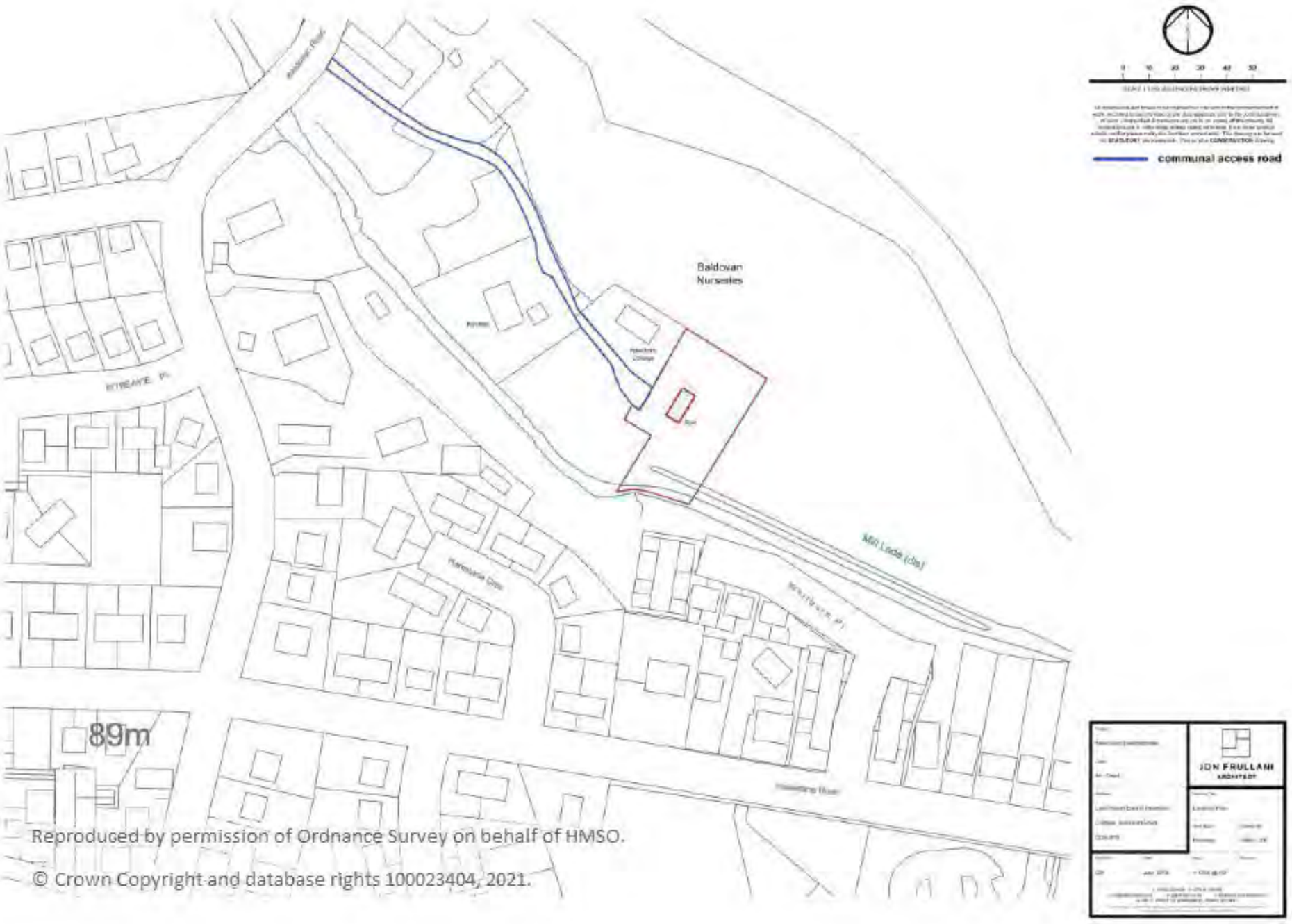


Figure 1: Site Location Plan

Figure 2: Historic Map of Baldovan

The photographs in Figures 3, 4,5 and 6 illustrate the relationship between the application site and Hawthorn Cottage, the site boundaries and the condition of the dilapidated building on site. The photographs and site location plan clearly illustrate that following the closure of the bleach fields the application site has not formed part of the curtilage of Hawthorn Cottage but rather is land that has not been maintained and latterly was in use for grazing horses. The photograph in Figure 5 shows the fencing that separates the application site from the curtilage of Hawthorn Cottage.

Figure 3: View looking east over application site from access road

Figure 4: Dilapidated Bleach Works Building

Figure 5: View North of Hawthorn Cottage from Dighty Burn

Figure 6 View North Over Application Site from Dighty Burn

Pre-application enquiry 17/00945/PREAPP was submitted to the Council seeking advice on proposals involving the erection of 2 houses at land adjacent to Hawthorn Cottage.

The pre-application responses from the Council stated that the conversion of the dilapidated building on site would not be supported. This was because the dilapidated building was located in what was considered the extended curtilage of Hawthorn Cottage and was therefore a domestic building. Further, the pre-application responses stated that the proposal would not be supported as the surrounding houses were not considered to form a building group. As such the site was not a gap site and the erection of housing on the site would not constitute the rounding off of an existing building group. Therefore, the Council concluded, having never visited the site that the proposal would be contrary to Policy TC2 Residential Development of the Angus Local Development Plan.

Taking these matters into account we have revised the design and plot layout of the proposed development. The proposal now involves the erection of one house rather than two. We have researched the history of the dilapidated building on site and can demonstrate that it is not a domestic building but rather like Hawthorn Cottage formed an integral part of Baldovan Bleach Fields.

Following the closure of the Baldovan Bleach Fields, Hawthorn Cottage was sold as a dwelling house with the application site being used as grazing ground for horses.

Planning permission was obtained in 2003 to extend Hawthorn Cottage. The site location plan for planning application ref: 03/00776/FUL included the application site for the current application within the red edge boundary. This was because this was all of the land in the ownership of the applicant. This was interpreted by the Council in their response to pre-application enquiry ref: 17/00945/PREAPP to mean that the site of the proposed development was domestic garden ground. However, the photographs in Figures 3, 4, 5 and 6 clearly show that the site has never formed part of the curtilage of Hawthorn Cottage but rather is separated from the curtilage of Hawthorn Cottage by fencing and hedging.

3.0 PROPOSED DEVELOPMENT

The proposal involves the demolition of the dilapidated former bleach field building, site remediation and the erection of a detached dwelling house and garage.

The new dwelling will have a north to south orientation with the principal elevation facing south over the Dighty Burn.

The proposed house will have a traditional H plan shape with pitched roofs finished in slate. The elevations of the proposed house will be finished in a combination of timber cladding, stone and roughcast. Accommodation within the house will be spread over 2 levels with window and door openings on the ground floor south elevation opening out on to a decked area.

Access to the site will be taken from the road serving Hawthorn and Rhynfield Cottages and the existing paddocks which terminates midway along the western boundary of the site. A driveway will extend west to east in front of the principal elevation of the house to a garage located in the north eastern corner of the site.

The proposed garage will have a pitched roof finished in slate and roughcast walls to match the proposed house. The garage and driveway will provide parking for up to 4 vehicles.

The proposed house will have an area of private garden ground to the rear (north) with an area of 500sqm.

The layout and design of the proposed development are illustrated by the Site Layout Plan in Figure 7.

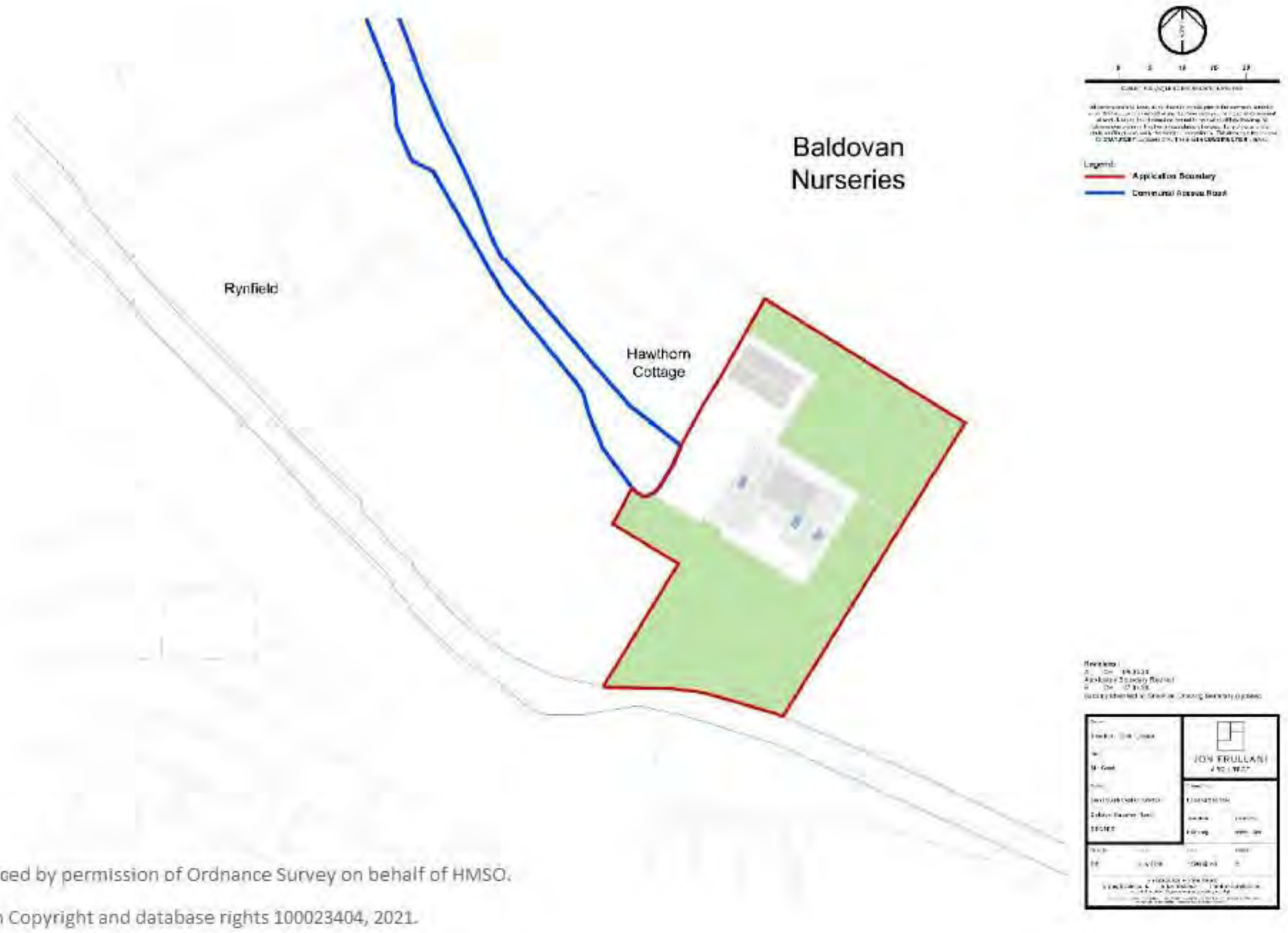


Figure 7: Site Layout Plan

4.0 **DEVELOPMENT PLAN**

The statutory development plan for Angus comprises:

- TAYplan, approved 2017
- Angus Local Development Plan, adopted 2016

Other relevant material considerations to this proposal are:

- National Planning Framework 3
- Scottish Planning Policy 2014

5.0 EVALUATION OF PROPOSED DEVELOPMENT

Section 25 of the Act identifies that "*where, in making any determination under the planning Acts, regard is to be had to the development plan, the determination shall be made in accordance with the plan unless material considerations indicate otherwise*."

This principle is restated in Section 37(2) of the Act on the determination of applications states that *"In dealing with such an application the authority shall have regard to the provisions of the development plan, so far as material to the application, and to any other*

material considerations".

The determining issues in this case are whether; the proposal complies with development plan policy; or if there are any other material considerations which justify a departure from policy.

TAYplan 2017

TAYplan is the Strategic Development Plan (SDP) for Angus, Perth and Kinross, Dundee and Northern Fife. The SDP sets the strategic planning policy context for the area for the period 2016 – 2036.

TAYplan identifies that *"By 2036, the TAYplan area will be sustainable, more attractive, competitive and vibrant without creating an unacceptable burden on our planet. The quality of life will make it a place of first choice where more people choose to live, work, study and visit and where businesses choose to invest and create jobs."*

To meet the strategic planning objectives of TAYplan there are a number of policy requirements to be delivered through Local Development Plans. The Angus Local Development Plan delivers the requirements of Policy 1Locational Priorities, Policy 2 Shaping Better Quality Places through policies addressing design, housing, economic development, and the built and natural environment.

Policy 4 Homes requires Local Development Plans to allocate sufficient land to meet the housing land requirement, for 10 years, and ensure a minimum of 5 years effective housing land supply at all times. To support economic growth Policy 4 encourages the Angus Local Development Plan to have the flexibility to plan for housing numbers in excess of the housing land requirement. Policy 4 also requires Local Development Plans to facilitate a mix of housing type, size and tenure to meet the needs and aspirations of a range of different households throughout their lives.

The site, if granted planning permission, would contribute to the existing effective housing supply facilitating the delivery of new housing in the short-term and meeting the requirements of Policy 4 Homes.

Angus Local Development Plan 2016

Policy DS1 in the Angus Local Development Plan (ALDP) indicates that out with development boundaries proposals will be supported where they are of a scale and nature appropriate to their location. It indicates that proposals that re-use or make better use of vacant, derelict or under-used brownfield land or buildings will be supported where they are in accordance with relevant policies of the ALDP.

Policy TC2 indicates that in countryside locations Angus Council will support proposals for new dwelling houses which fall into at least one of a number of categories. In addition, Policy TC2 requires all proposals for new residential development to be compatible in terms of land use; to provide a satisfactory residential environment; not to result in unacceptable impact on the built and natural environment, surrounding amenity, access and infrastructure; and to include provision for affordable housing in accordance with Policy TC3. Proposals are also required to be assessed in terms of the Angus Council Countryside Housing Supplementary Guidance.

In terms of possible acceptable situations identified by TC2, the proposal does not involve retention, renovation or acceptable replacement of an existing house; it does not involve conversion of a non-residential building; it is not a gap site (defined as the space between the curtilages of two houses; or between the curtilage of one house and a metalled road; or between the curtilage of one house

and a substantial building}; it does not round off an established building group of 3 or more existing dwellings; and it is not required for an essential worker in association with management of land or a rural business.

Policy TC2 offers support for up to four new houses where development involves the regeneration or redevelopment of a brownfield site where the development delivers significant visual or environmental improvement through the removal of derelict buildings, contamination or an incompatible land use.

The main issue raised by the Council during the pre-application enquiry process was the nature of the site. This was due to confusion over whether the site forms part of the curtilage of Hawthorn Cottage or if the site is a 'rural brownfield site' and if sufficient environmental benefit could be gained by its redevelopment for housing.

The Countryside Housing Supplementary Guidance defines rural brownfield sites as:

Sites that have previously been developed. In rural areas this usually means sites that are occupied by redundant or unused buildings or where the land has been significantly degraded by a former activity.

The information provided in section 2.0 Site and 4.0 Planning History demonstrate that the site and the dilapidated building upon it forms part of the former Baldovan Bleach Fields.

The buildings that form Rhynfield Cottage, Hawthorne Cottage, the derelict building on site and the remaining footprint of former buildings formed part of the Bleach Fields. Historically a Bleach Field was an area of land adjacent to a watercourse where linen or jute produced in a mill could be stretched out soaked in chlorine diluted by water from the watercourse and left to dry in the sun. Typically this caused significant contamination of the land and surrounding watercourses. The dilapidated building on site was used as a boiler house and as such there are concentrations of ash within and surrounding the building. Ash has to be removed from the site as it is unknown what materials were burned to create the ash and what contaminants are present on site.

The dilapidated stone building that was formerly used as a boiler house was last known to be used for the storage of hay and feed for horses grazing on the site.

Taking cognisance of the above reasoning there is clear and irrefutable evidence to demonstrate that the application site although currently overgrown was last in use as a paddock for grazing horses and does not form domestic curtilage associated with Hawthorn Cottage. The site is a brownfield given its historic use as part of Baldovan Bleach Field.

The proposed house would have a H plan combining three rectangular plans with narrow gables and wide frontages which is characteristic of houses found in rural Angus. The external finishes combined with the scale, massing and design of the building and the sloping topography of the site would allow the dwelling to appear as a recessive element in the landscape. The house would be back clothed with woodland which would allow the house to integrate well in the surrounding landscape. Taking cognisance of the above reasoning we believe the proposed house could be accommodated without any adverse impact on the character of the surrounding area or existing housing.

The proposal would not adversely affect any natural heritage designation.

By utilising the existing access to the site the proposed development will have no adverse impacts on road traffic and pedestrian safety.

The development is not of a scale that would require a contribution towards affordable housing or other community infrastructure.

Surface water would be managed by means of sustainable drainage infrastructure on site (permeable paving and soakaways) which is in accordance with Policy PV15.

In terms of the detailed criteria provided at Appendix 3 of the Countryside Housing Supplementary Guidance, the proposal would not create a gap site or rounding off opportunity for additional housing development and would not require the subdivision of an existing residential curtilage. The proposal would not extend existing ribbon development. The proposal would not result in the coalescence of building groups or of a building group with a nearby settlement. The proposal does not give rise to any significant issues in terms of the Appendix 3 requirements.

Redevelopment of the site with a dwelling of a high quality design would provide a significant visual improvement, consistent with the aims of policy TC2. Taking the above matters into consideration we have demonstrated the proposed development to accord with Angus Council's countryside housing policy.

Policy DS3 requires development to deliver a high design standard and draw upon those aspects of landscape or townscape that contribute positively to the character and sense of place of the area in which they are to be located. It suggests that development should fit with the character and pattern of development in the surrounding area and that access and parking requirements of the Roads Authority are met.

Policy DS4 relates to amenity and states that proposals must have full regard to opportunities for maintaining and improving environmental quality. Development is not permitted where there would be an unacceptable adverse impact on the area or the environment or amenity of nearby sensitive property.

In terms of the residential environment to be provided, the plot would be comparable with existing plot sizes serving Hawthorn and Rhynfield Cottages. The paddock to the south of Hawthorn Cottage will be retained as part of the proposed development.

The proposed plot has an area of 2050sqm. The proposed house would have a reasonable degree of privacy with there being a distance in excess of 18m between the facing windows of habitable rooms of the proposed house and neighbouring properties. There would be in excess of 1000sqm of private garden ground and adequate space to provide 4 vehicle parking spaces as well as bin and recycling storage.

The site contains no designation for natural or built heritage interests. The proposal is consistent with the character and pattern of development in the area and provides an acceptable design solution as evidenced above.

There will be adequate separation between the proposed dwelling and those to the west. This shall ensure that there is no adverse impact on the amenity and environmental quality of the existing and proposed dwellings by virtue of the scale and massing of the proposed house. Similarly, the separation distance between the proposed house and existing buildings will ensure that there is no unacceptable impact on the amenity or environmental quality of the proposed house in terms of overlooking and overshadowing.

Access and parking arrangements are in accordance with the Council's standards and would not impact on road traffic and pedestrian safety.

The proposal is not of a scale or location where it would require a developer contribution or affordable housing when assessed against the Developer Contributions and Affordable Housing Supplementary Guidance and there is no reason to consider it would result in unacceptable impact on infrastructure. There are no issues against the remaining criteria of Policy DS4.

Although the proposal will involve the removal of several trees on site, the landscape plan accompanying this application illustrates our proposals to reinforce the northern and eastern site boundaries with tree planting as well as replacement tree planting in the southern sector of the site.

Taking cognisance of the above reasoning the proposed development has been evidenced to satisfy the requirements of the adopted Angus Local Development Plan.

Material Considerations

1. National Policy and Guidance

The Scottish Government sets out the national planning context in both National Planning Framework 3 and in Scottish Planning Policy {SPP} 2014.

The National Planning Framework outlines the long-term strategy for Scotland and provides a spatial representation of the Government's economic strategy and plans for delivery of infrastructure.

SPP sets out Scottish Government policy on how nationally important land use planning matters should be addressed across the country.

Together the application of the National Planning Framework and Scottish Planning Policy at the national, strategic and local levels will enable the planning system to deliver the Scottish Government's vision and outcomes for Scotland that include:

- A successful, sustainable place;
- A low carbon place;
- A natural, resilient place;
- A connected place.

SPP sets out the principal overarching policies on Sustainability and Placemaking and reaffirms that these policies should be applied to all development.

Both the NPF3 and SPP stipulate the need for a coordinated approach to rural development. This is reaffirmed by SPP which states that in rural areas, where new development can often help to sustain communities, plans and decision-making should generally promote a pattern of development that is appropriate to the character of the particular area. This should include provision for small-scale housing and other development which supports sustainable economic growth in a range of locations, taking account of environmental protection policies and addressing issues of location, access, siting, design and environmental impact.

The location of the application site accords with the broad approach of the above national policy and guidance statements to promote a pattern of development that is appropriate to the character of

the particular area, together with supporting sustainable economic growth. Therefore, the proposed development is considered to positively contribute to placemaking objectives and will provide for new housing of a high-quality design that is also deliverable in a location that is appropriate.

2. **Views of the Objectors: previous application (20/00167/FULL)**

3 letters of objection were received by the Council when determining planning application ref: 20/00167/FULL. The objections raise the following concerns:

- Development is outwith development boundary of Strathmartine;
- Detrimental impact on amenity of existing properties;
- Environmental pollution;
- Road safety issues. inadequate access track with lack of passing places and visibility concerns at junction;
- Information relating to previous uses of the site and its condition is disputed;
- There is virtually no trace of the former bleachworks on the site with nature largely taken the area back.
- Impacts on trees and wildlife;
- Applicant has failed to notify one of landowners which wraps around applicants site.

The material considerations highlighted in red have been addressed in the assessment of the proposal against the requirements of the Development Plan above and are not supported. The concerns highlighted in blue are not material planning considerations but rather matters to be considered by the appellant should planning permission be granted.

6.0 EVALUATION OF COUNCIL'S ASSESSMENT OF PLANNING APPLICATION REF: 20/00167/FULL

In assessing planning application ref: 20/00167/FULL the Planning Case Officer has refused planning permission for the following reasons:

1. *The application is contrary to Policy TC2 of the Angus Local Development Plan 2016 and the Countryside Housing Supplementary Guidance because it does not comply with any of the circumstances that would allow for the construction of a new house in a countryside location.*

2. The proposal is contrary to Policy PV12 of the Angus Local Development Plan (2016) because insufficient information has been submitted to demonstrate that the development would not be subject to an unacceptable level of flood risk and would not materially increase the probability of flooding to existing or planned development.

3. The proposal is contrary to Policy PV15 of the Angus Local Development Plan (2016) because a private drainage system is proposed and insufficient information has been submitted to demonstrate that there is no viable connection to the public sewer.

4.The application is contrary to Policy DS1 of the Angus Local Development Plan 2016 as the proposal is not in accordance with relevant policies of the local development plan, namely policies TC2, PV12 and PV15.

In relation to Reason for Refusal 1, the Case Officer's Report of Handling states:

Criterion (a) of the Appendix 3 Detailed Countryside Housing Criteria indicates that development proposals should not create a gap or rounding off opportunity for additional greenfield development. It also indicates that the sub division of existing residential curtilages to artificially create new build plots will not be supported.

The proposal fails both of those tests because the site is within an existing residential curtilage and a house on this site would create a gap site for an additional house to the west. The planning history of Hawthorn Cottage (ref: 03/00776/FUL) proposed works to stone building within the site and identifies it as falling within its garden ground. Aerial imagery shows that that site appears to have been maintained as garden ground, unlike the unmaintained land further to the east. The development of a house on the site would also create a gap site for an additional new dwelling to the west between the proposed new house and Rynfield. As such, the proposal is contrary to both tests of criterion (a) and the principle of a house on the site does not comply with Policy TC2 and the associated Countryside Housing Supplementary Guidance.

In relation to the above concerns we have provided historic mapping and an account of the history to the application site in Section 2 to this statement and throughout the supporting information provided as part of application ref: 20/00167/FUL. The history to the site demonstrates that contrary to the Case Officers opinion the application site does not form part of the curtilage of Hawthorn Cottage but rather was part of the Baldovan Bleach Fields. This has been verified by the consultation response from Aberdeenshire Council's Archaeology Service in relation to application ref: 20/00167/FULL where it was confirmed that the site was occupied by a former Mill. This is consistent with the use of the site as a Bleach Field and the dilapidated building on site as a boiler house. Furthermore, the photographs in Figures 3-6 clearly demonstrate that the application site is separated from Hawthorn Cottage by a boundary fence. Had the site formed part of the garden ground serving Hawthorn Cottage there would be no boundary treatments separating the 2 parcels of land unless they were indeed separate entities. In addition, a visit to the site rather than reliance on aerial photography would clearly demonstrate that there is a marked difference in the condition of the application site in comparison to the well maintained curtilage of Hawthorn Cottage.

The Case Officer insinuates that the proposal will create a gap site to the west of application site and south of Hawthorn Cottage. However, for this to be the case the Council would need to approve planning permission contrary to the Development Plan to erect a house on the gap site. It would not be possible for such a development to satisfy the requirements of Policy TC2 and the Countryside Housing Supplementary Guidance due to the significant adverse impact that such a development would have on the amenity and environmental quality of Hawthorn Cottage.

Taking cognisance of the history of the application site we have demonstrated that it does not form part of the curtilage of Hawthorn Cottage, that the approval of planning permission will not create a gap site but that the proposal would provide a significant visual and environmental improvement to the area through the redevelopment of a brownfield site. In this regard the proposed development satisfies the requirements of Policy TC2 of the adopted Angus Local Development Plan.

In relation to Reasons for Refusal 2 and 3, a Flood Risk Assessment has not been provided due to the Council's hostility towards development on the application site. Had the Case Officer been willing to accept that the site is not part of the curtilage of Hawthorn Cottage as demonstrated through out this statement and the statements provided in support of application ref: 20/00167/FULL our client would have incurred the cost of providing a Flood Risk Assessment knowing that the principle of a house on the application site satisfied Policy TC2. Also, had the Case Officer communicated that

connection to the public sewer would be supported over private treatment our client would have agreed to this given that capacity exists in the public sewer network. Should the Local Review Body be minded to support the proposals compliance with Policy TC2, the submission of a Flood Risk Assessment and connection to the public sewer can be controlled by planning conditions thus satisfying Policies PV12 and PV15 and addressing Reasons for Refusal 2 and 3.

By addressing Reasons for Refusal 1, 2 and 3 we have demonstrated that Reason for Refusal 4 is academic in that it only exists due to Reasons for Refusal 1, 2 and 3.

While great attention has been paid to the failings of the proposed development when assessed against the requirements of the Development Plan, the Case Officers assessment of the qualitative aspects of the proposed development are skewed towards the refusal of planning permission. Indeed the aims and objectives of the key national policies and guidance evaluated in Section 5 of this statement have not been considered by the Case Officer and it would seem that a decision to refuse planning permission had been taken before the development had been assessed against the requirements of the Development Plan. This is highlighted by the Report of Handling for planning application ref: 20/00167/FULL where no merit is given to the high quality design of the proposed development in relation to the objectives of the proposed development and how these reflect upon the content of Policy 4 of the Tayplan Strategic Development Plan or Policy TC2 of the adopted Local Development Plan. Furthermore, had the content of the national policy and guidance highlighted by the supporting planning statement to planning application ref: 20/00167/FULL and detailed within Section 5 of this appeal statement, the planning history and the consultation response received from Aberdeenshire Council's Archaeology Team been taken into account we are confident that the Case Officer would not have concluded that the proposed development is contrary to Policy TC2 of the adopted Local Development Plan.

7.0 APPEAL OF PLANNING APPLICATION REF: 20/00167/FULL AND REPORT TO SCOTTISH MINISTERS

Following the refusal of the previous planning application (ref: 20/00167/FULL), an appeal to the Committee was submitted. The decision of the Review Committee was to grant planning permission, subject to conditions. Please see below excerpt from Report by Allison Coard:

"2.12 Subsequent to this Council members (committee dated 4 November 2020) undertook to a carry out an unaccompanied site visit. On 24 November 2020, the minute of the development Management Review Committee states that following the site visit it was agreed the proposal would provide for the regeneration or redevelopment of a brownfield site and would round off a group of housing. It noted the outstanding objection from SEPA and considered that the proposal would not materially increase the probability of flooding to existing or planned development and therefore should be approved.

2.13 The decision of the Review Committee was to grant planning permissions subject to a number of conditions (as set out in the report by the Director of Legal and Democratic Services) dated 16 December 2020. It was recognised that the decision would be referred to Scottish Ministers as there was an outstanding objection from the Scottish Environment Protection Agency.

2.14 In subsequent further written submissions the council confirmed it took the view that the impact of any flood risk was not significant enough to merit refusal nor that it would materially increase the probability of flooding to existing or planned development. In addition

as a matter of clarification it advised that it did not receive further email correspondence from SEPA on 29 April 2020 confirming that their response of 17 March 2020 to the application was both an objection on the grounds of lack of information on flood risk and an objection on the grounds of proposals for a private sewage system when there is a public sewer. This email was not submitted to the Development Management Review Committee on 4 November 2020 but both grounds of objection were referred to in the Report of Handling considered by the Committee."

The above clarifies the flood risk was not great enough to merit refusal. SEPA issued an objection by the matters stated above – lack of information and proposal for a private drainage system. This application proposes that the development would be connected to the public sewer. As proposed in the approval by the Review Committee, the applicant would submit details of the drainage as a condition on the permission for approval before the commencement of any works.

8.0 CONCLUSION

The purpose of this statement has been to demonstrate that the proposal aligns with the aspirations of the Scottish Planning Policy, National Planning Framework as well as the Development Plan and satisfies the specific requirements of the adopted Angus Local Development Plan.

Taking these matters into consideration it is respectfully requested that, having regard to the requirements of Section 25 and 37 of the Town and Country Planning (Scotland) Act, 1997 as amended, this application is supported and approval is granted.

Millard

More than civil engineers

Proposed House on land adjacent to Hawthorn Cottage, Baldovan, Angus

Flood Risk Assessment

Ref: 16420/AB/781

February 2022

REGISTRATION OF AMENDMENTS

Revision and Date	Amendment Details	Revision Prepared By	Revision Approved By

CLIENT: Mr Chris Grant

ENGINEER: Millard Consulting
Seabraes
18 Greenmarket
Dundee
DD1 4QB

Tel: 01382 227380

Report Prepared By:

[redacted]....
Andrew Braid

Report Checked By:

[redacted]
.....
Ken Pirie (Managing Director)

CONTENTS

PLANS

1.0 Introduction

Millard Consulting have been instructed by Mr Chris Grant to carry out a Flood Risk Assessment in relation to the construction of a new house on land adjacent to Hawthorn Cottage at Baldovan in Angus.

1.1 Scope and Methodology

The purpose of this assessment is to assess the 1 in 200 year flood risk to the site and the access route to the site from Baldovan Road.

Flood risk is to be considered from the Dighty Water which flows in a south easterly direction in the vicinity of the site. A 1D-2D linked hydraulic model of the Dighty Water has been constructed using Flood Modeller, modelling flow within the watercourse and overland flow across the flood plain where required.

The potential impact of climate change will also be quantified as part of the assessment. An appropriate climate change allowance will be applied in line with the SEPA document "Climate change allowances for flood risk assessment in land use planning" (SEPA, 2019). As part of this guidance, climate change allowances vary dependent on site location and catchment size, with specific values for each identified river basin region. The subject watercourse is within the Tay region, hence a climate change allowance of 35% will be applied.

To enable the hydraulic model to be constructed cross sections on the Dighty Water were surveyed by Benchmark Land Surveys. Benchmark Land Surveys have also undertaken a topographical survey of the site, the access road to the site and selected potential offsite floodplain areas.

This Flood Risk Assessment is carried out in accordance with the requirements of the Scottish Planning Policy *(SPP) (Scottish Government, 2020)*. This assessment uses a set of procedures originally set out in the Flood Estimation Handbook *(Institute of Hydrology, 1999)* and embodied in the FEH and WINFAP software packages currently used.

The assessment is prepared using our best engineering judgement but there are levels of uncertainty implicit in the historical data and methods of analysis. Details of the range of possible error in the methods of flood estimation are given in the Flood Estimation Handbook (FEH).

2.0 General Description of Site

The site at Baldovan is located at Ordnance Survey grid reference 339000, 734342. The site location is shown in Figure 1 below:

Figure 1 – Site Location Plan

The site is 2050m^2 in size and is bounded to the north west by Hawthorn Cottage and the access into the site, open land covered with high grass, brush and trees to the north east and south east, and by the Dighty Water to the south west. There is an existing building on site which was part of a former mill complex located on site. The building is now dilapidated.

The topography of the site slopes in a south westerly direction towards the Dighty Water. The gradient varies however, with a gradual fall from the location of the building, towards the Dighty, and a steeper slope to the north east. Site levels sit significantly higher than the Dighty Water as it passes the site, with a level difference of between 3.22m and 3.91m measured between the top of the left bank and the lowest bed level of the watercourse in the vicinity of the site.

As it passes the site the Dighty Water flows a relatively straight course in a south easterly direction. The watercourse has occasional weeds in the channel, while the banks are steep in the vicinity of the site. The watercourse is tree-lined in the vicinity of the site.

The Dighty Water is bridged by Baldovan Road approximately 200m upstream of the site. The Baldovan Road bridge consists of two masonry arches, while masonry parapets are present at both the upstream and downstream sides of the bridge. Immediately downstream of the bridge the Gorrie Burn flows into the Dighty Water. The Gorrie Burn flows from Clatto Reservoir approximately 2km west of the site, along a straight course to the Dighty Water. A pipe crossing is also located on the downstream side of the bridge.

Upstream of Baldovan Road there is less vegetation on the banks of the watercourse, while the land adjacent to the Dighty Water is covered by short grass. Downstream of Baldovan Road the Dighty Water is bounded by

a mixture of private gardens and open land. A significant area of open land is located immediately downstream of the bridge, the majority of which is covered with short grass.

The site is accessed by a private road which runs from Baldovan Road adjacent to the northern side of the masonry arch bridge.

In addition to the Dighty Water, the remnants of a former mill lade can be seen running alongside the Dighty as it passes the site. A former mill lade ran approximately along the route of the access into the site from Baldovan Road. It also ran through land to the north east of the Dighty upstream of Baldovan Road, with an offtake from the Dighty Water into the lade channel located approximately 380m upstream of Baldovan Road. The former mill lade has now been infilled, with the exception of a short length which has essentially become part of the channel of the Dighty Water. With the exception of the aforementioned dilapidated building, all former mill buildings on site have been demolished.

The site has been topographically surveyed by Benchmark Land Surveys. The topographical survey is shown on three drawings within the "Plans" section of this report. The surveyed cross sections are also enclosed within the "Plans" section.

Photograph 1 – looking north east across the site from the bank of the Dighty Water.

Photograph 2 – taken from the same location as Photograph 1, looking in a north westerly direction.

Photograph 3 – looking downstream on the Dighty Water as it passes the site.

Photograph 4 – looking on the Dighty Water downstream of the site.

Photograph 5 – upstream side of the Baldovan Road masonry arch bridge.

Photograph 6 – a view of the access road into the site from Baldovan Road.

Photograph 7 – looking in a southerly direction towards the bridge at Baldovan Road.

Photograph 8 – looking upstream on the Dighty Water from Baldovan Road.

3.0 General Observations

The house is proposed where the site topography changes from a steeper slope, to a shallower slope running towards the Dighty Water. Part of the proposed house is located across the area currently occupied by the dilapidated building. A detached garage is also proposed on site.

The access road from Baldovan Road is the only route of access into the site.

There is a pipeline crossing immediately downstream of the Baldovan Road bridge, however it sits higher than the soffit of the bridge, and hence has not been modelled in this assessment.

Dundee City Council have advised that they believe water has ponded on the Baldovan Road bridge previously, however it was believed this was due to surface water exceeding the capacity of gullies rather than out of bank flow from the Dighty Water flowing onto the deck of the bridge.

Dundee City Council provided photographs of high flow levels at the Baldovan Road bridge during a flood event on the 4th of September 2009. This information has been used to calibrate the hydraulic model. The calibration undertaken is discussed further in Section 5.0.

The SEPA flood map has been assessed as part of this assessment. This shows a risk of floodwater flowing onto Baldovan Road during a 1 in 200 year flood event, before flowing along the access track, through the site and back into the Dighty Water. The SEPA flood map also shows this occurring for a 1 in 10 year flood event. There are no records of flooding on the access track that have been provided to Millard Consulting.

4.0 Estimation of Flood Flows

In order to define the extent and water surface level of the 1 in 200 year (0.5% annual probability) floodplain, flood flows have been estimated for the Dighty Water both upstream and downstream of Baldovan Road. The FEH Statistical Method and ReFH2 have been utilised to estimate flood flows at the site.

The FEH Rainfall Runoff Method is known to provide an unreasonably high estimation of flood flow on the Dighty Water, and hence this method has therefore not been applied in this instance.

The flow estimation process is outlined below.

4.1 Dighty Water – Upstream of Baldovan Road

4.1.1 FEH Statistical Method – WINFAP 5

Estimation of Index Flood QMED

In order to define the extent and water surface level of the 0.5% annual probability floodplain, we must first estimate the Index Flood, Q_{MED}, using the methods outlined in the Flood Estimation Handbook (FEH).

An initial estimate of the flood flows for the Dighty Water adjacent to the site was made using the Catchment descriptor Method. This method is described in Volume 3, Chapter 13, of the FEH. The catchment descriptors define various physical and hydrological properties and characteristics of the land that forms the catchment upstream of the point of interest. The formula also includes variables that define the statistical rainfall pattern within the catchment. There is a further adjustment to the formula that accounts for the degree of urbanisation of the catchment.

The method produces the mean annual flood Q_{MED} – the index flood – which is the flood flow along the river or floodplain that is statistically "exceeded on average every other year". It is roughly equivalent to the two-year flood. The exercise is done using the FEH and WINFAP software.

Catchment Descriptors have been obtained from the FEH Web Service, which state a catchment size of 52.39km^2 for the Dighty Water upstream of Baldovan Road. The catchment area has been checked by the manual assessment of Ordnance Survey mapping, and this confirmed the FEH derived catchment size as appropriate. Catchment descriptors for the Dighty Water upstream of Baldovan Road, and the defined catchment are shown in Figures 2 and 3 overleaf.

The WINFAP-FEH estimation of QMED from catchment descriptors is 8.988m^3/s.

VERSION	"FEH CD-ROM	Version	4.0.0	exported	16:18:24	GMT
CATCHMENT	GB	338800	734550	NO 38800	34550	
CENTROID	GB	333138	737249	NO 33138	37249	
AREA	52.39					
ALTBAR	181					
ASPBAR	164					
ASPVAR	0.25					
BFIHOST	0.587					
BFIHOST19	0.538					
DPLBAR	8.79					
DPSBAR	81.9					
FARL	0.969					
FPEXT	0.0718					
FPDBAR	0.56					
FPLOC	0.9					
LDP	15.2					
PROPWET	0.46					
RMED-1H	8.4					
RMED-1D	36.6					
RMED-2D	46.7					
SAAR	818					
SAAR4170	859					
SPRHOST	39.51					
URBCONC1990	-999999					
URBEXT1990	0.0042					
URBLOC1990	-999999					
URBCONC2000	0.763					
URBEXT2000	0.0069					
URBLOC2000	0.694					
C	-0.0158					
D1	0.48073					
D2	0.4181					
D3	0.29018					
E	0.24594					
F	2.17916					
C(1 km)	-0.015					
D1(1 km)	0.476					
D2(1 km)	0.423					
D3(1 km)	0.286					
E(1 km)	0.243					
F(1 km)	2.133					

Figure 2 – Dighty Water catchment descriptors upstream of Baldovan Road

Figure 3 – Dighty Water catchment upstream of Baldovan Road, as defined by the FEH Web Service (FEH Web Service, 2021)

Adjustment to QMED from a Donor Site

In order to make the estimation of Q_{MED} more accurate, it is necessary to use flow data from donor sites with similar hydrological characteristics, where gauged information does exist for an adequate number of years. An appropriate local adjustment to the estimate of Q_{MED} at the subject site is then made. The procedure uses several donor sites to estimate an adjusted Q_{MED} value which is then applied to the subject site.

Using WINFAP software and applying the method whereby six WINFAP selected donors are utilised, the adjusted QMED value for the Dighty Water upstream of Baldovan Road becomes 10.515m^3/s. With the effect of urbanisation included, the QMed value increases to 10.606m^3/s.

There is a gauging station located on the Dighty Water at Balmossie, some 10.5km downstream of the site. The catchment of the Dighty at the gauged location is significantly larger than the subject catchment (127.41km^2 at the gauge, 52.39km^2 upstream of Baldovan Road), while the catchment is also significantly more urbanised. However, for comparative purposes the adjustment factor provided by the gauge was considered. During an assessment undertaken in October 2020 for an alternative site on the Dighty Water, Millard Consulting estimated an adjustment factor of 1.11 for the Balmossie gauge. This is lower than the adjustment factor of 1.16 provided by the WINFAP selected donor method outlined above (10.515/8.988 = 1.16). The recommended method of applying 6 , WINFAP selected donors therefore provides a more conservative QMed value, hence this approach will be adopted in this assessment.

To ensure adherence with the precautionary principle, the Qmed value of 10.606m^3/s will be applied as the adjusted Qmed in the further analysis.

Flood Growth Curves

In order to estimate the magnitude of the range of possible statistical flood events which will occur in this catchment, for example the flood that will statistically occur once in 200 years (the 0.5% flood), it is necessary to determine a flood growth curve and a flood frequency curve. This is done by forming a "Pooling Group", i.e. by selecting a group of other catchments across the UK which have very similar characteristics to the subject site and which have existing gauged flow records covering a statistically adequate number of years, and subjecting this group to statistical analysis.

The catchment descriptors from the FEH Web Service are entered as a data file to the WINFAP software, which collates a pooling group of similar catchments, subjects these to a statistical analysis, and calculates a range of flows representing floods of different probabilities at the subject site.

The results can vary slightly, depending upon the chosen weighting of the statistical analysis, but adopting the recommended "Generalised Logistic" (GL) technique, the 1 in 200 year flood flow is estimated to be 34.6m^3/s.

The data and results for the WINFAP growth curve derivations are shown in Appendix A.

4.1.2 Revitalised Flood Hydrograph Method (Version 2.3)

The second method utilised for the assessment of flood flows in the Dighty Water was the Revitalised Flood Hydrograph Method. This method is the second version of a method which was originally established as an update to the FEH Rainfall Runoff method.

The ReFH2 model is comprised of three components; a loss model, a routing model and a baseflow model. The total rainfall, less the losses is input into the routing model, with results from the routing and baseflow models combined to provide a prediction of flow. The ReFH2 model is used in conjunction with a depth-duration-frequency model, either the FEH99 model or FEH13 model. In this instance, the FEH13 model was used to provide the rainfall input.

Using the ReFH2 software, the flood flow estimate for the Dighty Water upstream of Baldovan Road was 28.98m^3/s

Output from the ReFH2 analysis is enclosed within Appendix B.

4.2 Dighty Water adjacent to Hawthorn Cottage

4.2.1 FEH Statistical Method (using WINFAP 5)

Estimation of Index Flood QMED

In order to define the extent and water surface level of the 0.5% annual probability floodplain, we must first estimate the Index Flood, Q_{MED}, using the methods outlined in the Flood Estimation Handbook (FEH).

An initial estimate of the flood flows for the Dighty Water adjacent to the site was made using the Catchment descriptor Method. This method is described in Volume 3, Chapter 13, of the FEH. The catchment descriptors define various physical and hydrological properties and characteristics of the land that forms the catchment upstream of the point of interest. The formula also includes variables that define the statistical rainfall pattern within the catchment. There is a further adjustment to the formula that accounts for the degree of urbanisation of the catchment.

The method produces the mean annual flood Q_{MED} – the index flood – which is the flood flow along the river or floodplain that is statistically "exceeded on average every other year". It is roughly equivalent to the two-year flood. The exercise is done using the FEH and WINFAP software.

Catchment Descriptors have been obtained from the FEH Web Service, which state a catchment size of 53.78km^2 for the Dighty Water adjacent to Hawthorn Cottage. The catchment area has been checked by the manual assessment of Ordnance Survey mapping, and this confirmed the FEH derived catchment size as appropriate. Catchment descriptors for the Dighty Water adjacent to Hawthorn Cottage, and the defined catchment are shown in Figures 4 and 5 overleaf.

The WINFAP-FEH estimation of QMED from catchment descriptors is 9.068m^3/s.

VERSION	"FEH CD-ROM"	Version	4.0.0	exported 08:34:20	GMT	
CATCHMENT	GB	338950	734350	NO 38950 34350		
CENTROID	GB	333259	737179	NO 33259 37179		
AREA	53.78					
ALTBAR	180					
ASPBAR	160					
ASPVAR	0.24					
BFIHOST	0.586					
BFIHOST19	0.538					
DPLBAR	8.9					
DPSBAR	81.4					
FARL	0.966					
FPEXT	0.0706					
FPDBAR	0.553					
FPLOC	0.915					
LDP	15.49					
PROPWET	0.46					
RMED-1H	8.4					
RMED-1D	36.6					
RMED-2D	46.7					
SAAR	817					
SAAR4170	858					
SPRHOST	39.65					
URBCONC1990	0.773					
URBEXT1990	0.0084					
URBLOC1990	0.39					
URBCONC2000	0.835					
URBEXT2000	0.0124					
URBLOC2000	0.452					
C	-0.01578					
D1	0.48065					
D2	0.41819					
D3	0.29001					
E	0.24591					
F	2.17817					
C(1km)	-0.015					
D1(1km)	0.474					
D2(1km)	0.427					
D3(1km)	0.28					
E(1km)	0.245					
F(1km)	2.125					

Figure 4 – Dighty Water catchment descriptors at Hawthorn Cottage

Figure 5 – Dighty Water catchment at Hawthorn Cottage, as defined by the FEH Web Service (FEH Web Service, 2021)

Adjustment to QMED from a Donor Site

Using WINFAP software and applying the method whereby six WINFAP selected donors are utilised, the adjusted QMED value for the Dighty Water at Hawthorn Cottage becomes 10.604m^3/s (adjustment ratio = 1.17). With the effect of urbanisation included, the QMed value increases to 10.769m^3/s.

To ensure adherence with the precautionary principle, the Qmed value of 10.769m^3/s will be applied as the adjusted Qmed in the further analysis.

Flood Growth Curves

In order to estimate the magnitude of the range of possible statistical flood events which will occur in this catchment, for example the flood that will statistically occur once in 200 years (the 0.5% flood), it is necessary to determine a flood growth curve and a flood frequency curve. This is done by forming a "Pooling Group", i.e. by selecting a group of other catchments across the UK which have very similar characteristics to the subject site and which have existing gauged flow records covering a statistically adequate number of years, and subjecting this group to statistical analysis.

The catchment descriptors from the FEH Web Service are entered as a data file to the WINFAP software, which collates a pooling group of similar catchments, subjects these to a statistical analysis, and calculates a range of flows representing floods of different probabilities at the subject site.

The results can vary slightly, depending upon the chosen weighting of the statistical analysis, but adopting the recommended "Generalised Logistic" (GL) technique, the 1 in 200 year flood flow is estimated to be 37.24m^3/s.

The data and results for the WINFAP growth curve derivations are shown in Appendix A.

4.2.2 Revitalised Flood Hydrograph Method (Version 2.3)

Using the ReFH2 software, the flood flow estimate for the Dighty Water at Hawthorn Cottage was 29.76m^3/s

Output from the ReFH2 analysis is enclosed within Appendix B.

4.3 Additional Flow Comparison

As an additional flow comparion, a single site analysis was carried out on annual maxima data from the Balmossie gauge. 50 years of data up to 2018 was utilised. The single site analysis predicted a QMed value of 18.528m^3/s and a 1 in 200 year flood flow of 61.996m^3/s at Balmossie. Adjusting these values by a ratio of catchment size alone (53.78/127.41 = 0.422) provides predicted flow estimates of 7.82m^3/s and 26.16m^3/s on the Dighty Water at Hawthorn Cottage.

4.4 Applicable Flood Flows

The flood flows estimated using the FEH Statistical Method are larger than those predicted by ReFH2. In comparison with other flood risk assessments undertaken by Millard Consulting on the Dighty Water in recent years, the flood flows predicted in this report using WINFAP 5 appear conservative, however in line with the precautionary principle the larger flood flows estimated using the FEH Statistical Method have been applied in the hydraulic model, for which results are discussed in Section 5.0 of this report. Final 1 in 200 year flood flows are as follows:

200 year upstream of Baldovan Road = 34.6m^3/s
200 year at Hawthorn Cottage = 37.2m^3/s

5.0 Predicted Flood Levels

5.1 Initial Model

Having estimated the 1 in 200 year flood flow in the Dighty Water adjacent to the site, it is necessary to analyse the watercourse to establish predicted 1 in 200 year flood levels.

To establish predicted flood levels a 1D-2D linked hydraulic model of the Dighty Water in the vicinity of the site has been constructed using Flood Modeller software. The watercourse channel has been modelled in 1D using cross sectional data surveyed by Benchmark Land Surveys. A 2D grid has been prepared using a topographical survey, also undertaken by Benchmark Land Surveys, supplemented by Phase 4 LiDAR data obtained from the Scottish Government. The topographical survey and watercourse cross sections were surveyed in 2021 specifically for this assessment. It should be noted that due to predicted flood levels, the 2D element was only utilised in the assessment of climate change impact, i.e. the 1 in 200 year + 35% flood event.

Manning's n coefficients were selected for the site based on inspection of existing conditions, and comparison with tabulated descriptors in tables of Manning's values. For the 1D model, roughness values of 0.04 were applied for the Dighty Water channel, while values of 0.06 and 0.1 were applied for the banks where an increase was required above 0.04. For flood plains, values of 0.03, 0.035, 0.04, 0.06 and 0.1 were applied at varying locations. For the 2D area a general roughness value of 0.03 was applied, however specific values of 0.013, 0.03 and 0.06 were applied for areas of road, short grass and bank within the 2D active area. These areas are shown in Figure 6 below. In addition, z lines were added to represent the parapet on the south eastern side of Baldovan Road and walls in the vicinity of the existing houses on the northern side of the access road into the site in the vicinity of Baldovan Road. These houses were also represented with an increased level which prevents floodwater from entering the properties in the model.

Figure 6 – 2D features

Once appropriate Manning's values had been selected, boundary conditions at the downstream and upstream ends of the modelled length were applied. A normal depth condition was applied at the downstream end while an FEH Boundary was applied at the upstream end providing inflow at the upstream end of the modelled reach. In addition a lateral inflow was applied immediately downstream of Baldovan Road to mimick inflow from the Gorrie Burn. The inflow has been set as the difference between the estimated 1 in 200 year flood flow upstream and downstream of Baldovan Road.

Figures 7, 8 and 9 below show the modelled cross section locations:

Figure 7 – Cross section locations (1 of 3)

Figure 8 – Cross section locations (2 of 3)

Figure 9 – Cross section location (3 of 3)

To check the model was producing verifiable results, it was calibrated to a previous flood event which occurred on the 4th of September 2009. Photographic evidence of water level within the Dighty was provided by Andrew Reid of Dundee City Council. An inflow for the model was obtained using the time stamp on the appropriate photograph, estimating the time of travel for floodwater from the site to the Balmossie gauge, and using measured flow data from the Balmossie gauge, estimating the likely flow at the site on the basis of contributing catchment area. The flow data for Balmossie was received from SEPA as part of a previous flood risk assessment on the Dighty Water.

An estimate of the flood flow contribution from the catchment upstream of the site during the aforementioned flood event was required as it is unknown to what extent the tributaries of the Dighty Water, upstream of Balmossie, were contributing. It has therefore been assumed that 41% of the flood flow recorded at Balmossie passed the site, i.e. the ratio of catchment size between the Dighty at Balmossie and the Dighty at Baldovan Road (52.39/127.41 = 0.41).

The below photograph has been used for calibration purposes as it shows the flood level at the upstream side of the bridge at Baldovan Road. The photograph was taken at 10:49am on the 4th of September 2009. Assuming an average downstream velocity of 1.5m/s, it is estimated that the flow at Baldovan at 10:49am would have reached the Balmossie gauge some 10.5km downstream at approximately 12:45pm. The flow recorded at Balmossie at 12:45pm on the 4th of September 2009 was 43.904m^3/s. Multiplying this flow by the catchment ratio results in an estimated flood flow of 18m^3/s. It is therefore estimated that the flow at Baldovan at the time of the below photograph would have been approximately 18m^3/s.

Photograph 9 – A view of the Dighty Water at the upstream side of the Baldovan Road bridge taken at 10:49am on the 4th of September 2009

The soffit of the bridge arch is at a level of 73.14m AOD. The hydraulic model predicts a flood level of 73.06m AOD with a flood flow of 18m^3/s. Given this level is 0.08m below the soffit, it can be said that the model is providing a verifiable result and is suitable for use.

Table 5.1 below shows the predicted flood levels for a 1 in 200 year event:

Location	Flood Level (m AOD)
Dighty01	70.3
Dighty02	70.62
Dighty03	71.03
Dighty04	71.26
Dighty05	71.77
Dighty06	72.22
Dighty07	72.72
Dighty08	73.06
Dighty09	73.46
Dighty10	74.43
Dighty11	74.43
Dighty12	74.48

Table 5.1 – 1 in 200 year flood levels (0.5% (Q200) flow)

The predicted extent of flooding on site for a 1 in 200 year flood event is shown in Figure 10 overleaf. The Mass Error noted by Flood Modeller for this analysis was -0.57%.

Figure 10 – Predicted flood extent for 1 in 200 year flood event

It should be noted that floodwater would be expected to gather on Baldovan Road at the location of the bridge during a 1 in 200 year flood event. The floodwater would not however be expected to adversely impact the access road to the site. The predicted flood level immediately upstream of Baldovan Road is 74.43m, while the access road at its junction with Baldovan Road is at a level of between approximately 74.7m and 74.84m.

5.2 Sensitivity Analysis

Sensitivity analyses were carried out to check the effect of a variation in flow rate, of variation in Manning's 'n' values, and of variation on downstream boundary condition.

5.2.1 Variation in Flowrate

The potential impact of an increase in 200 year flood flow of 20% has been assessed. The results of this analysis are compared directly with the 1 in 200 year results in Table 5.2 overleaf:

Location	200yr Flood Level (m AOD)	200yr + 20% Flood Level (m AOD)	Variation (m)
Dighty01	70.3	70.44	0.14
Dighty02	70.62	70.74	0.12
Dighty03	71.03	71.16	0.13
Dighty04	71.26	71.42	0.16
Dighty05	71.77	71.94	0.17
Dighty06	72.22	72.38	0.16
Dighty07	72.72	72.9	0.18
Dighty08	73.06	73.24	0.18
Dighty09	73.46	73.64	0.18
Dighty10	74.43	74.84	0.41
Dighty11	74.43	74.83	0.4
Dighty12	74.48	74.88	0.4

Table 5.2 – Comparison between predicted 1 in 200 Year and 1 in 200 year + 20% flood levels

The above table shows a predicted increase in flood level of approximately 0.17m at the location of the site, with an increase of approximately 0.4m at Baldovan Road, due to the effect of the bridge. It should be noted that this analysis has been modelled 1D only, with a spill at the bridge made up of levels which flood water would need to spill over to flow beyond the bridge. A limited element of storage would be available in reality on Baldovan Road at the bridge before floodwater would flow around the bridge parapet to the downstream side of the bridge.

5.2.2 Variation in Manning's n

Sensitivity of the model to changes in Manning's n were tested, by increasing the initial values by 20%. The results of this analysis are shown in Table 5.3 below:

Location	200yr Flood Level (m AOD)	200yr Flood Level (m AOD) with n + 20%	Variation (m)
Dighty01	70.3	70.44	0.14
Dighty02	70.62	70.76	0.14
Dighty03	71.03	71.16	0.13
Dighty04	71.26	71.4	0.14
Dighty05	71.77	71.91	0.14
Dighty06	72.22	72.48	0.26
Dighty07	72.72	72.9	0.18
Dighty08	73.06	73.22	0.16
Dighty09	73.46	73.61	0.15
Dighty10	74.43	74.61	0.18
Dighty11	74.43	74.62	0.19
Dighty12	74.48	74.68	0.2

Table 5.3 – Assessment of potential impact of increased roughness

5.2.3 Variation in Downstream Boundary Slope

Sensitivity of the model to changes in downstream boundary slope were tested, by decreasing the slope by 0.01. The results of this analysis are shown in Table 5.4 overleaf:

Location	200yr Flood Level (m AOD)	200yr Flood Level (m AOD) with downstream slope – 0.01	Variation (m)
Dighty01	70.3	69.98	0.32
Dighty02	70.62	70.56	0.06
Dighty03	71.03	71.03	0
Dighty04	71.26	71.26	0
Dighty05	71.77	71.77	0
Dighty06	72.22	72.22	0
Dighty07	72.72	72.72	0
Dighty08	73.06	73.06	0
Dighty09	73.46	73.46	0
Dighty10	74.43	74.43	0
Dighty11	74.43	74.43	0
Dighty12	74.48	74.48	0

Table 5.4 – Assessment of potential impact of decreased downstream boundary slope

5.3 Flood Levels including Climate Change

The potential for climate change to impact flood risk in the vicinity of the site has been assessed with 35% added to the 1 in 200 year flood flow as required by the SEPA document "Climate change allowances for flood risk assessment in land use planning" (SEPA, 2019).

The flood levels predicted by the hydraulic model including the potential impact of climate change are outlined in the table below. Mass error for this model run was -0.8% for the 1D element and 2.08% for the 2D element, while a 2D mesh size of 2m was utilised.

Location	Level (m)		Variation in level (m)
	Q200 Flood Level	Q200 + 35% Flood Level	
Dighty01	70.3	70.5	0.2
Dighty02	70.62	70.79	0.17
Dighty03	71.03	71.21	0.18
Dighty04	71.26	71.47	0.21
Dighty05	71.77	71.99	0.22
Dighty06	72.22	72.44	0.22
Dighty07	72.72	72.96	0.24
Dighty08	73.06	73.29	0.23
Dighty09	73.46	73.7	0.24
Dighty10	74.43	74.94	0.51
Dighty11	74.43	74.92	0.49
Dighty12	74.48	74.97	0.49

Table 5.5 Comparison between predicted Q200 and Q200 + 35% Flood Levels

The model predicts the 1 in 200 year, plus 35% flood event would result in floodwater flowing onto Baldovan Road and into the access road running from Baldovan Road towards the site, however the overland flow would then return to the watercourse without flowing along to the site. The results show a predicted increase in flood level of 0.22m at the site with a 35% increase in 1 in 200 year flood flow.

Figure 11 below shows the predicted 1 in 200 year flood extent, with an increase in flood flow of 35%.

Figure 11 – Predicted 1 in 200 year + 35% flood extents

Due to the placement of the left bank link line downstream of the bridge at Baldovan Road, a small gap in the flood extent is shown in this vicinity between the 1D and 2D maps. The overland flow returns to the watercourse downstream of Baldovan Road.

5.4 Flood Levels including Blockage

The potential impact of a reduction in bridge opening of 20% has been modelled, with soffit levels for both arches being lowered as required. The results of this analysis are shown in Table 5.6 overleaf:

Location	200yr Flood Level (m AOD)	200yr Flood Level including reduction in soffit level to reduce opening by 20% (m AOD)	Variation (m)
Dighty01	70.3	70.3	0
Dighty02	70.62	70.62	0
Dighty03	71.03	71.03	0
Dighty04	71.26	71.26	0
Dighty05	71.77	71.77	0
Dighty06	72.22	72.22	0
Dighty07	72.72	72.72	0
Dighty08	73.06	73.06	0
Dighty09	73.46	73.46	0
Dighty10	74.43	74.55	0.12
Dighty11	74.43	74.54	0.11
Dighty12	74.48	74.59	0.11

Table 5.5 – Assessment of blockage impact

With a reduction in bridge opening of 20%, floodwater would be expected to flow onto Baldovan Road, however it is not predicted to get high enough to adversely impact the access road into the site.

6.0 Proposed Mitigation and Management of Flood Risk

Modelling undertaken as part of this assessment predicts that the site is outwith the 1 in 200 year flood extent of the Dighty Water, while access to and from the site is predicted to be flood free during this event along the access road into the site from Baldovan Road. Angus Council have confirmed flood free access is required for the 1 in 200 year flood event only in this instance. Flood free vehicular access is predicted to be available during a 1 in 200 year flood event via the access road into the site, then along Baldovan Road in a north easterly direction.

The site is well above the predicted 1 in 200 year, plus climate change flood level predicted adjacent to the site, with a 1 in 200 year + 35% flood level of 71.99m predicted and existing ground levels above 73m in the vicinity of the existing building on site. Although floodwater is not predicted to impact the site during a 1 in 200 year (plus climate change) flood event, it is recommended that ground levels immediately around the new house are set no lower than 73.9m AOD to ensure they are above existing ground levels to the west and south west. Finished ground levels should fall towards the Dighty Water from the house as they do currently. The proposed house should be constructed with a finished floor level set a suitable upstand above surrounding ground levels, commensurate with good building practice. These measures provide additional assurance that should a flood with a return period greater than 1 in 200 years (including climate change) occur, or indeed a significant bridge blockage occur in conjunction with a very rare flood event which results in floodwater flowing along the access road to the site, the house would not be adversely impacted.

7.0 Conclusions

It is concluded that the site and access road are outwith the 1 in 200 year flood extent of the Dighty Water and as such, the site is developable with respect to flood risk.

The access road into the site is predicted to flood in the vicinity of Baldovan Road with climate change impact included, however the site is predicted to remain flood free during this event.

It s recommended that finished ground levels around the perimeter if the proposed house are set no lower than 73.9m AOD, with an upstand above surrounding ground levels to the finished floor level, commensurate with good building practice.

We have used our best engineering judgement in this Assessment, and our calculations have been carried out using the Flood Estimation Handbook, WINFAP, HEC-RAS and other standard hydrological methods. We note that as with all such Flood Risk Assessments the accuracy of the results is only as good as the data and statistical techniques used.

8.0 References

i. Flood Estimation Handbook, Duncan Reed, CEH Institute of Hydrology, Wallingford, 1999.

ii. WINFAP-FEH, Version 5, Wallingford Hydrosolutions and NERC

iii. Flood Modeller Version 5, Jacobs, 2020

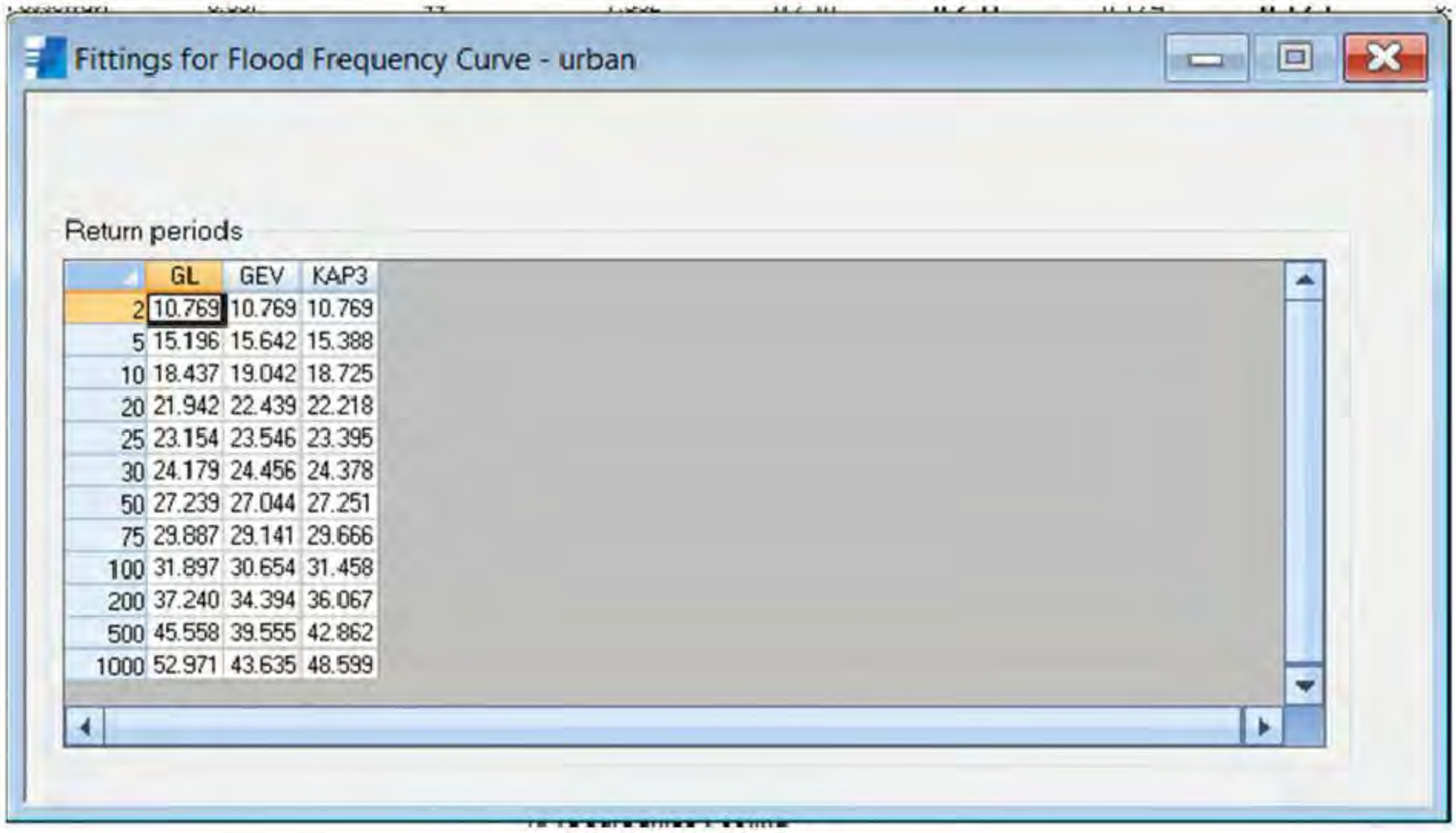
iv. ReFH 2.3, Wallingford Hydrosolutions, 2019

v. Scottish Planning Policy, Scottish Government, Crown Copyright, December 2020

vi. Climate change allowances for flood risk assessment in land use planning, SEPA, 2019

Appendix A: Results from WINFAP Flow Estimation

Dighty Water at Hawthorn Cottage

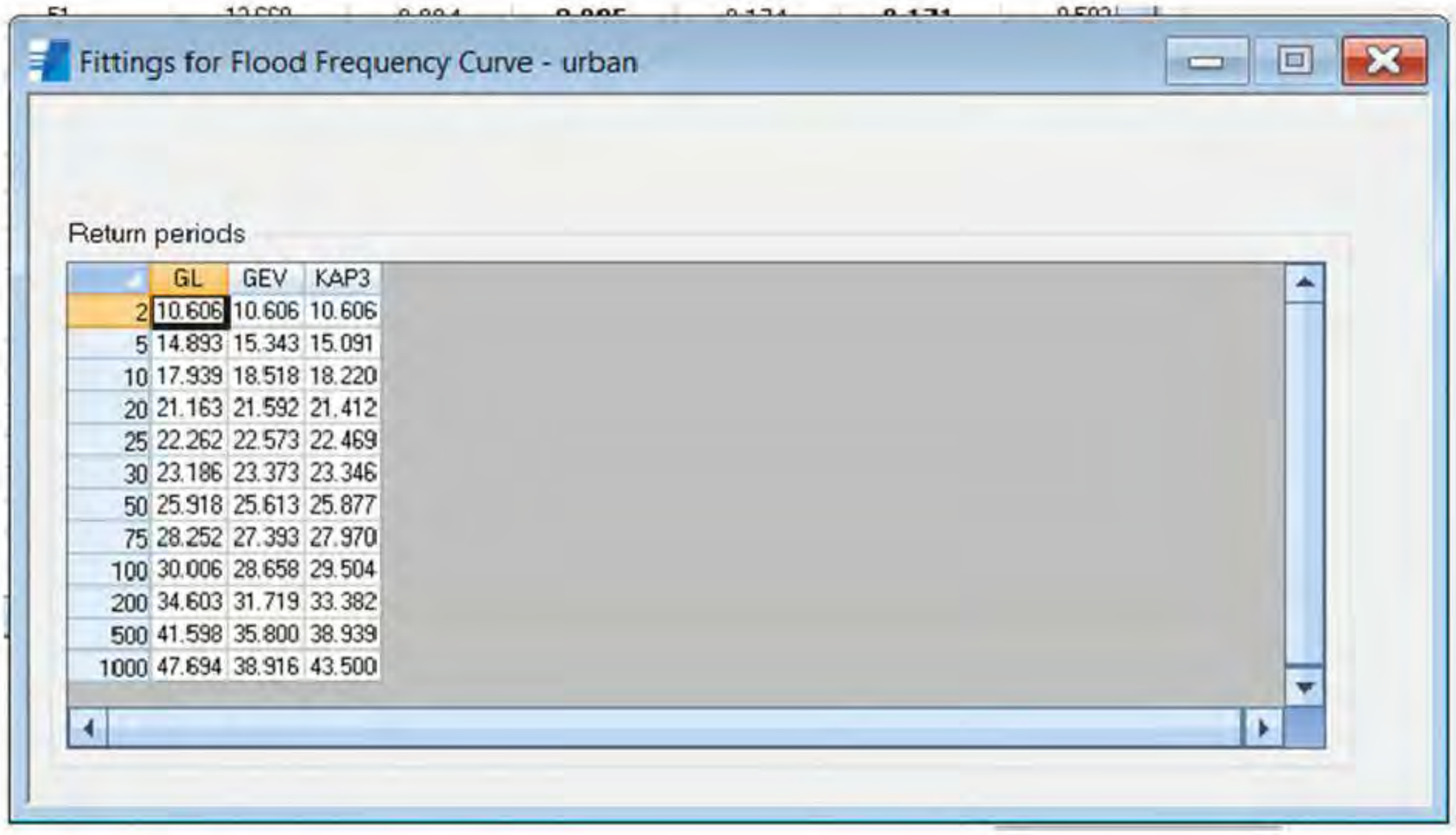


	GL	GEV	KAP3
2	10.769	10.769	10.769
5	15.196	15.642	15.388
10	18.437	19.042	18.725
20	21.942	22.439	22.218
25	23.154	23.546	23.395
30	24.179	24.456	24.378
50	27.239	27.044	27.251
75	29.887	29.141	29.666
100	31.897	30.654	31.458
200	37.240	34.394	36.067
500	45.558	39.555	42.862
1000	52.971	43.635	48.599

AM Data | Catchment Descriptors

	Station	Distance (SDM)	Years of data	QMED AM	L-CV Observed	L-CV Deurbanised	L-SKEW Observed	L-SKEW Deurbanised	Discordancy
1	41022 (Lod @ Halfway Bridge)	0.172	50	16.250	0.296	**0.297**	0.174	**0.172**	0.874
2	53017 (Boyd @ Bitton)	0.350	47	13.870	0.243	**0.245**	0.083	**0.080**	0.577
3	76019 (Roe Beck @ Stockdalewath)	0.481	21	42.852	0.223	**0.223**	0.304	**0.304**	1.279
4	9006 (Deskford Burn @ Cullen)	0.517	9	21.783	0.300	**0.300**	0.129	**0.129**	1.231
5	53023 (Sherston Avon @ Fosseway)	0.557	44	7.332	0.230	**0.231**	0.174	**0.173**	0.072
6	39042 (Leach @ Priory Mill Lechlade)	0.568	48	3.085	0.196	**0.196**	0.063	**0.062**	1.131
7	20007 (Gifford Water @ Lennoxlove)	0.578	46	16.895	0.319	**0.319**	0.188	**0.187**	0.811
8	7010 (Muckle Burn @ Brodie)	0.582	14	17.452	0.188	**0.188**	0.318	**0.318**	2.034
9	44011 (Asker @ Bridport East Bridge)	0.607	25	16.449	0.225	**0.227**	0.153	**0.150**	0.314
10	44003 (Asker @ Bridport)	0.607	14	12.354	0.224	**0.226**	0.170	**0.168**	1.651
11	27095 (Pickering Beck @ Pickering)	0.615	20	7.796	0.305	**0.306**	0.314	**0.314**	0.569
12	51001 (Doniford Stream @ Swill Bridge)	0.630	52	12.524	0.317	**0.319**	0.372	**0.370**	1.330
13	205005 (Ravernet @ Ravernet)	0.689	48	14.792	0.211	**0.211**	0.293	**0.293**	0.888
14	203043 (Donawater @ Shannoy)	0.806	34	31.685	0.163	**0.163**	0.072	**0.072**	1.144
15	54036 (Isbourne @ Hinton on the Green)	0.831	48	13.578	0.329	**0.331**	0.324	**0.322**	1.094

Dighty Water upstream of Baldovan Road



	GL	GEV	KAP3
2	10.606	10.606	10.606
5	14.893	15.343	15.091
10	17.939	18.518	18.220
20	21.163	21.592	21.412
25	22.262	22.573	22.469
30	23.186	23.373	23.346
50	25.918	25.613	25.877
75	28.252	27.393	27.970
100	30.006	28.658	29.504
200	34.603	31.719	33.382
500	41.598	35.800	38.939
1000	47.694	38.916	43.500

AM Data | Catchment Descriptors

	Station	Distance (SDM)	Years of data	QMED AM	L-CV Observed	L-CV Deurbanised	L-SKEW Observed	L-SKEW Deurbanised	Discordar
1	41022 (Lod @ Halfway Bridge)	0.187	50	16.250	0.296	**0.297**	0.174	**0.172**	0.749
2	53017 (Boyd @ Bilton)	0.332	47	13.870	0.243	**0.245**	0.083	**0.080**	0.430
3	30004 (Lymn @ Partney Mill)	0.412	58	7.184	0.224	**0.225**	0.030	**0.029**	0.966
4	76019 (Roe Beck @ Stockdalewath)	0.487	21	42.852	0.223	**0.223**	0.304	**0.304**	2.457
5	9006 (Deskford Burn @ Cullen)	0.510	9	21.783	0.300	**0.300**	0.129	**0.129**	1.021
6	53023 (Sherston Avon @ Fosseway)	0.585	44	7.332	0.230	**0.231**	0.174	**0.173**	0.103
7	41020 (Bevern Stream @ Clappers Bridg	0.587	51	13.660	0.204	**0.205**	0.174	**0.171**	0.583
8	39042 (Leach @ Priory Mill Lechlade)	0.598	48	3.085	0.196	**0.196**	0.063	**0.062**	0.916
9	44011 (Asker @ Bridport East Bridge)	0.605	25	16.449	0.225	**0.227**	0.153	**0.150**	0.557
10	44003 (Asker @ Bridport)	0.605	14	12.354	0.224	**0.226**	0.170	**0.168**	1.399
11	20007 (Gilford Water @ Lennoxlove)	0.608	46	16.895	0.319	**0.319**	0.188	**0.187**	0.843
12	27095 (Pickering Beck @ Pickering)	0.637	20	7.796	0.305	**0.306**	0.314	**0.314**	0.961
13	205005 (Ravernet @ Ravernet)	0.710	48	14.792	0.211	**0.211**	0.293	**0.293**	1.186
14	54036 (Isbourne @ Hinton on the Green)	0.863	48	13.578	0.329	**0.331**	0.324	**0.322**	1.830
15									

Appendix B: Results from ReFH2 Flow Estimation

UK Design Flood Estimation

Generated on 29 October 2021 09:32:49 by abraid
Printed from the ReFH2 Flood Modelling software package, version 3.2.7650.24314

Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

Site details

Checksum: 3F0A-6963

Site name: Dighty Water upstream of Baldovan Road Bridge

Easting: 338800

Northing: 734550

Country: Scotland

Catchment Area (km²): 52.39

Using plot scale calculations: No

Model: 2.3

Site description: None

Model run: 200 year

Summary of results

Rainfall - FEH 2013 model (mm):	68.09	Total runoff (ML):	619.55
Total Rainfall (mm):	46.44	Total flow (ML):	1910.86
Peak Rainfall (mm):	3.14	Peak flow (m³/s):	28.98

Parameters

Where the user has overriden a system-generated value, this original value is shown in square brackets after the value used.
** Indicates that the user locked the duration/timestep*

Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:30:00	No
Timestep (hh:mm:ss)	00:10:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.74	No
ARF (Areal reduction factor)	0.92	No
Seasonality	Winter	No

Loss model parameters

Name	Value	User-defined?
Cini (mm)	93.38	No
Cmax (mm)	461.97	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.59	No
Up	0.65	No
Uk	0.8	No

Baseflow model parameters

Name	Value	User-defined?
BFO (m^3/s)	0.97	No
BL (hr)	41.39	No
BR	2.11	No

Urbanisation parameters

Name	Value	User-defined?
Urban area (km^2)	0.57	No
Urbext 2000	0.01	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km^2)	0.00	Yes
Sewer capacity (m^3/s)	0.00	Yes

UK Design Flood Estimation

Generated on 29 October 2021 09:35:46 by abraid
Printed from the ReFH2 Flood Modelling software package, version 3.2.7650.24314

Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

Site details

Checksum: 012B-9732

Site name: Dighty Water adjacent to Hawthorn Cottage

Easting: 338950

Northing: 734350

Country: Scotland

Catchment Area (km²): 53.78

Using plot scale calculations: No

Model: 2.3

Site description: None

Model run: 200 year

Summary of results

Rainfall - FEH 2013 model (mm):	68.10	Total runoff (ML):	639.70
Total Rainfall (mm):	46.39	Total flow (ML):	1960.80
Peak Rainfall (mm):	3.13	Peak flow (m³/s):	29.76

Parameters

Where the user has overriden a system-generated value, this original value is shown in square brackets after the value used.
** Indicates that the user locked the duration/timestep*

Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:30:00	No
Timestep (hh:mm:ss)	00:10:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.74	No
ARF (Areal reduction factor)	0.92	No
Seasonality	Winter	No

Loss model parameters

Name	Value	User-defined?
Cini (mm)	93.38	No
Cmax (mm)	461.97	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.62	No
Up	0.65	No
Uk	0.8	No

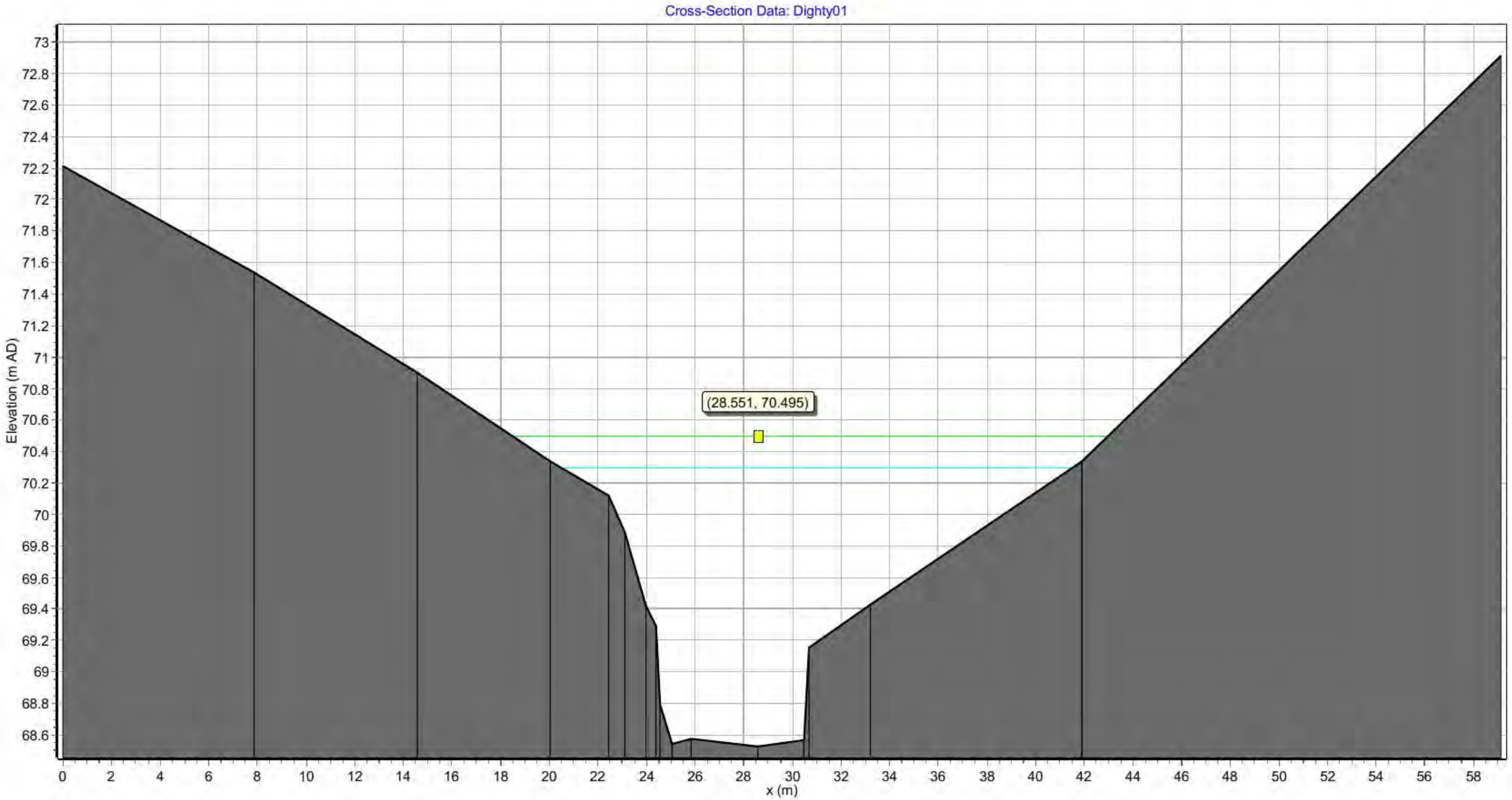
Baseflow model parameters

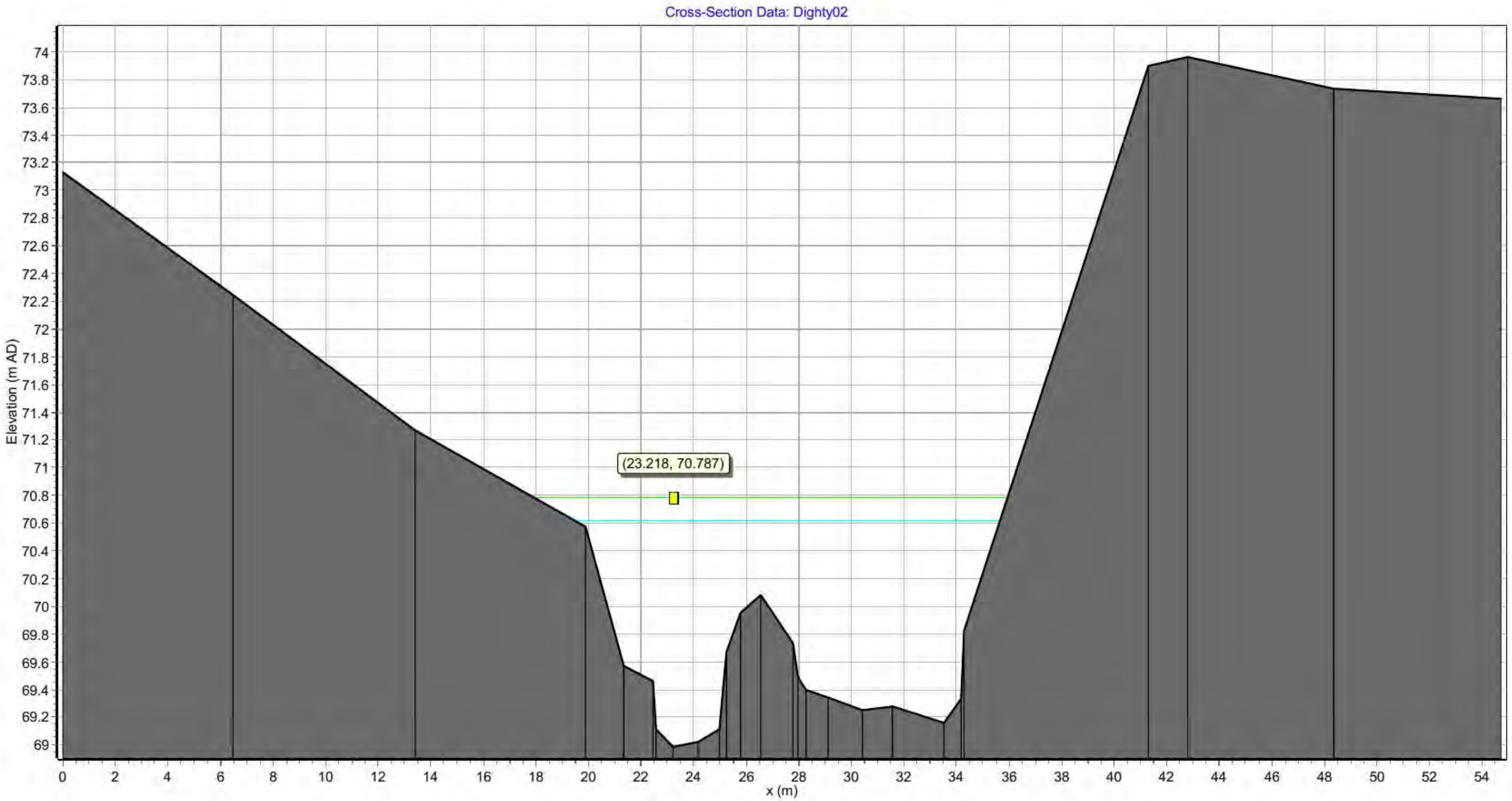
Name	Value	User-defined?
BF0 (m^3/s)	1	No
BL (hr)	41.53	No
BR	2.11	No

Urbanisation parameters

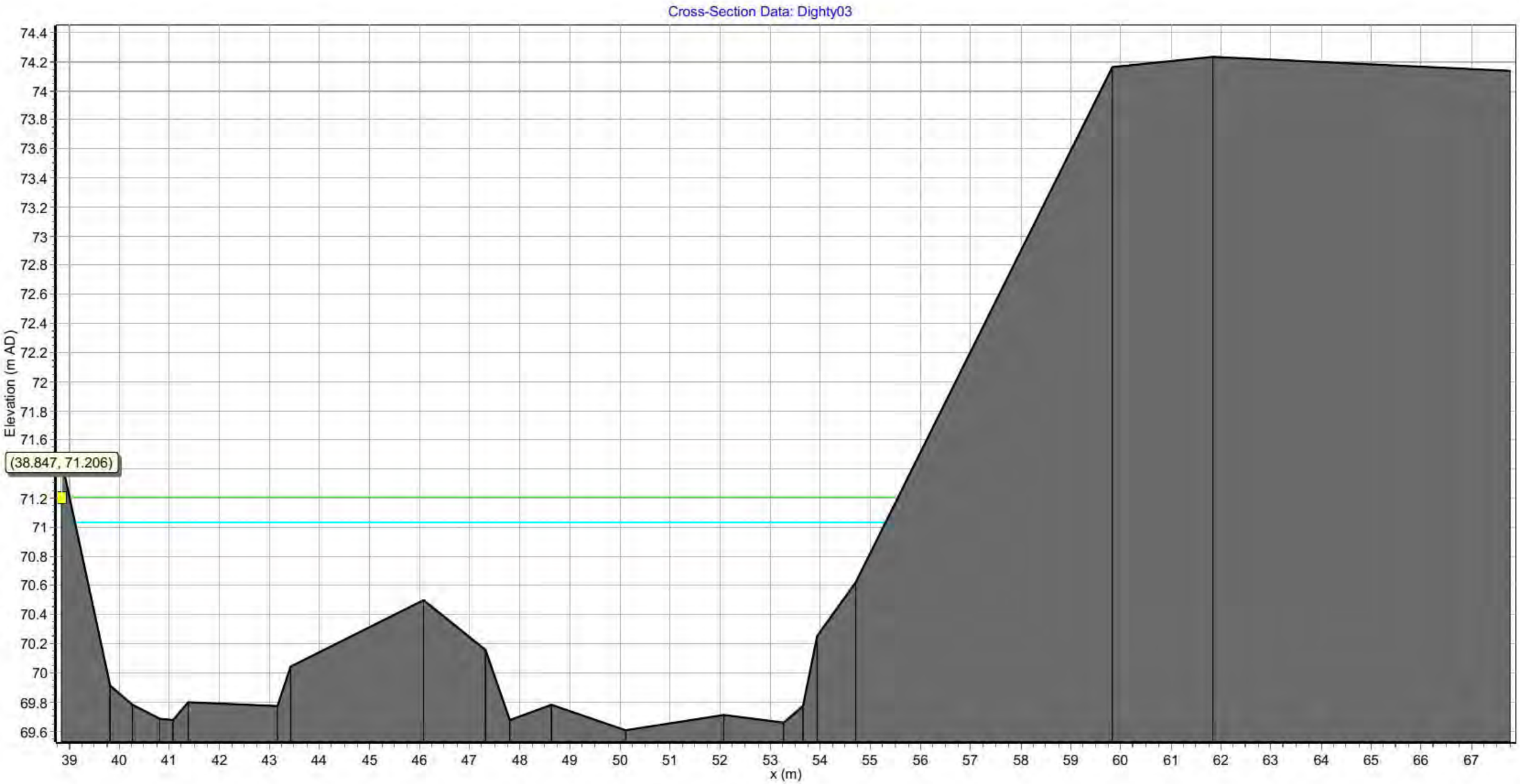
Name	Value	User-defined?
Urban area (km^2)	1.04	No
Urbext 2000	0.01	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km^2)	0.00	Yes
Sewer capacity (m^3/s)	0.00	Yes

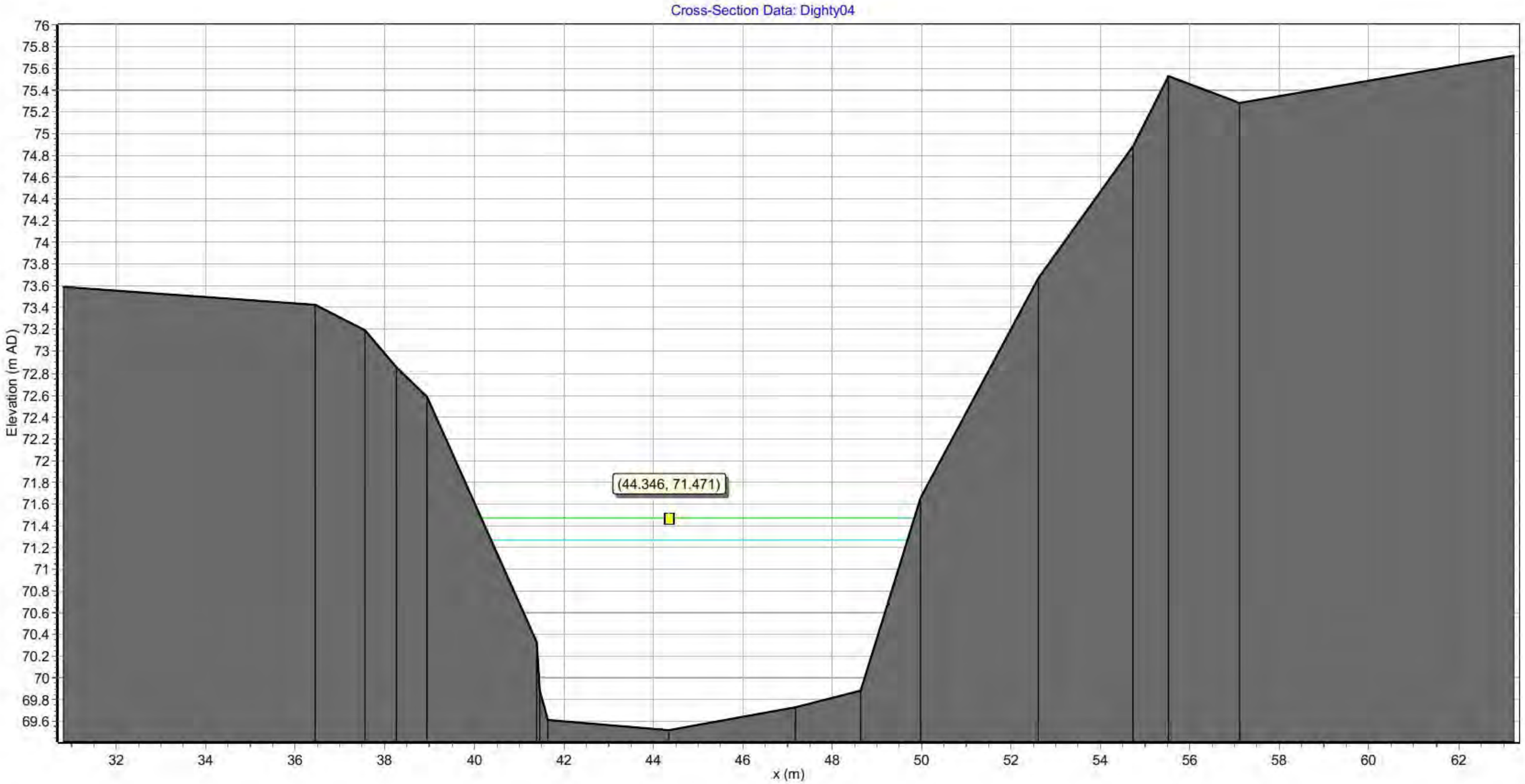
Appendix C: Output from Hydraulic Model

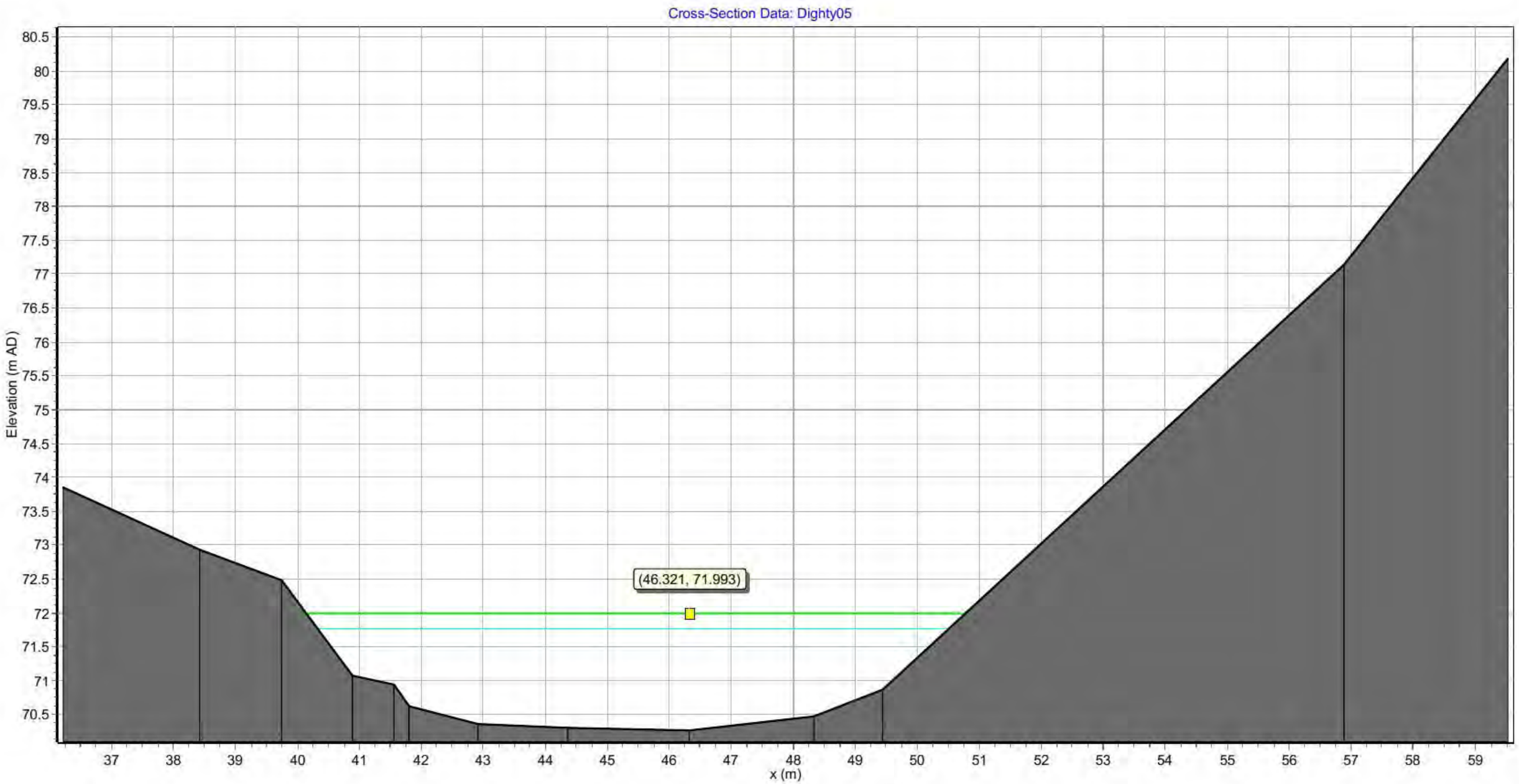

Cross-Section Data: Dighty01
(28.551, 70.495)
Elevation (m AD)
x (m)
Maximum Stage (70.495 m AD) ; 0 - 13 hours: Dighty01 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (70.295 m AD) ; 0 - 20 hours: Dighty01 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty01
Mannings n: Dighty01
Panel Markers: Dighty01
Conveyance: Dighty01

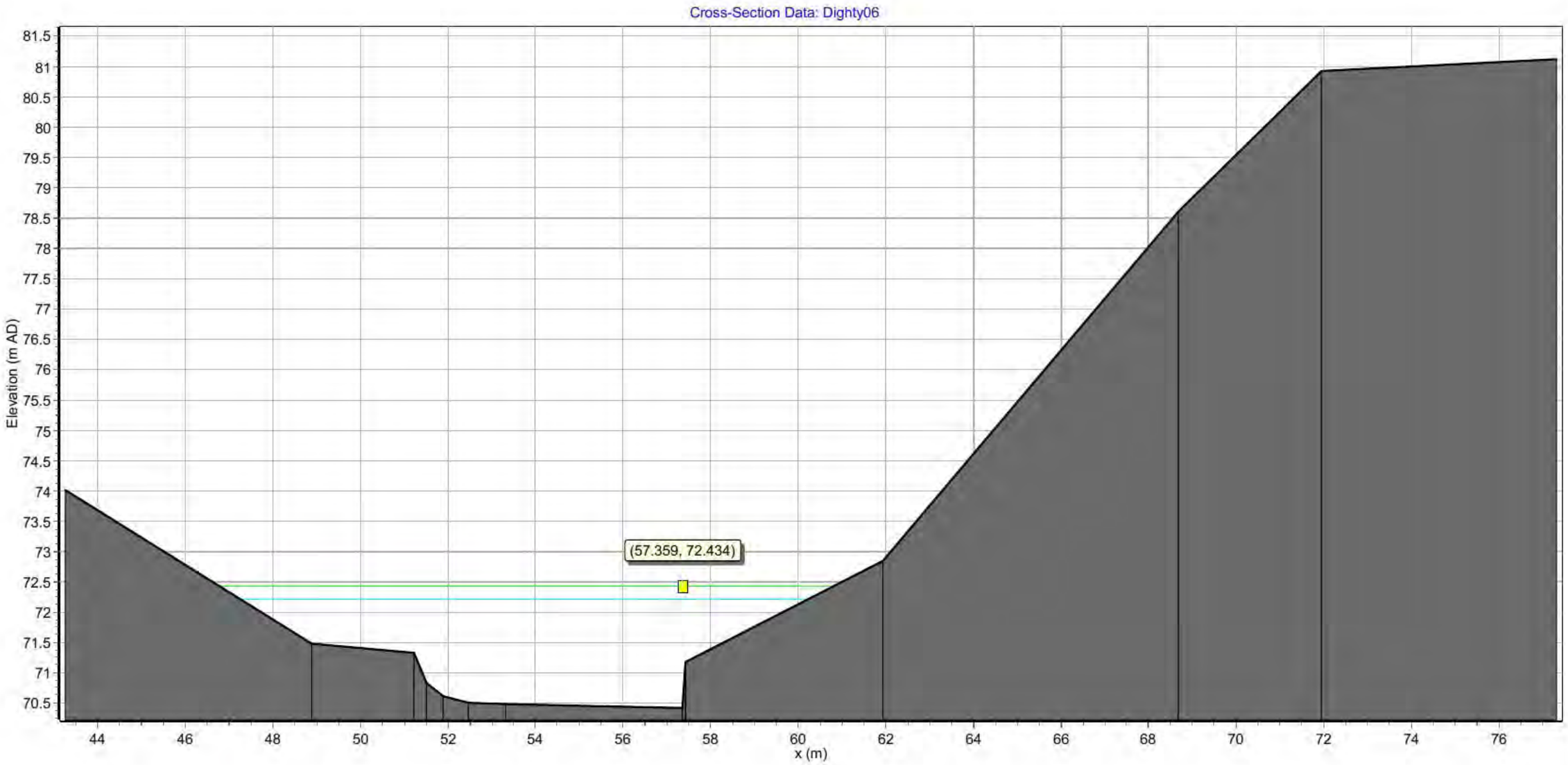


- Maximum Stage (70.619 m AD) ; 0 - 20 hours: Dighty02 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
- Maximum Stage (70.787 m AD) ; 0 - 13 hours: Dighty02 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
- Bed elevation: Dighty02
- Mannings n: Dighty02
- Panel Markers: Dighty02
- Conveyance: Dighty02

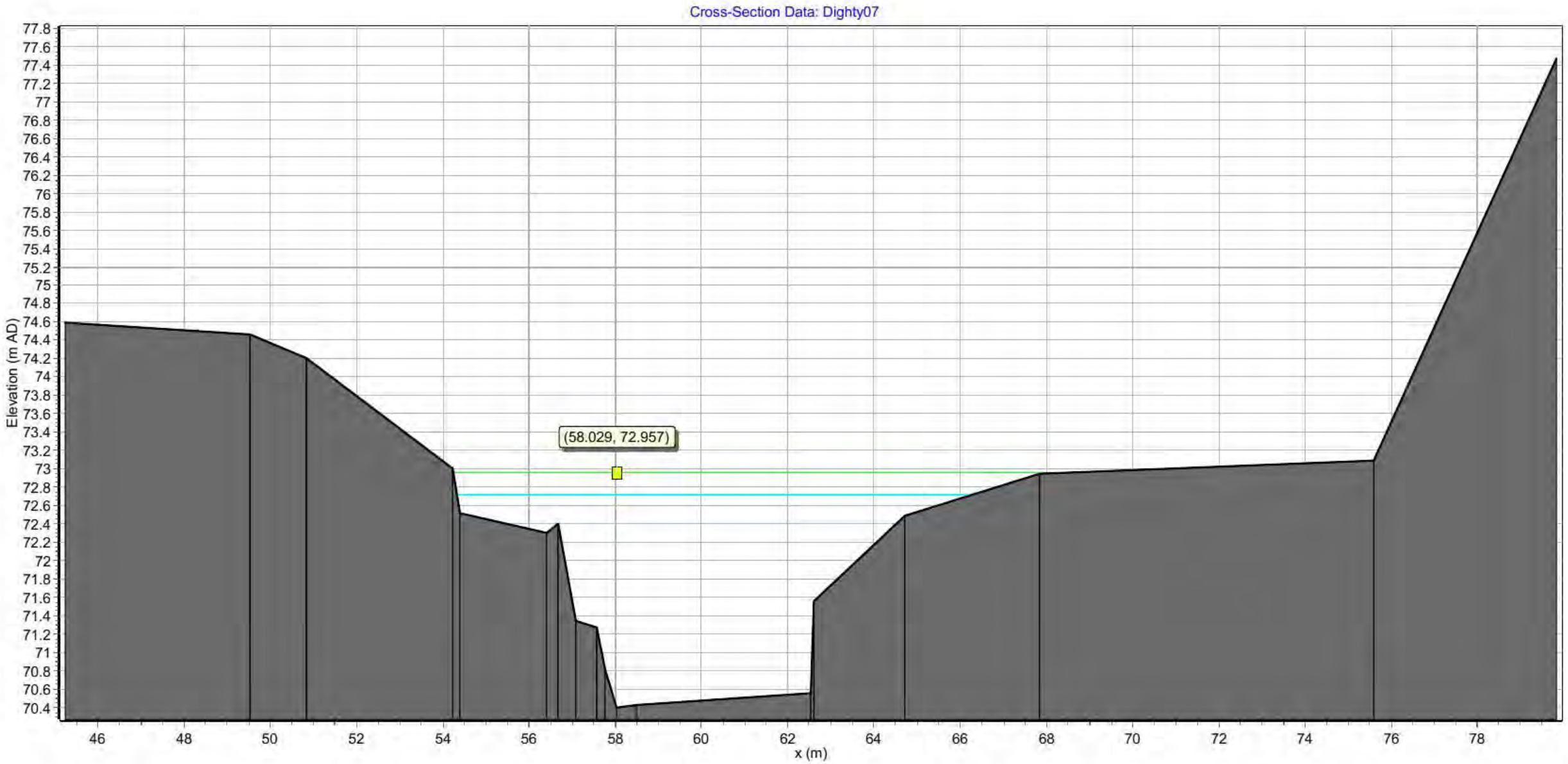

Cross-Section Data: Dighty03
Elevation (m AD)
x (m)
(38.847, 71.206)
74.4
74.2
74
73.8
73.6
73.4
73.2
73
72.8
72.6
72.4
72.2
72
71.8
71.6
71.2
71
70.8
70.6
70.4
70.2
70
69.8
69.6
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
Maximum Stage (71.206 m AD) ; 0 - 13 hours: Dighty03 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (71.031 m AD) ; 0 - 20 hours: Dighty03 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty03
Mannings n: Dighty03
Panel Markers: Dighty03
Conveyance: Dighty03
Deactivation Markers: Dighty03

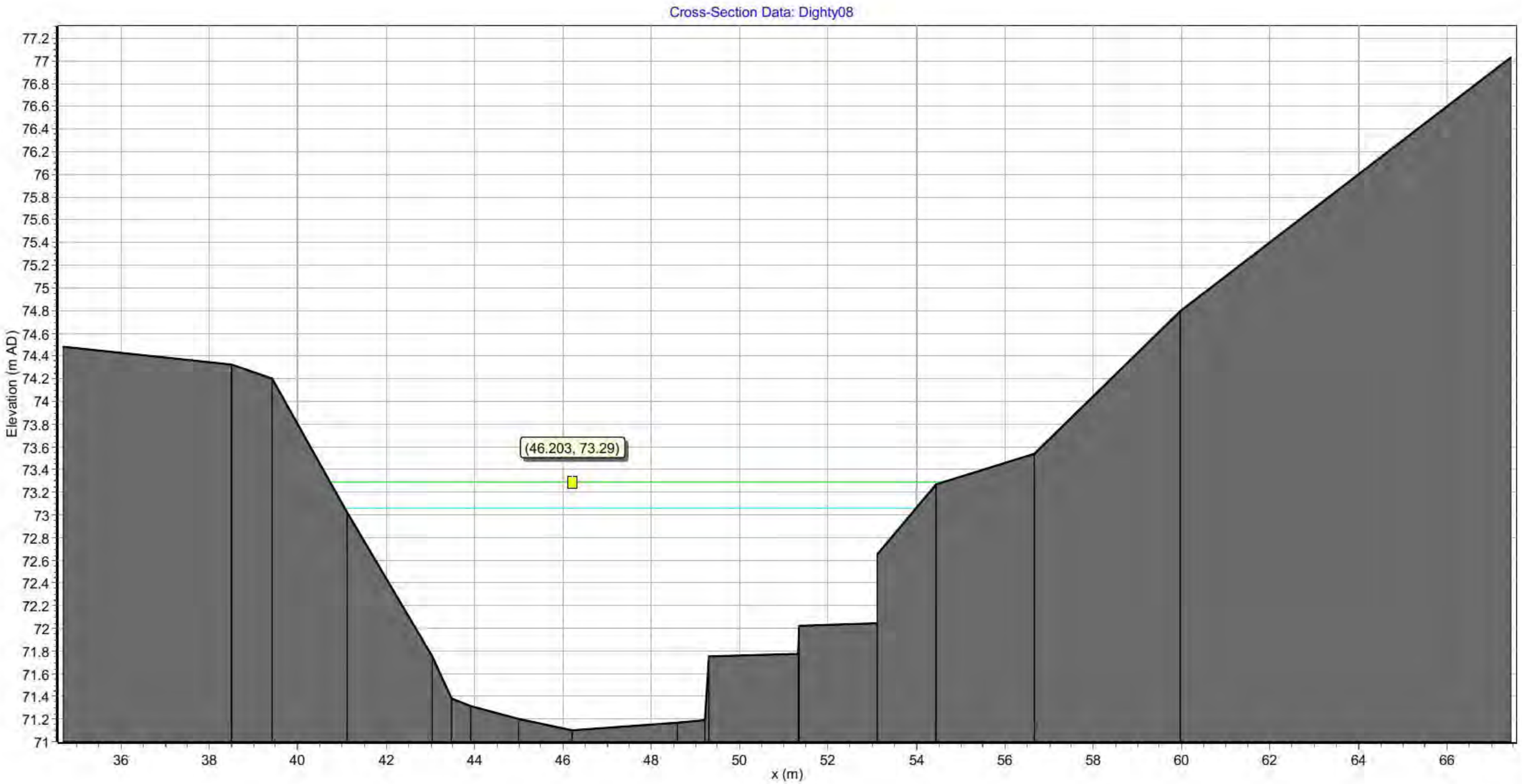

Cross-Section Data: Dighty04
Elevation (m AD)
x (m)
(44.346, 71.471)
Maximum Stage (71.261 m AD) ; 0 - 20 hours: Dighty04 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Maximum Stage (71.471 m AD) ; 0 - 13 hours: Dighty04 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Bed elevation: Dighty04
Mannings n: Dighty04
Panel Markers: Dighty04
Conveyance: Dighty04
Deactivation Markers: Dighty04

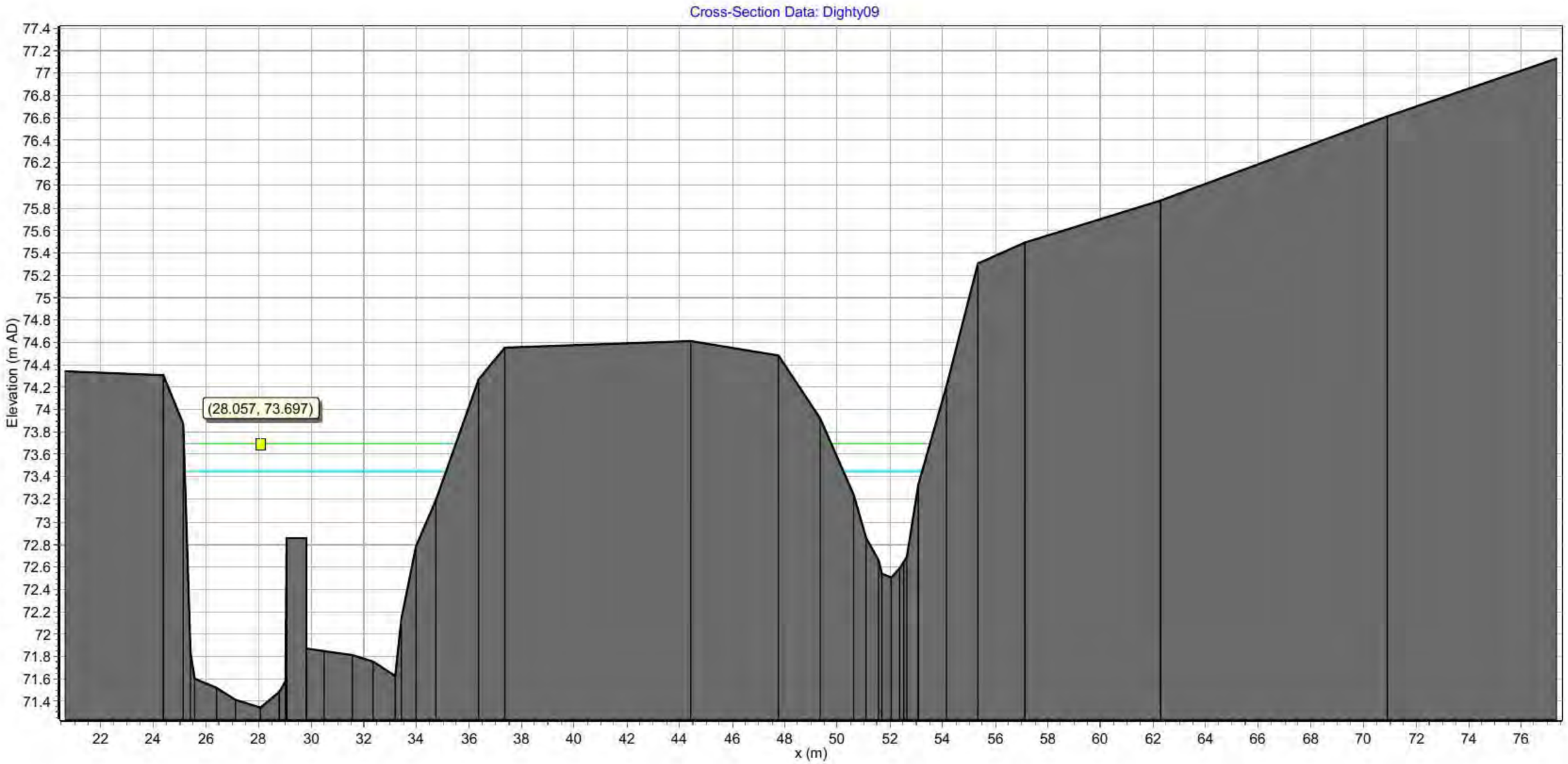

Cross-Section Data: Dighty05
Elevation (m AD)
80.5
80
79.5
79
78.5
78
77.5
77
76.5
76
75.5
75
74.5
74
73.5
73
72.5
72
71.5
71
70.5
(46.321, 71.993)
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
x (m)
Maximum Stage (71.993 m AD) ; 0 - 13 hours: Dighty05 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (71.774 m AD) ; 0 - 20 hours: Dighty05 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty05
Mannings n: Dighty05
Panel Markers: Dighty05
Conveyance: Dighty05
Deactivation Markers: Dighty05

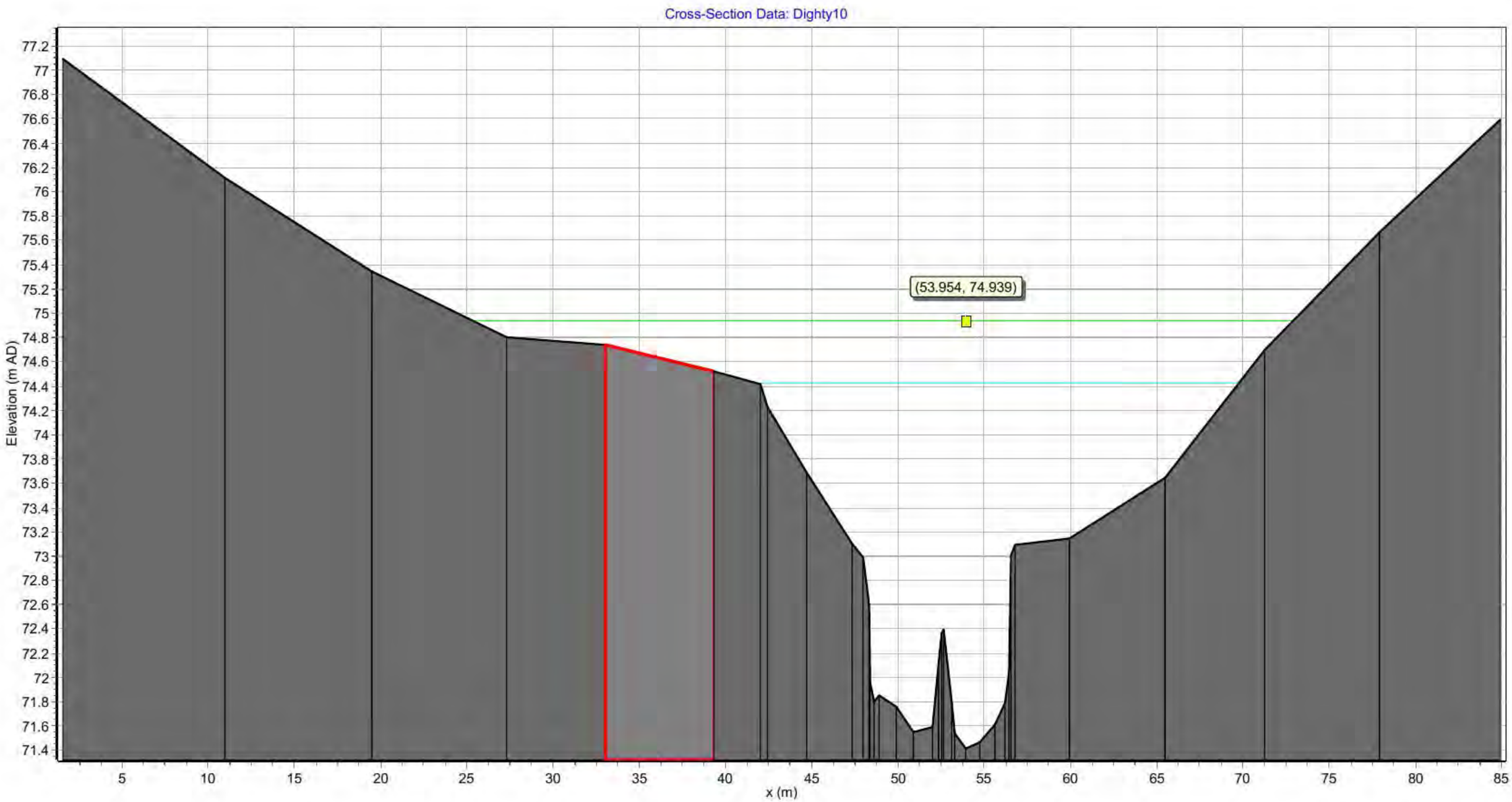


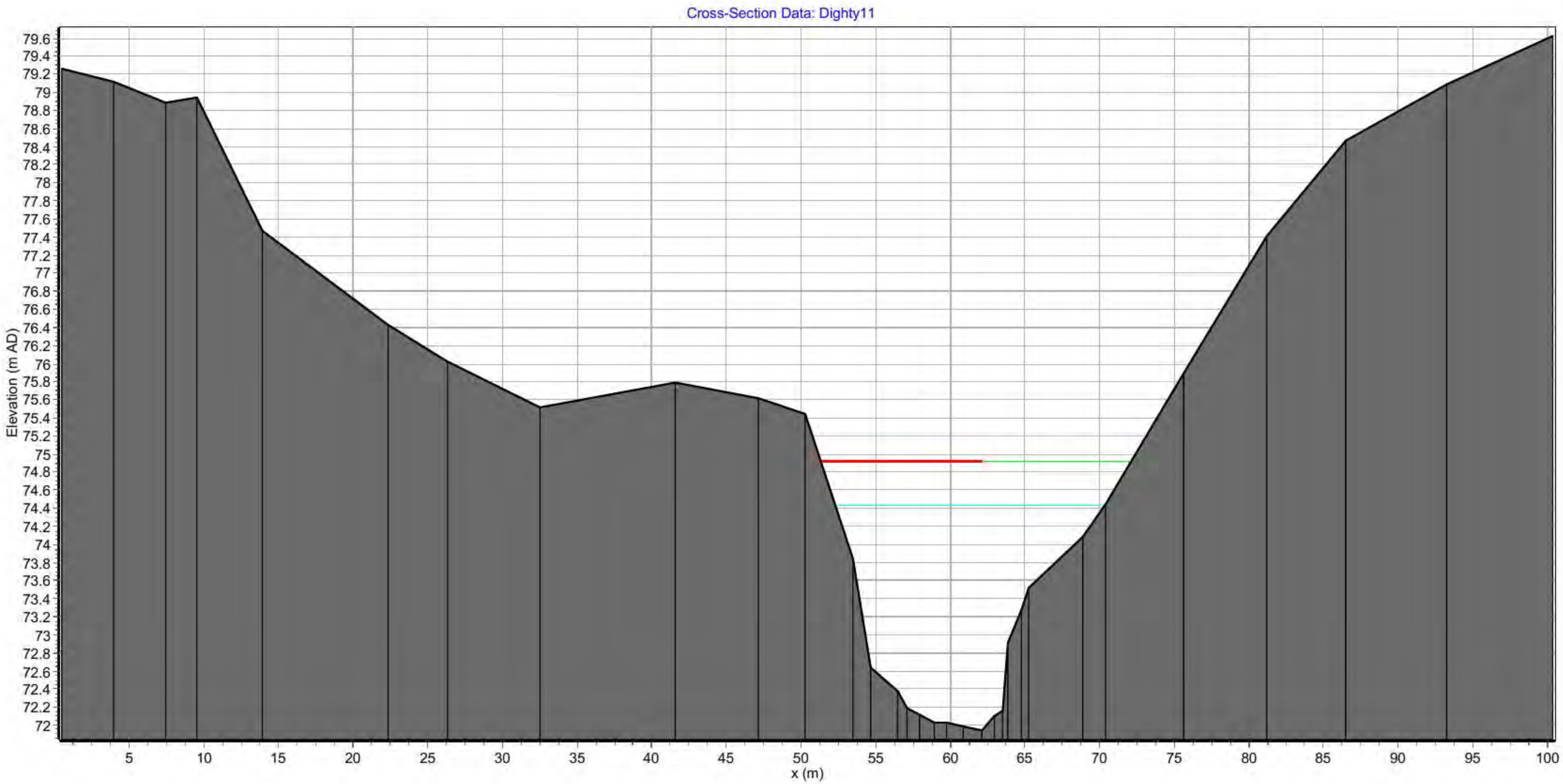
- [x] Maximum Stage (72.223 m AD) ; 0 - 20 hours: Dighty06 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
- [x] Maximum Stage (72.434 m AD) ; 0 - 13 hours: Dighty06 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
- [x] Bed elevation: Dighty06
- [ ] Mannings n: Dighty06
- [ ] Panel Markers: Dighty06
- [ ] Conveyance: Dighty06
- [ ] Upstream Section: Dighty06
- [ ] Upstream Conveyance: Dighty06
- [ ] Deactivation Markers: Dighty06

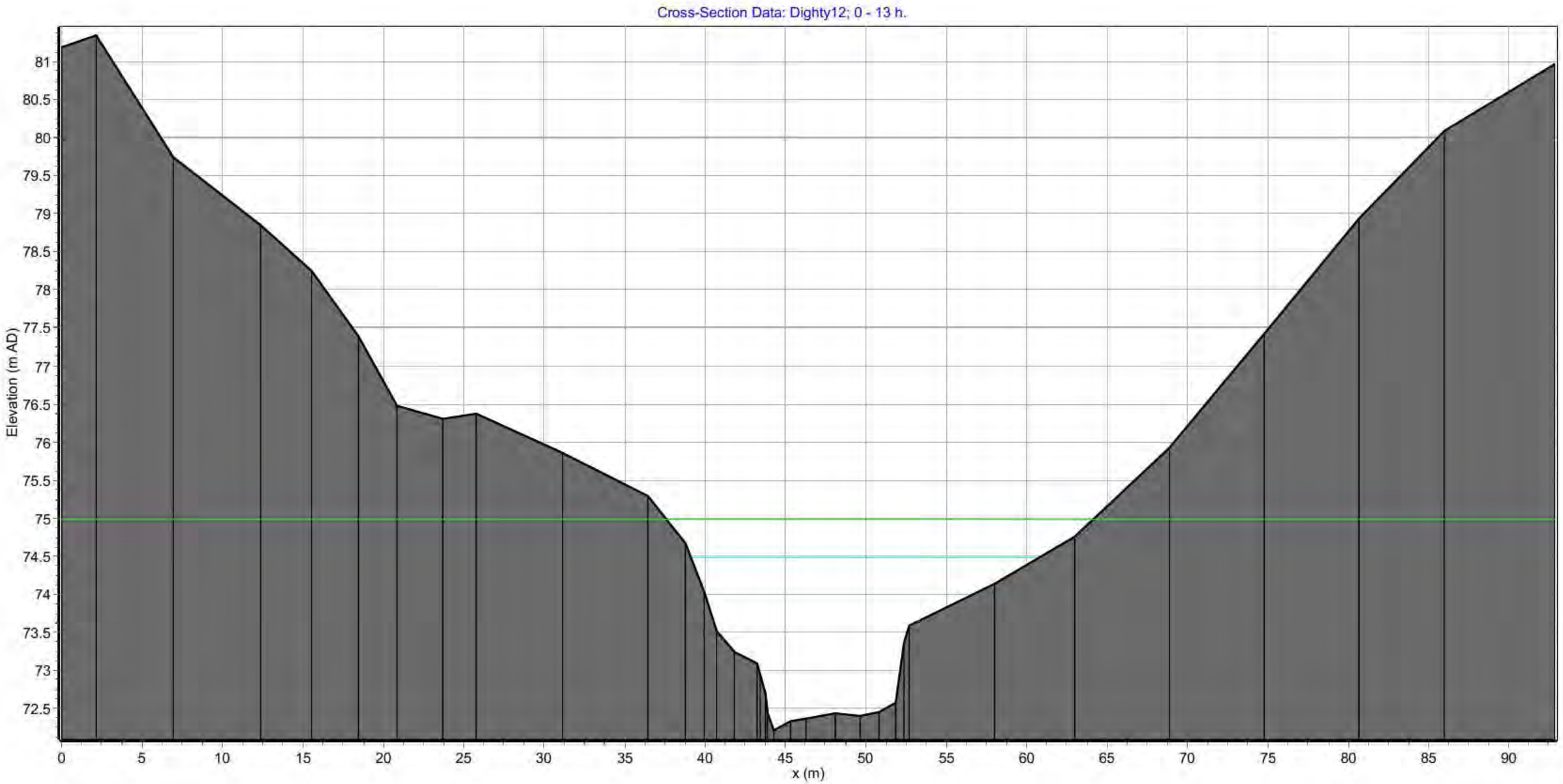

Cross-Section Data: Dighty07
Elevation (m AD)
x (m)
(58.029, 72.957)
77.8
77.6
77.4
77.2
77
76.8
76.6
76.4
76.2
76
75.8
75.6
75.4
75.2
75
74.8
74.6
74.4
74.2
74
73.8
73.6
73.4
73.2
73
72.8
72.6
72.4
72.2
72
71.8
71.6
71.4
71.2
71
70.8
70.6
70.4
46
48
50
52
54
56
58
60
62
64
66
68
70
72
74
76
78
Maximum Stage (72.957 m AD) ; 0 - 13 hours: Dighty07 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (72.715 m AD) ; 0 - 20 hours: Dighty07 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty07
Mannings n: Dighty07
Panel Markers: Dighty07
Conveyance: Dighty07
Downstream Section: Dighty07
Downstream Conveyance: Dighty07
Deactivation Markers: Dighty07


Cross-Section Data: Dighty08
Elevation (m AD)
77.2
77
76.8
76.6
76.4
76.2
76
75.8
75.6
75.4
75.2
75
74.8
74.6
74.4
74.2
74
73.8
73.6
73.4
73.2
73
72.8
72.6
72.4
72.2
72
71.8
71.6
71.4
71.2
71
(46.203, 73.29)
36
38
40
42
44
46
48
50
52
54
56
58
60
62
64
66
x (m)
Maximum Stage (73.059 m AD) ; 0 - 20 hours: Dighty08 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Maximum Stage (73.29 m AD) ; 0 - 13 hours: Dighty08 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Bed elevation: Dighty08
Mannings n: Dighty08
Panel Markers: Dighty08
Conveyance: Dighty08
Deactivation Markers: Dighty08


Cross-Section Data: Dighty09
Elevation (m AD)
x (m)
(28.057, 73.697)
77.4
77.2
77
76.8
76.6
76.4
76.2
76
75.8
75.6
75.4
75.2
75
74.8
74.6
74.4
74.2
74
73.8
73.6
73.4
73.2
73
72.8
72.6
72.4
72.2
72
71.8
71.6
71.4
22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76
Maximum Stage (73.697 m AD) ; 0 - 13 hours: Dighty09 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (73.456 m AD) ; 0 - 20 hours: Dighty09 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty09
Mannings n: Dighty09
Panel Markers: Dighty09
Conveyance: Dighty09
Upstream Section: Dighty09
Upstream Conveyance: Dighty09
Deactivation Markers: Dighty09


Cross-Section Data: Dighty10
Elevation (m AD)
77.2
77
76.8
76.6
76.4
76.2
76
75.8
75.6
75.4
75.2
75
74.8
74.6
74.4
74.2
74
73.8
73.6
73.4
73.2
73
72.8
72.6
72.4
72.2
72
71.8
71.6
71.4
(53.954, 74.939)
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
x (m)
Maximum Stage (74.426 m AD) ; 0 - 20 hours: Dighty10 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Maximum Stage (74.939 m AD) ; 0 - 13 hours: Dighty10 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Bed elevation: Dighty10
Mannings n: Dighty10
Panel Markers: Dighty10
Conveyance: Dighty10


Cross-Section Data: Dighty11
Elevation (m AD)
79.6
79.4
79.2
79
78.8
78.6
78.4
78.2
78
77.8
77.6
77.4
77.2
77
76.8
76.6
76.4
76.2
76
75.8
75.6
75.4
75.2
75
74.8
74.6
74.4
74.2
74
73.8
73.6
73.4
73.2
73
72.8
72.6
72.4
72.2
72
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
x (m)
Maximum Stage (74.92 m AD) ; 0 - 13 hours: Dighty11 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (74.425 m AD) ; 0 - 20 hours: Dighty11 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty11
Mannings n: Dighty11
Panel Markers: Dighty11
Conveyance: Dighty11
Upstream Section: Dighty11
Upstream Conveyance: Dighty11


Cross-Section Data: Dighty12; 0 - 13 h.
Elevation (m AD)
81
80.5
80
79.5
79
78.5
78
77.5
77
76.5
76
75.5
75
74.5
74
73.5
73
72.5
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
x (m)
Maximum Stage (74.483 m AD) ; 0 - 20 hours: Dighty12 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty12
Mannings n: Dighty12
Panel Markers: Dighty12
Conveyance: Dighty12
Downstream Section: Dighty12
Downstream Conveyance: Dighty12
Maximum Stage (74.973 m AD) ; 0 - 13 hours: Dighty12 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl

Appendix D: SEPA Checklist

Flood Risk Assessment (FRA) Checklist

(SS-NFR-F-001 - Version 13 - Last updated 15/04/2015

This document should be attached within the front cover of any flood risk assessments issued to Local Planning Authorities (LPA) in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist SEPA in reviewing FRAs, when consulted by LPAs. This document should not be a substitute for a FRA.

Development Proposal						
Site Name		Land adjacent to Hawthorn Cottage at Baldovan, Angus				
Grid Reference	Easting:	339000	Northing:	734342		
Local Authority		Angus Council				
Planning Reference number (if known)		20/00167/FULL				
Nature of the development		Residential	If residential, state type:	Single house		
Size of the development site		0.2 Ha				
Identified Flood Risk	Source:	Fluvial	Source name:	Dighty Water		
Supporting Information						
Have clear maps / plans been provided within the FRA (including topographic and flood inundation plans)		Yes				
Has a historic flood search been undertaken?		Yes				
Is a formal flood prevention scheme present?		No	If known, state the standard of protection offered			
Current / historical site use		Currently vacant, although one historic building on site. Formerly part of mill complex.				
Hydrology						
Area of catchment		53.78 km^2				
Qmed estimate		10.769 m^3/s	Method:	Catchment Descriptors		
Estimate of 200 year design flood flow		37.24 m^3/s				
Estimation method(s) used *		Pooled analysis	If other (please specify methodology used):			
			If Pooled analysis have group details been included	Yes		
Hydraulics						
Hydraulic modelling method		Linked 1D 2D	Software used:	Other		
If other please specify		Flood Modeller				
Modelled reach length		478 m				
Any structures within the modelled length?		Bridges	Specify, if combination			
Brief summary of sensitivity tests, and range:						
variation on flow (%)		20 %				
variation on channel roughness		20%				
blockage of structure (range of % blocked)		20 %	Reference CIRIA culvert design guide R168, section 8.4			
boundary conditions:		**Upstream**		**Downstream**		
(1) type		Flow		Normal depth		
	Specify if other		Specify if other			
(2) does it influence water levels at the site?		Yes		No		
Has model been calibrated (gauge data / flood records)?		Yes				
Is the hydraulic model available to SEPA?		No				
Design flood levels	200 year	71.77 m AOD	200 year plus climate change	71.99	m AOD	

Flood Risk Assessment (FRA) Checklist

(SS-NFR-F-001 - Version 13 - Last updated 15/04/2015

Coastal						
Estimate of 200 year design flood level			m AOD			
Estimation method(s) used		Select from List	If other (please specify methodology used):			
Allowance for climate change (m)			m			
Allowance for wave action etc (m)			m			
Overall design flood level			m AOD			
Development						
Is any of the site within the functional floodplain? (refer to SPP para 255)		No		If yes, what is the net loss of storage		m^3
Is the site brownfield or greenfield		Brownfield				
Freeboard on design water level (m)		2m	m			
Is the development for essential civil infrastructure or vulnerable groups?		No		If yes, has consideration been given to 1000 year design flood?	Select from List	
Is safe / dry access and egress available?		Vehicular and Pedestrian		Min access/egress level		m AOD
If there is no dry access, what return period is dry access available?			years			
If there is no dry access, what is the impact on the access routes?	Max Flood Depth @ 200 year event:		m	Max Flood Velocity:		m/s
Design levels	Ground level	73.9	m AOD	Min FFL:	74.05	mAOD
Mitigation						
Can development be designed to avoid all areas at risk of flooding?		Yes				
Is mitigation proposed?		No				
If yes, is compenstory storage necessary?		No				
Demonstration of compensatory storage on a "like for like" basis?		Select from List				
Should water resistant materials and forms of construction be used?		Select from List				
Comments						
Any additional comments:						

Approved by: Andrew Braid
Organisation: Millard Consulting
Date: 04/02/2022

Note: Further details and guidance is provided in 'Technical Flood Risk Guidance for Stakeholders' which can be accesssed here:- **CLICK HERE**

** ReFH2 is now accepted by SEPA for flow estimates in Scotland. Any use of this method should be compared with other accepted methods.*

PLANS

AC16

Legend

Borehole	◆	Control Station	△
Gate	✕	Marker	◆
Tree	✳	Stump	○
Trial Pit	▨		

Bottom of bank
Building outline
Bushes
Channel line
Fences
Hedge
Overhead Wires - Electricity
Overhead wires - Telephone
Path
Road centreline
Top of bank
Top of kerb
Tree canopy
Wall
Foul Sewer
Surface Water Sewer

Abbreviations

AV = Air Valve
BT = British Telecom
EA = Eaves Level
EP = Electricity Pole
FFL = Finished Floor Level
FP = Flag Pole
G = Gully
GV = Gas Valve
HY = Hydrant
IL = Invert Level
LP = Lamp Post
MH = Manhole

PEG = Marker Peg
RE = Rodding Eye
RS = Road Sign
SC = Stopcock
SV = Stop Valve
TL = Traffic Light
TOW = Top of Wall
TRP = Trial Pit
TP = Telegraph Pole
TV - Television
WM = Water Meter
WV = Water Valve

Control Stations

Station No.	Description	Easting (m)	Northing (m)	Level (m)
1	Nail in peg	339006.138	734325.849	73.751
2	Nail in tar	338971.177	734357.903	74.002

Notes

1. Contours at vertical features are indicative.
2. Levels for road are taken along channel line.
3. Isolated mature trees are denoted by trunk and average outer canopy.
4. Every effort has been made to locate all service covers but it should be noted that ground cover or local obstructions may hinder the ability to locate covers.
5. All control station coordinates should be checked and verified prior to use
6. All data remains property of Benchmark Land Surveys Ltd until payment has been made in full.
7. All levels to OS Datum (OSGM15 Geoid) unless noted otherwise.
8. North relates to OS Grid North unless noted otherwise.
9. All coordinates relate to OSGB36 (OSTN15)

Revision	Description	Date

Benchmark Land Surveys

21 Pitempton Road
Dundee DD3 9SZ
T: [redacted]
E: info@benchmarklandsurveys.com
www.benchmarklandsurveys.com

Project
Hawthorn Cottage - Baldovan

Title
Topographic Survey - 2d

Drawn by	Checked	File
MN	MN	A1

Drawing Number	Revision	Scale	Date
766/1		1:150	19/10/21

Legend

Borehole
Gate
Tree
Trial Pit
Control Station
Marker
Stump

Bottom of bank
Building outline
Bushes
Channel line
Fences
Hedge
Overhead Wires - Electricity
Overhead wires - Telephone
Path
Road centreline
Top of bank
Top of kerb
Tree canopy
Wall
Foul Sewer
Surface Water Sewer

Abbreviations

AV = Air Valve
BT = British Telecom
EA = Eaves Level
EP = Electricity Pole
FFL = Finished Floor Level
FP = Flag Pole
G = Gully
GV = Gas Valve
HY = Hydrant
IL = Invert Level
LP = Lamp Post
MH = Manhole
PEG = Marker Peg
RE = Rodding Eye
RS = Road Sign
SC = Stopcock
SV = Stop Valve
TL = Traffic Light
TOW = Top of Wall
TRP = Trial Pit
TP = Telegraph Pole
TV - Television
WM = Water Meter
WV = Water Valve

Control Stations

Station No.	Description	Easting (m)	Northing (m)	Level (m)
1	Nail in peg	339006.138	734325.849	73.751
2	Nail in tar	338971.177	734357.903	74.002

Notes

1. Contours at vertical features are indicative.
2. Levels for road are taken along channel line.
3. Isolated mature trees are denoted by trunk and average outer canopy.
4. Every effort has been made to locate all service covers but it should be noted that ground cover or local obstructions may hinder the ability to locate covers.
5. All control station coordinates should be checked and verified prior to use
6. All data remains property of Benchmark Land Surveys Ltd until payment has been made in full.
7. All levels to OS Datum (OSGM15 Geoid) unless noted otherwise.
8. North relates to OS Grid North unless noted otherwise.
9. All coordinates relate to OSGB36 (OSTN15)

Revision	Description	Date

Benchmark Land Surveys

21 Pitempton Road
Dundee DD3 9SZ
T: [redacted]
E: info@benchmarklandsurveys.com
www.benchmarklandsurveys.com

Project
Hawthorn Cottage - Baldovan

Title
Topographic Survey - 2d
West Site - Road

Drawn by	Checked	File
MN	MN	A1

Drawing Number	Revision	Scale	Date
766/2		1:200	19/10/21

Legend

Borehole
Gate
Tree
Trial Pit
Control Station
Marker
Stump

Bottom of bank
Building outline
Bushes
Channel line
Fences
Hedge
Overhead Wires - Electricity
Overhead wires - Telephone
Path
Road centreline
Top of bank
Top of kerb
Tree canopy
Wall
Foul Sewer
Surface Water Sewer

Abbreviations

AV = Air Valve
BT = British Telecom
EA = Eaves Level
EP = Electricity Pole
FFL = Finished Floor Level
FP = Flag Pole
G = Gully
GV = Gas Valve
HY = Hydrant
IL = Invert Level
LP = Lamp Post
MH = Manhole
PEG = Marker Peg
RE = Rodding Eye
RS = Road Sign
SC = Stopcock
SV = Stop Valve
TL = Traffic Light
TOW = Top of Wall
TRP = Trial Pit
TP = Telegraph Pole
TV - Television
WM = Water Meter
WV = Water Valve

Control Stations

Station No.	Description	Easting (m)	Northing (m)	Level (m)
1	Nail in peg	339006.138	734325.849	73.751
2	Nail in tar	338971.177	734357.903	74.002

Notes

1. Contours at vertical features are indicative.
2. Levels for road are taken along channel line.
3. Isolated mature trees are denoted by trunk and average outer canopy.
4. Every effort has been made to locate all service covers but it should be noted that ground cover or local obstructions may hinder the ability to locate covers.
5. All control station coordinates should be checked and verified prior to use
6. All data remains property of Benchmark Land Surveys Ltd until payment has been made in full.
7. All levels to OS Datum (OSGM15 Geoid) unless noted otherwise.
8. North relates to OS Grid North unless noted otherwise.
9. All coordinates relate to OSGB36 (OSTN15)

Revision	Description	Date

Benchmark
Land Surveys

21 Pitempton Road
Dundee DD3 9SZ
T: [redacted]
E: info@benchmarklandsurveys.com
www.benchmarklandsurveys.com

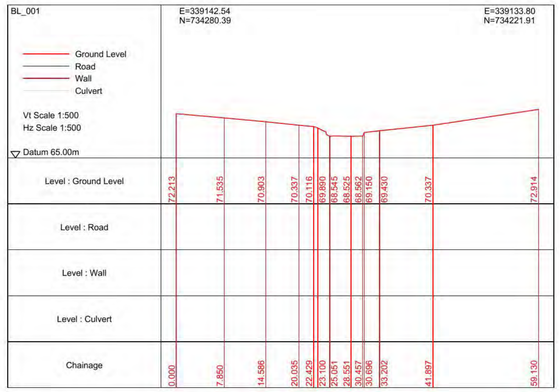
Project
Hawthorn Cottage - Baldovan

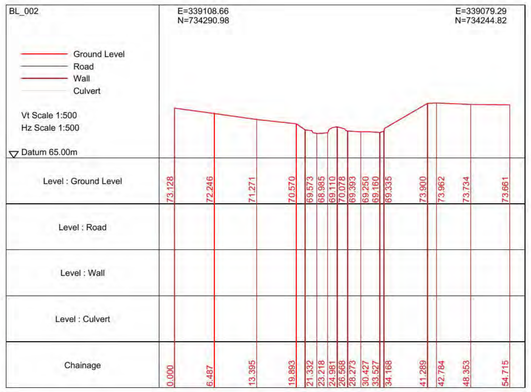
Title
Topographic Survey - 2d
Mid Site - Levels

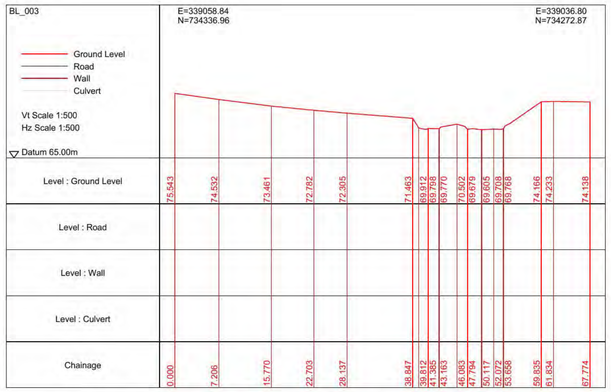
Drawn by	Checked	File
MN	MN	A1

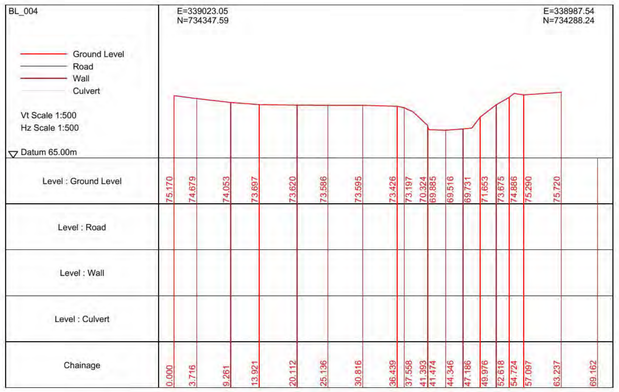
Drawing Number	Revision	Scale
766/5		1:250

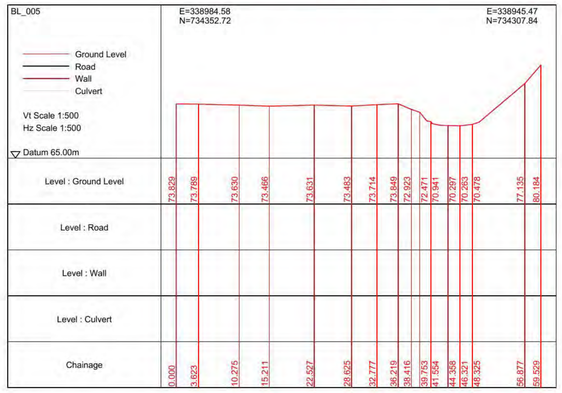
Date
7/1/22

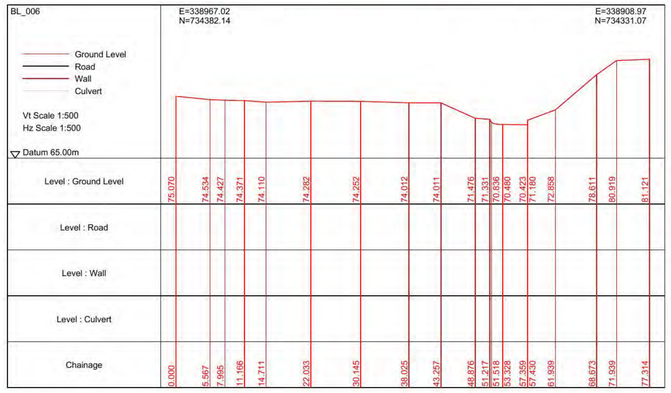


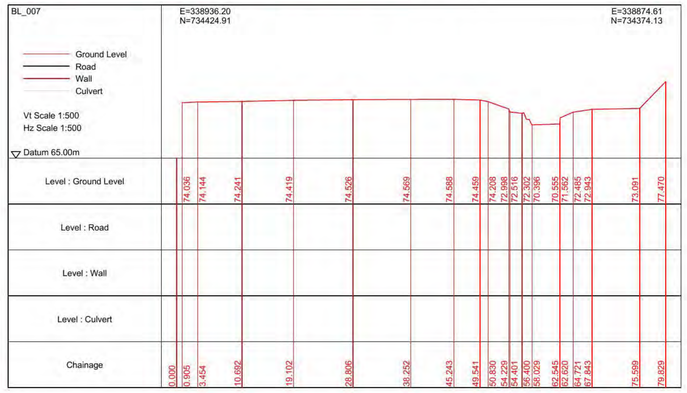


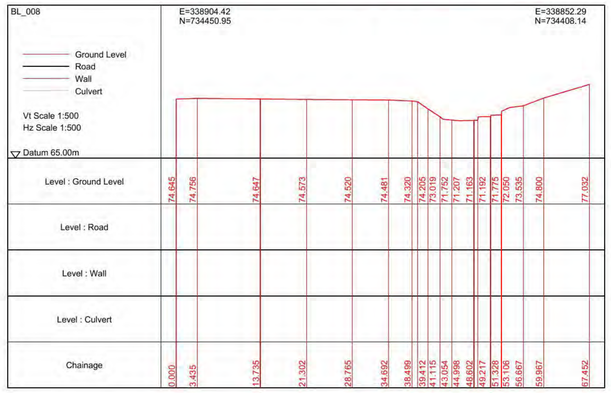


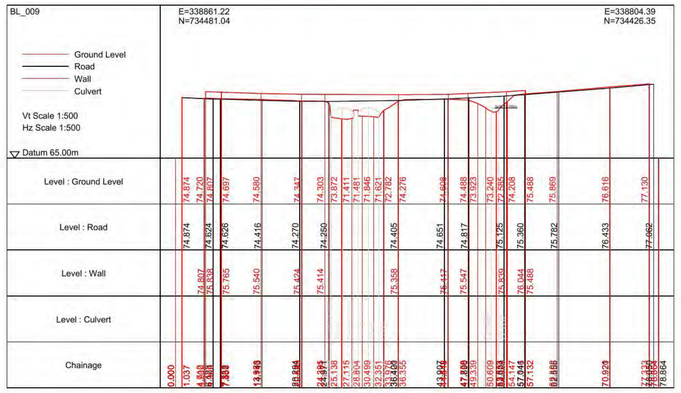


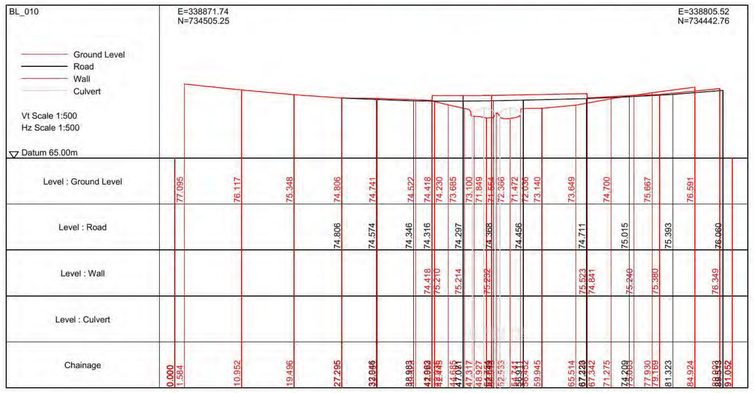


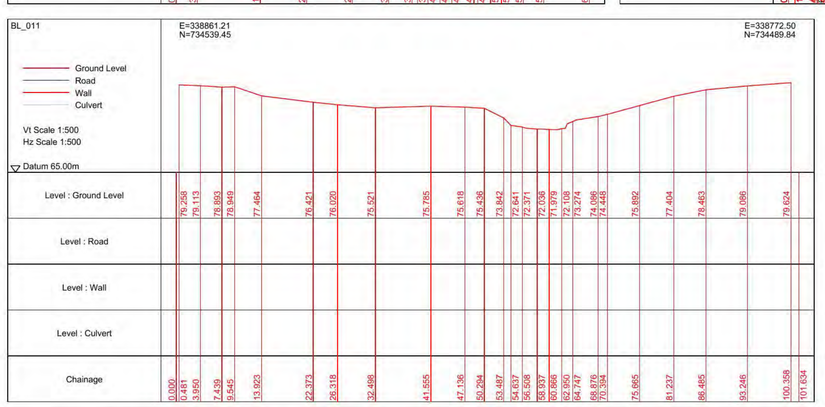


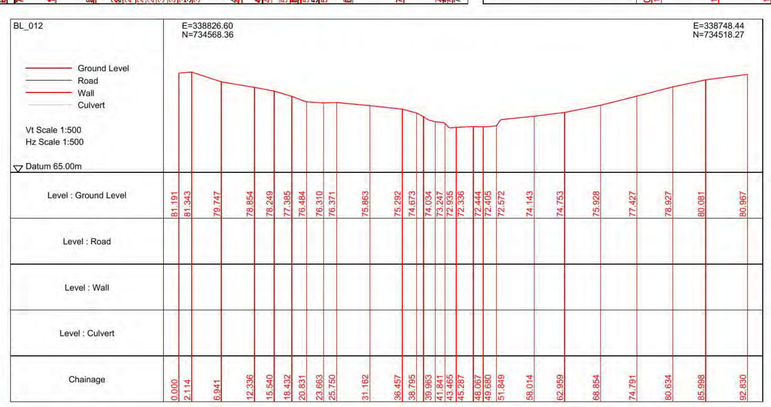












Revision	Description	Date

Benchmark Land Surveys

21 Pitempton Road
Dundee DD3 9SZ
T: [redacted]
E: info@benchmarklandsurveys.com
www.benchmarklandsurveys.com

Project
Hawthorn Cottage - Baldovan

Title
Cross Sections

Drawn by	Checked	File
MN	MN	A1

Drawing Number	Revision	Scale
766/6		1:500

Date
19/10/21

Millard
Structures

Millard
Infrastructure

Millard
Flood Risk

Millard
Environmental

Millard
Hydrology

Millard
Transportation

ISO 14001 REGISTERED FIRM
ISO 9001 REGISTERED FIRM
Building Standards Approved Certifier The Scottish Government

Dundee | Perth | Aberdeen
Registered in Scotland No. SC220557
Registered Office: Seabraes, 18 Greenmarket, Dundee DD1 4QB
TA Millard Scotland Ltd trading as Millard Consulting

APPENDIX 2

DEVELOPMENT MANAGEMENT REVIEW COMMITTEE

APPLICATION FOR REVIEW – LAND AT HAWTHORN COTTAGE, STRATHMARTINE

APPLICATION NO 21/00707/FULL

APPLICANT'S SUBMISSION

Page No

Angus House Orchardbank Business Park Forfar DD8 1AN Tel: 01307 473360 Fax: 01307 461 895 Email: plnprocessing@angus.gov.uk

Applications cannot be validated until all the necessary documentation has been submitted and the required fee has been paid.

Thank you for completing this application form:

ONLINE REFERENCE 100466717-004

The online reference is the unique reference for your online form only. The Planning Authority will allocate an Application Number when your form is validated. Please quote this reference if you need to contact the planning Authority about this application.

Applicant or Agent Details

Are you an applicant or an agent? * (An agent is an architect, consultant or someone else acting on behalf of the applicant in connection with this application) ☐ Applicant ☒ Agent

Agent Details

Please enter Agent details

Company/Organisation:	JON FRULLANI ARCHITECT		
Ref. Number:		You must enter a Building Name or Number, or both: *	
First Name: *	JON	Building Name:	
Last Name: *	FRULLANI	Building Number:	140
Telephone Number: *	01382224828	Address 1 (Street): *	Perth Road
Extension Number:		Address 2:	
Mobile Number:		Town/City: *	Dundee
Fax Number:		Country: *	United Kingdom
		Postcode: *	DD1 4JW
Email Address: *	jon@jfarchitect.co.uk		

Is the applicant an individual or an organisation/corporate entity? *

☒ Individual ☐ Organisation/Corporate entity

Applicant Details

Please enter Applicant details

Title:	Mr	You must enter a Building Name or Number, or both: *	
Other Title:		Building Name:	
First Name: *	Kenneth	Building Number:	10
Last Name: *	Grant	Address 1 (Street): *	Kettins Terrace
Company/Organisation		Address 2:	
Telephone Number: *		Town/City: *	Dundee
Extension Number:		Country: *	Scotland
Mobile Number:		Postcode: *	DD3 9RJ
Fax Number:			
Email Address: *	jon@jfarchitect.co.uk		

Site Address Details

Planning Authority:	Angus Council

Full postal address of the site (including postcode where available):

Address 1:	HAWTHORN COTTAGE
Address 2:	BALDOVAN
Address 3:	STRATHMARTINE
Address 4:	
Address 5:	
Town/City/Settlement:	DUNDEE
Post Code:	DD3 0PD

Please identify/describe the location of the site or sites

Northing	734376	Easting	338984

Description of Proposal

Please provide a description of your proposal to which your review relates. The description should be the same as given in the application form, or as amended with the agreement of the planning authority: *
(Max 500 characters)

Erection of a dwellinghouse

Type of Application

What type of application did you submit to the planning authority? *

☒ Application for planning permission (including householder application but excluding application to work minerals).

☐ Application for planning permission in principle.

☐ Further application.

☐ Application for approval of matters specified in conditions.

What does your review relate to? *

☒ Refusal Notice.

☐ Grant of permission with Conditions imposed.

☐ No decision reached within the prescribed period (two months after validation date or any agreed extension) – deemed refusal.

Statement of reasons for seeking review

You must state in full, why you are a seeking a review of the planning authority's decision (or failure to make a decision). Your statement must set out all matters you consider require to be taken into account in determining your review. If necessary this can be provided as a separate document in the 'Supporting Documents' section: * (Max 500 characters)

Note: you are unlikely to have a further opportunity to add to your statement of appeal at a later date, so it is essential that you produce all of the information you want the decision-maker to take into account.

You should not however raise any new matter which was not before the planning authority at the time it decided your application (or at the time expiry of the period of determination), unless you can demonstrate that the new matter could not have been raised before that time or that it not being raised before that time is a consequence of exceptional circumstances.

Please see enclosed supporting statement

Have you raised any matters which were not before the appointed officer at the time the Determination on your application was made? * ☐ Yes ☒ No

If yes, you should explain in the box below, why you are raising the new matter, why it was not raised with the appointed officer before your application was determined and why you consider it should be considered in your review: * (Max 500 characters)

Please provide a list of all supporting documents, materials and evidence which you wish to submit with your notice of review and intend to rely on in support of your review. You can attach these documents electronically later in the process: * (Max 500 characters)

Location Plan, Existing Site Plan, Existing Floor Plan, Existing Elevations, Proposed Site Plan, Proposed Floor Plans and Elevations, Proposed Garage Floor Plans and Elevations, Existing and Proposed Site Sections, Proposed Internal Elevations, Flood Risk Assessment, Review Supporting Statement, Bat Survey

Application Details

Please provide the application reference no. given to you by your planning authority for your previous application: 21/00707/FULL

What date was the application submitted to the planning authority? * 03/09/2021

What date was the decision issued by the planning authority? * 21/04/2023

Review Procedure

The Local Review Body will decide on the procedure to be used to determine your review and may at any time during the review process require that further information or representations be made to enable them to determine the review. Further information may be required by one or a combination of procedures, such as: written submissions; the holding of one or more hearing sessions and/or inspecting the land which is the subject of the review case.

Can this review continue to a conclusion, in your opinion, based on a review of the relevant information provided by yourself and other parties only, without any further procedures? For example, written submission, hearing session, site inspection. *

☒ Yes ☐ No

In the event that the Local Review Body appointed to consider your application decides to inspect the site, in your opinion:

Can the site be clearly seen from a road or public land? * ☒ Yes ☐ No

Is it possible for the site to be accessed safely and without barriers to entry? * ☒ Yes ☐ No

Checklist – Application for Notice of Review

Please complete the following checklist to make sure you have provided all the necessary information in support of your appeal. Failure to submit all this information may result in your appeal being deemed invalid.

Have you provided the name and address of the applicant?. * ☒ Yes ☐ No

Have you provided the date and reference number of the application which is the subject of this review? * ☒ Yes ☐ No

If you are the agent, acting on behalf of the applicant, have you provided details of your name and address and indicated whether any notice or correspondence required in connection with the review should be sent to you or the applicant? * ☒ Yes ☐ No ☐ N/A

Have you provided a statement setting out your reasons for requiring a review and by what procedure (or combination of procedures) you wish the review to be conducted? * ☒ Yes ☐ No

Note: You must state, in full, why you are seeking a review on your application. Your statement must set out all matters you consider require to be taken into account in determining your review. You may not have a further opportunity to add to your statement of review at a later date. It is therefore essential that you submit with your notice of review, all necessary information and evidence that you rely on and wish the Local Review Body to consider as part of your review.

Please attach a copy of all documents, material and evidence which you intend to rely on (e.g. plans and Drawings) which are now the subject of this review * ☒ Yes ☐ No

Note: Where the review relates to a further application e.g. renewal of planning permission or modification, variation or removal of a planning condition or where it relates to an application for approval of matters specified in conditions, it is advisable to provide the application reference number, approved plans and decision notice (if any) from the earlier consent.

Declare – Notice of Review

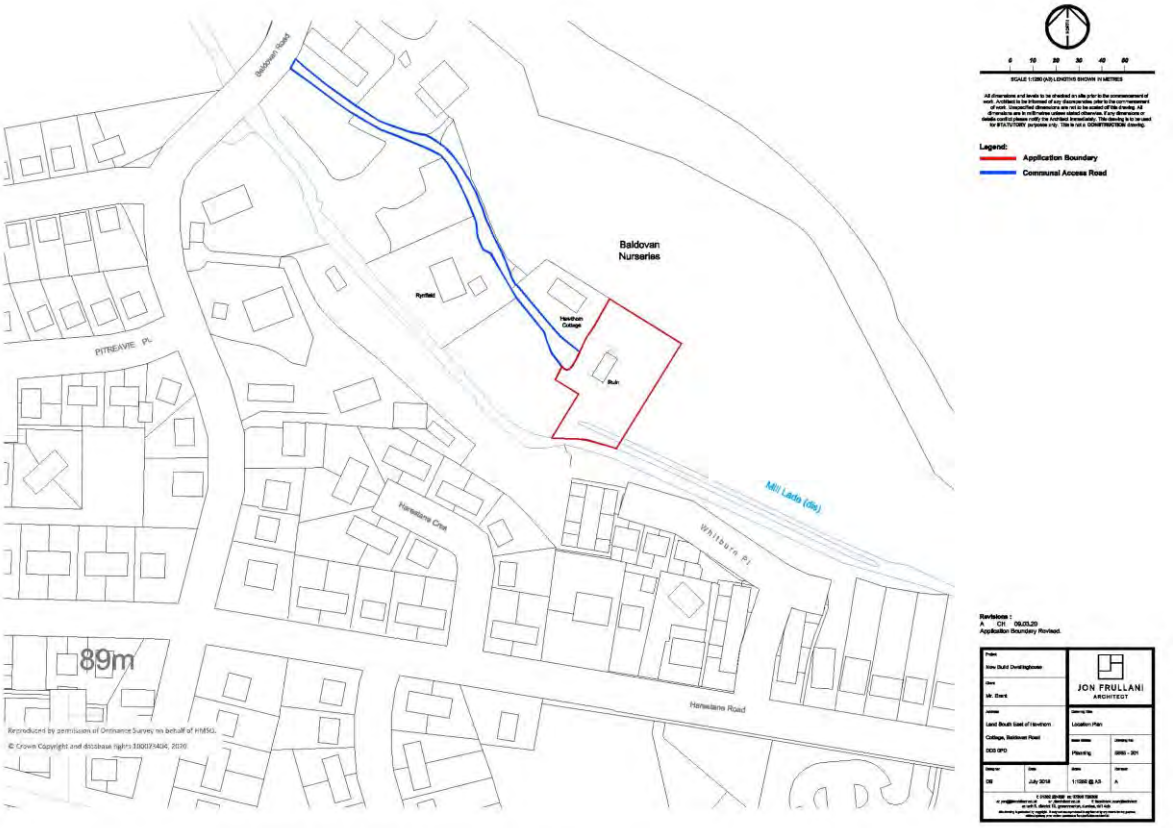
I/We the applicant/agent certify that this is an application for review on the grounds stated.

Declaration Name: Mr JON FRULLANI

Declaration Date: 29/05/2023

ERECTION OF NEW DWELLINGHOUSE AT LAND ADJACENT TO HAWTHORN COTTAGE BALDOVAN STRATHMARTINE

REVIEW STATEMENT



Town and Country Planning(Scotland) Act 1997 as amended
Planning Application Ref: 21/00707/FULL
Appellant: Mr K. Grant
Date: May 2023

Contents

1.0 INTRODUCTION

This Notice of Review has been submitted on behalf of Mr Kenneth Grant and relates to a Planning Application for the erection of a new dwelling house at land adjacent to Hawthorn Cottage, Baldovan, Strathmartine.

Angus Council registered the application on 3 September 2021 under planning application reference: 21/00707/FULL.

The planning application was validated on 29 March 2022 and determined on 21 April 2023. The Planning Decision Notice cites the following reasons for refusal of planning permission:

1. *The proposal is contrary to policy TC2 of the Angus Local Development Plan and its associated, Countryside Housing Supplementary Guidance because it does not comply with any of the circumstances that would allow for the construction of a new house in a countryside location. The proposal is also contrary to Policies 9 and 17 of NPF4 as it does not sustainably reuse brownfield land as the site has naturalised and returned to a natural state without intervention.*

2. *The application is contrary to Policy DS1 of the Angus Local Development Plan 2016 as the proposal is not in accordance with relevant policies of the local development plan.*

In determining the planning application, the Planning Authority is required, under Sections 25 and 37 of the Town and Country Planning (Scotland) Act, 1997 (as amended) (the "Act") to determine the application in accordance with the Development Plan unless material considerations indicate otherwise.

The appellant disagrees with the Case Officer's Decision and respectfully requests that the Review is considered in light of the material considerations detailed within this statement which we believe to justify approval of the proposal having regard to the requirements of Sections 25 and 37 of the Act.

It is respectfully requested that this Review is supported and planning permission granted for the reasons provided in this statement.

2.0 APPLICATION SITE AND CONTEXT

The site is located to the east of Hawthorn Cottage and extends to 2050sqm in area as illustrated by Figure 1: Site Location Plan.

To the west the site is bound by the curtilage of Hawthorn Cottage and to the east and north by Baldovan Nurseries. To the south the site is bound by the Dighty Burn. The site was formerly part of Baldovan Bleach Fields and passing through the southern sector of the site is the laid that served the former Bleach Fields.

The site is accessed from the private road serving Rhynfield Cottage and Hawthorn Cottage.

Occupying the site is a dilapidated stone building complete to wall head height. The building formed part of the bleach works as demonstrated by Figure 2: Historic Map of Baldovan. The map extract in Figure 2 is from Forfarshire Sheet 050.13.

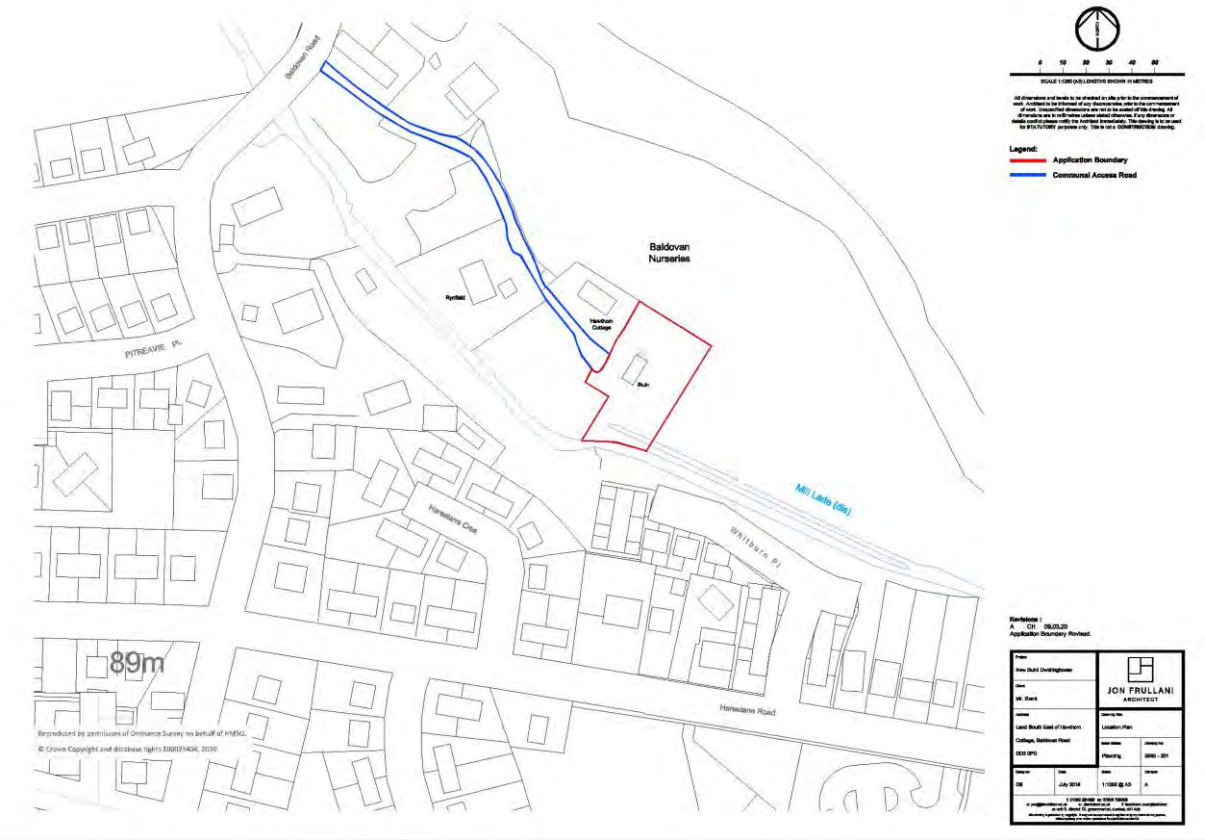


Figure 1: Site Location Plan

The photographs in Figures 3, 4, 5 and 6 illustrate the relationship between the applcation site and Hawthorn Cottage, the site boundaries and the condition of the dilapidated building on site. The photographs and site location plan clearly illustrate that following the closure of the bleach fields the application site has not formed part of the curtilage of Hawthorn Cottage but rather is land that has not been maintained and latterly was in use for grazing horses. The photograph in Figure 5 shows the fencing that separates the application site from the curtilage of Hawthorn Cottage.

Figure 2: Historic Map of Baldovan

Figure 3: View Looking East Over Application Site from Access Road

Figure 4: Dilapidated Bleach Works Building

Figure 5: View North of Hawthorn Cottage from Dighty Burn

Figure 6 View North Over Application Site from Dighty Burn

3.0 PROPOSED DEVELOPMENT

Planning application ref: 21/00707/FULL sought planning permission for the erection of a new dwellinghouse on land adjacent to Hawthorn Cottage, Baldovan, Strathmartine.

The proposal involves the demolition of the dilapidated former bleach field building, site remediation and the erection of a detached dwellinghouse and garage.

The new dwelling will have a north to south orientation with the principal elevation facing south over the Dighty Burn.

The proposed house will have a traditional H plan shape with pitched roofs finished in slate. The elevations of the proposed house will be finished in a combination of timber cladding, stone and roughcast. Accommodation within the house will be spread over 2 levels with window and door openings on the ground floor south elevation opening out on to a decked area.

Access to the site will be taken from the road serving Hawthorn and Rhynfield Cottages and the existing paddocks which terminates midway along the western boundary of the site. A driveway will extend west to east in front of the principal elevation of the house to a garage located in the northeastern corner of the site.

The proposed garage will have a pitched roof finished in slate and roughcast walls to match the proposed house. The garage and driveway will provide parking for up to 4 vehicles.

The proposed house will have an area of private garden ground to the rear (north) with an area of 500sqm.

The layout and design of the proposed development are illustrated by the Site Layout Plan in Figure 7.

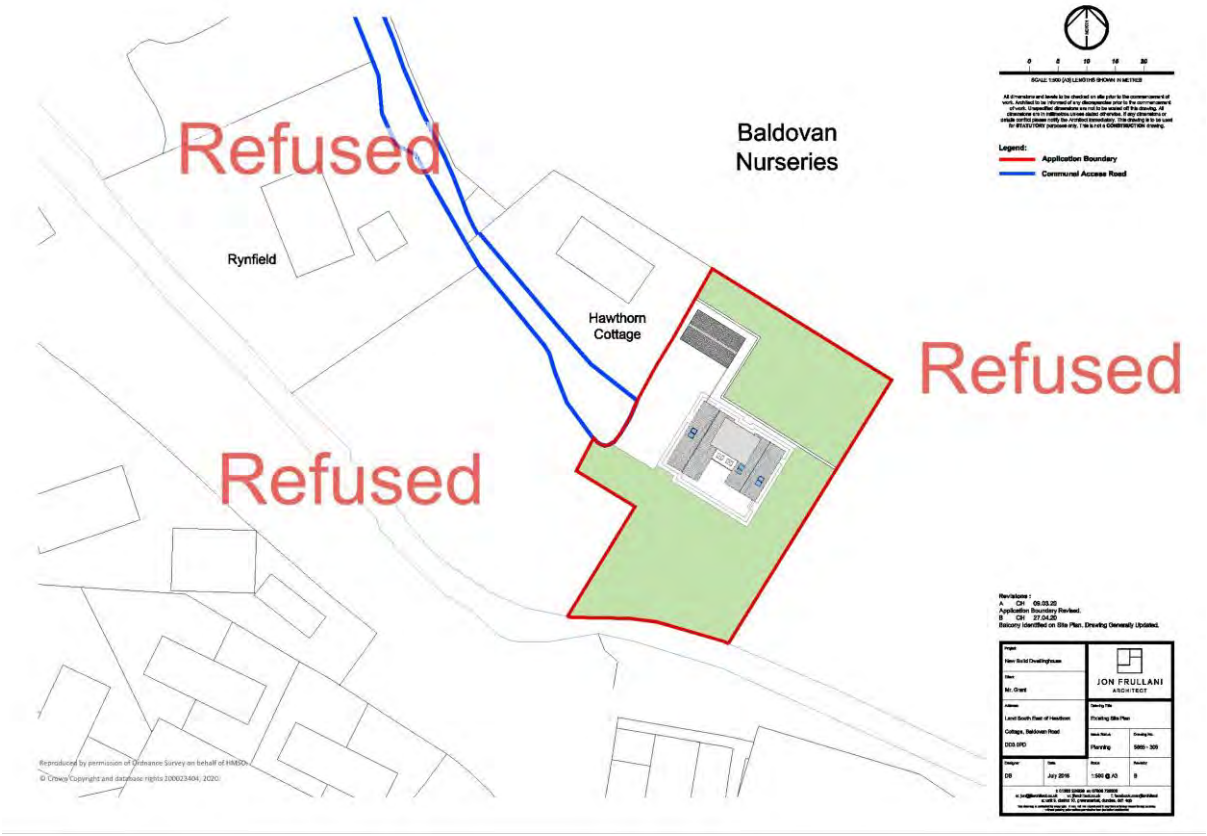


Figure 7: Site Layout Plan

4.0 EVALUATION OF PROPOSED DEVELOPMENT

Section 25 of the Act identifies that "*where, in making any determination under the Planning Acts, regard is to be had to the development plan, the determination shall be made in accordance with the plan unless material considerations indicate otherwise*."

This principle is restated in Section 37(2) of the Act on the determination of applications states that, *"In dealing with such an application the authority shall have regard to the provisions of the development plan, so far as material to the application, and to any other material considerations*".

The determining issues in this case are whether; the proposal complies with development plan policy; or if there are any other material considerations which justify a departure from policy.

The statutory development plan for Angus comprises:

- National Planning Framework 4 (NPF4) (Published 2023)
- Angus Local Development Plan, adopted 2016

Policy DS1 in the Angus Local Development Plan (ALDP) indicates that outwith development boundaries proposals will be supported where they are of a scale and nature appropriate to their location. It indicates that proposals that re-use or make better use of vacant, derelict or under-used brownfield land or buildings will be supported where they are in accordance with relevant policies of the ALDP.

Policy TC2 indicates that in countryside locations Angus Council will support proposals for new dwelling houses which fall into at least one of a number of categories. In addition, Policy TC2 requires all proposals for new residential development to be compatible in terms of land use; to provide a satisfactory residential environment; not to result in unacceptable impact on the built and natural environment, surrounding amenity, access and infrastructure; and to include provision for affordable housing in accordance with Policy TC3. Proposals are also required to be assessed in terms of the Angus Council Countryside Housing Supplementary Guidance.

In terms of possible acceptable situations identified by TC2, the proposal does not involve retention, renovation or acceptable replacement of an existing house; it does not involve conversion of a non-residential building; it is not a gap site (defined as the space between the curtilages of two houses; or between the curtilage of one house and a metalled road; or between the curtilage of one house and a substantial building); it does not round off an established building group of 3 or more existing dwellings; and it is not required for an essential worker in association with management of land or a rural business.

Policy TC2 offers support for up to four new houses where development involves the regeneration or redevelopment of a brownfield site where the development delivers significant visual or environmental improvement through the removal of derelict buildings, contamination or an incompatible land use.

The Countryside Housing Supplementary Guidance defines rural brownfield sites as:

"*Sites that have previously been developed. In rural areas this usually means sites that are occupied by redundant or unused buildings or where the land has been significantly degraded by a former activity.*"

The information provided in section 2.0 Application Site and Context demonstrate that the site and the dilapidated building upon it forms part of the former Baldovan Bleach Fields.

The buildings that form Rhynfield Cottage, Hawthorne Cottage, the derelict building on site and the remaining footprint of former buildings formed part of the Bleach Fields. Historically a Bleach Field was an area of land adjacent to a watercourse where linen or jute produced in a mill could be stretched out soaked in chlorine diluted by water from the watercourse and left to dry in the sun. Typically this caused significant contamination of the land and surrounding watercourses. The dilapidated building on site was used as a boiler house and as such there are concentrations of ash within and surrounding the building. Ash has to be removed from the site as it is unknown what materials were burned to create the ash and what contaminants are present on site.

The dilapidated stone building that was formerly used as a boiler house was last known to be used for the storage of hay and feed for horses grazing on the site.

Taking cognisance of the above reasoning there is clear and irrefutable evidence to demonstrate that the application site although currently overgrown was last in use as a paddock for grazing horses and does not form domestic curtilage associated with Hawthorn Cottage. The site is a brownfield given its historic use as part of Baldovan Bleach Field.

The proposed house would have a H plan combining three rectangular plans with narrow gables and wide frontages which is characteristic of houses found in rural Angus. The external finishes combined with the scale, massing and design of the building and the sloping topography of the site would allow the dwelling to appear as a recessive element in the landscape. The house would be back clothed with woodland which would allow the house to integrate well in the surrounding landscape. Taking cognisance of the above reasoning we believe the proposed house could be accommodated without any adverse impact on the character of the surrounding area or existing housing.

The proposal would not adversely affect any natural heritage designation.

By utilising the existing access to the site the proposed development will have no adverse impacts on road traffic and pedestrian safety.

The development is not of a scale that would require a contribution towards affordable housing or other community infrastructure.

Surface water would be managed by means of sustainable drainage infrastructure on site (permeable paving and soakaways) which is in accordance with Policy PV15.

In terms of the detailed criteria provided at Appendix 3 of the Countryside Housing Supplementary Guidance, the proposal would not create a gap site or rounding off opportunity for additional housing development and would not require the subdivision of an existing residential curtilage. The proposal would not extend existing ribbon development. The proposal would not result in the coalescence of building groups or of a building group with a nearby settlement. The proposal does not give rise to any significant issues in terms of the Appendix 3 requirements.

Redevelopment of the site with a dwelling of a high quality design would provide a significant visual improvement, consistent with the aims of policy TC2. Taking the above

matters into consideration we have demonstrated the proposed development to accord with Angus Council's countryside housing policy.

Policy DS3 requires development to deliver a high design standard and draw upon those aspects of landscape or townscape that contribute positively to the character and sense of place of the area in which they are to be located. It suggests that development should fit with the character and pattern of development in the surrounding area and that access and parking requirements of the Roads Authority are met.

Policy DS4 relates to amenity and states that proposals must have full regard to opportunities for maintaining and improving environmental quality. Development is not permitted where there would be an unacceptable adverse impact on the area or the environment or amenity of nearby sensitive property.

In terms of the residential environment to be provided, the plot would be comparable with existing plot sizes serving Hawthorn and Rhynfield Cottages. The paddock to the south of Hawthorn Cottage will be retained as part of the proposed development.

The proposed plot has an area of 2050sqm. The proposed house would have a reasonable degree of privacy with there being a distance in excess of 18m between the facing windows of habitable rooms of the proposed house and neighbouring properties. There would be in excess of 1000sqm of private garden ground and adequate space to provide 4 vehicle parking spaces as well as bin and recycling storage.

The site contains no designation for natural or built heritage interests. The proposal is consistent with the character and pattern of development in the area and provides an acceptable design solution as evidenced above.

There will be adequate separation between the proposed dwelling and those to the west. This shall ensure that there is no adverse impact on the amenity and environmental quality of the existing and proposed dwellings by virtue of the scale and massing of the proposed house. Similarly the separation distance between the proposed house and existing buildings will ensure that there is no unacceptable impact on the amenity or environmental quality of the proposed house in terms of overlooking and overshadowing.

Access and parking arrangements are in accordance with the Council's standards and would not impact on road traffic and pedestrian safety.

The proposal is not of a scale or location where it would require a developer contribution or affordable housing when assessed against the Developer Contributions and Affordable Housing Supplementary Guidance and there is no reason to consider it would result in unacceptable impact on infrastructure. There are no issues against the remaining criteria of Policy DS4.

Policy PV5 Protected Species is supportive of proposals that protect and enhance all wildlife including its habitats, important roost or nesting places. A bat survey was submitted in support of the proposed development demonstrating that there was no evidence of roosts

or bat activity on site with the existing building and surrounding trees not being suitable to host roosts. In this regard the proposal satisfies the requirements of Policy PV5.

Policy PV7 stipulates that woodland, trees and hedges that contribute to the nature conservation, heritage, amenity, townscape or landscape value of Angus will be protected and enhanced. Despite the proposal involving the localised removal of existing self seeded low amenity value trees to accommodate the proposed house within the site there is ample space remaining to allow for replacement planting. The appellant is agreeable to this matter being controlled by condition. As such the proposal can satisfy the requirements of PV7.

In respect of flood risk, a Flood Risk Assessment was submitted in support of the proposed development. Both SEPA and the Council's Roads – Flooding Service have no objection to the current proposal. Both parties note that the FRA demonstrates that the proposed house location is outwith the functional floodplain and agree with the suggestion within the FRA that the land around the proposed house footprint should be no lower than 73.9m AOD. Therefore, with the principle of the development otherwise acceptable there is now no concerns regarding flood risk, subject to suitable finished ground and floor levels.

The proposal does not give rise to significant issues in terms of remaining development plan policy and associated issues could be addressed by condition, such as the requirement for SUDS, the submission of a photographic survey and upgrades to the existing access track.

Taking cognisance of the above reasoning the proposed development has been evidenced to satisfy the requirements of the adopted Angus Local Development Plan 2016.

Turning to National Planning Framework 4, Policy 9 requires that proposals that result in the sustainable reuse of brownfield land including vacant and derelict land and buildings, whether permanent or temporary, to be supported. However in determining whether the reuse is sustainable, the biodiversity value of brownfield land which has naturalised should be taken into account. NPF4 Policy 17 'Rural Homes' states development proposals for new homes in rural areas will be supported where the development is suitably scaled, sited and designed to be in keeping with the character of the area and complies with at least one of a number of other criteria, this includes amongst other things, reuse of brownfield land where a return to a natural state has not or will not happen without intervention.

Recognising that the application site is semi naturalised the existing building and its footprint remain in situ and free from vegetation due to the impact of its historic use. As such the site of the existing building will not return to a natural state without intervention. This is evidenced by the passage of time since the building was used as part of the functioning bleach field.

In summary, the proposed development has been evidenced to satisfy the requirements of Development Plan comprising National Planning Framework 4 and the Angus Local Development Plan 2016.

Material Considerations

1. Views of the Objectors

2 letters of objection were received by the Council when determining planning application ref: 21/00707/FULL. The concerns raised and responses are detailed below:

Concern: Development is outwith the development boundary of Strathmartine and sited on green belt land.

Response: The objectors raise concerns relating to the location of the application site outside the Strathmartine settlement boundary and it being located on a green belt. The proposal has been assessed against policies relating to housing in the countryside and it is recognised that the site is located outside of a development boundary but is not located within a designated green belt.

Concern: Detrimental impact on amenity (noise, traffic and privacy) of existing properties.

Response: In terms of impacts on amenity, the proposed house is positioned on the application site to ensure that it would not give rise to unacceptable impacts in terms of overlooking, privacy or loss of light when assessed against the Council's planning guidance. While there would be some impact associated with increased activity along the site access track that impact is not likely to be so significant as to warrant refusal of planning permission.
Concern: Road safety issues (inadequate access track with lack of passing places and visibility concerns at Junction);

Response: The Council's Roads Service is satisfied that the access could accommodate an additional dwelling subject to improvements being made to allow space for vehicles to pass.

Concern: Impacts on trees and wildlife

Response: The proposal is unlikely to result in any significant impact on wildlife. No signs of bats were recorded in the bat survey and the large open areas close to the site would be largely unaffected by the proposal. Whilst the site does contain some planting, were the proposal otherwise acceptable planning conditions could be applied to ensure suitable planting within the site is maintained, enhanced or compensated.

Concern: Environmental pollution and contamination from Giant Hogweed and Japanese Knotweed

Response: The Council's contaminated land officer has requested a condition be attached requiring further investigation to identify any land contamination as well as approval for unassociated remediation strategy. In terms of colonisation by non-native invasive species such as Giant Hogweed and Japanese Knotweed a programme of decontamination is required. However, remediation and naturalisation will not occur without intervention. It is this intervention that forms the basis for justification of the proposed development.

Concern: No evidence of housing need

Response: The development plan supports housing of this scale in rural locations.

Concern: Flood risk concerns

Response: Flood risk matters have now been addressed as detailed above and there is no concern in this regard.

Concern: The owners of Hawthorn cottage do not have legal authority to extend right of access to further properties without permission from the owners of the access lane

Response: Legal access rights over land and damage to neighbouring property are civil matters that are not controlled through the planning process.

The concerns of the objectors are of insufficient weight to justify the refusal of planning permission.

5.0 CONCLUSION

The determining issue in this Review is whether the proposed development meets the criteria of Local Development Plan and National Planning Framework 4 policy to justify the erection of a new house in the countryside.

The evaluation of the proposed development against the requirements of the Development Plan in Section 4.0 demonstrates the proposals compliance with detailed criteria of NPF4 and the Angus Local Development Plan regarding countryside housing. Furthermore, Section 4.0 also evaluates the concerns of objectors concluding that as material considerations they hold insufficient weight to justify setting aside the Development Plan to refuse planning permission.

Taking these matters into consideration it is respectfully requested that, having regard to the requirements of Section 25 and 37 of the Town and Country Planning (Scotland) Act, 1997, as amended, this appeal is supported and planning permission granted.

ITEM 3i

NORTH

0 10 20 30 40 50

SCALE 1:1250 (A3) LENGTHS SHOWN IN METRES

*All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.*

Legend:

Application Boundary

Communal Access Road

Revisions :
A CH 09.03.20
Application Boundary Revised.

Project: New Build Dwellinghouse		JON FRULLANI ARCHITECT	
Client: Mr. Grant			
Address: Land South East of Hawthorn Cottage, Baldovan Road DD3 0PD		Drawing Title: Location Plan	
		Issue Status: Planning	Drawing No.: 5865 - 301
Designer: DB	Date: July 2018	Scale: 1:1250 @ A3	Revision: A

t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.[redacted] facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

ITEM 3ii

NORTH

0 5 10 15 20

SCALE 1:500 (A3) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.

Legend:

Application Boundary

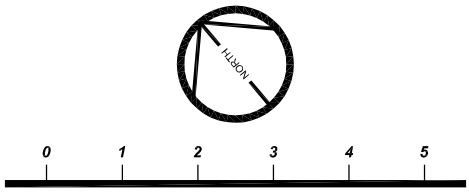
Communal Access Road

Revisions :
A CH 09.03.20
Application Boundary Revised.

Project: New Build Dwellinghouse		JON FRULLANI ARCHITECT	
Client: Mr. Grant			
Address: Land South East of Hawthorn Cottage, Baldovan Road DD3 0PD		Drawing Title: Existing Site Plan	
		Issue Status: Planning	Drawing No.: 5865 - 302
Designer: DB	Date: July 2018	Scale: 1:500 @ A3	Revision: A

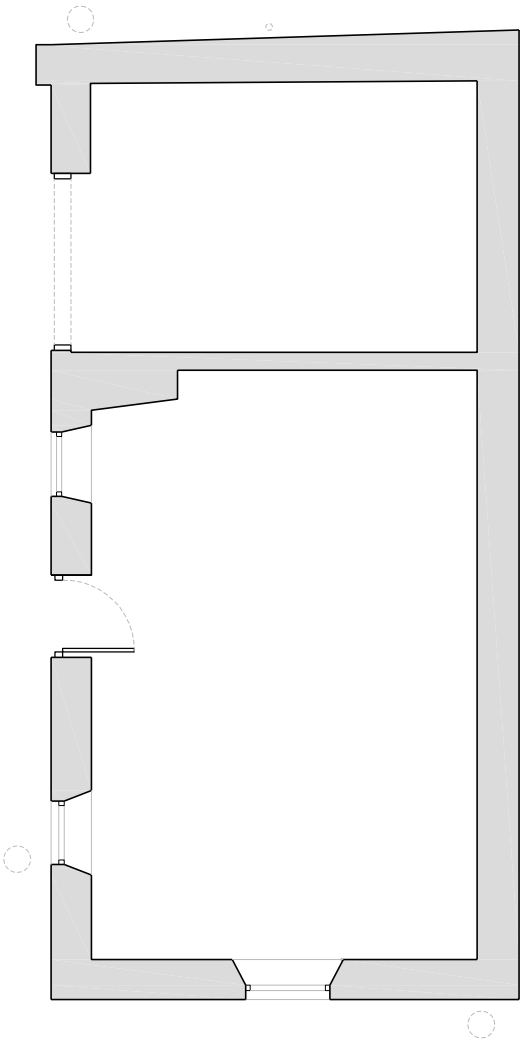
t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

ITEM 3iii



SCALE 1:100 (A4) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.



Project: New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hawthorn Cottage, Baldovan Road DD3 0PD	Drawing Title: Existing Floor Plan
	Issue Status: Planning / Drawing No.: 5865 - 303
Designer: DB / Date: July 2018	Scale: 1:100 @ A4 / Revision: -

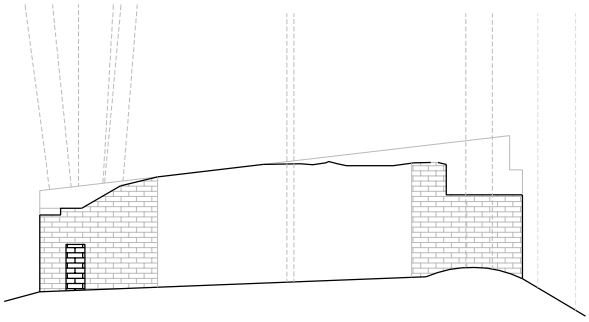
t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

ITEM 3iv

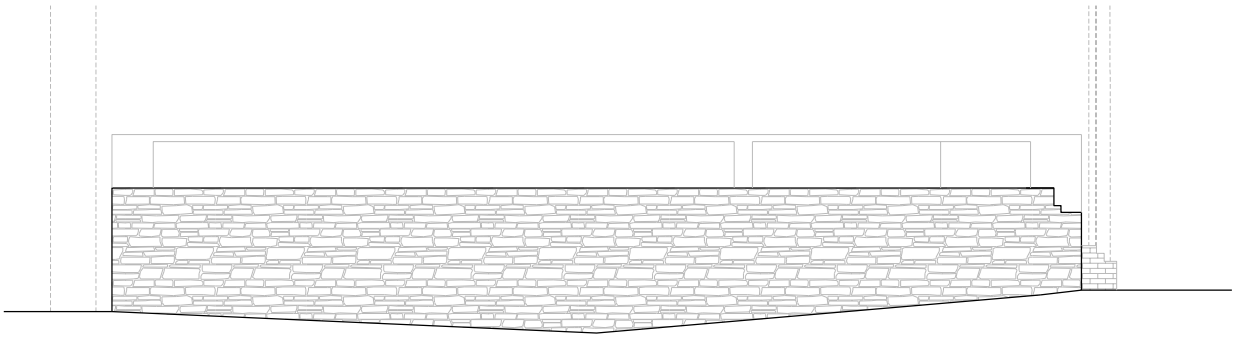
0 1 2 3 4 5

SCALE 1:100 (A4) LENGTHS SHOWN IN METRES

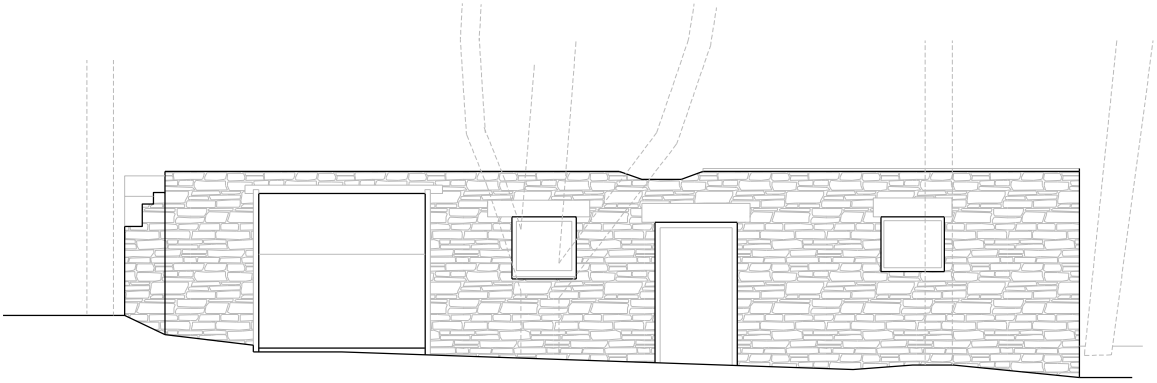
All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.



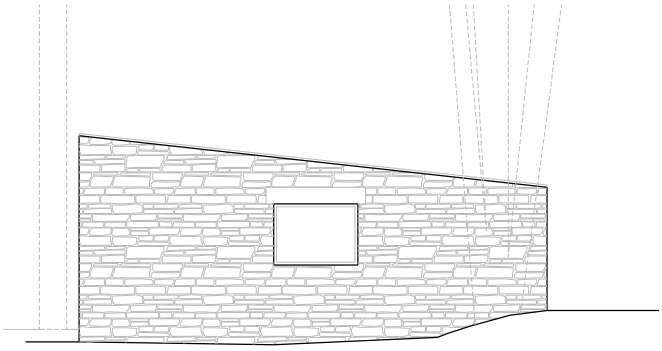
North - East Elevation



South - East Elevation



North - West Elevation



South - West Elevation

Project: New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD	Drawing Title: Existing Elevations
	Issue Status: Planning / Drawing No.: 5865 - 304
Designer: DB / Date: July 2018	Scale: 1:100 @ A4 / Revision: A

t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

ITEM 3v

0 5 10 15 20

SCALE 1:500 (A3) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commenc ement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified d mensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimens ions or details conflict please notify the Architect immediately. This drawing is t o be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.

Legend:

Application Boundary

Communal Access Road

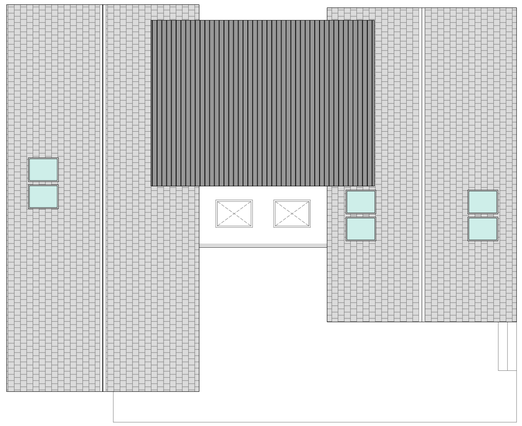
Revisions :

A CH 09.03.20
App ication Boundary Revised.
B CH 27.04.20
Balcony Identified on Site Plan. Drawing Generally Updated.

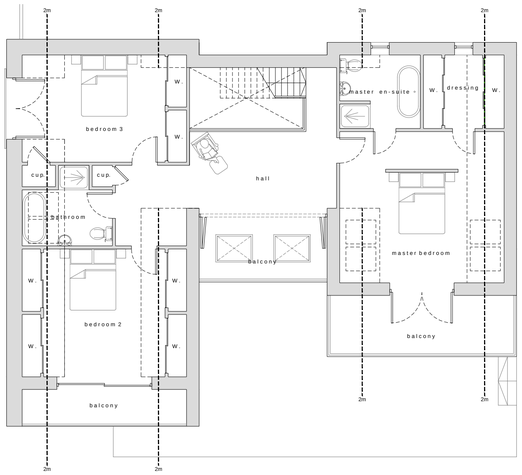
Project: New Build Dwellinghouse		JON FRULLANI ARCHITECT	
Client: Mr. Grant			
Address: Land South East of Hawthorn Cottage, Baldovan Road DD3 0PD		Drawing Title: Existing Site Plan	
		Issue Status: Planning	Drawing No.: 5865 - 305
Designer: DB	Date: July 2018	Scale: 1:500 @ A3	Revision: B

t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

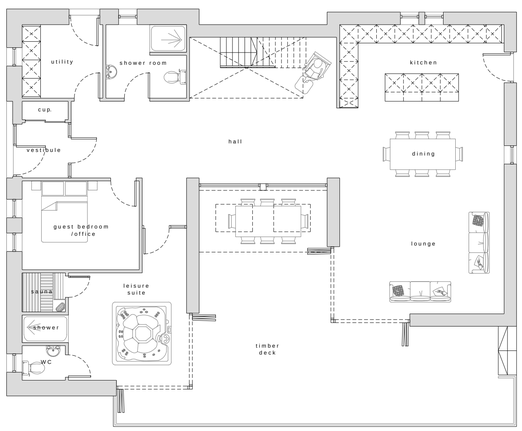
ITEM 3vi



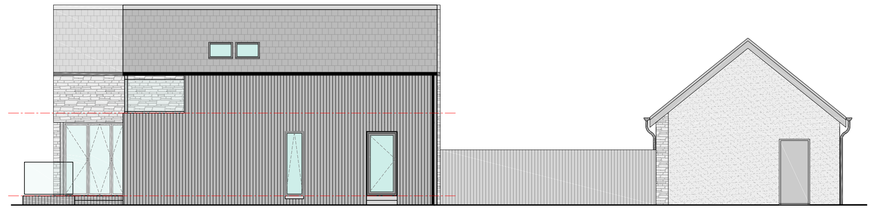
Roof Plan



First Floor Plan

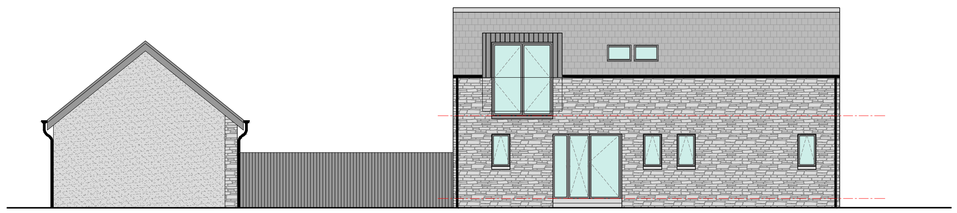


Ground Floor Plan

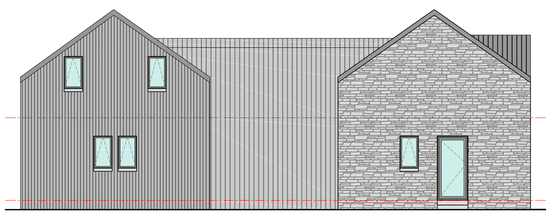


South - East Elevation

South - West Elevation



North - West Elevation



North - East Elevation

0 2 4 6 8 10

SCALE 1:100 (A1) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.

Material Schedule

Roof:
Pitched Roofs: Slate
Flat Roof: Zinc *colour: grey*

Fascias & Soffits:
uPVC.
Colour; anthracite

Rainwater Goods:
uPVC.
Colour; Black

Walls:
Wet dash white render
Anthracite composite timber cladding
Denfind Stone
Standing Seam Zinc *Colour; grey*

Windows & Doors:
High quality double glazed uPVC windows.
Colour; Grey

Project: New Build Dwelling House	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD	Drawing Title: Prp Plans + Elevations
	Issue Status: Planning / Drawing No.: 5865 - 306
Designer: RS / Date: August 2021	Scale: 1:100 @ A1 / Revision: A

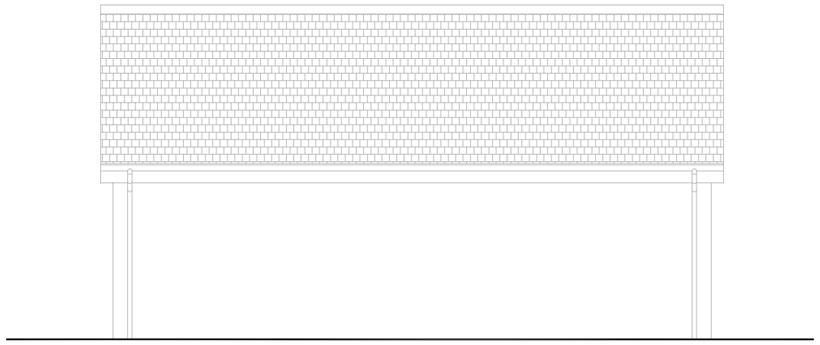
t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

ITEM 3vii

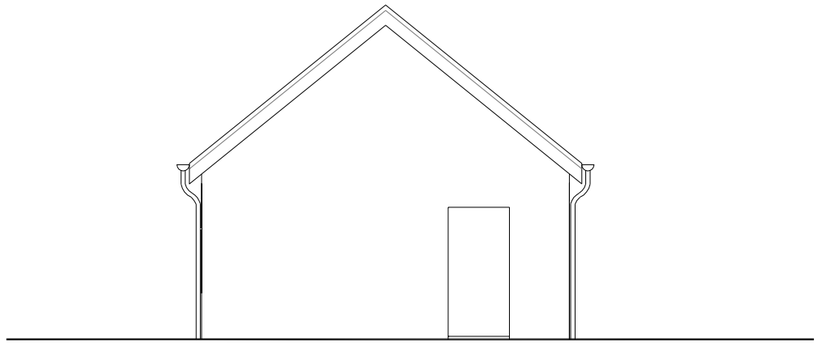
0 1 2 3 4 5

SCALE 1:100 (A3) LENGTHS SHOWN IN METRES

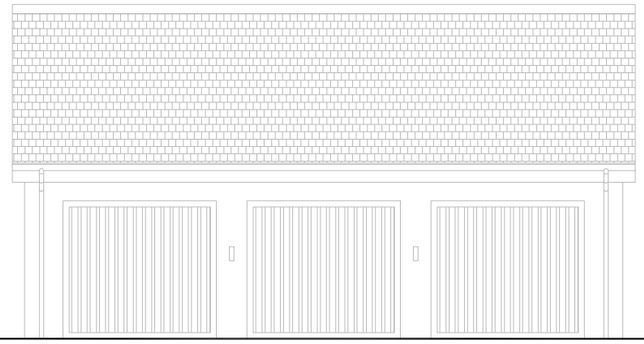
All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.



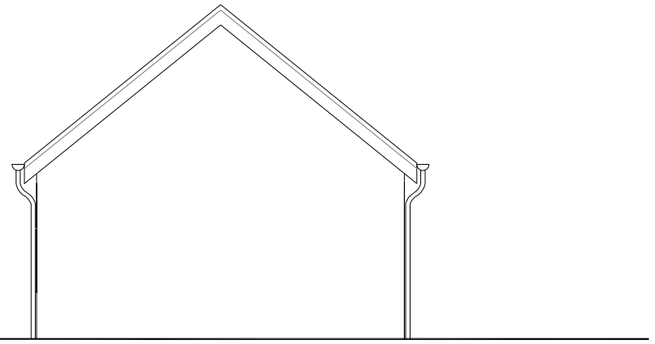
North Elevation



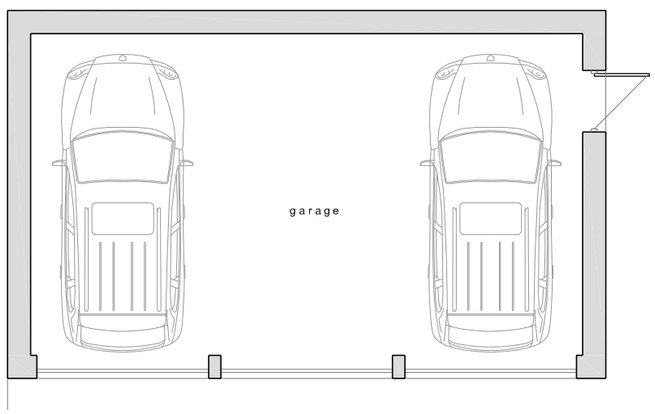
East Elevation



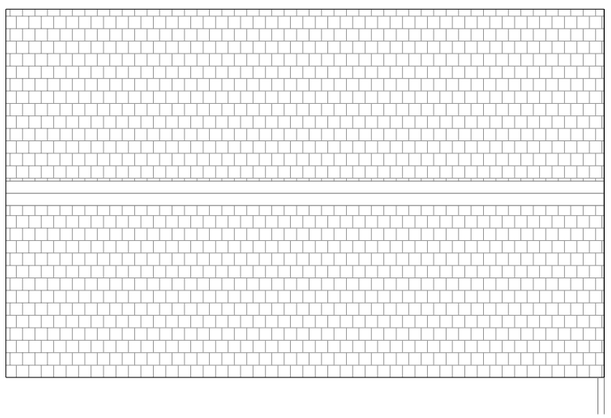
South Elevation



West Elevation



Floor Plan



Roof Plan

Project: New Build Dwellinghouse	JON FRULLANI ARCHITECT
Client: Mr. Grant	
Address: Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD	Drawing Title: Proposed Garage
	Issue Status: Planning / Drawing No.: 5865 - 307
Designer: RS / Date: July 2019	Scale: 1:100 @ A3 / Revision: A

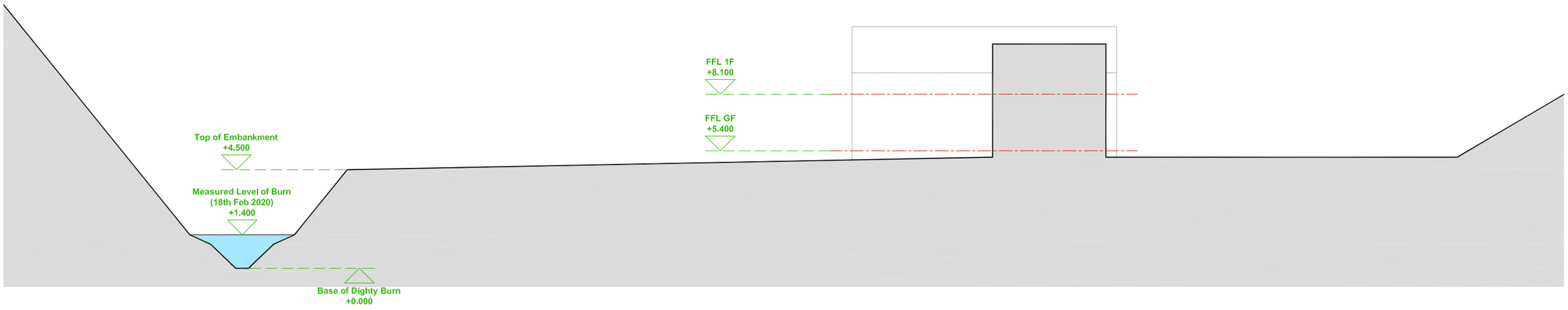
t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, dlstrict 10, greenmarket, dundee, dd1 4qb

0 .1 .2 .3 .4 .5

SCALE 1:1000 (A3) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.

ITEM 3viii



Project: New Build Dwellinghouse		JON FRULLANI ARCHITECT	
Client: Mr. Grant			
Address: Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD		Drawing Title: Proposed Site Section	
		Issue Status: Planning	Drawing No.: 5865 - 308
Designer: CH	Date: August 2021	Scale: 1:1000 @ A3	Revision: A

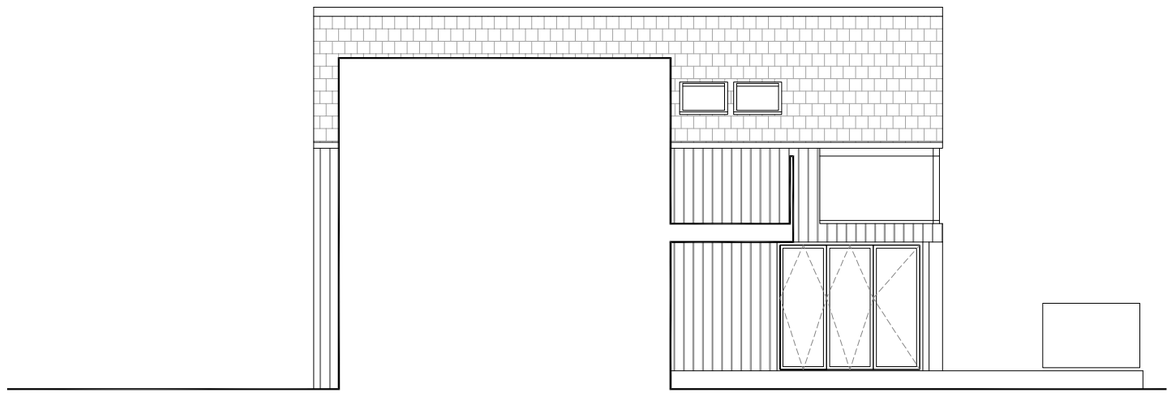
t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

0 1 2 3 4 5

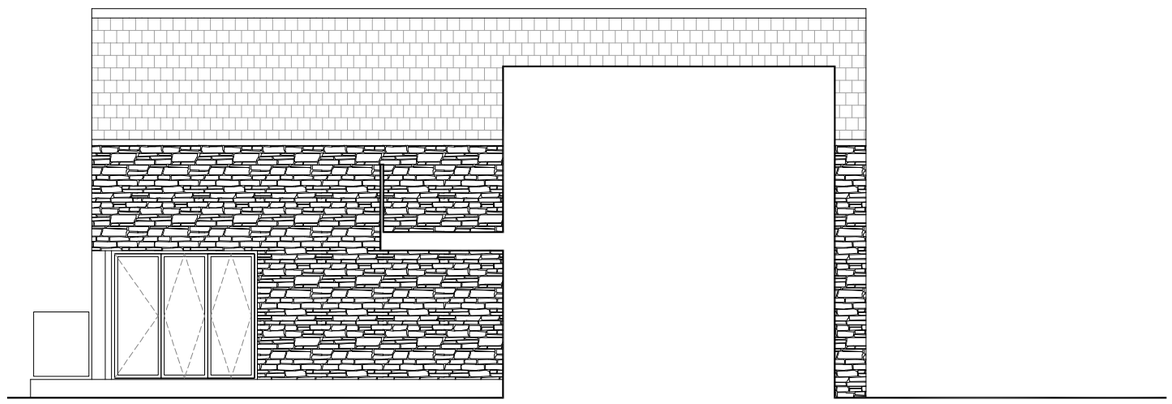
SCALE 1:100 (A3) LENGTHS SHOWN IN METRES

All dimensions and levels to be checked on site prior to the commencement of work. Architect to be informed of any discrepancies prior to the commencement of work. Unspecified dimensions are not to be scaled off this drawing. All dimensions are in millimetres unless stated otherwise. If any dimensions or details conflict please notify the Architect immediately. This drawing is to be used for **STATUTORY** purposes only. This is not a **CONSTRUCTION** drawing.

ITEM 3vix



North - West Elevation - Internal



South - East Elevation - Internal

Project	New Build Dwellinghouse
Client	Mr. Grant
Address	Land South East of Hawthorn Cottage, Baldovan Rd DD3 0PD

JON FRULLANI
ARCHITECT

Drawing Title	Proposed Elevations - Internal Elevations
Issue Status	Planning
Drawing No.	5865 - 309
Designer	CH
Date	August 2021
Scale	1:100 @ A3
Revision	A

t: 01382 224828 m: [redacted]
e: jon@jfarchitect.co.uk w: jfarchitect.co.uk f: facebook.com/jfarchitect
a: unit 5, district 10, greenmarket, dundee, dd1 4qb

ITEM 4

Millard
More than civil engineers

Proposed House on land adjacent to Hawthorn Cottage, Baldovan, Angus

Flood Risk Assessment

Ref: 16420/AB/781
February 2022

REGISTRATION OF AMENDMENTS

Revision and Date	Amendment Details	Revision Prepared By	Revision Approved By

CLIENT: Mr Chris Grant

ENGINEER: Millard Consulting
Seabraes
18 Greenmarket
Dundee
DD1 4QB

Tel: 01382 227380

Report Prepared By:

.. ..
Andrew Braid

Report Checked By:

... .
Ken Pirie (Managing Director)

CONTENTS

PLANS

1.0 Introduction

Millard Consulting have been instructed by Mr Chris Grant to carry out a Flood Risk Assessment in relation to the construction of a new house on land adjacent to Hawthorn Cottage at Baldovan in Angus.

1.1 Scope and Methodology

The purpose of this assessment is to assess the 1 in 200 year flood risk to the site and the access route to the site from Baldovan Road.

Flood risk is to be considered from the Dighty Water which flows in a south easterly direction in the vicinity of the site. A 1D-2D linked hydraulic model of the Dighty Water has been constructed using Flood Modeller, modelling flow within the watercourse and overland flow across the flood plain where required.

The potential impact of climate change will also be quantified as part of the assessment. An appropriate climate change allowance will be applied in line with the SEPA document “Climate change allowances for flood risk assessment in land use planning” (SEPA, 2019). As part of this guidance, climate change allowances vary dependent on site location and catchment size, with specific values for each identified river basin region. The subject watercourse is within the Tay region, hence a climate change allowance of 35% will be applied.

To enable the hydraulic model to be constructed cross sections on the Dighty Water were surveyed by Benchmark Land Surveys. Benchmark Land Surveys have also undertaken a topographical survey of the site, the access road to the site and selected potential offsite floodplain areas.

This Flood Risk Assessment is carried out in accordance with the requirements of the Scottish Planning Policy *(SPP) (Scottish Government, 2020)*. This assessment uses a set of procedures originally set out in the Flood Estimation Handbook *(Institute of Hydrology, 1999)* and embodied in the FEH and WINFAP software packages currently used.

The assessment is prepared using our best engineering judgement but there are levels of uncertainty implicit in the historical data and methods of analysis. Details of the range of possible error in the methods of flood estimation are given in the Flood Estimation Handbook (FEH).

2.0 General Description of Site

The site at Baldovan is located at Ordnance Survey grid reference 339000, 734342. The site location is shown in Figure 1 below:

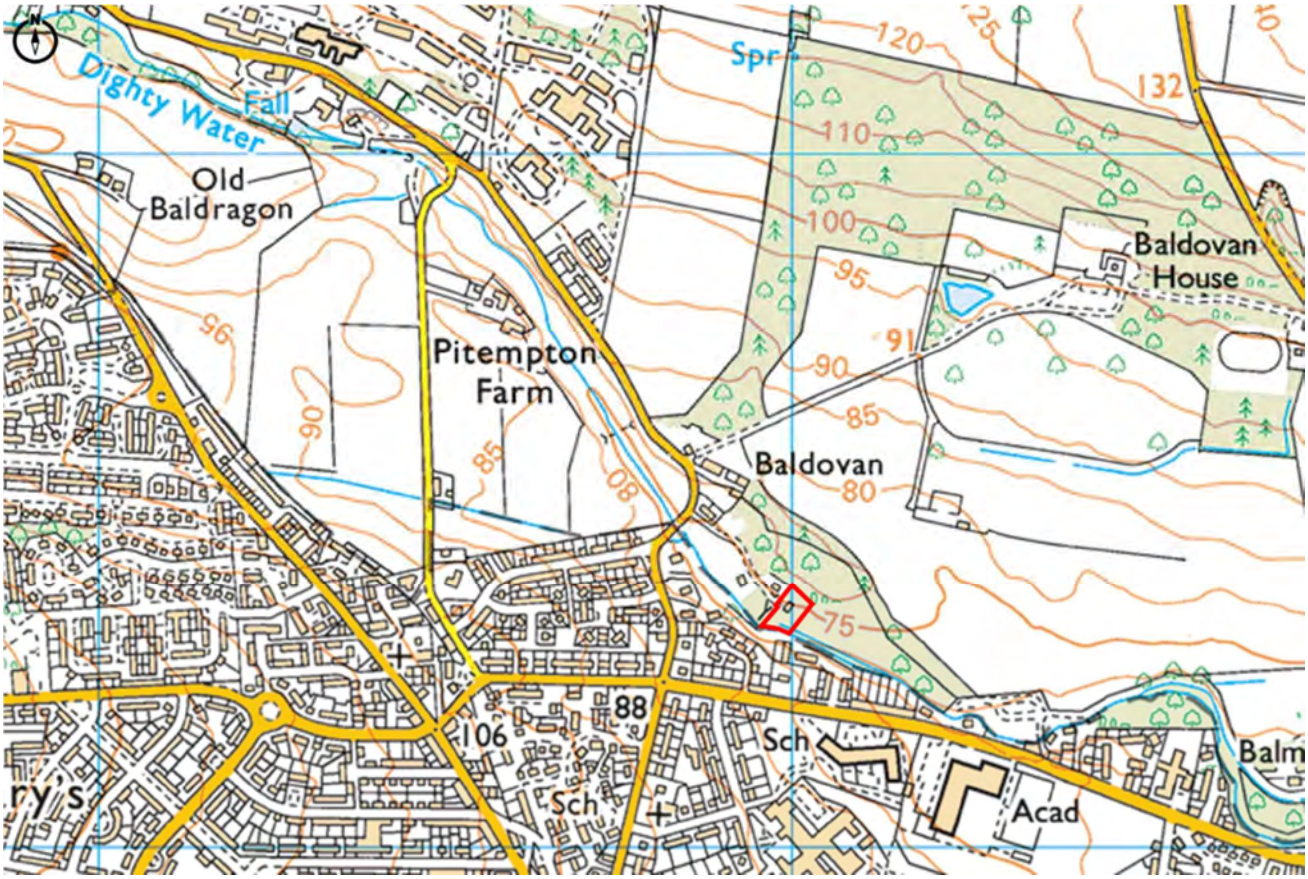


Figure 1 – Site Location Plan

The site is 2050m^2 in size and is bounded to the north west by Hawthorn Cottage and the access into the site, open land covered with high grass, brush and trees to the north east and south east, and by the Dighty Water to the south west. There is an existing building on site which was part of a former mill complex located on site. The building is now dilapidated.

The topography of the site slopes in a south westerly direction towards the Dighty Water. The gradient varies however, with a gradual fall from the location of the building, towards the Dighty, and a steeper slope to the north east. Site levels sit significantly higher than the Dighty Water as it passes the site, with a level difference of between 3.22m and 3.91m measured between the top of the left bank and the lowest bed level of the watercourse in the vicinity of the site.

As it passes the site the Dighty Water flows a relatively straight course in a south easterly direction. The watercourse has occasional weeds in the channel, while the banks are steep in the vicinity of the site. The watercourse is tree-lined in the vicinity of the site.

The Dighty Water is bridged by Baldovan Road approximately 200m upstream of the site. The Baldovan Road bridge consists of two masonry arches, while masonry parapets are present at both the upstream and downstream sides of the bridge. Immediately downstream of the bridge the Gorrie Burn flows into the Dighty Water. The Gorrie Burn flows from Clatto Reservoir approximately 2km west of the site, along a straight course to the Dighty Water. A pipe crossing is also located on the downstream side of the bridge.

Upstream of Baldovan Road there is less vegetation on the banks of the watercourse, while the land adjacent to the Dighty Water is covered by short grass. Downstream of Baldovan Road the Dighty Water is bounded by

a mixture of private gardens and open land. A significant area of open land is located immediately downstream of the bridge, the majority of which is covered with short grass.

The site is accessed by a private road which runs from Baldovan Road adjacent to the northern side of the masonry arch bridge.

In addition to the Dighty Water, the remnants of a former mill lade can be seen running alongside the Dighty as it passes the site. A former mill lade ran approximately along the route of the access into the site from Baldovan Road. It also ran through land to the north east of the Dighty upstream of Baldovan Road, with an offtake from the Dighty Water into the lade channel located approximately 380m upstream of Baldovan Road. The former mill lade has now been infilled, with the exception of a short length which has essentially become part of the channel of the Dighty Water. With the exception of the aforementioned dilapidated building, all former mill buildings on site have been demolished.

The site has been topographically surveyed by Benchmark Land Surveys. The topographical survey is shown on three drawings within the “Plans” section of this report. The surveyed cross sections are also enclosed within the “Plans” section.

Photograph 1 – looking north east across the site from the bank of the Dighty Water.

Photograph 2 – taken from the same location as Photograph 1, looking in a north westerly direction.

Photograph 3 – looking downstream on the Dighty Water as it passes the site.

Photograph 4 – looking on the Dighty Water downstream of the site.

Photograph 5 – upstream side of the Baldovan Road masonry arch bridge.

Photograph 6 – a view of the access road into the site from Baldovan Road.

Photograph 7 – looking in a southerly direction towards the bridge at Baldovan Road.

Photograph 8 – looking upstream on the Dighty Water from Baldovan Road.

3.0 General Observations

The house is proposed where the site topography changes from a steeper slope, to a shallower slope running towards the Dighty Water. Part of the proposed house is located across the area currently occupied by the dilapidated building. A detached garage is also proposed on site.

The access road from Baldovan Road is the only route of access into the site.

There is a pipeline crossing immediately downstream of the Baldovan Road bridge, however it sits higher than the soffit of the bridge, and hence has not been modelled in this assessment.

Dundee City Council have advised that they believe water has ponded on the Baldovan Road bridge previously, however it was believed this was due to surface water exceeding the capacity of gullies rather than out of bank flow from the Dighty Water flowing onto the deck of the bridge.

Dundee City Council provided photographs of high flow levels at the Baldovan Road bridge during a flood event on the 4th of September 2009. This information has been used to calibrate the hydraulic model. The calibration undertaken is discussed further in Section 5.0.

The SEPA flood map has been assessed as part of this assessment. This shows a risk of floodwater flowing onto Baldovan Road during a 1 in 200 year flood event, before flowing along the access track, through the site and back into the Dighty Water. The SEPA flood map also shows this occurring for a 1 in 10 year flood event. There are no records of flooding on the access track that have been provided to Millard Consulting.

4.0 Estimation of Flood Flows

In order to define the extent and water surface level of the 1 in 200 year (0.5% annual probability) floodplain, flood flows have been estimated for the Dighty Water both upstream and downstream of Baldovan Road. The FEH Statistical Method and ReFH2 have been utilised to estimate flood flows at the site.

The FEH Rainfall Runoff Method is known to provide an unreasonably high estimation of flood flow on the Dighty Water, and hence this method has therefore not been applied in this instance.

The flow estimation process is outlined below.

4.1 Dighty Water – Upstream of Baldovan Road

4.1.1 FEH Statistical Method – WINFAP 5

Estimation of Index Flood QMED

In order to define the extent and water surface level of the 0.5% annual probability floodplain, we must first estimate the Index Flood, Q_{MED}, using the methods outlined in the Flood Estimation Handbook (FEH).

An initial estimate of the flood flows for the Dighty Water adjacent to the site was made using the Catchment descriptor Method. This method is described in Volume 3, Chapter 13, of the FEH. The catchment descriptors define various physical and hydrological properties and characteristics of the land that forms the catchment upstream of the point of interest. The formula also includes variables that define the statistical rainfall pattern within the catchment. There is a further adjustment to the formula that accounts for the degree of urbanisation of the catchment.

The method produces the mean annual flood Q_{MED} – the index flood – which is the flood flow along the river or floodplain that is statistically "exceeded on average every other year". It is roughly equivalent to the two-year flood. The exercise is done using the FEH and WINFAP software.

Catchment Descriptors have been obtained from the FEH Web Service, which state a catchment size of 52.39km^2 for the Dighty Water upstream of Baldovan Road. The catchment area has been checked by the manual assessment of Ordnance Survey mapping, and this confirmed the FEH derived catchment size as appropriate. Catchment descriptors for the Dighty Water upstream of Baldovan Road, and the defined catchment are shown in Figures 2 and 3 overleaf.

The WINFAP-FEH estimation of QMED from catchment descriptors is 8.988m^3/s.

VERSION	"FEH CD-ROM	Version	4.0.0	exported	16:18:24	GMT
CATCHMENT	GB	338800	734550	NO 38800	34550	
CENTROID	GB	333138	737249	NO 33138	37249	
AREA	52.39					
ALTBAR	181					
ASPBAR	164					
ASPVAR	0.25					
BFIHOST	0.587					
BFIHOST19	0.538					
DPLBAR	8.79					
DPSBAR	81.9					
FARL	0.969					
FPEXT	0.0718					
FPDBAR	0.56					
FPLOC	0.9					
LDP	15.2					
PROPWET	0.46					
RMED-1H	8.4					
RMED-1D	36.6					
RMED-2D	46.7					
SAAR	818					
SAAR4170	859					
SPRHOST	39.51					
URBCONC1990	-999999					
URBEXT1990	0.0042					
URBLOC1990	-999999					
URBCONC2000	0.763					
URBEXT2000	0.0069					
URBLOC2000	0.694					
C	-0.0158					
D1	0.48073					
D2	0.4181					
D3	0.29018					
E	0.24594					
F	2.17916					
C(1km)	-0.015					
D1(1km)	0.476					
D2(1km)	0.423					
D3(1km)	0.286					
E(1km)	0.243					
F(1km)	2.133					

Figure 2 – Dighty Water catchment descriptors upstream of Baldovan Road

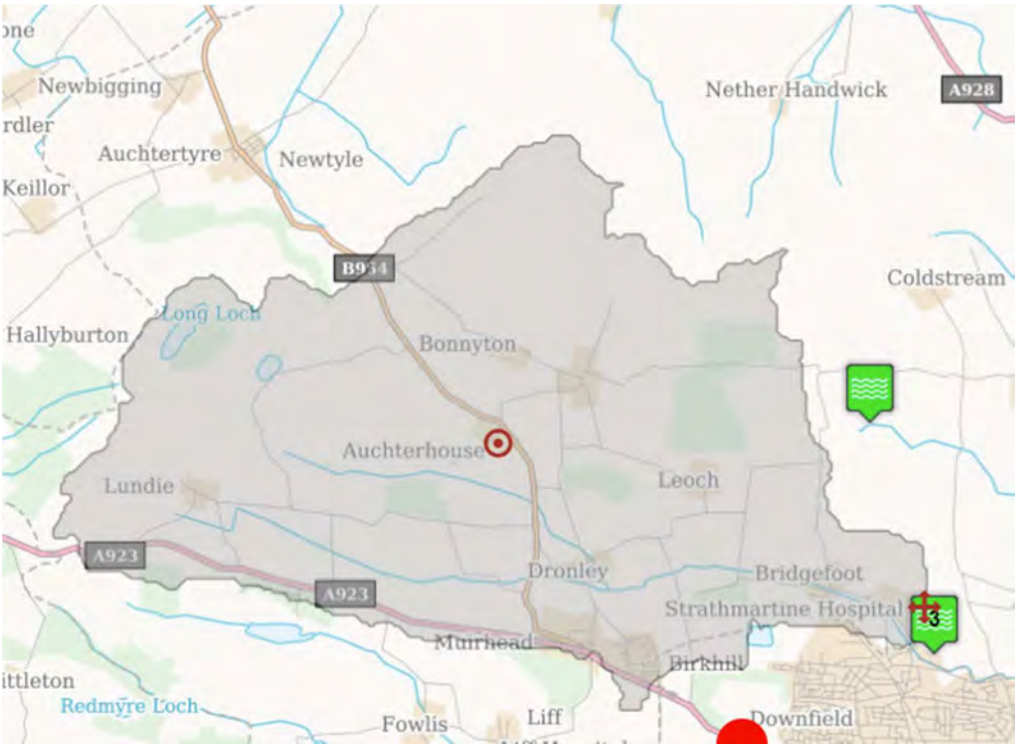


Figure 3 – Dighty Water catchment upstream of Baldovan Road, as defined by the FEH Web Service (FEH Web Service, 2021)

Adjustment to QMED from a Donor Site

In order to make the estimation of Q_{MED} more accurate, it is necessary to use flow data from donor sites with similar hydrological characteristics, where gauged information does exist for an adequate number of years. An appropriate local adjustment to the estimate of Q_{MED} at the subject site is then made. The procedure uses several donor sites to estimate an adjusted Q_{MED} value which is then applied to the subject site.

Using WINFAP software and applying the method whereby six WINFAP selected donors are utilised, the adjusted QMED value for the Dighty Water upstream of Baldovan Road becomes 10.515m^3/s. With the effect of urbanisation included, the QMed value increases to 10.606m^3/s.

There is a gauging station located on the Dighty Water at Balmossie, some 10.5km downstream of the site. The catchment of the Dighty at the gauged location is significantly larger than the subject catchment (127.41km^2 at the gauge, 52.39km^2 upstream of Baldovan Road), while the catchment is also significantly more urbanised. However, for comparative purposes the adjustment factor provided by the gauge was considered. During an assessment undertaken in October 2020 for an alternative site on the Dighty Water, Millard Consulting estimated an adjustment factor of 1.11 for the Balmossie gauge. This is lower than the adjustment factor of 1.16 provided by the WINFAP selected donor method outlined above (10.515/8.988 = 1.16). The recommended method of applying 6 , WINFAP selected donors therefore provides a more conservative QMed value, hence this approach will be adopted in this assessment.

To ensure adherence with the precautionary principle, the Qmed value of 10.606m^3/s will be applied as the adjusted Qmed in the further analysis.

Flood Growth Curves

In order to estimate the magnitude of the range of possible statistical flood events which will occur in this catchment, for example the flood that will statistically occur once in 200 years (the 0.5% flood), it is necessary to determine a flood growth curve and a flood frequency curve. This is done by forming a “Pooling Group”, i.e. by selecting a group of other catchments across the UK which have very similar characteristics to the subject site and which have existing gauged flow records covering a statistically adequate number of years, and subjecting this group to statistical analysis.

The catchment descriptors from the FEH Web Service are entered as a data file to the WINFAP software, which collates a pooling group of similar catchments, subjects these to a statistical analysis, and calculates a range of flows representing floods of different probabilities at the subject site.

The results can vary slightly, depending upon the chosen weighting of the statistical analysis, but adopting the recommended “Generalised Logistic” (GL) technique, the 1 in 200 year flood flow is estimated to be 34.6m^3/s.

The data and results for the WINFAP growth curve derivations are shown in Appendix A.

4.1.2 Revitalised Flood Hydrograph Method (Version 2.3)

The second method utilised for the assessment of flood flows in the Dighty Water was the Revitalised Flood Hydrograph Method. This method is the second version of a method which was originally established as an update to the FEH Rainfall Runoff method.

The ReFH2 model is comprised of three components; a loss model, a routing model and a baseflow model. The total rainfall, less the losses is input into the routing model, with results from the routing and baseflow models combined to provide a prediction of flow. The ReFH2 model is used in conjunction with a depth-duration-frequency model, either the FEH99 model or FEH13 model. In this instance, the FEH13 model was used to provide the rainfall input.

Using the ReFH2 software, the flood flow estimate for the Dighty Water upstream of Baldovan Road was 28.98m^3/s

Output from the ReFH2 analysis is enclosed within Appendix B.

4.2 Dighty Water adjacent to Hawthorn Cottage

4.2.1 FEH Statistical Method (using WINFAP 5)

Estimation of Index Flood QMED

In order to define the extent and water surface level of the 0.5% annual probability floodplain, we must first estimate the Index Flood, Q_{MED}, using the methods outlined in the Flood Estimation Handbook (FEH).

An initial estimate of the flood flows for the Dighty Water adjacent to the site was made using the Catchment descriptor Method. This method is described in Volume 3, Chapter 13, of the FEH. The catchment descriptors define various physical and hydrological properties and characteristics of the land that forms the catchment upstream of the point of interest. The formula also includes variables that define the statistical rainfall pattern within the catchment. There is a further adjustment to the formula that accounts for the degree of urbanisation of the catchment.

The method produces the mean annual flood Q_{MED} – the index flood – which is the flood flow along the river or floodplain that is statistically "exceeded on average every other year". It is roughly equivalent to the two-year flood. The exercise is done using the FEH and WINFAP software.

Catchment Descriptors have been obtained from the FEH Web Service, which state a catchment size of 53.78km^2 for the Dighty Water adjacent to Hawthorn Cottage. The catchment area has been checked by the manual assessment of Ordnance Survey mapping, and this confirmed the FEH derived catchment size as appropriate. Catchment descriptors for the Dighty Water adjacent to Hawthorn Cottage, and the defined catchment are shown in Figures 4 and 5 overleaf.

The WINFAP-FEH estimation of QMED from catchment descriptors is 9.068m^3/s.

VERSION	"FEH CD-ROM"	Version	4.0.0	exported 08:34:20		GMT
CATCHMENT	GB	338950	734350	NO 38950 34350		
CENTROID	GB	333259	737179	NO 33259 37179		
AREA	53.78					
ALTBAR	180					
ASPBAR	160					
ASPVAR	0.24					
BFIHOST	0.586					
BFIHOST19	0.538					
DPLBAR	8.9					
DPSBAR	81.4					
FARL	0.966					
FPEXT	0.0706					
FPDBAR	0.553					
FPLOC	0.915					
LDP	15.49					
PROPWET	0.46					
RMED-1H	8.4					
RMED-1D	36.6					
RMED-2D	46.7					
SAAR	817					
SAAR4170	858					
SPRHOST	39.65					
URBCONC1990	0.773					
URBEXT1990	0.0084					
URBLOC1990	0.39					
URBCONC2000	0.835					
URBEXT2000	0.0124					
URBLOC2000	0.452					
C	-0.01578					
D1	0.48065					
D2	0.41819					
D3	0.29001					
E	0.24591					
F	2.17817					
C(1km)	-0.015					
D1(1km)	0.474					
D2(1km)	0.427					
D3(1km)	0.28					
E(1km)	0.245					
F(1km)	2.125					

Figure 4 – Dighty Water catchment descriptors at Hawthorn Cottage

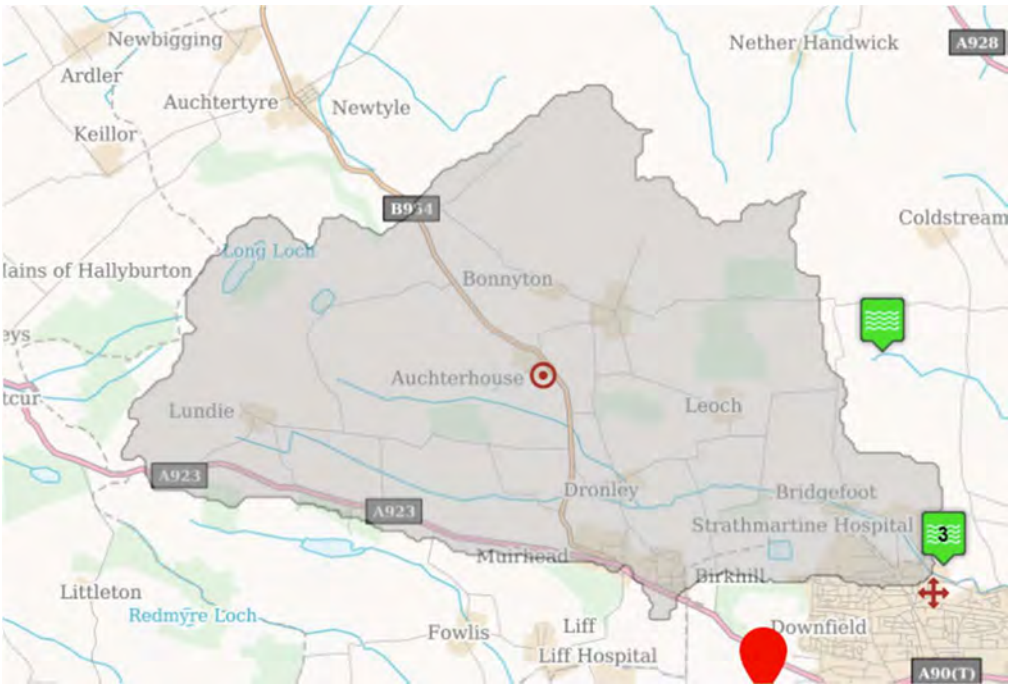


Figure 5 – Dighty Water catchment at Hawthorn Cottage, as defined by the FEH Web Service (FEH Web Service, 2021)

Adjustment to QMED from a Donor Site

Using WINFAP software and applying the method whereby six WINFAP selected donors are utilised, the adjusted QMED value for the Dighty Water at Hawthorn Cottage becomes 10.604m^3/s (adjustment ratio = 1.17). With the effect of urbanisation included, the QMed value increases to 10.769m^3/s.

To ensure adherence with the precautionary principle, the Qmed value of 10.769m^3/s will be applied as the adjusted Qmed in the further analysis.

Flood Growth Curves

In order to estimate the magnitude of the range of possible statistical flood events which will occur in this catchment, for example the flood that will statistically occur once in 200 years (the 0.5% flood), it is necessary to determine a flood growth curve and a flood frequency curve. This is done by forming a "Pooling Group", i.e. by selecting a group of other catchments across the UK which have very similar characteristics to the subject site and which have existing gauged flow records covering a statistically adequate number of years, and subjecting this group to statistical analysis.

The catchment descriptors from the FEH Web Service are entered as a data file to the WINFAP software, which collates a pooling group of similar catchments, subjects these to a statistical analysis, and calculates a range of flows representing floods of different probabilities at the subject site.

The results can vary slightly, depending upon the chosen weighting of the statistical analysis, but adopting the recommended "Generalised Logistic" (GL) technique, the 1 in 200 year flood flow is estimated to be 37.24m^3/s.

The data and results for the WINFAP growth curve derivations are shown in Appendix A.

4.2.2 Revitalised Flood Hydrograph Method (Version 2.3)

Using the ReFH2 software, the flood flow estimate for the Dighty Water at Hawthorn Cottage was 29.76m^3/s

Output from the ReFH2 analysis is enclosed within Appendix B.

4.3 Additional Flow Comparison

As an additional flow comparion, a single site analysis was carried out on annual maxima data from the Balmossie gauge. 50 years of data up to 2018 was utilised. The single site analysis predicted a QMed value of 18.528m^3/s and a 1 in 200 year flood flow of 61.996m^3/s at Balmossie. Adjusting these values by a ratio of catchment size alone (53.78/127.41 = 0.422) provides predicted flow estimates of 7.82m^3/s and 26.16m^3/s on the Dighty Water at Hawthorn Cottage.

4.4 Applicable Flood Flows

The flood flows estimated using the FEH Statistical Method are larger than those predicted by ReFH2. In comparison with other flood risk assessments undertaken by Millard Consulting on the Dighty Water in recent years, the flood flows predicted in this report using WINFAP 5 appear conservative, however in line with the precautionary principle the larger flood flows estimated using the FEH Statistical Method have been applied in the hydraulic model, for which results are discussed in Section 5.0 of this report. Final 1 in 200 year flood flows are as follows:

200 year upstream of Baldovan Road	= 34.6m^3/s
200 year at Hawthorn Cottage	= 37.2m^3/s

5.0 Predicted Flood Levels

5.1 Initial Model

Having estimated the 1 in 200 year flood flow in the Dighty Water adjacent to the site, it is necessary to analyse the watercourse to establish predicted 1 in 200 year flood levels.

To establish predicted flood levels a 1D-2D linked hydraulic model of the Dighty Water in the vicinity of the site has been constructed using Flood Modeller software. The watercourse channel has been modelled in 1D using cross sectional data surveyed by Benchmark Land Surveys. A 2D grid has been prepared using a topographical survey, also undertaken by Benchmark Land Surveys, supplemented by Phase 4 LiDAR data obtained from the Scottish Government. The topographical survey and watercourse cross sections were surveyed in 2021 specifically for this assessment. It should be noted that due to predicted flood levels, the 2D element was only utilised in the assessment of climate change impact, i.e. the 1 in 200 year + 35% flood event.

Manning's n coefficients were selected for the site based on inspection of existing conditions, and comparison with tabulated descriptors in tables of Manning's values. For the 1D model, roughness values of 0.04 were applied for the Dighty Water channel, while values of 0.06 and 0.1 were applied for the banks where an increase was required above 0.04. For flood plains, values of 0.03, 0.035, 0.04, 0.06 and 0.1 were applied at varying locations. For the 2D area a general roughness value of 0.03 was applied, however specific values of 0.013, 0.03 and 0.06 were applied for areas of road, short grass and bank within the 2D active area. These areas are shown in Figure 6 below. In addition, z lines were added to represent the parapet on the south eastern side of Baldovan Road and walls in the vicinity of the existing houses on the northern side of the access road into the site in the vicinity of Baldovan Road. These houses were also represented with an increased level which prevents floodwater from entering the properties in the model.

Figure 6 – 2D features

Once appropriate Manning's values had been selected, boundary conditions at the downstream and upstream ends of the modelled length were applied. A normal depth condition was applied at the downstream end while an FEH Boundary was applied at the upstream end providing inflow at the upstream end of the modelled reach. In addition a lateral inflow was applied immediately downstream of Baldovan Road to mimick inflow from the Gorrie Burn. The inflow has been set as the difference between the estimated 1 in 200 year flood flow upstream and downstream of Baldovan Road.

Figures 7, 8 and 9 below show the modelled cross section locations:

Figure 7 – Cross section locations (1 of 3)

Figure 8 – Cross section locations (2 of 3)

Figure 9 – Cross section location (3 of 3)

To check the model was producing verifiable results, it was calibrated to a previous flood event which occurred on the 4th of September 2009. Photographic evidence of water level within the Dighty was provided by Andrew Reid of Dundee City Council. An inflow for the model was obtained using the time stamp on the appropriate photograph, estimating the time of travel for floodwater from the site to the Balmossie gauge, and using measured flow data from the Balmossie gauge, estimating the likely flow at the site on the basis of contributing catchment area. The flow data for Balmossie was received from SEPA as part of a previous flood risk assessment on the Dighty Water.

An estimate of the flood flow contribution from the catchment upstream of the site during the aforementioned flood event was required as it is unknown to what extent the tributaries of the Dighty Water, upstream of Balmossie, were contributing. It has therefore been assumed that 41% of the flood flow recorded at Balmossie passed the site, i.e. the ratio of catchment size between the Dighty at Balmossie and the Dighty at Baldovan Road (52.39/127.41 = 0.41).

The below photograph has been used for calibration purposes as it shows the flood level at the upstream side of the bridge at Baldovan Road. The photograph was taken at 10:49am on the 4th of September 2009. Assuming an average downstream velocity of 1.5m/s, it is estimated that the flow at Baldovan at 10:49am would have reached the Balmossie gauge some 10.5km downstream at approximately 12:45pm. The flow recorded at Balmossie at 12:45pm on the 4th of September 2009 was 43.904m^3/s. Multiplying this flow by the catchment ratio results in an estimated flood flow of 18m^3/s. It is therefore estimated that the flow at Baldovan at the time of the below photograph would have been approximately 18m^3/s.

Photograph 9 – A view of the Dighty Water at the upstream side of the Baldovan Road bridge taken at 10:49am on the 4th of September 2009

The soffit of the bridge arch is at a level of 73.14m AOD. The hydraulic model predicts a flood level of 73.06m AOD with a flood flow of 18m^3/s. Given this level is 0.08m below the soffit, it can be said that the model is providing a verifiable result and is suitable for use.

Table 5.1 below shows the predicted flood levels for a 1 in 200 year event:

Location	Flood Level (m AOD)
Dighty01	70.3
Dighty02	70.62
Dighty03	71.03
Dighty04	71.26
Dighty05	71.77
Dighty06	72.22
Dighty07	72.72
Dighty08	73.06
Dighty09	73.46
Dighty10	74.43
Dighty11	74.43
Dighty12	74.48

Table 5.1 – 1 in 200 year flood levels (0.5% (Q200) flow)

The predicted extent of flooding on site for a 1 in 200 year flood event is shown in Figure 10 overleaf. The Mass Error noted by Flood Modeller for this analysis was -0.57%.

Figure 10 – Predicted flood extent for 1 in 200 year flood event

It should be noted that floodwater would be expected to gather on Baldovan Road at the location of the bridge during a 1 in 200 year flood event. The floodwater would not however be expected to adversely impact the access road to the site. The predicted flood level immediately upstream of Baldovan Road is 74.43m, while the access road at its junction with Baldovan Road is at a level of between approximately 74.7m and 74.84m.

5.2 Sensitivity Analysis

Sensitivity analyses were carried out to check the effect of a variation in flow rate, of variation in Manning's 'n' values, and of variation on downstream boundary condition.

5.2.1 Variation in Flowrate

The potential impact of an increase in 200 year flood flow of 20% has been assessed. The results of this analysis are compared directly with the 1 in 200 year results in Table 5.2 overleaf:

Location	200yr Flood Level (m AOD)	200yr + 20% Flood Level (m AOD)	Variation (m)
Dighty01	70.3	70.44	0.14
Dighty02	70.62	70.74	0.12
Dighty03	71.03	71.16	0.13
Dighty04	71.26	71.42	0.16
Dighty05	71.77	71.94	0.17
Dighty06	72.22	72.38	0.16
Dighty07	72.72	72.9	0.18
Dighty08	73.06	73.24	0.18
Dighty09	73.46	73.64	0.18
Dighty10	74.43	74.84	0.41
Dighty11	74.43	74.83	0.4
Dighty12	74.48	74.88	0.4

Table 5.2 – Comparison between predicted 1 in 200 Year and 1 in 200 year + 20% flood levels

The above table shows a predicted increase in flood level of approximately 0.17m at the location of the site, with an increase of approximately 0.4m at Baldovan Road, due to the effect of the bridge. It should be noted that this analysis has been modelled 1D only, with a spill at the bridge made up of levels which flood water would need to spill over to flow beyond the bridge. A limited element of storage would be available in reality on Baldovan Road at the bridge before floodwater would flow around the bridge parapet to the downstream side of the bridge.

5.2.2 Variation in Manning's n

Sensitivity of the model to changes in Manning's n were tested, by increasing the initial values by 20%. The results of this analysis are shown in Table 5.3 below:

Location	200yr Flood Level (m AOD)	200yr Flood Level (m AOD) with n + 20%	Variation (m)
Dighty01	70.3	70.44	0.14
Dighty02	70.62	70.76	0.14
Dighty03	71.03	71.16	0.13
Dighty04	71.26	71.4	0.14
Dighty05	71.77	71.91	0.14
Dighty06	72.22	72.48	0.26
Dighty07	72.72	72.9	0.18
Dighty08	73.06	73.22	0.16
Dighty09	73.46	73.61	0.15
Dighty10	74.43	74.61	0.18
Dighty11	74.43	74.62	0.19
Dighty12	74.48	74.68	0.2

Table 5.3 – Assessment of potential impact of increased roughness

5.2.3 Variation in Downstream Boundary Slope

Sensitivity of the model to changes in downstream boundary slope were tested, by decreasing the slope by 0.01. The results of this analysis are shown in Table 5.4 overleaf:

Location	200yr Flood Level (m AOD)	200yr Flood Level (m AOD) with downstream slope – 0.01	Variation (m)
Dighty01	70.3	69.98	0.32
Dighty02	70.62	70.56	0.06
Dighty03	71.03	71.03	0
Dighty04	71.26	71.26	0
Dighty05	71.77	71.77	0
Dighty06	72.22	72.22	0
Dighty07	72.72	72.72	0
Dighty08	73.06	73.06	0
Dighty09	73.46	73.46	0
Dighty10	74.43	74.43	0
Dighty11	74.43	74.43	0
Dighty12	74.48	74.48	0

Table 5.4 – Assessment of potential impact of decreased downstream boundary slope

5.3 Flood Levels including Climate Change

The potential for climate change to impact flood risk in the vicinity of the site has been assessed with 35% added to the 1 in 200 year flood flow as required by the SEPA document “Climate change allowances for flood risk assessment in land use planning” (SEPA, 2019).

The flood levels predicted by the hydraulic model including the potential impact of climate change are outlined in the table below. Mass error for this model run was -0.8% for the 1D element and 2.08% for the 2D element, while a 2D mesh size of 2m was utilised.

Location	Level (m)		Variation in level (m)
	Q200 Flood Level	Q200 + 35% Flood Level	
Dighty01	70.3	70.5	0.2
Dighty02	70.62	70.79	0.17
Dighty03	71.03	71.21	0.18
Dighty04	71.26	71.47	0.21
Dighty05	71.77	71.99	0.22
Dighty06	72.22	72.44	0.22
Dighty07	72.72	72.96	0.24
Dighty08	73.06	73.29	0.23
Dighty09	73.46	73.7	0.24
Dighty10	74.43	74.94	0.51
Dighty11	74.43	74.92	0.49
Dighty12	74.48	74.97	0.49

Table 5.5 Comparison between predicted Q200 and Q200 + 35% Flood Levels

The model predicts the 1 in 200 year, plus 35% flood event would result in floodwater flowing onto Baldovan Road and into the access road running from Baldovan Road towards the site, however the overland flow would then return to the watercourse without flowing along to the site. The results show a predicted increase in flood level of 0.22m at the site with a 35% increase in 1 in 200 year flood flow.

Figure 11 below shows the predicted 1 in 200 year flood extent, with an increase in flood flow of 35%.

Figure 11 – Predicted 1 in 200 year + 35% flood extents

Due to the placement of the left bank link line downstream of the bridge at Baldovan Road, a small gap in the flood extent is shown in this vicinity between the 1D and 2D maps. The overland flow returns to the watercourse downstream of Baldovan Road.

5.4 Flood Levels including Blockage

The potential impact of a reduction in bridge opening of 20% has been modelled, with soffit levels for both arches being lowered as required. The results of this analysis are shown in Table 5.6 overleaf:

Location	200yr Flood Level (m AOD)	200yr Flood Level including reduction in soffit level to reduce opening by 20% (m AOD)	Variation (m)
Dighty01	70.3	70.3	0
Dighty02	70.62	70.62	0
Dighty03	71.03	71.03	0
Dighty04	71.26	71.26	0
Dighty05	71.77	71.77	0
Dighty06	72.22	72.22	0
Dighty07	72.72	72.72	0
Dighty08	73.06	73.06	0
Dighty09	73.46	73.46	0
Dighty10	74.43	74.55	0.12
Dighty11	74.43	74.54	0.11
Dighty12	74.48	74.59	0.11

Table 5.5 – Assessment of blockage impact

With a reduction in bridge opening of 20%, floodwater would be expected to flow onto Baldovan Road, however it is not predicted to get high enough to adversely impact the access road into the site.

6.0 Proposed Mitigation and Management of Flood Risk

Modelling undertaken as part of this assessment predicts that the site is outwith the 1 in 200 year flood extent of the Dighty Water, while access to and from the site is predicted to be flood free during this event along the access road into the site from Baldovan Road. Angus Council have confirmed flood free access is required for the 1 in 200 year flood event only in this instance. Flood free vehicular access is predicted to be available during a 1 in 200 year flood event via the access road into the site, then along Baldovan Road in a north easterly direction.

The site is well above the predicted 1 in 200 year, plus climate change flood level predicted adjacent to the site, with a 1 in 200 year + 35% flood level of 71.99m predicted and existing ground levels above 73m in the vicinity of the existing building on site. Although floodwater is not predicted to impact the site during a 1 in 200 year (plus climate change) flood event, it is recommended that ground levels immediately around the new house are set no lower than 73.9m AOD to ensure they are above existing ground levels to the west and south west. Finished ground levels should fall towards the Dighty Water from the house as they do currently. The proposed house should be constructed with a finished floor level set a suitable upstand above surrounding ground levels, commensurate with good building practice. These measures provide additional assurance that should a flood with a return period greater than 1 in 200 years (including climate change) occur, or indeed a significant bridge blockage occur in conjunction with a very rare flood event which results in floodwater flowing along the access road to the site, the house would not be adversely impacted.

7.0 Conclusions

It is concluded that the site and access road are outwith the 1 in 200 year flood extent of the Dighty Water and as such, the site is developable with respect to flood risk.

The access road into the site is predicted to flood in the vicinity of Baldovan Road with climate change impact included, however the site is predicted to remain flood free during this event.

It s recommended that finished ground levels around the perimeter if the proposed house are set no lower than 73.9m AOD, with an upstand above surrounding ground levels to the finished floor level, commensurate with good building practice.

We have used our best engineering judgement in this Assessment, and our calculations have been carried out using the Flood Estimation Handbook, WINFAP, HEC-RAS and other standard hydrological methods. We note that as with all such Flood Risk Assessments the accuracy of the results is only as good as the data and statistical techniques used.

8.0 References

i. Flood Estimation Handbook, Duncan Reed, CEH Institute of Hydrology, Wallingford, 1999.

ii. WINFAP-FEH, Version 5, Wallingford Hydrosolutions and NERC

iii. Flood Modeller Version 5, Jacobs, 2020

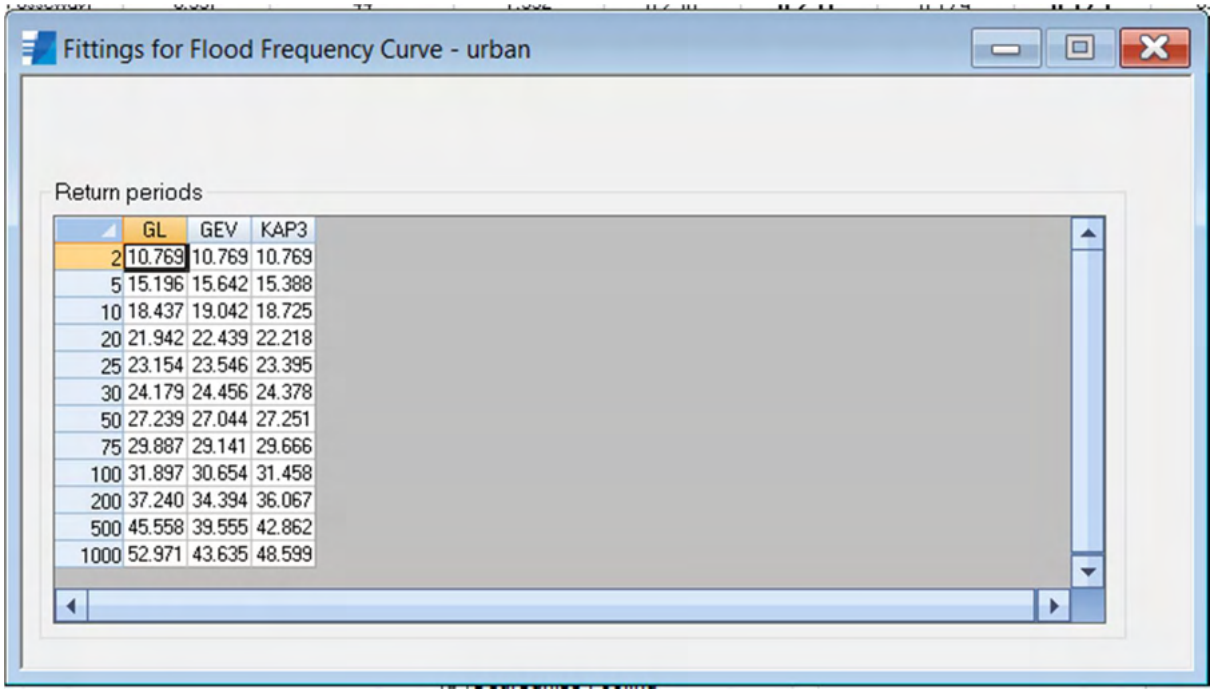
iv. ReFH 2.3, Wallingford Hydrosolutions, 2019

v. Scottish Planning Policy, Scottish Government, Crown Copyright, December 2020

vi. Climate change allowances for flood risk assessment in land use planning, SEPA, 2019

Appendix A: Results from WINFAP Flow Estimation

Dighty Water at Hawthorn Cottage

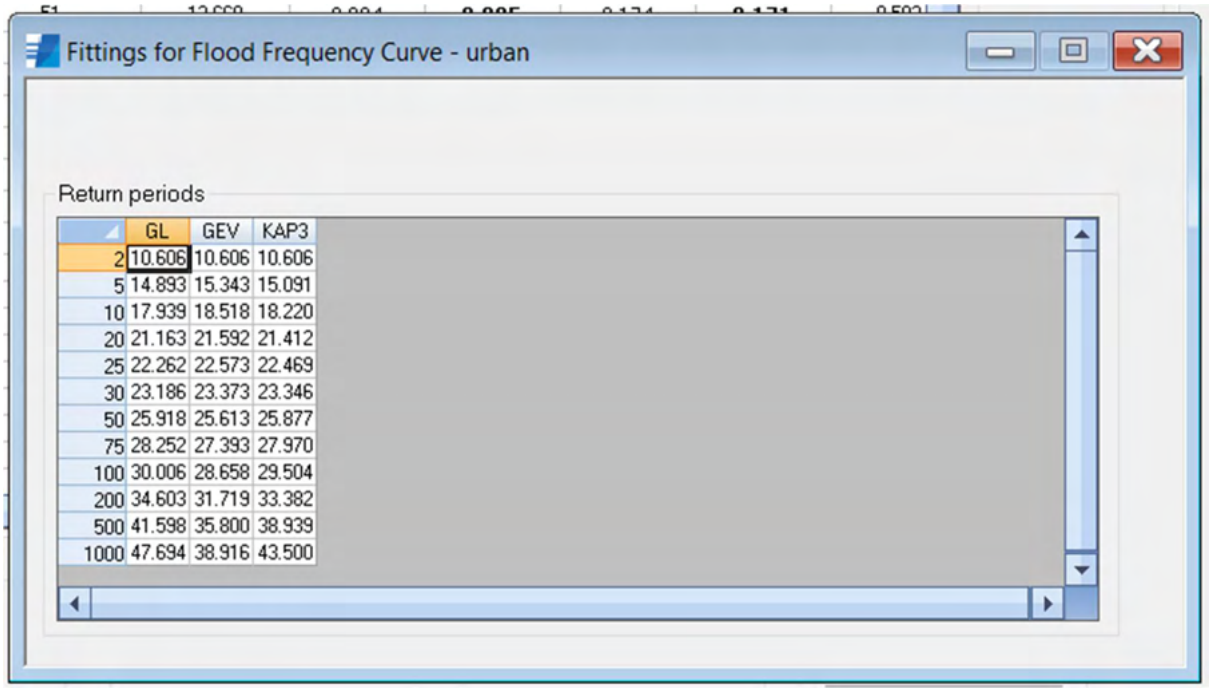


	GL	GEV	KAP3
2	10.769	10.769	10.769
5	15.196	15.642	15.388
10	18.437	19.042	18.725
20	21.942	22.439	22.218
25	23.154	23.546	23.395
30	24.179	24.456	24.378
50	27.239	27.044	27.251
75	29.887	29.141	29.666
100	31.897	30.654	31.458
200	37.240	34.394	36.067
500	45.558	39.555	42.862
1000	52.971	43.635	48.599

AM Data | Catchment Descriptors

	Station	Distance (SDM)	Years of data	QMED AM	L-CV Observed	L-CV Deurbanised	L-SKEW Observed	L-SKEW Deurbanised	Discordancy
1	41022 (Lod @ Halfway Bridge)	0.172	50	16.250	0.296	**0.297**	0.174	**0.172**	0.874
2	53017 (Boyd @ Bitton)	0.350	47	13.870	0.243	**0.245**	0.083	**0.080**	0.577
3	76019 (Roe Beck @ Stockdalewath)	0.481	21	42.852	0.223	**0.223**	0.304	**0.304**	1.279
4	9006 (Deskford Burn @ Cullen)	0.517	9	21.783	0.300	**0.300**	0.129	**0.129**	1.231
5	53023 (Sherston Avon @ Fosseway)	0.557	44	7.332	0.230	**0.231**	0.174	**0.173**	0.072
6	39042 (Leach @ Priory Mill Lechlade)	0.568	48	3.085	0.196	**0.196**	0.063	**0.062**	1.131
7	20007 (Gifford Water @ Lennoxlove)	0.578	46	16.895	0.319	**0.319**	0.188	**0.187**	0.811
8	7010 (Muckle Burn @ Brodie)	0.582	14	17.452	0.188	**0.188**	0.318	**0.318**	2.034
9	44011 (Asker @ Bridport East Bridge)	0.607	25	16.449	0.225	**0.227**	0.153	**0.150**	0.314
10	44003 (Asker @ Bridport)	0.607	14	12.354	0.224	**0.226**	0.170	**0.168**	1.651
11	27095 (Pickering Beck @ Pickering)	0.615	20	7.796	0.305	**0.306**	0.314	**0.314**	0.569
12	51001 (Doniford Stream @ Swill Bridge)	0.630	52	12.524	0.317	**0.319**	0.372	**0.370**	1.330
13	205005 (Ravernet @ Ravernet)	0.689	48	14.792	0.211	**0.211**	0.293	**0.293**	0.888
14	203043 (Donawater @ Shanmoy)	0.806	34	31.685	0.163	**0.163**	0.072	**0.072**	1.144
15	54036 (Isbourne @ Hinton on the Green)	0.831	48	13.578	0.329	**0.331**	0.324	**0.322**	1.094

Dighty Water upstream of Baldovan Road



	GL	GEV	KAP3
2	10.606	10.606	10.606
5	14.893	15.343	15.091
10	17.939	18.518	18.220
20	21.163	21.592	21.412
25	22.262	22.573	22.469
30	23.186	23.373	23.346
50	25.918	25.613	25.877
75	28.252	27.393	27.970
100	30.006	28.658	29.504
200	34.603	31.719	33.382
500	41.598	35.800	38.939
1000	47.694	38.916	43.500

AM Data | Catchment Descriptors

	Station	Distance (SDM)	Years of data	QMED AM	L-CV Observed	L-CV Deurbanised	L-SKEW Observed	L-SKEW Deurbanised	Discordar
1	41022 (Lod @ Halfway Bridge)	0.187	50	16.250	0.296	**0.297**	0.174	**0.172**	0.749
2	53017 (Boyd @ Bitton)	0.332	47	13.870	0.243	**0.245**	0.083	**0.080**	0.430
3	30004 (Lymn @ Partney Mill)	0.412	58	7.184	0.224	**0.225**	0.030	**0.029**	0.966
4	76019 (Roe Beck @ Stockdalewath)	0.487	21	42.852	0.223	**0.223**	0.304	**0.304**	2.457
5	9006 (Deskford Burn @ Cullen)	0.510	9	21.783	0.300	**0.300**	0.129	**0.129**	1.021
6	53023 (Sherston Avon @ Fosseway)	0.585	44	7.332	0.230	**0.231**	0.174	**0.173**	0.103
7	41020 (Bevern Stream @ Clappers Bridg	0.587	51	13.660	0.204	**0.205**	0.174	**0.171**	0.583
8	39042 (Leach @ Priory Mill Lechlade)	0.598	48	3.085	0.196	**0.196**	0.063	**0.062**	0.916
9	44011 (Asker @ Bridport East Bridge)	0.605	25	16.449	0.225	**0.227**	0.153	**0.150**	0.557
10	44003 (Asker @ Bridport)	0.605	14	12.354	0.224	**0.226**	0.170	**0.168**	1.399
11	20007 (Gilford Water @ Lennoxlove)	0.608	46	16.895	0.319	**0.319**	0.188	**0.187**	0.843
12	27095 (Pickering Beck @ Pickering)	0.637	20	7.796	0.305	**0.306**	0.314	**0.314**	0.961
13	205005 (Ravernet @ Ravernet)	0.710	48	14.792	0.211	**0.211**	0.293	**0.293**	1.186
14	54036 (Isbourne @ Hinton on the Green)	0.863	48	13.578	0.329	**0.331**	0.324	**0.322**	1.830
15									

Appendix B: Results from ReFH2 Flow Estimation

UK Design Flood Estimation

Generated on 29 October 2021 09:32:49 by abraid
Printed from the ReFH2 Flood Modelling software package, version 3.2.7650.24314

Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

Site details Checksum: 3F0A-6963

Site name: Dighty Water upstream of Baldovan Road Bridge

Easting: 338800

Northing: 734550

Country: Scotland

Catchment Area (km²): 52.39

Using plot scale calculations: No

Model: 2.3

Site description: None

Model run: 200 year

Summary of results

Rainfall - FEH 2013 model (mm):	68.09	Total runoff (ML):	619.55
Total Rainfall (mm):	46.44	Total flow (ML):	1910.86
Peak Rainfall (mm):	3.14	Peak flow (m³/s):	28.98

Parameters

Where the user has overriden a system-generated value, this original value is shown in square brackets after the value used.
** Indicates that the user locked the duration/timestep*

Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:30:00	No
Timestep (hh:mm:ss)	00:10:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.74	No
ARF (Areal reduction factor)	0.92	No
Seasonality	Winter	No

Loss model parameters

Name	Value	User-defined?
Cini (mm)	93.38	No
Cmax (mm)	461.97	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.59	No
Up	0.65	No
Uk	0.8	No

Baseflow model parameters

Name	Value	User-defined?
BF0 (m^3/s)	0.97	No
BL (hr)	41.39	No
BR	2.11	No

Urbanisation parameters

Name	Value	User-defined?
Urban area (km^2)	0.57	No
Urbext 2000	0.01	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km^2)	0.00	Yes
Sewer capacity (m^3/s)	0.00	Yes

UK Design Flood Estimation

Generated on 29 October 2021 09:35:46 by abraid
Printed from the ReFH2 Flood Modelling software package, version 3.2.7650.24314

Summary of estimate using the Flood Estimation Handbook revitalised flood hydrograph method (ReFH2)

Site details Checksum: 012B-9732

Site name: Dighty Water adjacent to Hawthorn Cottage

Easting: 338950

Northing: 734350

Country: Scotland

Catchment Area (km²): 53.78

Using plot scale calculations: No

Model: 2.3

Site description: None

Model run: 200 year

Summary of results

Rainfall - FEH 2013 model (mm):	68.10	Total runoff (ML):	639.70
Total Rainfall (mm):	46.39	Total flow (ML):	1960.80
Peak Rainfall (mm):	3.13	Peak flow (m³/s):	29.76

Parameters

Where the user has overriden a system-generated value, this original value is shown in square brackets after the value used.
** Indicates that the user locked the duration/timestep*

Rainfall parameters (Rainfall - FEH 2013 model)

Name	Value	User-defined?
Duration (hh:mm:ss)	06:30:00	No
Timestep (hh:mm:ss)	00:10:00 [00:30:00]	Yes
SCF (Seasonal correction factor)	0.74	No
ARF (Areal reduction factor)	0.92	No
Seasonality	Winter	No

Loss model parameters

Name	Value	User-defined?
Cini (mm)	93.38	No
Cmax (mm)	461.97	No
Use alpha correction factor	No	No
Alpha correction factor	n/a	No

Routing model parameters

Name	Value	User-defined?
Tp (hr)	3.62	No
Up	0.65	No
Uk	0.8	No

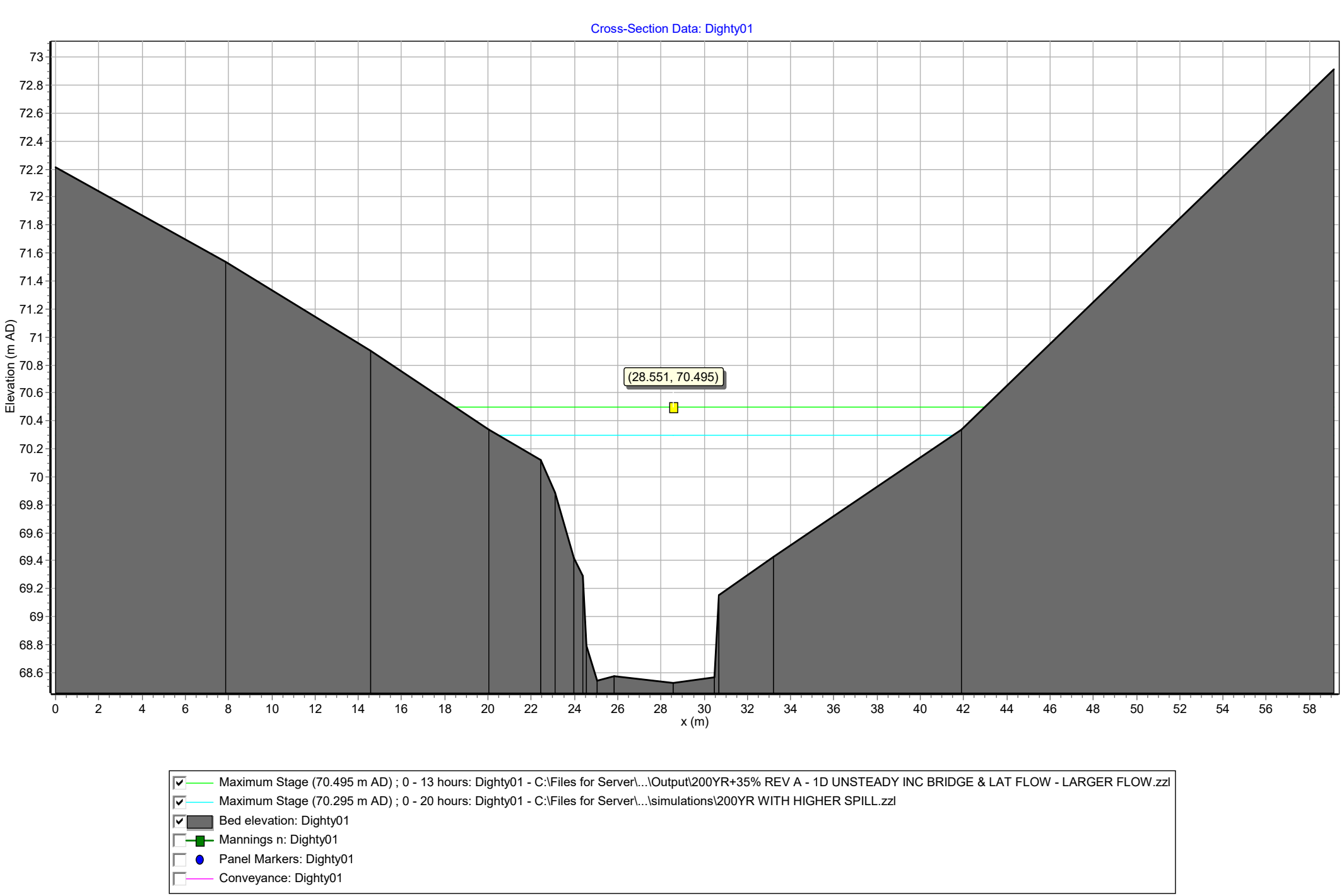
Baseflow model parameters

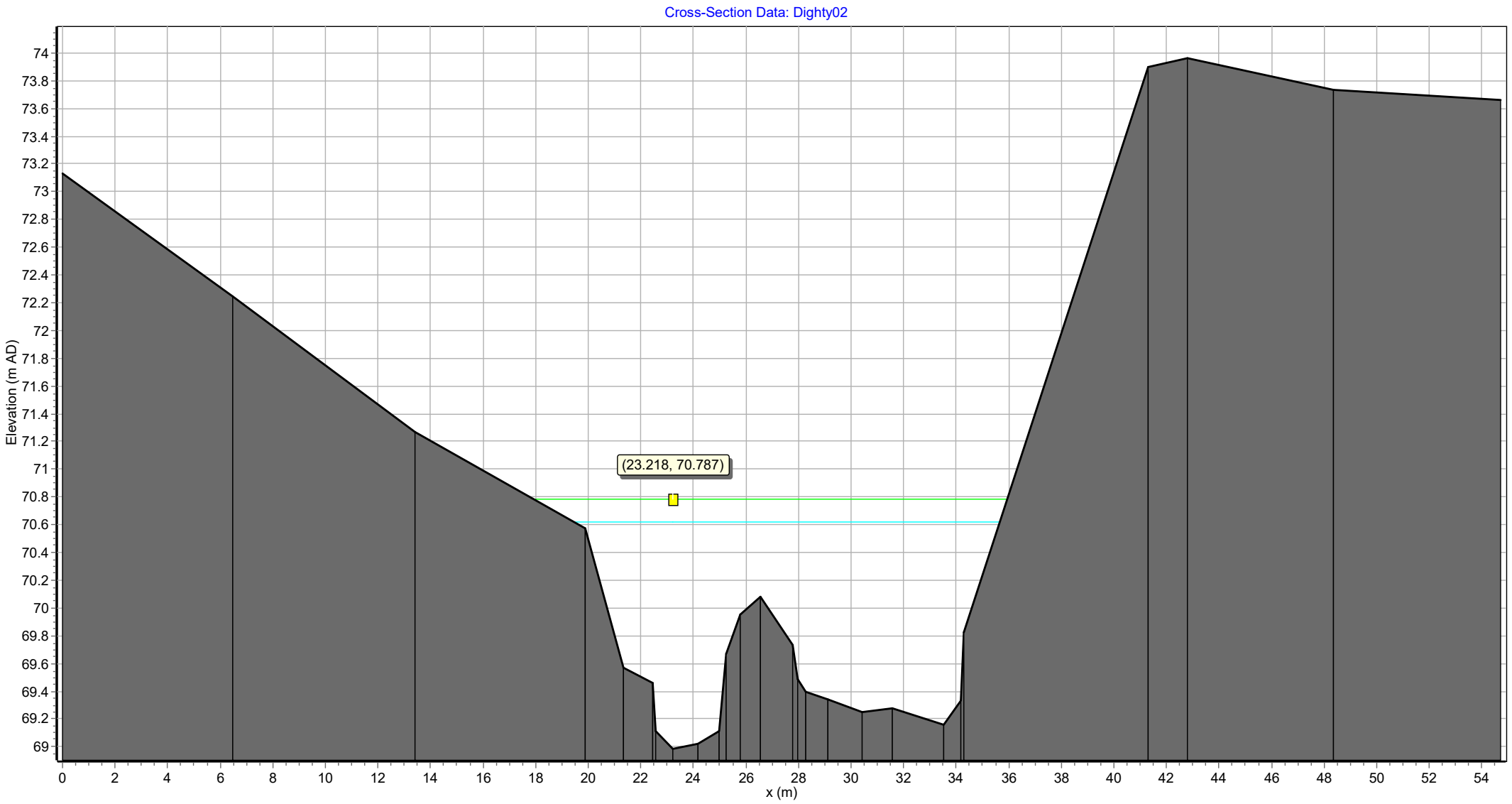
Name	Value	User-defined?
BF0 (m^3/s)	1	No
BL (hr)	41.53	No
BR	2.11	No

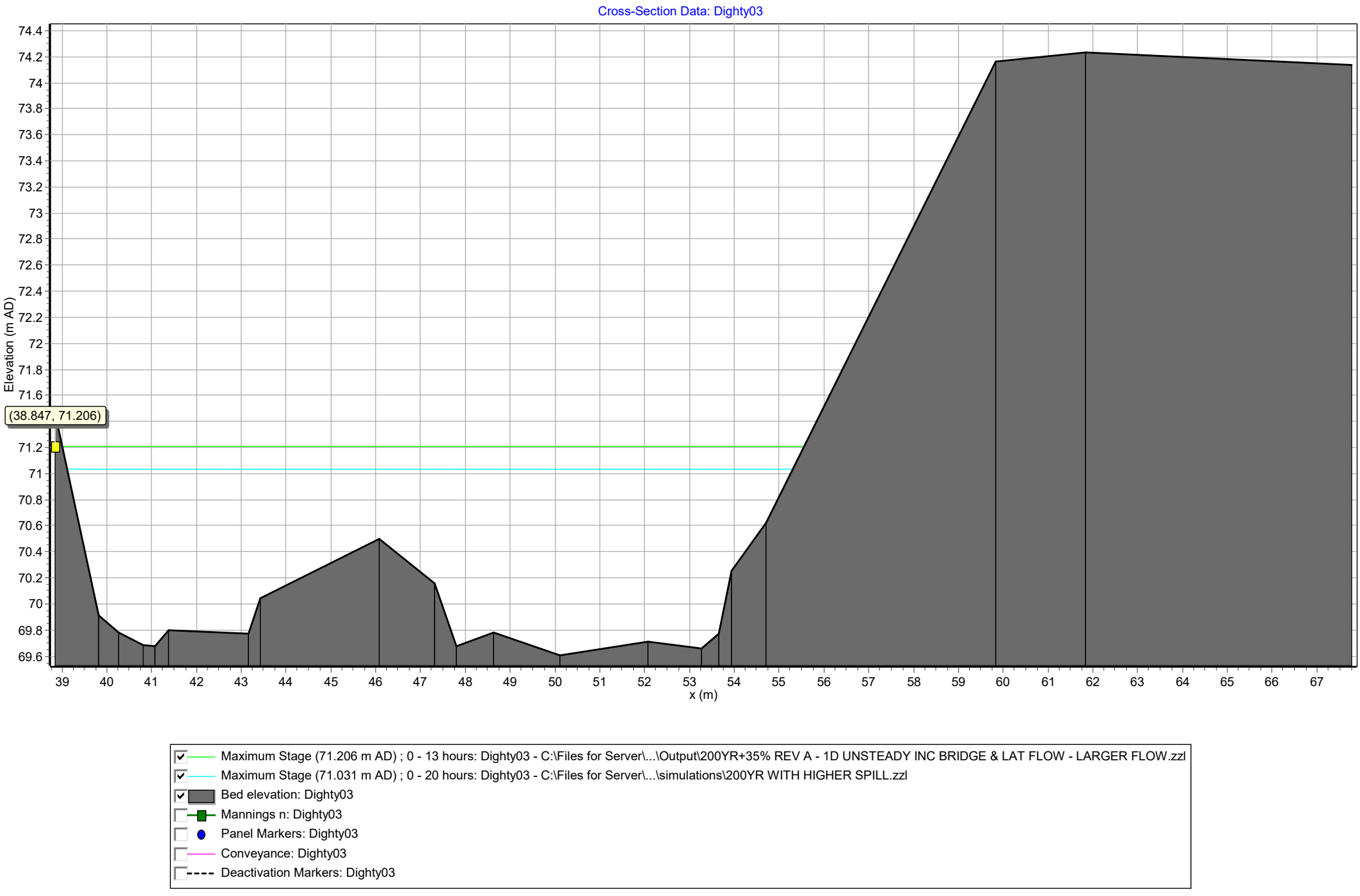
Urbanisation parameters

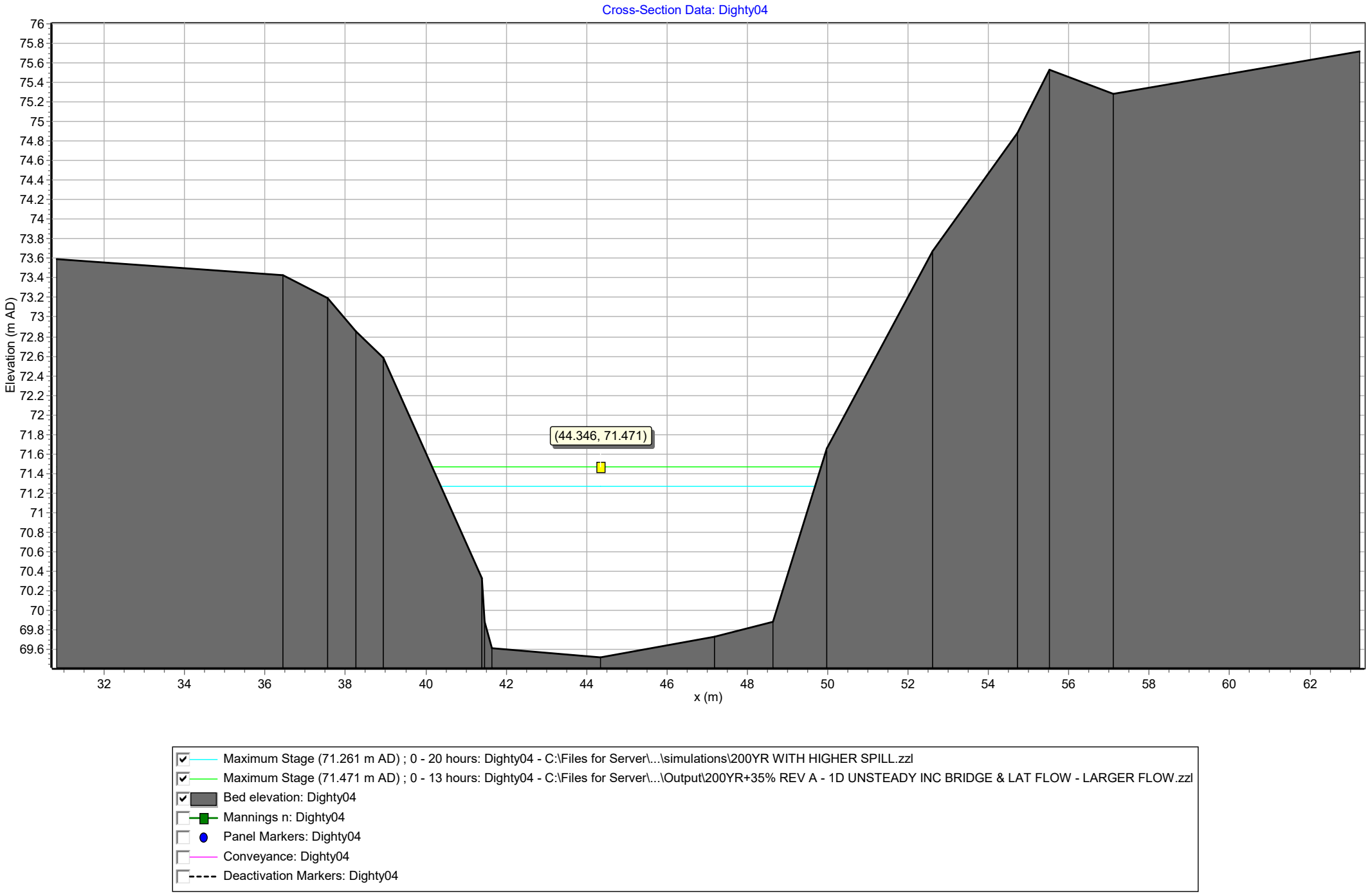
Name	Value	User-defined?
Urban area (km^2)	1.04	No
Urbext 2000	0.01	No
Impervious runoff factor	0.7	No
Imperviousness factor	0.4	No
Tp scaling factor	0.75	No
Depression storage depth (mm)	0.5	No
Exporting drained area (km^2)	0.00	Yes
Sewer capacity (m^3/s)	0.00	Yes

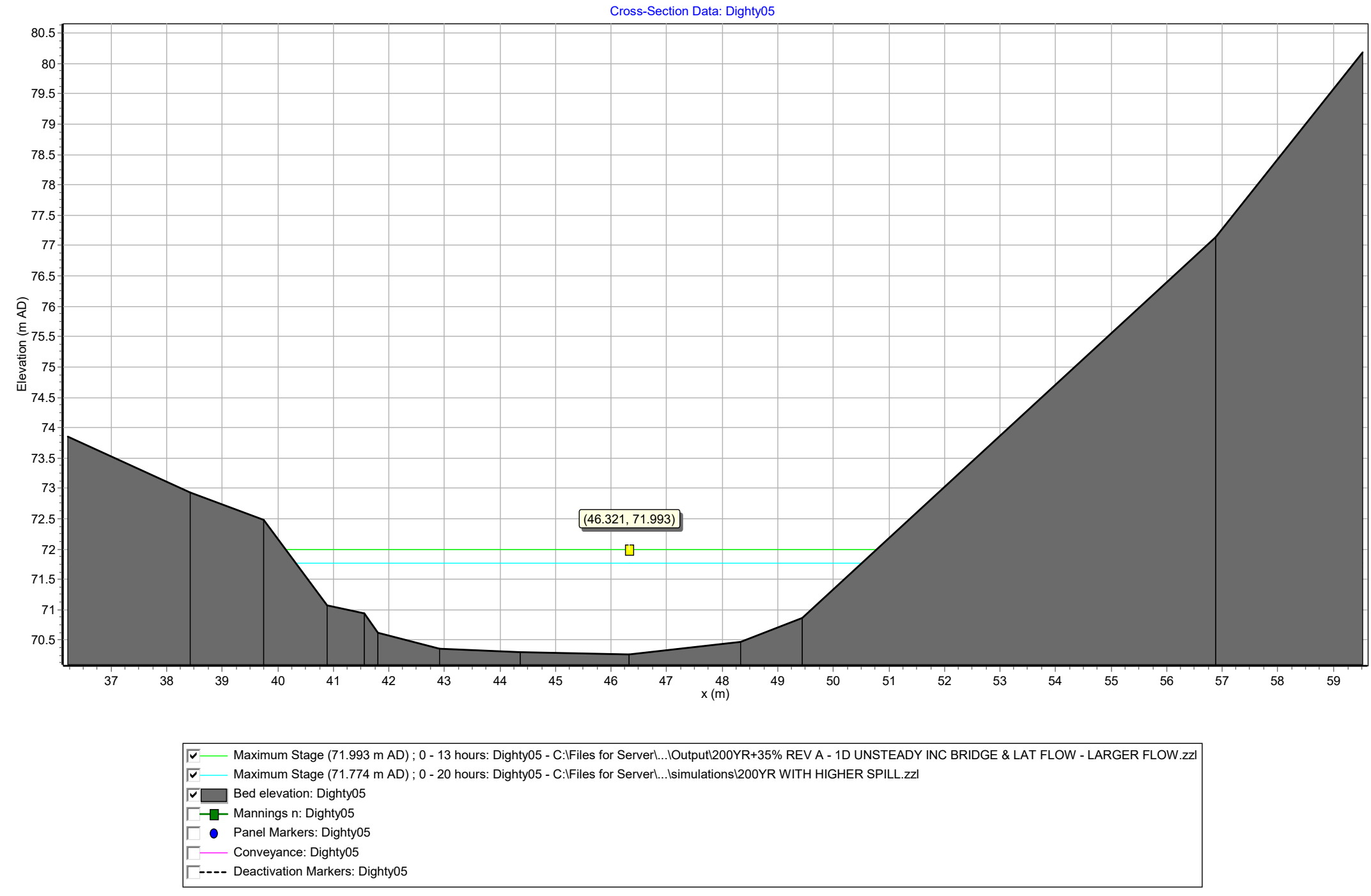
Appendix C: Output from Hydraulic Model

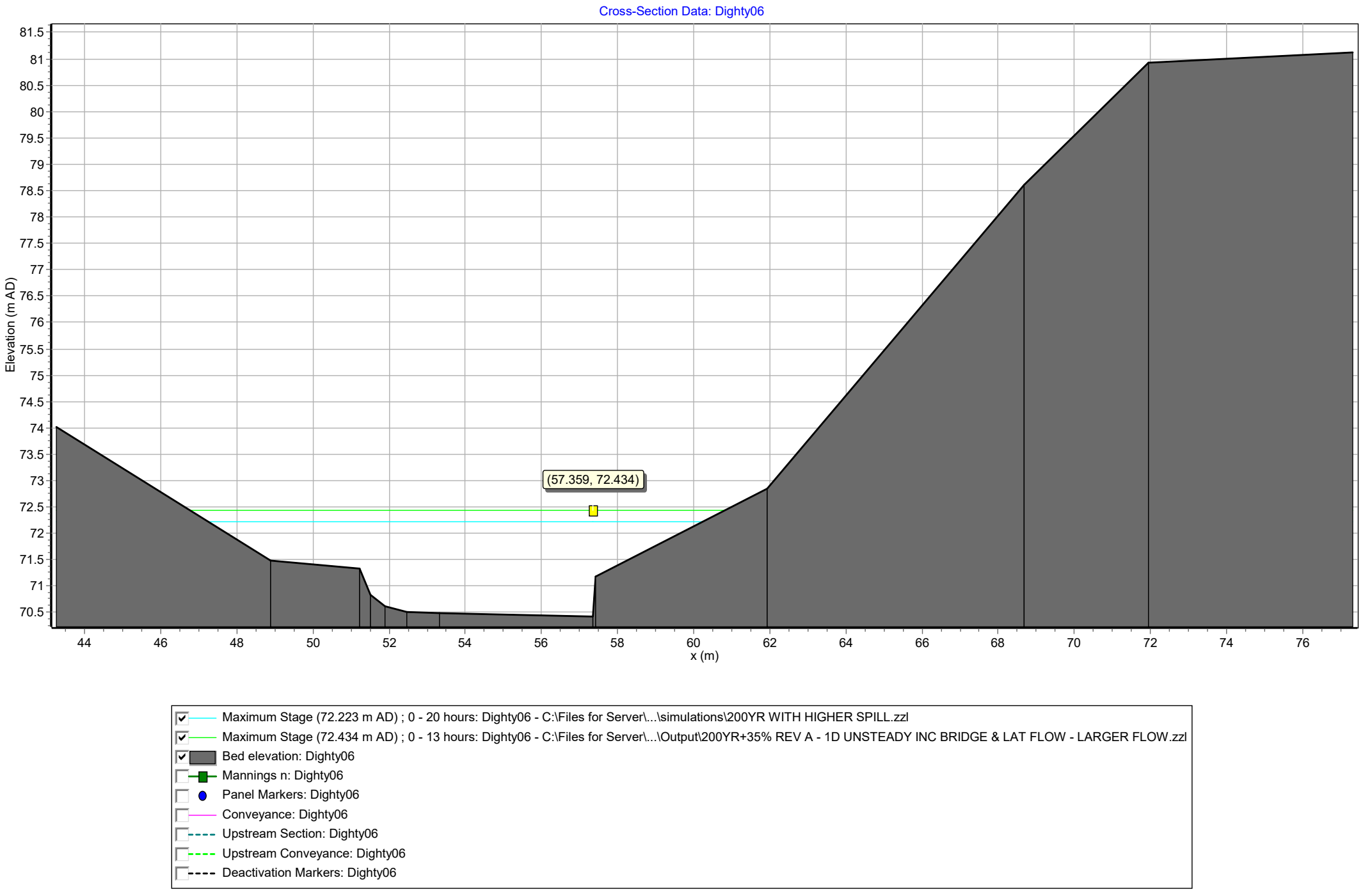

Cross-Section Data: Dighty01
Elevation (m AD)
x (m)
(28.551, 70.495)
Maximum Stage (70.495 m AD) ; 0 - 13 hours: Dighty01 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (70.295 m AD) ; 0 - 20 hours: Dighty01 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty01
Mannings n: Dighty01
Panel Markers: Dighty01
Conveyance: Dighty01

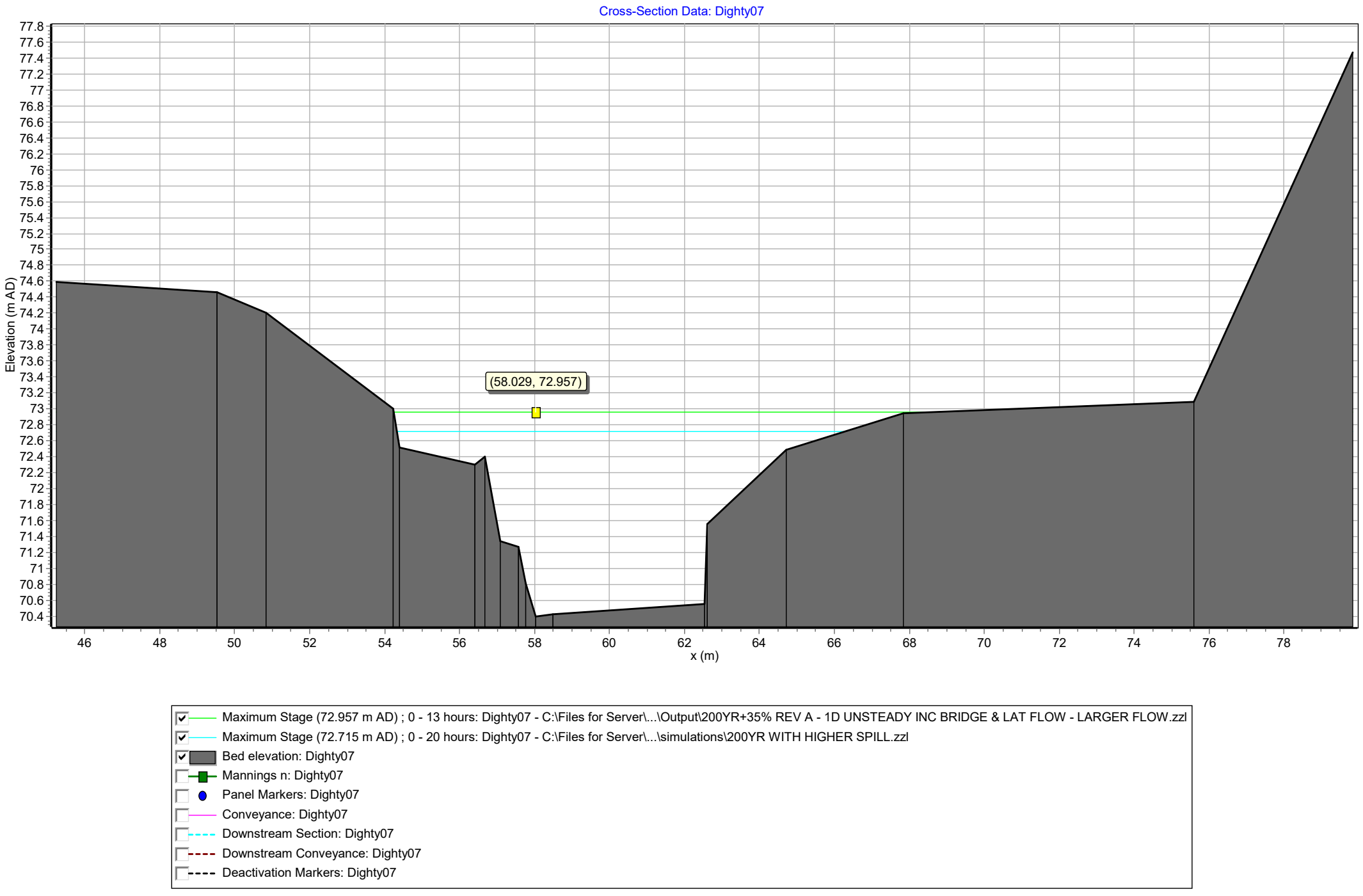

Cross-Section Data: Dighty02
Elevation (m AD)
x (m)
(23.218, 70.787)
Maximum Stage (70.619 m AD) ; 0 - 20 hours: Dighty02 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Maximum Stage (70.787 m AD) ; 0 - 13 hours: Dighty02 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Bed elevation: Dighty02
Mannings n: Dighty02
Panel Markers: Dighty02
Conveyance: Dighty02

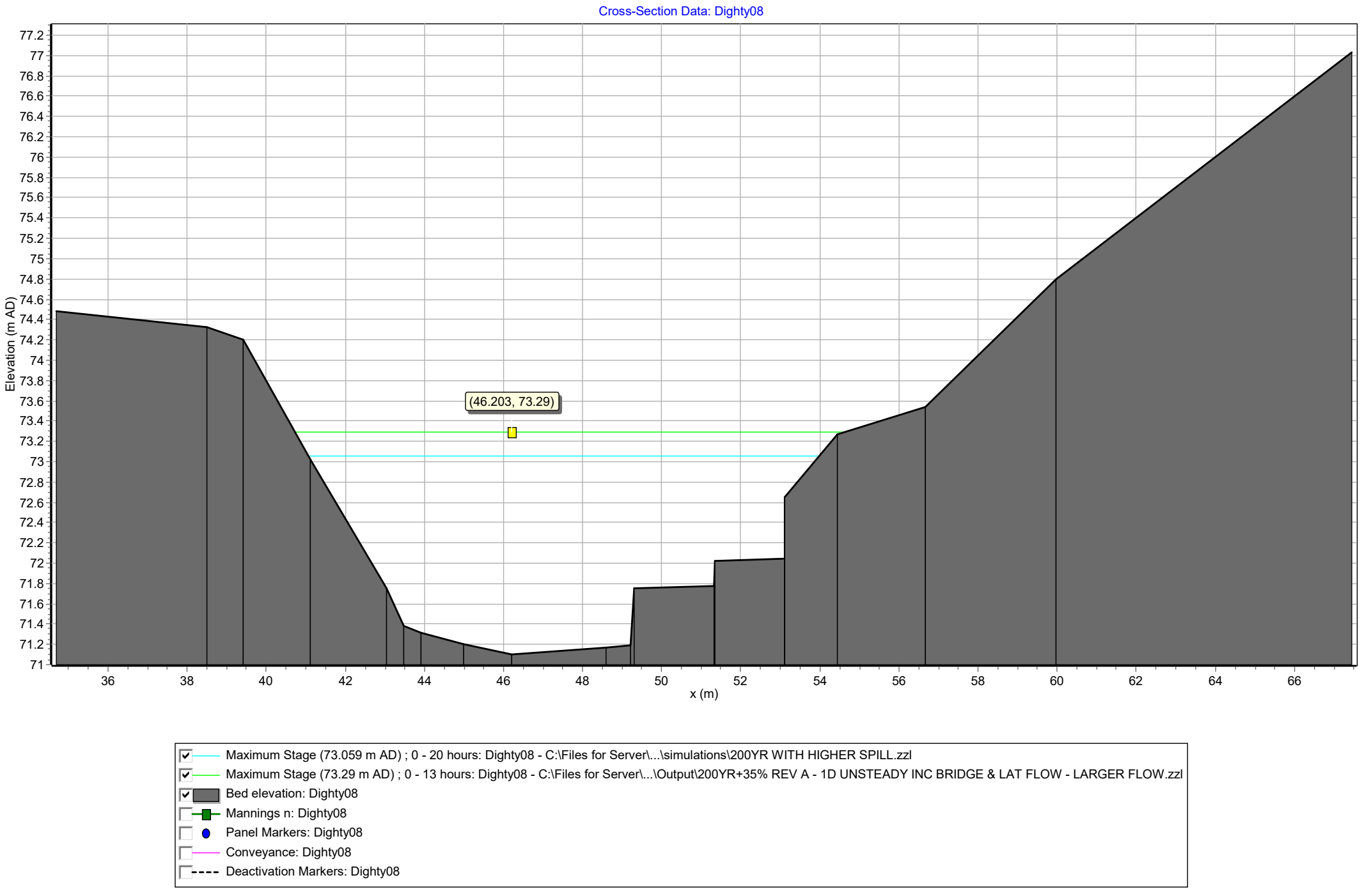

Cross-Section Data: Dighty03
Elevation (m AD)
x (m)
(38.847, 71.206)
74.4
74.2
74
73.8
73.6
73.4
73.2
73
72.8
72.6
72.4
72.2
72
71.8
71.6
71.2
71
70.8
70.6
70.4
70.2
70
69.8
69.6
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
Maximum Stage (71.206 m AD) ; 0 - 13 hours: Dighty03 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (71.031 m AD) ; 0 - 20 hours: Dighty03 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty03
Mannings n: Dighty03
Panel Markers: Dighty03
Conveyance: Dighty03
Deactivation Markers: Dighty03

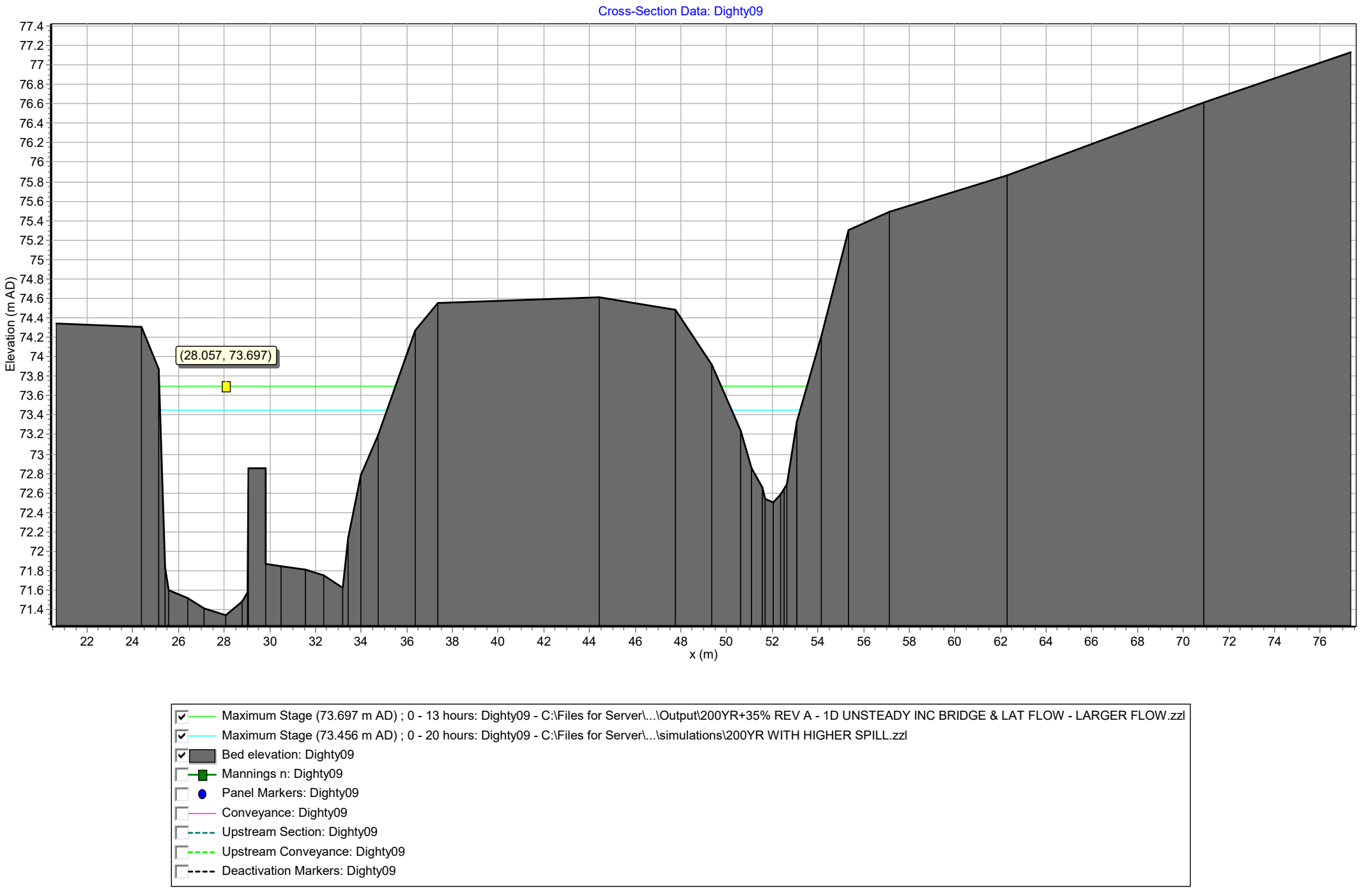

Cross-Section Data: Dighty04
Elevation (m AD)
x (m)
(44.346, 71.471)
Maximum Stage (71.261 m AD) ; 0 - 20 hours: Dighty04 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Maximum Stage (71.471 m AD) ; 0 - 13 hours: Dighty04 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Bed elevation: Dighty04
Mannings n: Dighty04
Panel Markers: Dighty04
Conveyance: Dighty04
Deactivation Markers: Dighty04

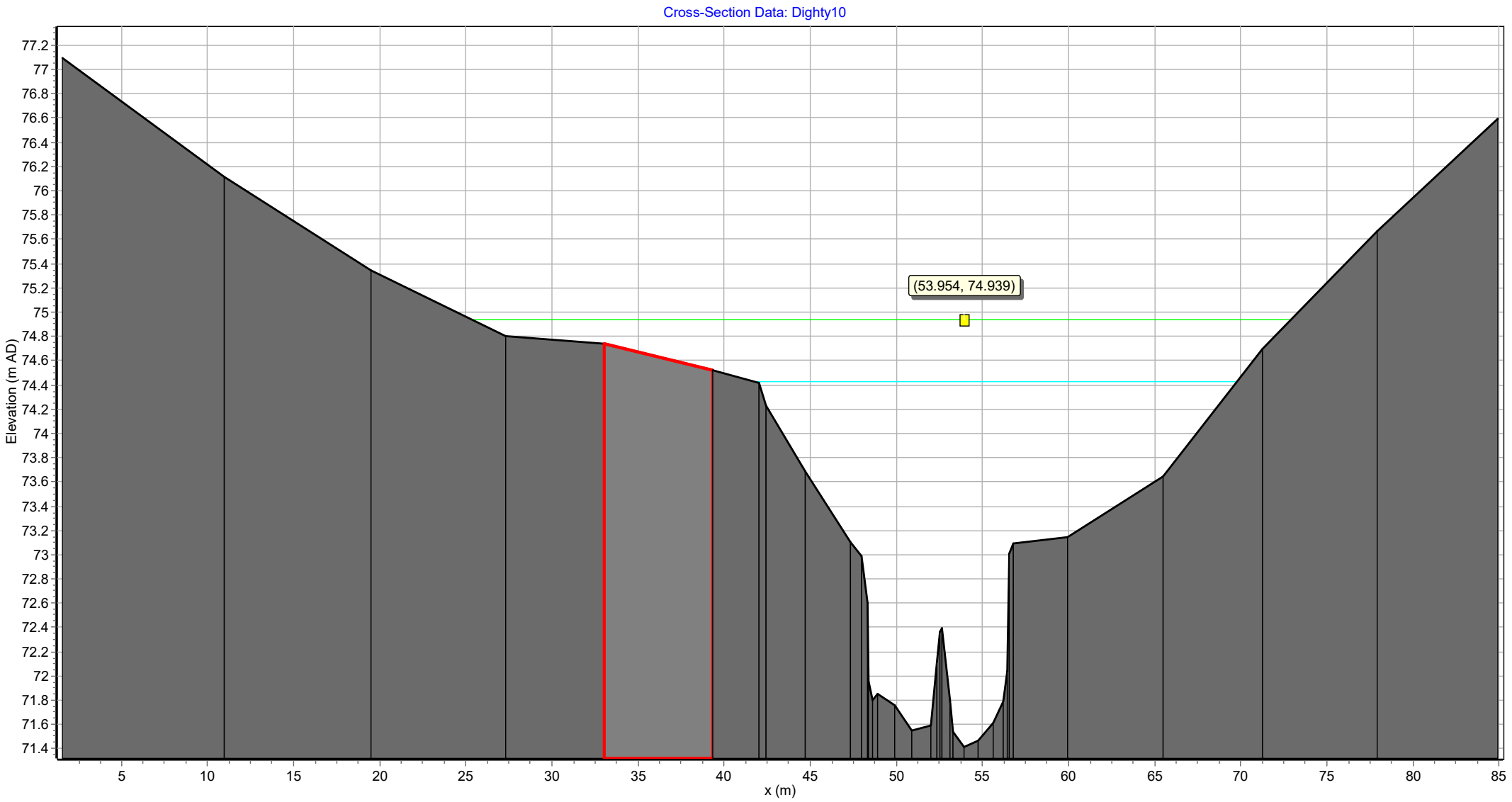

Cross-Section Data: Dighty05
Elevation (m AD)
80.5
80
79.5
79
78.5
78
77.5
77
76.5
76
75.5
75
74.5
74
73.5
73
72.5
72
71.5
71
70.5
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
x (m)
(46.321, 71.993)
Maximum Stage (71.993 m AD) ; 0 - 13 hours: Dighty05 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (71.774 m AD) ; 0 - 20 hours: Dighty05 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty05
Mannings n: Dighty05
Panel Markers: Dighty05
Conveyance: Dighty05
Deactivation Markers: Dighty05


Cross-Section Data: Dighty06
Elevation (m AD)
x (m)
(57.359, 72.434)
81.5
81
80.5
80
79.5
79
78.5
78
77.5
77
76.5
76
75.5
75
74.5
74
73.5
73
72.5
72
71.5
71
70.5
44
46
48
50
52
54
56
58
60
62
64
66
68
70
72
74
76
Maximum Stage (72.223 m AD) ; 0 - 20 hours: Dighty06 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Maximum Stage (72.434 m AD) ; 0 - 13 hours: Dighty06 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Bed elevation: Dighty06
Mannings n: Dighty06
Panel Markers: Dighty06
Conveyance: Dighty06
Upstream Section: Dighty06
Upstream Conveyance: Dighty06
Deactivation Markers: Dighty06

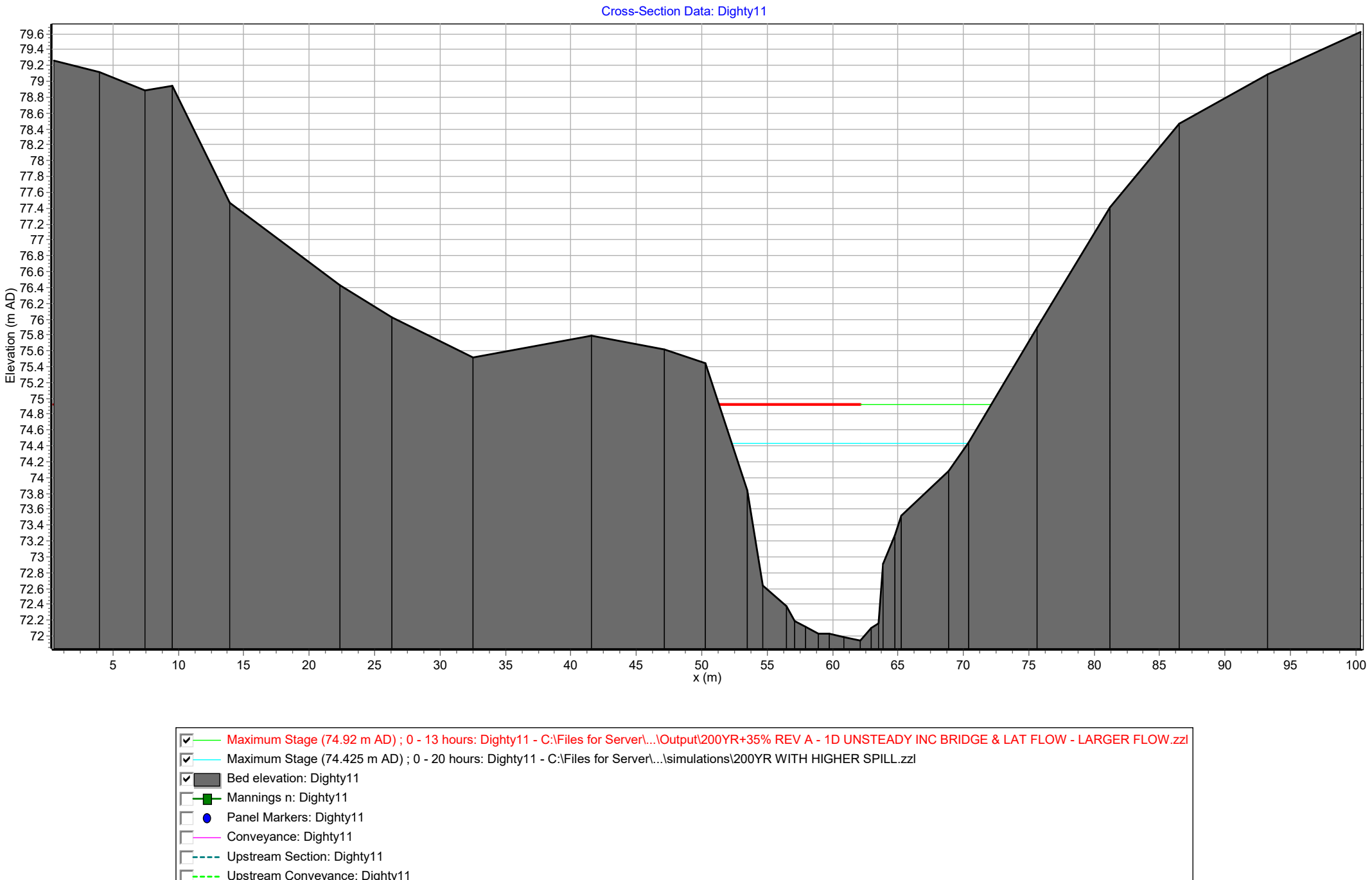

Cross-Section Data: Dighty07
Elevation (m AD)
x (m)
(58.029, 72.957)
Maximum Stage (72.957 m AD) ; 0 - 13 hours: Dighty07 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (72.715 m AD) ; 0 - 20 hours: Dighty07 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty07
Mannings n: Dighty07
Panel Markers: Dighty07
Conveyance: Dighty07
Downstream Section: Dighty07
Downstream Conveyance: Dighty07
Deactivation Markers: Dighty07

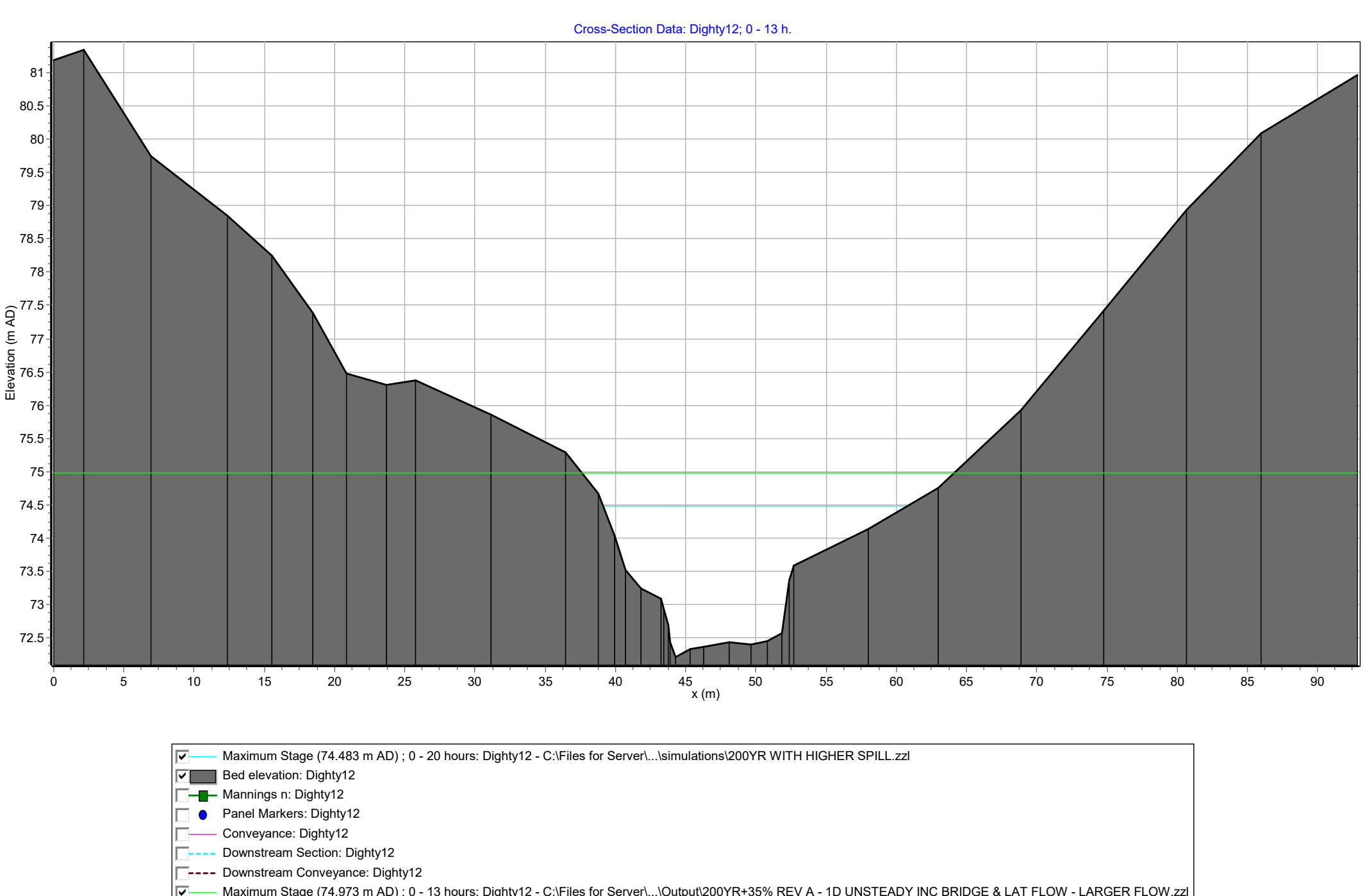

Cross-Section Data: Dighty08
Elevation (m AD)
x (m)
(46.203, 73.29)
77.2
77
76.8
76.6
76.4
76.2
76
75.8
75.6
75.4
75.2
75
74.8
74.6
74.4
74.2
74
73.8
73.6
73.4
73.2
73
72.8
72.6
72.4
72.2
72
71.8
71.6
71.4
71.2
71
36
38
40
42
44
46
48
50
52
54
56
58
60
62
64
66
Maximum Stage (73.059 m AD) ; 0 - 20 hours: Dighty08 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Maximum Stage (73.29 m AD) ; 0 - 13 hours: Dighty08 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Bed elevation: Dighty08
Mannings n: Dighty08
Panel Markers: Dighty08
Conveyance: Dighty08
Deactivation Markers: Dighty08


Cross-Section Data: Dighty09
Elevation (m AD)
x (m)
(28.057, 73.697)
Maximum Stage (73.697 m AD) ; 0 - 13 hours: Dighty09 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (73.456 m AD) ; 0 - 20 hours: Dighty09 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty09
Mannings n: Dighty09
Panel Markers: Dighty09
Conveyance: Dighty09
Upstream Section: Dighty09
Upstream Conveyance: Dighty09
Deactivation Markers: Dighty09



- Maximum Stage (74.426 m AD) ; 0 - 20 hours: Dighty10 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
- Maximum Stage (74.939 m AD) ; 0 - 13 hours: Dighty10 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
- Bed elevation: Dighty10
- Mannings n: Dighty10
- Panel Markers: Dighty10
- Conveyance: Dighty10


Cross-Section Data: Dighty11
Elevation (m AD)
x (m)
Maximum Stage (74.92 m AD) ; 0 - 13 hours: Dighty11 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl
Maximum Stage (74.425 m AD) ; 0 - 20 hours: Dighty11 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty11
Mannings n: Dighty11
Panel Markers: Dighty11
Conveyance: Dighty11
Upstream Section: Dighty11
Upstream Conveyance: Dighty11


Cross-Section Data: Dighty12; 0 - 13 h.
Elevation (m AD)
81
80.5
80
79.5
79
78.5
78
77.5
77
76.5
76
75.5
75
74.5
74
73.5
73
72.5
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
x (m)
Maximum Stage (74.483 m AD) ; 0 - 20 hours: Dighty12 - C:\Files for Server\...\simulations\200YR WITH HIGHER SPILL.zzl
Bed elevation: Dighty12
Mannings n: Dighty12
Panel Markers: Dighty12
Conveyance: Dighty12
Downstream Section: Dighty12
Downstream Conveyance: Dighty12
Maximum Stage (74.973 m AD) ; 0 - 13 hours: Dighty12 - C:\Files for Server\...\Output\200YR+35% REV A - 1D UNSTEADY INC BRIDGE & LAT FLOW - LARGER FLOW.zzl

Appendix D: SEPA Checklist

Flood Risk Assessment (FRA) Checklist

(SS-NFR-F-001 - Version 13 - Last updated 15/04/2015

This document should be attached within the front cover of any flood risk assessments issued to Local Planning Authorities (LPA) in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist SEPA in reviewing FRAs, when consulted by LPAs. This document should not be a substitute for a FRA.

Development Proposal						
Site Name		Land adjacent to Hawthorn Cottage at Baldovan, Angus				
Grid Reference	Easting:	339000	Northing:	734342		
Local Authority		Angus Council				
Planning Reference number (if known)		20/00167/FULL				
Nature of the development		Residential	If residential, state type:	Single house		
Size of the development site		0.2 Ha				
Identified Flood Risk	Source:	Fluvial	Source name:	Dighty Water		
Supporting Information						
Have clear maps / plans been provided within the FRA (including topographic and flood inundation plans)		Yes				
Has a historic flood search been undertaken?		Yes				
Is a formal flood prevention scheme present?		No	If known, state the standard of protection offered			
Current / historical site use		Currently vacant, although one historic building on site. Formerly part of mill complex.				
Hydrology						
Area of catchment		53.78 km^2				
Qmed estimate		10.769 m^3/s	Method:	Catchment Descriptors		
Estimate of 200 year design flood flow		37.24 m^3/s				
Estimation method(s) used *		Pooled analysis	If other (please specify methodology used):			
			If Pooled analysis have group details been included	Yes		
Hydraulics						
Hydraulic modelling method		Linked 1D 2D	Software used:	Other		
If other please specify		Flood Modeller				
Modelled reach length		478 m				
Any structures within the modelled length?		Bridges	Specify, if combination			
Brief summary of sensitivity tests, and range:						
variation on flow (%)		20 %				
variation on channel roughness		20%				
blockage of structure (range of % blocked)		20 %	Reference CIRIA culvert design guide R168, section 8.4			
boundary conditions:		**Upstream**		**Downstream**		
(1) type		Flow		Normal depth		
	Specify if other		Specify if other			
(2) does it influence water levels at the site?		Yes		No		
Has model been calibrated (gauge data / flood records)?		Yes				
Is the hydraulic model available to SEPA?		No				
Design flood levels	200 year	71.77 m AOD	200 year plus climate change	71.99 m AOD		

Flood Risk Assessment (FRA) Checklist

(SS-NFR-F-001 - Version 13 - Last updated 15/04/2015

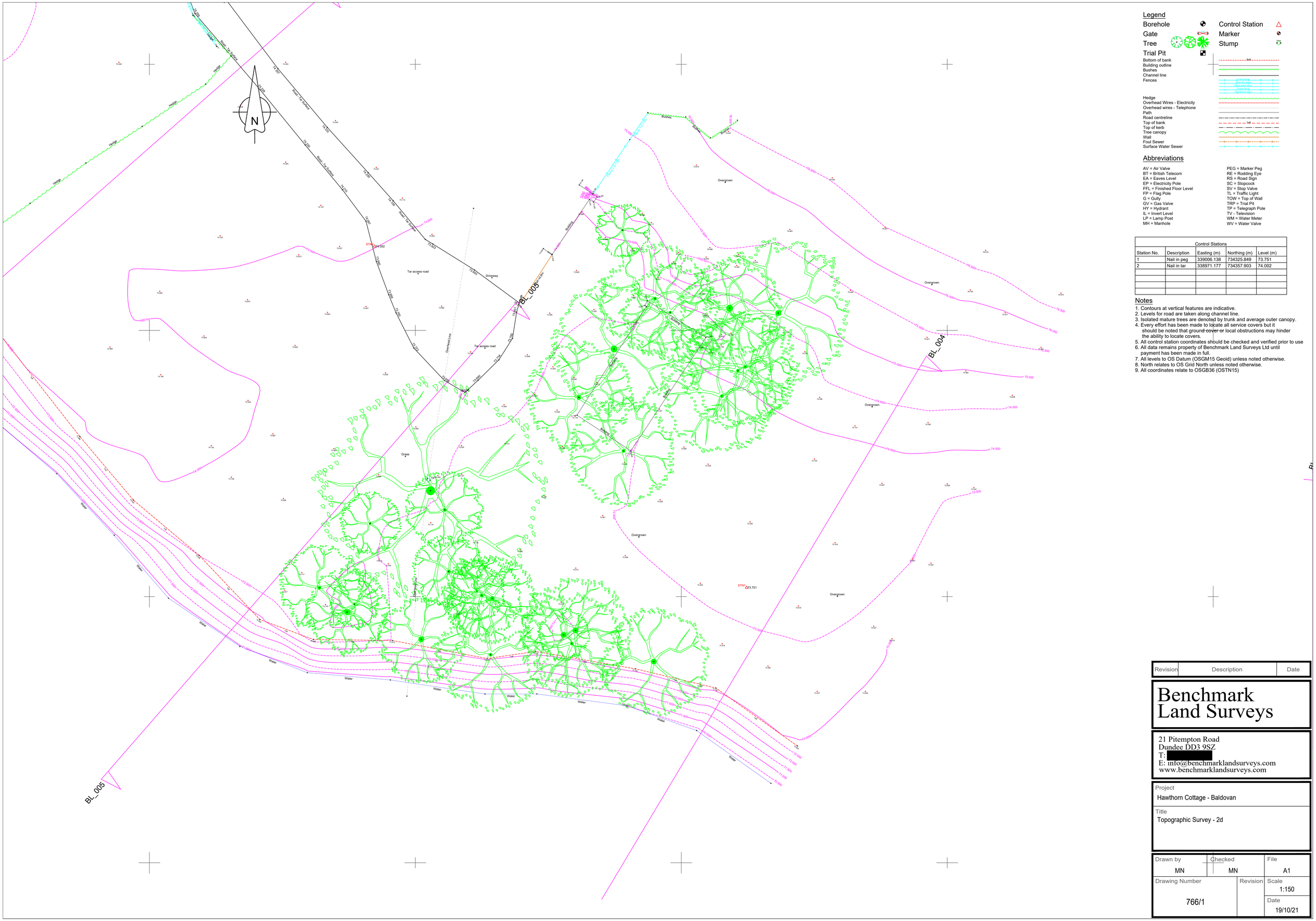
Coastal						
Estimate of 200 year design flood level			m AOD			
Estimation method(s) used		Select from List	If other (please specify methodology used):			
Allowance for climate change (m)			m			
Allowance for wave action etc (m)			m			
Overall design flood level			m AOD			
Development						
Is any of the site within the functional floodplain? (refer to SPP para 255)		No	If yes, what is the net loss of storage			m^3
Is the site brownfield or greenfield		Brownfield				
Freeboard on design water level (m)		2m	m			
Is the development for essential civil infrastructure or vulnerable groups?		No	If yes, has consideration been given to 1000 year design flood?	Select from List		
Is safe / dry access and egress available?		Vehicular and Pedestrian	Min access/egress level			m AOD
If there is no dry access, what return period is dry access available?			years			
If there is no dry access, what is the impact on the access routes?	Max Flood Depth @ 200 year event:		m	Max Flood Velocity:		m/s
Design levels	Ground level	73.9	m AOD	Min FFL:	74.05	mAOD
Mitigation						
Can development be designed to avoid all areas at risk of flooding?		Yes				
Is mitigation proposed?		No				
If yes, is compenstory storage necessary?		No				
Demonstration of compensatory storage on a "like for like" basis?		Select from List				
Should water resistant materials and forms of construction be used?		Select from List				
Comments						
Any additional comments:						

Approved by: **Andrew Braid**
Organisation: **Millard Consulting**
Date: **04/02/2022**

Note: Further details and guidance is provided in 'Technical Flood Risk Guidance for Stakeholders' which can be accesssed here:- **CLICK HERE**

**** ReFH2 is now accepted by SEPA for flow estimates in Scotland. Any use of this method should be compared with other accepted methods.***

PLANS



Legend

Borehole
Control Station
Gate
Marker
Tree
Stump
Trial Pit

Bottom of bank
Building outline
Bushes
Channel line
Fences
Hedge
Overhead Wires - Electricity
Overhead wires - Telephone
Path
Road centreline
Top of bank
Top of kerb
Tree canopy
Wall
Foul Sewer
Surface Water Sewer

Abbreviations

AV = Air Valve
BT = British Telecom
EA = Eaves Level
EP = Electricity Pole
FFL = Finished Floor Level
FP = Flag Pole
G = Gully
GV = Gas Valve
HY = Hydrant
IL = Invert Level
LP = Lamp Post
MH = Manhole
PEG = Marker Peg
RE = Rodding Eye
RS = Road Sign
SC = Stopcock
SV = Stop Valve
TL = Traffic Light
TOW = Top of Wall
TRP = Trial Pit
TP = Telegraph Pole
TV - Television
WM = Water Meter
WV = Water Valve

Control Stations				
Station No.	Description	Easting (m)	Northing (m)	Level (m)
1	Nail in peg	339006.138	734325.849	73.751
2	Nail in tar	338971.177	734357.903	74.002

Notes

1. Contours at vertical features are indicative.
2. Levels for road are taken along channel line.
3. Isolated mature trees are denoted by trunk and average outer canopy.
4. Every effort has been made to locate all service covers but it should be noted that ground cover or local obstructions may hinder the ability to locate covers.
5. All control station coordinates should be checked and verified prior to use
6. All data remains property of Benchmark Land Surveys Ltd until payment has been made in full.
7. All levels to OS Datum (OSGM15 Geoid) unless noted otherwise.
8. North relates to OS Grid North unless noted otherwise.
9. All coordinates relate to OSGB36 (OSTN15)

Revision	Description	Date

Benchmark Land Surveys

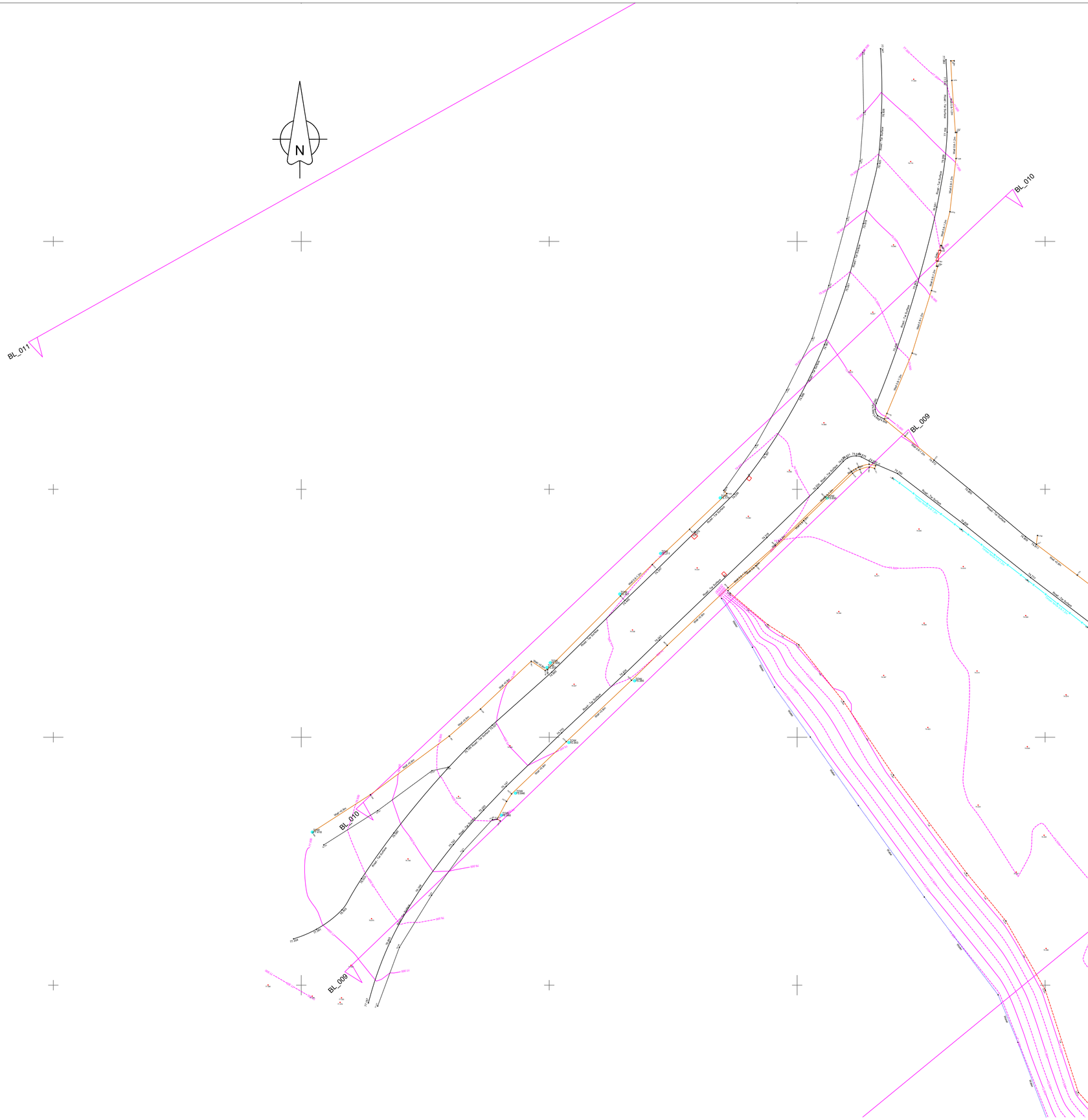
21 Pitempton Road
Dundee DD3 9SZ
T: [redacted]
E: info@benchmarklandsurveys.com
www.benchmarklandsurveys.com

Project
Hawthorn Cottage - Baldovan

Title
Topographic Survey - 2d

Drawn by	Checked	File
MN	MN	A1

Drawing Number	Revision	Scale	Date
766/1		1:150	19/10/21



Legend

Borehole
Gate
Tree
Trial Pit
Control Station
Marker
Stump

Bottom of bank
Building outline
Bushes
Channel line
Fences
Hedge
Overhead Wires - Electricity
Overhead wires - Telephone
Path
Road centreline
Top of bank
Top of kerb
Tree canopy
Wall
Foul Sewer
Surface Water Sewer

Abbreviations

AV = Air Valve
BT = British Telecom
EA = Eaves Level
EP = Electricity Pole
FFL = Finished Floor Level
FP = Flag Pole
G = Gully
GV = Gas Valve
HY = Hydrant
IL = Invert Level
LP = Lamp Post
MH = Manhole
PEG = Marker Peg
RE = Rodding Eye
RS = Road Sign
SC = Stopcock
SV = Stop Valve
TL = Traffic Light
TOW = Top of Wall
TRP = Trial Pit
TP = Telegraph Pole
TV - Television
WM = Water Meter
WV = Water Valve

Control Stations

Station No.	Description	Easting (m)	Northing (m)	Level (m)
1	Nail in peg	339006.138	734325.849	73.751
2	Nail in tar	338971.177	734357.903	74.002

Notes

1. Contours at vertical features are indicative.
2. Levels for road are taken along channel line.
3. Isolated mature trees are denoted by trunk and average outer canopy.
4. Every effort has been made to locate all service covers but it should be noted that ground cover or local obstructions may hinder the ability to locate covers.
5. All control station coordinates should be checked and verified prior to use
6. All data remains property of Benchmark Land Surveys Ltd until payment has been made in full.
7. All levels to OS Datum (OSGM15 Geoid) unless noted otherwise.
8. North relates to OS Grid North unless noted otherwise.
9. All coordinates relate to OSGB36 (OSTN15)

Revision	Description	Date

Benchmark Land Surveys

21 Pitempton Road
Dundee DD3 9SZ
T: [redacted]
E: info@benchmarklandsurveys.com
www.benchmarklandsurveys.com

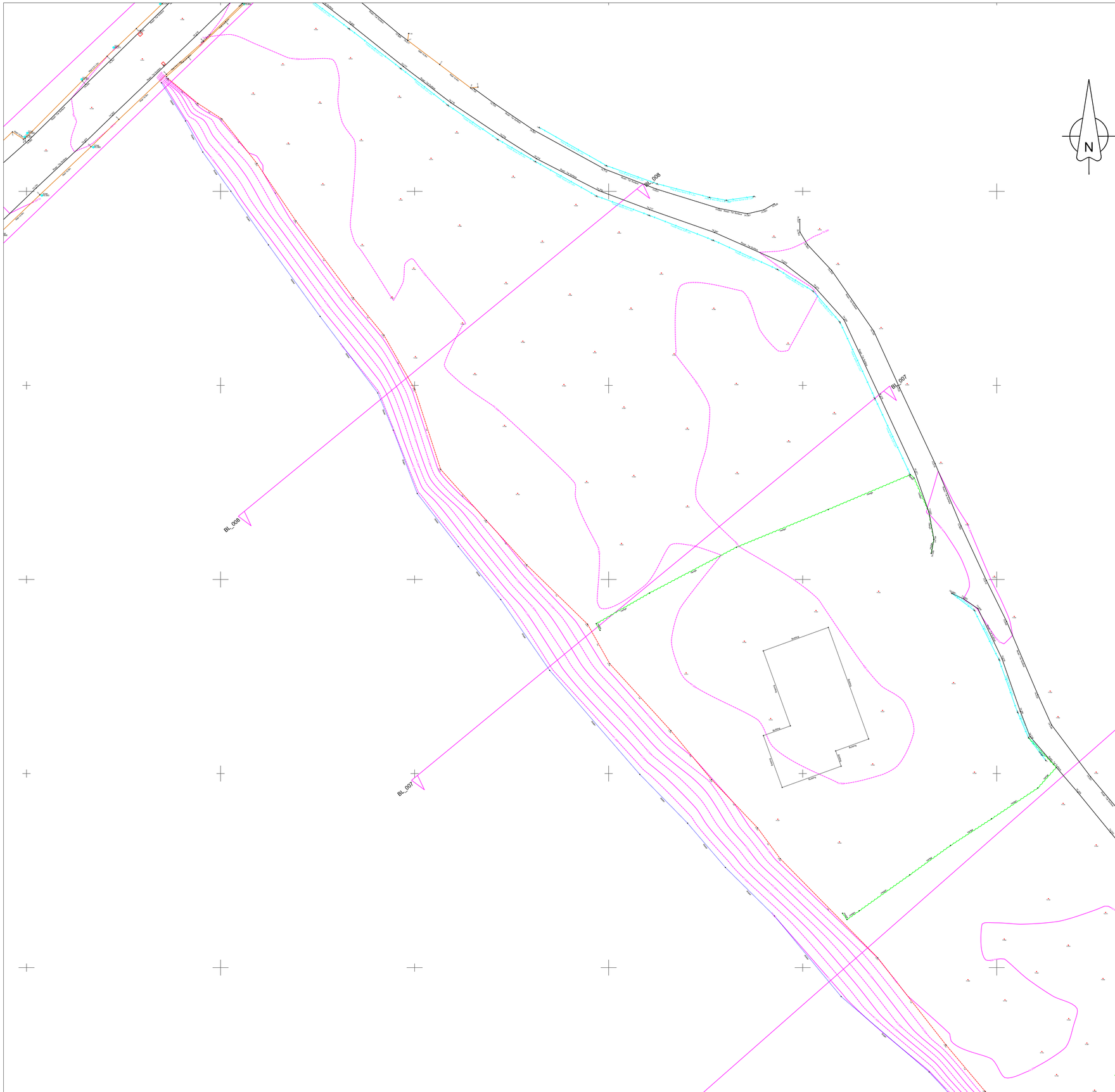
Project
Hawthorn Cottage - Baldovan

Title
Topographic Survey - 2d
West Site - Road

Drawn by	Checked	File
MN	MN	A1

Drawing Number	Revision	Scale
766/2		1:200

Date
19/10/21



Legend

Borehole
Control Station
Gate
Marker
Tree
Stump
Trial Pit

Bottom of bank
Building outline
Bushes
Channel line
Fences
Hedge
Overhead Wires - Electricity
Overhead wires - Telephone
Path
Road centreline
Top of bank
Top of kerb
Tree canopy
Wall
Foul Sewer
Surface Water Sewer

Abbreviations

AV = Air Valve
BT = British Telecom
EA = Eaves Level
EP = Electricity Pole
FFL = Finished Floor Level
FP = Flag Pole
G = Gully
GV = Gas Valve
HY = Hydrant
IL = Invert Level
LP = Lamp Post
MH = Manhole
PEG = Marker Peg
RE = Rodding Eye
RS = Road Sign
SC = Stopcock
SV = Stop Valve
TL = Traffic Light
TOW = Top of Wall
TRP = Trial Pit
TP = Telegraph Pole
TV - Television
WM = Water Meter
WV = Water Valve

Control Stations

Station No.	Description	Easting (m)	Northing (m)	Level (m)
1	Nail in peg	339006.138	734325.849	73.751
2	Nail in tar	338971.177	734357.903	74.002

Notes

1. Contours at vertical features are indicative.
2. Levels for road are taken along channel line.
3. Isolated mature trees are denoted by trunk and average outer canopy.
4. Every effort has been made to locate all service covers but it should be noted that ground cover or local obstructions may hinder the ability to locate covers.
5. All control station coordinates should be checked and verified prior to use
6. All data remains property of Benchmark Land Surveys Ltd until payment has been made in full.
7. All levels to OS Datum (OSGM15 Geoid) unless noted otherwise.
8. North relates to OS Grid North unless noted otherwise.
9. All coordinates relate to OSGB36 (OSTN15)

Revision	Description	Date

Benchmark Land Surveys

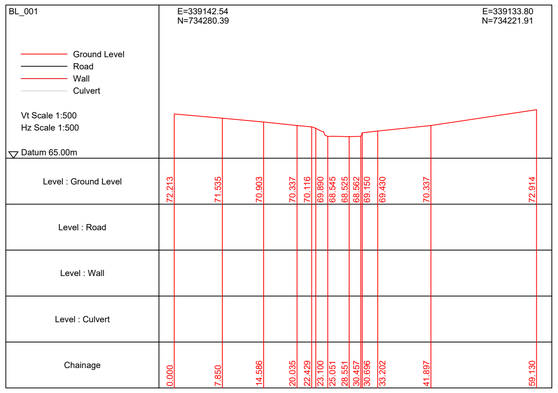
21 Pitempton Road
Dundee DD3 9SZ
T: [redacted]
E: info@benchmarklandsurveys.com
www.benchmarklandsurveys.com

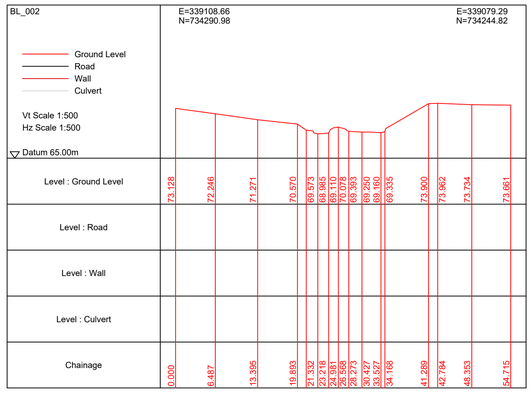
Project
Hawthorn Cottage - Baldovan

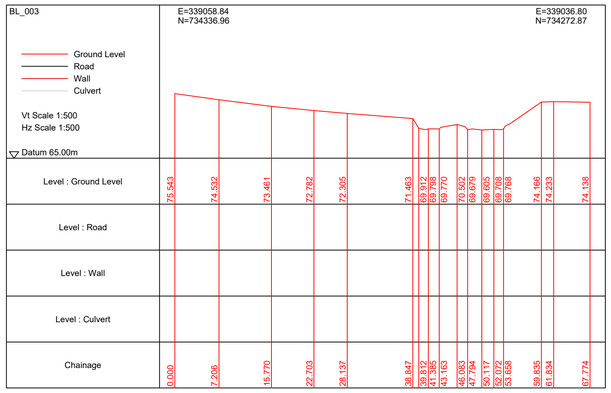
Title
Topographic Survey - 2d
Mid Site - Levels

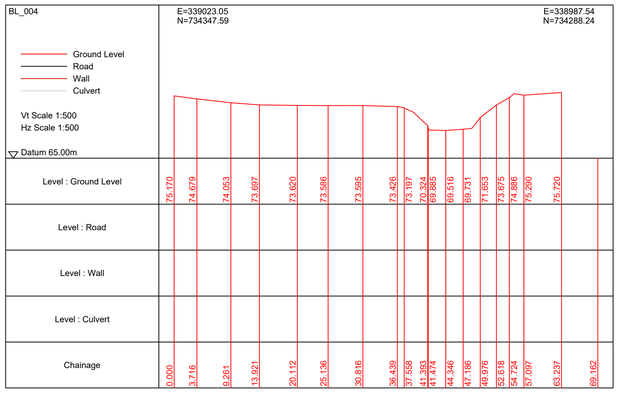
Drawn by	Checked	File
MN	MN	A1

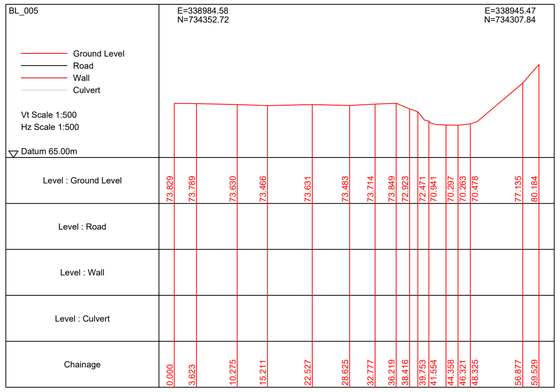
Drawing Number	Revision	Scale	Date
766/5		1:250	7/1/22

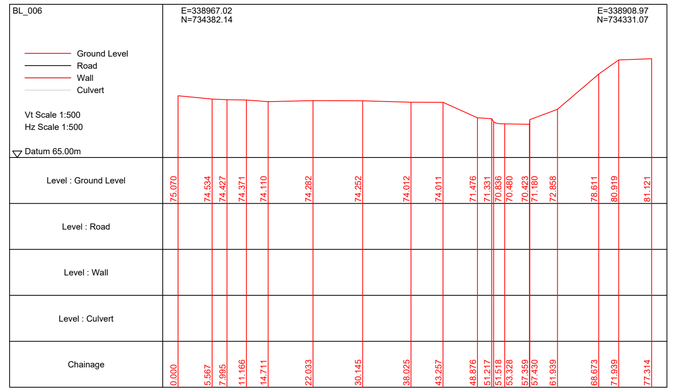


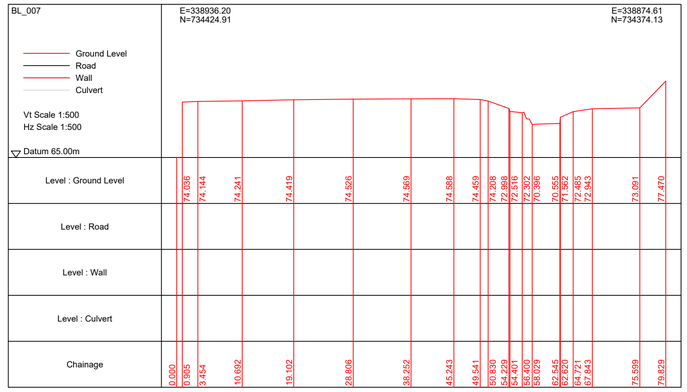


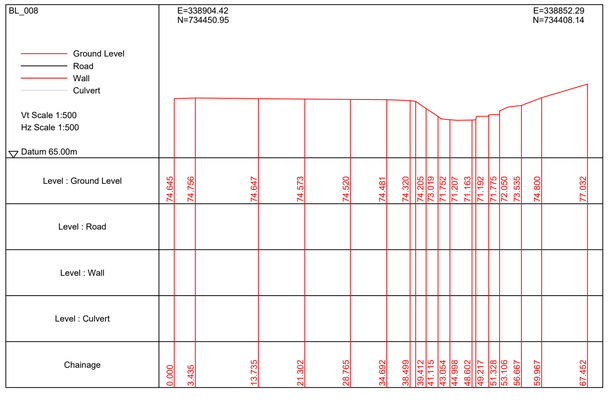


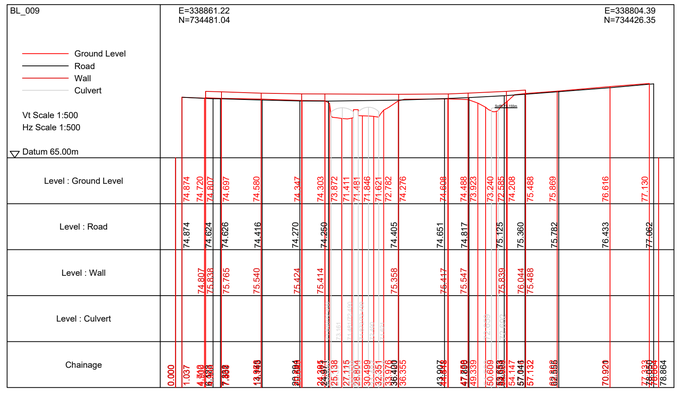


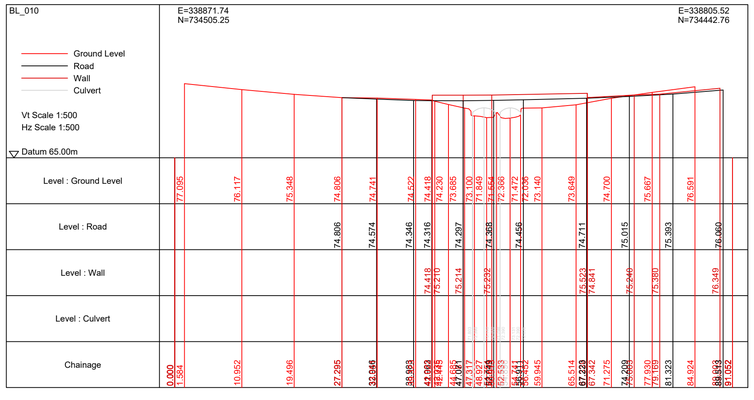


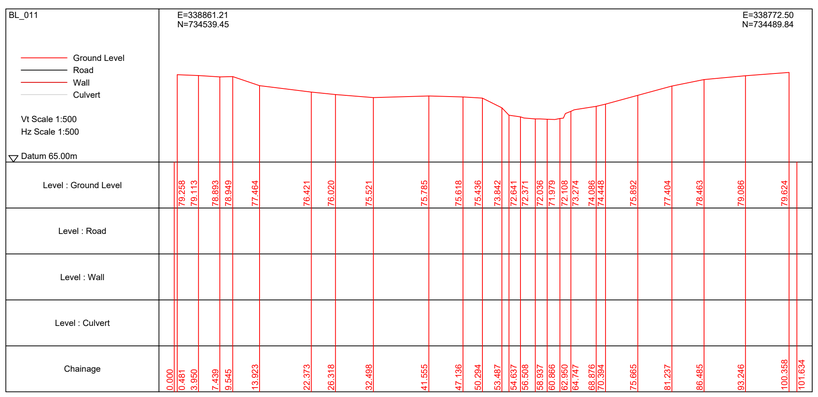


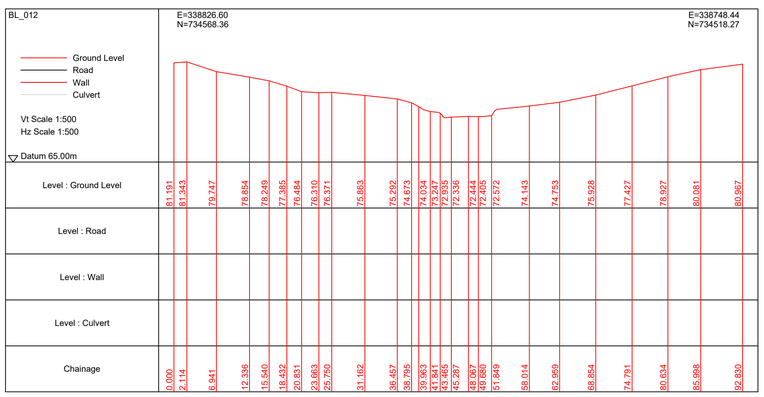












Revision	Description	Date

Benchmark Land Surveys

21 Pitempton Road
Dundee DD3 9SZ
T: [redacted]
E: info@benchmarklandsurveys.com
www.benchmarklandsurveys.com

Project
Hawthorn Cottage - Baldovan

Title
Cross Sections

Drawn by	Checked	File
MN	MN	A1

Drawing Number	Revision	Scale
766/6		1:500

Date
19/10/21

Millard
Structures

Millard
Infrastructure

Millard
Flood Risk

Millard
Environmental

Millard
Hydrology

Millard
Transportation

ISO 14001
REGISTERED FIRM

ISO 9001
REGISTERED FIRM

Building Standards
Approved Certifier
The Scottish Government

Dundee | Perth | Aberdeen
Registered in Scotland No. SC220557
Registered Office: Seabraes, 18 Greenmarket, Dundee DD1 4QB
TA Millard Scotland Ltd trading as Millard Consulting

Bat Survey Report

Ruined Steading
Baldovan Nursery
Baldovan Road
Dundee

August 2019 & August 2021

11 Victoria Street, Newport on Tay, Fife. DD6 8DJ

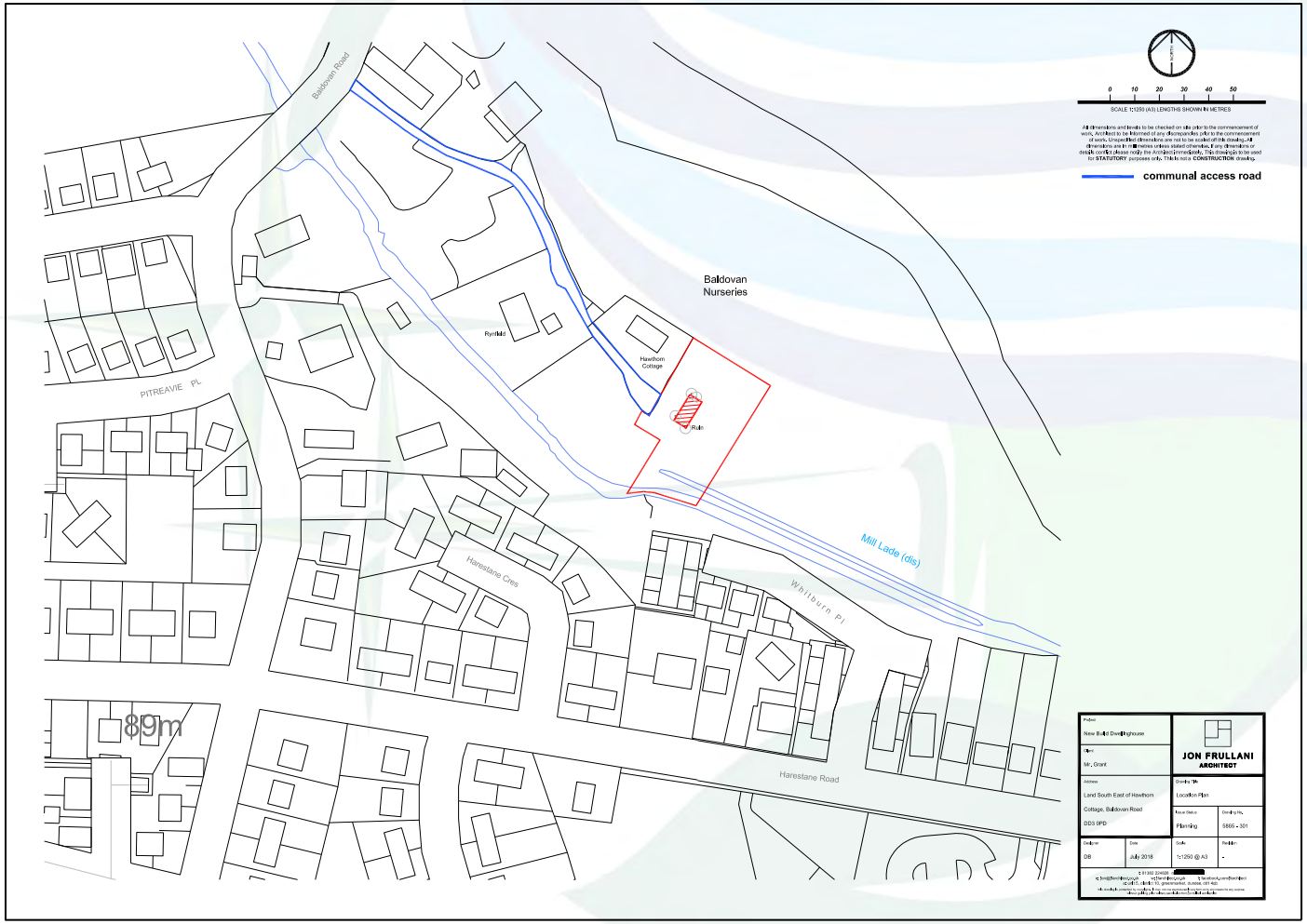


Figure 1. Site location in red.

Introduction

1.1 Licensed bat worker Dr Garry Mortimer was commissioned to carry out bat surveys for the proposed demolition of a small ruined steading situated near Baldovan Nursery just off Baldovan Road, Dundee. This Stage 1 Preliminary Roost Assessment (PRA) survey is as required by Council in regards to a potential planning application. A survey was carried out in August 2019 and no bats were present. Due to time constraints the original survey needed updating and another survey was carried out in August 2021.

1.2 Aims and Objectives

To determine if any bat species are present and roosting in the steading.

1.3 Species Protection Status

Bats are protected under Annex IIa and IVa of the EC Habitats Directive (92/43/EC) as applied in Scotland under the Conservation (Natural Habitats &c.) Regulations 1994, as amended by the Conservation (Natural Habitats, &c.) Amendment (Scotland) Regulations of 2004, 2007 and 2009. This creates a series of criminal offences that can result in substantial fines and/or imprisonment. These offences are listed below and make it illegal;

- To deliberately or recklessly capture, injure or kill bats
- To deliberately or recklessly harass a bat or group of bats
- To deliberately or recklessly disturb a bat wherever they occur in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young
- To deliberately or recklessly disturb a bat while it is hibernating or migrating
- To deliberately or recklessly disturb a bat in a manner that is, or is likely to significantly affect the local distribution or abundance of the species to which it belongs
- To deliberately or recklessly disturb a bat while it is rearing or otherwise caring for its young
- To deliberately or recklessly disturb a bat while it is occupying a structure or place which it used for shelter or protection
- To deliberately or recklessly obstruct access to a breeding site or resting place

of a bat, or otherwise deny the animal use of the breeding site or resting place (note that this protection exists even when the bat is not in occupation)

- To damage or destroy a breeding site or resting place (Note this is a strict liability offence and the prosecution do not have to prove deliberate or reckless intent, merely that the roost was damaged or destroyed)
- To possess or control or transport any live or dead bat which has been taken from the wild or anything derived from a bat or any such part of a bat
- In addition to the above offences it is an offence to knowingly cause or permit such offences to be committed.

Site Description

1.4 The ruined building is a small single storey stone building with only partial collapsed corrugated sheeting present on the roof situated near Baldovan Road Dundee in a rural wooded setting (Figures 2-4).

Figure 2. Front of building with stonework in good condition.

Figure 3. Shell of building with no roof present

Figure 4. Corrugated sheeting onto wooden joists

1.5 Standards and Guidance Followed for Bat Surveys

On August 28th 2019 and August 29th 2021 roost inspection bat surveys (Preliminary Roost Assessment) by Dr. G Mortimer was carried out in accordance with guidance from the BCT.

1.6 Buildings Inspections

The outside and inside of the building was inspected using ladders, endoscope and 10 x 40 binoculars where possible. The building were checked for any potential bat access points, droppings on walls or windows, urine stains, grease marks or other indications that a roost was present.

1.7 Trees

Several semi-mature self-sown sycamore and ash trees are present next to the building. No trees have bat roost potential.

Figure 5. Trees with no bat roost potential.

Results

1.8 Outside Structure of Buildings

Whilst in a ruined condition the standing stonework was of good condition and no potential bat access points available.

1.8 No signs of bats were recorded inside the interior and no bat roost potential was available.

Discussion of Survey Results

1.9 The bat surveys in 2019 & 2021 were undertaken to assess whether there were roosting bats present in the ruined building at Baldovan Road.

1.10 Following BCT Guidance the building was assessed as having negligible potential for roosting bats, that no signs of bats were recorded and that no further survey work will be required.

Conclusion

1.11 No signs of bats were recorded and none are considered to be present. It is considered that the proposed works poses a negligible risk of death or disturbance to European Protected Species and it is safe to proceed.

DISCLAIMER

This report has been prepared by Dr Garry Mortimer of GLM Ecology, with all reasonable skill and care within the terms of the agreement with the client. Dr Mortimer disclaims any responsibility to any parties in respect of matters outside this scope.

Best efforts were made to meet the objectives of this study through desktop study and field survey.

Information supplied by the client or any other parties and used in this report is assumed to be correct and GLM Ecology accepts no responsibility for inaccuracies in the data supplied.

It should be noted, that whilst every endeavour is made to meet the client's brief, no site investigation can guarantee absolute assessment or prediction of the natural environment. Numerous species are extremely mobile or only evident at certain times of year and habitats are subject to seasonal and temporal change.

GLM Ecology accepts no responsibility to third parties who duplicate, use, or disclose this report in whole or in part. Such third parties rely upon this report at their own risk.

Document Prepared By
Dr Garry Mortimer
GLM Ecology