APPENDIX J – Environmental Information

Environmental Baseline Report

Comrie Flood Protection Scheme

Environmental Baseline Report

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For:

Perth and Kinross Council

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1 Introduction

1.1 Project Background

The River Lednock and the Water of Ruchill meet the River Earn within the towns of Comrie and Dalginross, 7 miles (11 km) 8 km west of the town of Crieff in Perthshire. Flood waters from these watercourses have historically resulted in flood damage in Comrie and Dalginross. Significant flooding occurred in the Dalginross area in 1993, 1997 and 2006. The most recent flood events were on the 27th August and 19th November 2012 (see Figure 1 in Appendix A and Figure 1a: Location Plan below).

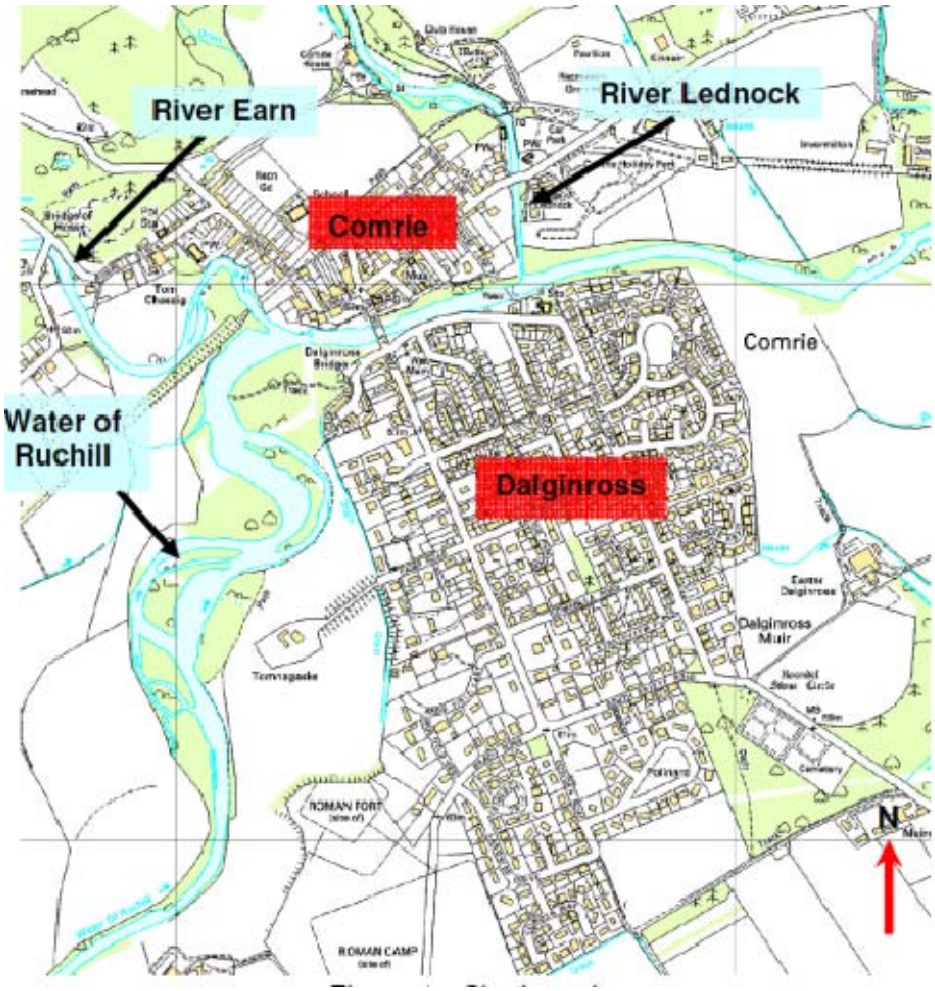


Figure 1a: Location Plan

Previously, Mouchel was engaged by Perth & Kinross Council (PKC) in 2006 and again in 2008 to carry out flood feasibility studies to investigate options to provide flood protection to Comrie. Following the flood in August 2012, PKC commissioned Mouchel to particularly investigate the flood mechanism that allowed flood water from the Water of Ruchill to enter Camp Road and areas close to the property 'Tomnagaske' and to design potential flood protection measures that may alleviate the flooding at this location. During

the development of the Camp Road Flood Protection Scheme a second flood event occurred on 19th November 2012 of a similar magnitude to the flood which occurred on the 27th August 2012. However, the impact of the November flooding was much greater as approximately double the number of properties were affected.

Mouchel has now been commissioned to further develop the previous flood study and in particular to provide details of feasible options to address flood risk in Comrie and Dalginross. As part of this work Mouchel has undertaken a preliminary environmental review to examine existing baseline conditions within the study area and to make further recommendations for environmental assessment.

1.2 Purpose of Baseline Report

The purpose of this baseline report is to identify environmental features which may be impacted by the introduction of the Proposed Scheme or that may constrain development of a scheme. The baseline information presented will be used to inform the development of a proposed scheme. In addition, the information in the report will be used to inform a screening request to determine if a statutory Environmental Impact assessment (EIA) will be required for the Proposed Scheme.

1.3 Report Content

This Baseline Report considers the following environmental parameters are of relevance and information on the following aspects have been included in this report:

- Planning Policy;
- Land Use;
- Landscape Effects and Visual Impacts;
- Ecology and Nature Conservation;
- Cultural Heritage;
- Geology, Hydrology and Water Resources;
- Socio-economy, Public Access and Amenity; and
- Traffic, Noise and Air Quality.

This Baseline Report is split into five sections:

- Section 1 provides background information on the need for a flood protection scheme and explains the purpose of the report.
- Section 2 provides a brief description of the options being considered.
- Section 3 provides methodology adopted for the scoping study, information on the consultation process applied and the outcome of these consultations.
- Section 4 provides baseline information on the study area gathered as a result of the consultation exercise and a desk study of available environmental information. This has been supplemented by a site visit.
- Section 5 makes recommendations on further environmental assessment.

2 Options

2.1 Background

Perth & Kinross Council's aim is to deliver a fully designed flood protection scheme to mitigate the effects of flooding in Comrie and Dalginross. The following options have been considered as part of this baseline study (see Figure 2 Scheme Extents and Wider Setting):

- Traditional flood walls and embankments
- Upstream flood water storage on River Earn
- Upstream flood water storage on Water of Ruchill
- Upstream flood water storage on the River Lednock

2.2 Primary Flood Protection Measures

The potential extent of the flood protection options is shown in Figure 2. An outline design for the scheme is currently being developed and will be based on the results of hydrological and hydraulic assessment, geotechnical and structural analysis.

Flood walls are proposed along the left and right banks of the River Earn, through the town centre, with the wall on the left bank also extending further west beyond the confluence with the Water of Ruchill. The wall on the right bank of the Earn extends southward at the Water of Ruchill confluence where it is set back from the watercourse following the line of an existing concrete wall. The options include the removal of this concrete wall.

Flood walls are also proposed along both banks of the River Lednock / Lednock Burn from its confluence with the Earn.

From the River Lednock confluence, a flood embankment extends along the left bank of the River Earn. A flood embankment is also proposed around the eastern edge of Dalginross.

Flood storage areas may also form part of the proposed scheme and three such areas have been identified where water could be temporarily stored upstream of Comrie during a flood event (see Figure 2). This would necessitate some local lowering of the land within these sites.

3 Methodology

3.1 Overview

The baseline information contained within this report has been collated from a desk study. It is recommended that consultation with statutory and non-statutory bodies is undertaken in conjunction with a site walkover to inform of any further environmental assessment. The following data sources have been used:

- Scottish Planning Guidance
  - http://www.gov.scot/Topics/Built-Environment/planning/Roles/Scottish-Government/Guidance
- National Planning Framework Scotland
  - http://www.gov.scot/Topics/Built-Environment/planning/National-Planning-Framework
- Scottish Planning Policy
  - http://www.gov.scot/Publications/2014/06/5823
- TAY Plan
  - http://www.tayplan-sdpa.gov.uk/
- National Scenic Areas
  - http://www.snh.gov.uk/protecting-scotlands-nature/protected-areas/national-designations/nsa/
  - http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa_code=9145
  - http://crtb.sedsh.gov.uk/spatialDataDownload/dload.asp
- Perth and Kinross Local Development Plan
  - http://www.pkc.gov.uk/Local-Development-Plan
- Protected Species Record:
  - https://data.nbn.org.uk/https://data.nbn.org.uk/Reports/10km_Grid_Square/Selector/NN
- EU Protected Species list of those found in Scotland
  - http://www.snh.gov.uk/docs/B551085.pdf
- Listed Buildings and Heritage
  - http://data.historic-scotland.gov.uk/pls/htmldb/
- Core Path Plan
  - http://www.pkc.gov.uk/corepaths

4 Baseline Information

4.1 Introduction

This chapter provides baseline environmental information for the study area. The study areas and potential areas of influence are defined in Figures 3, 4 and 5.

4.2 Planning Policy

In the UK, development is guided and regulated through national, regional and local planning policy.

The National Planning Framework 3 (NPF3) for Scotland published in June 2014 sets out a vision of Scotland, guiding Scotland's development for the next 20 to 30 years and setting out strategic development priorities to support the Scottish Government's central purpose - promoting sustainable economic growth. Planning authorities are required to take NPF3 into account when preparing development plans and it is a material consideration in the determination of planning applications.

The Planning Framework complements the statements of national planning policy set out in the Scottish Planning Policy (SPP). Planning Advice Notes (PANs) and circulars also provide guidance on planning issues.

Development Plans (Structure and Local Plans) form the basis on which decisions about development and future land use are made, and effectively incorporate national, regional and strategic policies within the local framework.

A Strategic Development Plan ("TAYplan") was adopted in June 2012 by Perth & Kinross, Dundee, Angus and Fife Councils. The TAYplan identifies the general scale and location of new development and infrastructure for the Perth & Kinross area within which Comrie and Dalginross are situated. The Perth & Kinross Local Development Plans show the detail of what development should take place for the next ten years reflecting the TAYplan strategy.

At a more local level, the Perth & Kinross Council Local Development Plan (LDP) approved in 2014 sets out the vision for how the region should develop up to 2024 and beyond. The current LDP will be replaced by the Perth and Kinross Local Development Plan 2 2018:2023 which is in preparation. The LDP forms the framework for making decisions on planning applications. The Plan provides all relevant policies and proposals that should be considered for any development proposal. It outlines the means by which sensitive areas are protected from the adverse effects of development and by which sustainable development can be achieved.

The LDP policies of relevance to the proposed flood protection scheme that should be considered further during any further detailed assessment are as follows.

4.3 Local Policy

The following local policies within the LDP are considered applicable to the environmental aspects or to the wider scheme.

Place-making Policies:

- Policy PM1: Place making
- Policy PM2: Design Statements
- Policy PM3: Infrastructure Contributions

Community Facilities, Sport and Recreation:

- Policy CF1: Open Space Retention and Provision
- Policy CF2: Public Access

The Historic Environment:

- Policy HE1: Scheduled Monuments and Non-Designated Archaeology
- Policy HE2: Listed Buildings
- Policy HE3: Conservation Areas
- Policy HE4: Gardens and Designed Landscapes
- Policy HE5: Protection, Promotion and Interpretation of Historic Battlefields

The Natural Environment:

- Policy NE1: Environment and Conservation Policies
- Policy NE2: Forestry, Woodland and Trees
- Policy NE3: Biodiversity
- Policy NE4: Green Infrastructure
- Policy NE5: Green Belt

Environmental Resources:

- Policy ER5: Prime Agricultural Land
- Policy ER6: Managing Future Landscape Change to Conserve and Enhance the Diversity and Quality of the Area's Landscapes

Environmental Protection and Public Safety:

- Policy EP1: Climate Change, Carbon Reduction and Sustainable Construction
- Policy EP2: New Development and Flooding
- Policy EP3: Water Environment and Drainage
- Policy EP4: Health and Safety Consultation Zones
- Policy EP12: Contaminated Land
- Policy EP15: Development within the River Tay Catchment Area

Environmental Resources

- Policy ER6: Managing Future Landscape Change to Conserve and Enhance the Diversity and Quality of the Area's Landscapes

4.4 Land Use

The proposed flood walls and embankments are located alongside the River Earn, River Lednock and Water of Ruchill which flow through the town of Comrie. Land use is therefore generally described as urbanised, with some riparian amenity areas adjacent to the River Earn. A main river crossing provides a road linkage between Comrie with Dalginross at Bridge Street. A network of footpaths and paved footways run adjacent to the River Earn and thereby provide public access close to the watercourse (see Figure 2).

The banks of the River Lednock comprises riparian woodland/scrub habitat and the edges of gardens associated with residential properties. A caravan park is situated close to the confluence of the Earn and the Lednock.

Land use associated with the proposed flood storage areas comprises flood plain land currently used for agricultural or for informal open space/recreation and woodland along the River Earn and Water of Ruchill. Current agricultural land use mainly comprises improved grassland and arable, with some intermittent interconnecting field boundaries. These areas are frequently bordered by trees/woodland, but there no information has been obtained that suggests these wooded areas have any specific commercial value.

4.5 Landscape and Visual Amenity

4.5.1 Landscape Designations

The options are not located in areas particularly designated for their landscape value; however, once such site does lie within the wider study area. The River Earn (Comrie to St Fillans) National Scenic Area, shown on Figure 2 is situated to the west.

National Scenic Areas (see Figure 2) are Scotland's only national landscape designation and constitute those areas of land considered of national significance on the basis of their outstanding scenic interest. They have been selected for their characteristic features of scenery comprising a mixture of richly diverse landscapes including prominent landforms, coastline, sea and freshwater lochs, rivers, woodlands and moorlands. LDP Policy ER6: 'Managing Future Landscape Change to Conserve and Enhance the Diversity and Quality of the Area's Landscapes' indicates that development and land use change should be compatible with the distinctive characteristics and features of Perth & Kinross's landscapes and that priority will be given to safeguarding and enhancing the landscape of National Scenic Areas.

4.5.2 Landscape Character

Comrie lies west of Crieff where the broad valley of Strathearn narrows at the respective confluences of the Water of Ruchill and River Lednock with the River Earn (see Figure 1).

According to SNH's Tayside Landscape Assessment[1] Comrie falls within the regional character area, Tayside Lowlands, and within the Broad Valley Lowlands landscape character area, defined as follows:

"*These areas* (the 5 broad lowland glens or straths) *share a range of common characteristics which set them apart from other valleys and glens. There are, however, significant variations in landscape character within this type. Strathearn, extends from Crieff eastwards to the Bridge of Earn, and to the south is the enclosed slopes of the Ochills, while to the north the Gask Ridge separates it from the valley of the Pow Water. Strathearn is considerably narrower and less extensive than other broad lowland glens and the River Earn is more prominent feature in the landscape, its broad meanders swinging back and forth across the floodplain. Overall, the strath retains a rich, well-wooded agricultural landscape, particularly towards the east*."

At a more local level, the landscape of the flood storage areas comprises flat floodplain which is influenced by agricultural practices and informal recreational use. Woodland is also a feature of the landscape, generally associated with the riparian corridor of the Water of Ruchill and the River Earn and the boundary edges of fields.

The location for the flood walls and embankments can generally be characterised as an urban landscape associated with the centre of Comrie, although the riverside setting and amenity grassland areas does increase the value of the landscape within this urbanised context.

4.5.3 Visual Amenity

In terms of potential visual receptors within and in the vicinity of the proposed flood protection measures, there are several residential properties / gardens and the caravan site in close proximity where views of the river may be gained. Views may also be gained from the local road network and residential properties (see Figure 2).

4.6 Ecology and Nature Conservation

4.6.1 Nature Conservation Designations

There are three International/European Designated Sites within 10km of the options (see Figure 3).

The Upper Strathearn Oakwoods Special Area of Conservation (SAC) is divided into three separate areas situated immediately northwest and southeast of Comrie. The first area lies adjacent to the River Lednock approximately 130m to the north west of the proposed flood wall locations and 2 km to the east from the River Earn storage area, the second Upper Strathearn Oakwood SAC is situated 400m to the north of the proposed flood wall and 1.6km to the south of the Lednock storage area and the third is approx. 7km to the south east of the flood wall. This site covers an area of approx. 150 hectares (ha) and is designated for its old sessile oak woods with *Ilex* and *Blechnum*. The site includes one of the most extensive deciduous woodlands in Tayside, formerly managed

[1] Land Use Consultants (1999). Tayside Landscape Character Assessment. Scottish Natural Heritage Review No. 122.

for coppice wood production. One of the woods is also of national importance for its lichen flora.

The Glenartney Juniper Wood SAC is situated approximately 600m to the south of the Water of Ruchill storage Area and is approximately 101ha in size. Glenartney holds the largest extent of *Juniperus communis* formations in Tayside at the southern edge of the Scottish Highlands. The juniper occurs widely at moderate altitude within a wide range of habitat mosaics, including acidic heaths, rush-pasture, bracken *Pteridium aquilinum* and grasslands.

The South Tayside Goose Roosts Special Protection Area (SPA) and RAMSAR site, designated under the Birds Directive, is situated 9.2km to the east of the Water of Ruchill storage area and 7.5 km to the south east of the proposed flood walls. There is second section to the South Tayside Goose Roosts, approx. 15km to the south of the proposed options, but it is thought to be outside the area of influence. The South Tayside Goose Roosts SPA covers an area of approximately 331ha. This site qualifies under Article 4.2 of the Birds Directive (79/409/EEC) by supporting populations of European importance of the following migratory species:

- Over winter populations if Greylag Goose *Anser anser*; and
- Over winter populations of Pink-footed Goose *Anser brachyrhynchus*.

It also qualifies for the SPA status as it regularly supports at least 20,000 waterfowl.

SACs and SPAs are strictly protected sites designated under the EC Habitats Directive and the Birds Directive respectively and are called Natura sites. They are internationally important for threatened habitats and species. Natura sites form a unique network of protected areas which stretches across Europe. SACs are included under Policy RC1 (Town and Neighbourhood Centres), and RD3 (Housing in the Countryside) of the Perth and Kinross LDP. SPAs and SACs are included under Environment and Conservation Policy NE1 (International Nature Conservation Sites) of the Perth and Kinross LDP.

There are three Special Sites of Scientific Interest (SSSI) within 1km of the proposed options (see Figures 4b, 4c and 4d), Comrie Woods SSSI, Glenartney Juniper Wood SSSI and Craig More SSSI.

Craig More SSSI (see Figure 4b and 4d) is located on the north side of the A85, one mile to the east of the village of Comrie and approx. 500m to the northeast of the proposed flood wall. This site is designated for its geological attributes and is therefore discussed under Section 4.8.

The Comrie Woods SSSI (see Figure 4b and 4d) is situated immediately south of the Lednock holding area. Comrie Woods SSSI forms part of the Upper Strathearn Oakwoods SAC, important for its upland oak woodland. The site is in two sections; the western section lying on the low hillsides to the west of the minor road running from Comrie up Glen Lednock and the eastern section situated on both sides along the River Lednock. The SSSI covers the woodlands in the valley of the River Lednock together with Pollyrigg and Twenty Shilling Woods which lie on two hills to the west of Glen Lednock.

Comrie Woods was selected as a SSSI on the basis that it represents one of the largest areas of sessile oak wood in Perth and Kinross. There is a good diversity of woodland

habitat types with some areas of alder wood and fragments of richer woodland, including ash, hazel, and wych elm, in the gorge adjacent to the River Lednock. The total broadleaved woodland area (not continuous) is 81.4 hectares. The woodland is mainly of Ancient Semi-Natural origin and is notable for a few exotic tree species; namely mature and regenerating beech which is a threat to the oak wood in the long term.

Glenartney Juniper Wood SSSI (see Figure 4c) is situated within the Glenartney Juniper Wood SAC (see above for designation description) 600m to the south of the Water of Ruchill storage area.

SSSIs are those areas of land and water considered to best represent our natural heritage - its diversity of plants, animals and habitats, rocks and landforms, or combinations of such natural features. SSSIs are designated and protected by the Nature Conservation (Scotland) Act 2004 and the Wildlife and Natural Environment (Scotland) Act 2010. SSSIs are protected from inappropriate development by the Strathmore and Glens Area Spatial Strategy of the Perth and Kinross LDP.

4.6.2 Woodland and trees

No Tree Preservation Orders (TPO) have been identified within the study area to date however Comrie is a Conservation Area. All trees in the Conservation Area are protected if they have a stem diameter of 75 millimetres measured at 1.5 meters from ground level. All trees in a Conservation Area are protected from pruning, lopping or felling without prior application to the Local Authority.

There are, however, areas of ancient woodland and long-established woodland within the study area, as shown on Figures 4a to 4d.

4.6.3 Protected Species Records

A desktop search of the National Biodiversity Network (NBN) and SNH records indicate that the following species of conservation concern are potentially within 2km of the extent of the options:

- Grey squirrel *Sciurus carolinensis*
- Red squirrel *Sciurus vulgaris*
- Pipistrelle bat *Pipistrellus pipistrellus*
- Soprano bat *Pipistrellus pygmaeus*
- Otter *Lutra lutra*
- Slow worm *Anguis fragilis*
- Atlantic salmon *Salmo salar*
- Sea Trout *Salmo trutta* and
- Lamprey *spp.*

The River Earn, the Water of Ruchill and the Lednock Water/Burn are all protected under the EC Freshwater Fish Directive (2006/44/EC) as salmonid waters.

Further consultation with statutory and non-statutory consultees will be undertaken to establish species records and to inform further surveys on completion of the outline scheme design.

4.7 Cultural Heritage

4.7.1 Overview

There are several designated sites / features of cultural heritage interest within the vicinity of the Proposed Scheme. These sites and their designations are listed below and indicated on Figures 5a to 5d.

4.7.2 Scheduled Ancient Monuments

Scheduled Ancient Monuments (SAMs) are nationally important sites and monuments that are legally protected under the Ancient Monuments and Archaeological Areas Act 1979.

There are no SAMs adjacent to the flood protection options, however the following SAM lies approximately 300m to the south of the Comrie flood defence shown on Figure 5d:

- Dalginross, Roman Fort and Camp, and stone circle – comprises the remains of a Roman fort and temporary camp represented by cropmarks, and a stone circle of prehistoric date.

Policy HE1 of the Perth and Kinross LDP covers the protection of Scheduled Ancient Monuments.

4.7.3 Listed Buildings

Listed Buildings (or structures) are notified due to their special architectural or historic interest. There are three categories of Listed Building: Category A (national or more than local importance); Category B (primarily local importance); and Category C(S) (may have been altered but retain elements of interest).

There are a number of Listed Buildings within Comrie and Dalginross (see Figure 5d), including the following:

- the Dalginross Bridge over the River Earn (Cat C);
- numerous properties on the left bank of the River Earn, set back along the river frontage and adjoining streets along Drummond Street, Dundas Street and Burrell Street (Cat A, B and C);
- old parish church (now Comrie Youth Centre Flambeaux Club) Dunira Street (Cat A) and church yard (Cat B);
- war memorial institute Bridgend (Cat C);
- Comrie post office buildings Bridge Street (Cat C);
- Comrie and Strowan parish church (Cat C);
- Schoolhouse Dundas Street (Cat B);
- Dunira Sawmill (Cat B);

- Dalchonzie Mill Bridge of the River Earn (Cat C);
- Bridge of Ross over River Earn (Cat B); and
- properties in the centre of Dalginross along Bridge Street and other adjoining streets, away from the location of the proposed flood defences;

Policy HE2 of the Perth and Kinross LDP insures that Listed Buildings are protected from unsympathetic alterations or works within the curtilage or in the general vicinity of the building which could damage the character of the building and/or impact on its setting.

4.7.4 Designed Landscapes

The Inventory of Historic Gardens and Designed Landscapes in Scotland, identifies those sites which are considered by SNH and Historic Scotland to be of national importance and which merit protection. The following such sites are situated in the study area (see Figures 5a and 5d):

- Dunira (see Figure 5a) – a 340 ha site in which the northern section of the River Earn storage area is situated.
- Aberuchill Castle (see Figure 5d) – a 308 ha site situated approximately 500m to the west of the flood walls and embankments.

Policy HE4 of the Perth and Kinross LDP seeks to protect and enhance Historic Gardens and Designed Landscapes and therefore considers development affecting the integrity of these sites through direct impact or impacts on their setting.

4.7.5 Conservation Area

The area of Comrie (see Figure 5d) to the north of the River Earn is identified as a Conservation Area. The south western quarter of the town to the south of the River Earn, is also identified as a Conservation Area and, in accordance with General Policy HE3 of the Perth and Kinross LDP development within the Conservation Area must “preserve or enhance its character or appearance. The design, materials, scale and siting of new development within a conservation area, and development outwith an area that will impact upon its special qualities should be appropriate to its appearance, character and setting”.

4.7.6 Other Archaeological Features

Other numerous sites and features have been recorded throughout the study area (both on the National Monuments Record of Scotland (RCAHMS) and the Scottish Sites and Monuments Record (local authority) and are generally associated with the designated sites listed above.

Further consultation will be undertaken with relevant statutory and non-statutory organisations to inform the identification and assessment of heritage assets.

4.8 Geology, Hydrology and Water Resources

4.8.1 Designated Sites

There are no geological Sites of Special Scientific Interest (SSSI), Regionally Important Geological Sites (RIGS) or other designated sites of geological value adjacent to the proposed options.

Craig More geological SSSI lies on the wooded slopes of Craig More approx. 500m northeast of the flood walls and covers an area of around 28 hectares (see Figures 4b and 4d). This SSSI contains excellent exposures of a large body of igneous rock (rock formed through the cooling of molten rock, or magma) called the Comrie Pluton. This pluton would have been formed about 400 million years ago by the cooling and crystallisation of magma deep within the Earth. This example is part of a large suite of plutons across the Highlands and Southern Uplands, collectively known as the Newer Caledonian Granites. Craig More SSSI is important both historically, as one of the places where this type of metamorphism was first studied, and for research and education.

4.8.2 General Geology

In terms of general geological conditions, two major groups and ages of rocks are found in the Strathearn area of Perthshire. These are separated by the Highland Boundary Fault (HBF) which is a major fracture running NE - SW across Scotland. To the north of the fault line lie the crystalline metamorphic rocks of Precambrian to Lower Cambrian age (older than 590Ma) of the Scottish Highlands. These contain igneous intrusions of Caledonian age. South of the HBF are younger sedimentary rocks with lava extrusions (Lower Devonian) which form the Ochil Hills on the southern fringes of Strathearn. The relative hardness of Highland metamorphic rocks, the sediments and the lavas have resulted in erosion into the 3 different landscapes of present day Strathearn: the craggy Highlands rising to 985m, the relatively flat valley floor and the modest Ochil Hills. Comrie lies just to the south of the HBF.

The Comrie and Dalginross areas are located on the Upper Earn bedrock and localised sand and gravel aquifers. Part of these aquifer are considered to be Water Protection Zones but none of the proposed options is within this zone.

4.8.3 Surface Water and Water Quality

The EC Water Framework Directive (WFD) was introduced to national legislation through the Water Environment and Water Services (Scotland) Act 2003. The Directive, through the Act, introduces a different approach to the management and regulation of the water environment than previous regimes. A central part of this Directive is the preparation of River Basin Management Plans that aim to protect and improve the water environment from current status.

The River Earn emerges from the eastern end of Loch Earn at St Fillans (Loch Earn itself extends some 10.5 km from St Fillans to Lochearnhead). The River Earn flows 51 km eastwards through Strath Earn, eventually meeting the River Tay at the head of the Firth of Tay near Bridge of Earn and discharging to the Tay Estuary. On its course it passes the settlements of Comrie and Crieff and is crossed by bridges at Kinkell, Dalreoch, Dupplin and Bridge of Earn.

The Water of Ruchill is a tributary of the River Earn, which drains east to the Firth of Tay. The Ruchill drains a 99.5 km^2 area of diverse and steep topography – the altitude ranges from 984m at Ben Vorlich to less than 80m at the point where the Ruchill discharges into the River Earn at Comrie.

The River Lednock rises as headstreams on the slopes of Ruadh Mheall and flows eastward passing through Loch Lednock then south, through Glen Lednock to join the River Earn at Comrie. The Falls of Lednock, which include the Deil's Caldron, are located on the river a mile (1.5 km) north of Comrie.

After prolonged periods of rainfall within these catchments the ground becomes saturated and further rainfall causes the rivers to rise rapidly - this is most pronounced in the case of the Ruchill. Water can be held back in Loch Earn by a gating system, but for only a limited period of time.

Under the WFD, there are ecological status and chemical status classification schemes for surface waterbodies, with differing ecological status classification schemes for rivers, lakes, transitional waters and coastal waters. Heavily modified and artificial water bodies are assessed in relation to their ecological potential and chemical status.

The quality elements relevant in assessing ecological status and ecological potential for surface waters are:

- Biological quality elements (covering algae, plants, fish and invertebrates);
- General physico-chemical quality elements;
- Environmental Quality Standards (EQSs) for specific pollutants (i.e. synthetic and non-synthetic pollutants); and
- Hydromorphological quality elements.

Surface water bodies are assigned to one of five ecological status classes (high, good, moderate, poor or bad) or one of five ecological potential classes (maximum, good, moderate, poor or bad). The status assigned is determined by the worst classed quality element.

There are two surface water chemical status classes; Good and Not Good. ‘Not good’ applies if an EQS for one or more relevant priority substances or dangerous substances is exceeded. The surface water chemical status classification scheme is common to all surface water bodies.

To achieve overall “good status”, a surface water needs to be at least good for ecological and chemical status.

The classification data shown in Table 1 below has been obtained for the three watercourses under consideration.

Table 1: Water Framework Directive River Classification Data

River	Overall Status (at 2008)	2015 Objective	2021 Objective	2027 Objective
Water of Ruchill	High	High	High	High
River Earn (Loch Earn to Water of Ruchill confluence) – upstream of Comrie	Moderate (ecological potential) – heavily modified	Moderate	Moderate	Moderate
River Earn (Water of Ruchill to Ruthven Water confluence) – downstream of Comrie	Good	Good	Good	Good
River Lednock/Lednock Burn	Bad (ecological potential) – heavily modified	Bad	Good	Good

The current status of the Water of Ruchill and the River Earn, downstream of Comrie, meets the requirements of the WFD therefore it is important to ensure that no deterioration from good status occurs.

4.9 Socio-economy, Public Access and Amenity

4.9.1 Socio-economy

Aspects of socio-economy relevant to this study relate to the following:

- Land use and agricultural practices.
- Fishing activity along the three watercourses.

These aspects may be influenced by the options and therefore will require further consideration and detailed assessment.

4.9.2 Public Access and Amenity

Under the Land Reform (Scotland) Act 2003, local authorities are required to produce a Core Path Plan which includes “a system of paths sufficient for the purpose of giving the public reasonable access throughout their area." Such paths may include rights of way, other existing paths or tracks, paths created by a path agreement or any other routes, waterways or places where people may cross land. A Core Paths Plan (January 2012) has been produced by Perth & Kinross Council and core paths identified within the study area include the following:

In the vicinity of the flood wall and embankments (see Figure 2):

- From the north of the River Earn in Comrie incorporating Monument Road, Burrell Road, School Road, Dunira Street, Neville Lane, Bark O Toon Lane, Nurses Lane and along the B827 (Bridge Street).
- South of the River Earn from Bridge Street through Dalginross, along Field of Refuge, Camp Road, along South Crieff Road, Cowden Road and around the edge of the housing estate to the east of Cowden Road.

- From Dundas Street along School Road and Melville Lane to the north of the River Earn and the A85, routing past the caravan park to join the line of a dismantled railway.
- On the eastern side of Dalginross, on the right bank of the River Earn, a core path arises off Strowan Road and routes close to the river.
- On the western side of Dalginross, at the Bridge Street crossing of the River Earn, a core path meanders to the floodplain and banks of the Water of Ruchill.

In terms of public amenity in the town centre, there are areas of open space / parkland adjacent to the River Earn. With regard to the proposed flood storage areas, access is available via the local road network and a series of tracks and paths. There is an informal path across the Water of Ruchill floodplain and adjacent to the river and this route is being promoted as a Core Path as indicated above.

Core paths in the vicinity of the upstream storage areas (River Earn and Lednock) have been identified as (see Figure 2):

- Along the southern bank of the River Earn between Dalchonzie Fruit Farm and Riverside Wild Garden. This core pathway passes through the River Earn storage area.
- Along the western bank of the River Lednock between the river and Monument Road. This core pathway passes to the south east of the River Lednock storage area.
- Through Laggan Wood along the eastern bank of the River Lednock. This core pathway passes through the River Lednock storage area.

4.10 Traffic, Noise and Air Quality

Comrie and Dalginross are served by trunk road links (the A85) from the east and west, with a B-road link from the south. It has the usual local road and public access arrangements associated with a small size town. As with all town centres, there are elevated air and noise emissions mainly associated with traffic and day-to-day activities of residents and visitors. Ambient air quality in the vicinity of the flood protection options is, however, anticipated to be relatively good considering the size of the surrounding built up area. As the embankments and walls are situated within an urban area, traffic emissions are anticipated to comprise the main source of air pollution. Similarly, the emissions associated with the three storage areas will arise from use of the local road network. The construction of the options is likely to increase the volume of Heavy Duty Vehicles using the local roads, further assessment may be necessary to quantify the likely effect on local air quality and dust deposition from the construction works and associated traffic.

The Proposed Scheme is located in areas which can be described as generally being quiet in terms of ambient noise levels. There are, however, several locations where the proposed flood measures are adjacent to roads, individual residences or the edges of built up areas. In the absence of noise level data, existing background noise sources are

assumed to be relatively low and, as for air quality, mainly associated with vehicular use of the local road network.

No significant existing sources of noise nuisance have been identified.

5 Key Potential Impacts

5.1 Introduction

This chapter presents an outline of the potential environmental impacts and issues that may need to be considered further through detailed environmental assessment. The following summary of potential issues describes both the potential positive or negative impacts on the physical, natural and human environment, which might result from the implementation of the flood protection options.

5.2 Summary of Key Issues

Key environmental issues where potential impacts (positive and negative) may arise are identified as follows:

- Beneficial effect of reduced flooding in the town centre.
- Negative temporary impacts from construction activities and permanent earthworks on landscape character / visual amenity.
- Negative visual impacts to receptors associated with the proposed wall and embankments.
- Adverse effects on flora and fauna, including protected habitats and species, due to temporary and permanent loss of habitat, construction disturbance and pollution.
- Impacts on breeding bird habitat. A range of common birds may nest in trees, scrub, ground cover or in riparian vegetation.
- Opportunity to enhance habitats for fauna within the catchment through wetland creation.
- Indirect impact on setting of SAMs, listed buildings and conservation area.
- Permanent loss / temporary loss / disturbance of agricultural land as a result of requirement for flood storage areas and water inundation.
- Implications for existing hydrogeological regime and hydrogeomorphology of watercourses - erosion, deposition and sediment transport.
- Impacts on access, e.g. public footpaths and cycleways, and amenity areas during construction and, potentially, operation.
- Opportunity to increase public amenity through landscaping enhancements.
- Sensitive receptors may experience temporary disturbance to the road network during the construction phase.

It is proposed that the above aspects will form the basis of any further and more detailed environmental assessment deemed necessary. Other aspects will be included where relevant and identified through EIA screening and scoping and further development of the scheme design.

There are specific impacts, explained below, which could inform scheme design and should be considered before seeking a screening opinion for a proposed scheme.

Construction of the River Earn or Water of Ruchill storage areas is unlikely to give rise to significant impacts. However, impacts that will require further assessment could include, but not be limited to; dust deposition, increased sedimentation and accidental spillages. These impacts are envisaged to be temporary, relatively short term and mitigated through the use of sensitive and appropriate construction methods outlined in a Construction Environment Management Plan (CEMP).

There is one listed building close to the proposed storage area on the River Earn but with the introduction of screening the potential impacts to the setting of this building are likely to be reduced. Due to the size of this storage area a portion of ancient woodland would be inundated with water and potentially removed. There is also a core path that runs through the proposed area which would need to be stopped up or diverted.

The Water of Ruchill storage area is also located in an area of ancient woodland which would be inundated with water or removed. Avoidance of ancient woodland is recommended although it has no statutory protection from development within it. A further Habitat Regulation Assessment (HRA) would be required to determine impacts to the Glenartney Woods SAC.

The River Lednock storage area is located within agricultural land which would be inundated but this is unlikely to give rise to significant impacts. However, this storage area is located adjacent to and upstream of the Upper Strathearn Oakwoods SAC and Comrie Woods SSSI. The construction and operation of this storage area could lead to direct and significant impacts to the flora and fauna which are present in the SAC and downstream as the natural flow and retention of water through the site could be altered by the control of waters upstream. A further HRA will be required to determine the magnitude of these potential impacts.

The proposed walls and embankments within Comrie are unlikely to have significant impacts on ecological designated sites. However, the proposals will be constructed within a Conservation Area, within sight of numerous listed buildings and the SAM. The setting of both of these will be impacted by the proposed walls and embankments is anticipated to require further consideration.

It is unlikely that any of the proposed options would have impacts on the South Tayside Goose Roosts SPA and RAMSAR site but a further HRA would be required in order to potentially scope these out of an EIA.

The proposed storage areas, wall and embankments may have impacts on the hydrogeomorphology of the River Earn, Lednock and Water of Ruchill. These impacts could affect terrestrial and aquatic ecology, water abstraction and agriculture and would require further consideration to ensure that these, and other potential impacts, can be mitigated through tertiary measures.

Potential construction impacts to air quality and ambient noise levels are expected to be short term and not significant but may require further consideration.

5.3 Environmental Impact Assessment

This Baseline Report has been carried out with reference to the Town & Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011, as amended (referred to as the EIA Regulations), which implement Council Directive No. 85/337/EEC on the assessment of the effects of certain public and private projects on the environment (the EIA Directive), as amended by Council Directive No. 2011/92/EU.

The EIA Directive's main aim is to ensure that the authority giving the primary consent (the 'competent authority') for a particular project makes its decision in the knowledge of any likely significant effects on the environment. The Directive therefore sets out a procedure that must be followed for certain types of project before they can be given 'development consent'. This procedure – known as Environmental Impact Assessment (EIA) – is a means of drawing together, in a systematic way, an assessment of a project's likely significant environmental effects. This helps to ensure that the importance of the predicted effects, and the scope for reducing them, are properly understood by the public and the relevant competent authority before it makes its decision.

Considering the criteria in the EIA Regulations, flood protection works are listed as Schedule 2 development and the 'area of works' proposed for the flood protection scheme for Comrie and Dalginross is likely to exceed the relevant threshold listed within this schedule i.e. greater than 1 hectare.

It is therefore recommended that the information in this report is transposed into a screening request to determine whether a statutory EIA is required for the Proposed Scheme.

Appendix A: Figures

Figure 1: Location Plan

Figure 2: Scheme Extent and Wider Context

Figure 3: European Designated Sites

Figure 4: Ecological Extents

Figure 5: Cultural Heritage Assets

LEDNOCK

RIVER EARN

WATER OF RUCHILL

Legend

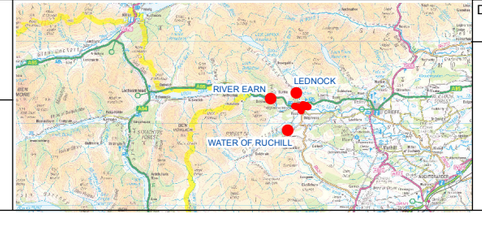
- Potential Flood Defence Wall
- Potential Flood Storage Area

Client: PERTH & KINROSS COUNCIL

Issued only for purpose Indicated: INFORMATION

Project: Comrie Flood Protection Scheme

Title: LOCATION PLAN



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Date	Approved	Date
JUNE 2016	RMc	JUNE 2016

Scale @ A3 1:90,000 (0 500 1000 2000 3000 Meters)

Job No. 1069622

Drawing No. FIGURE 1

Issue 1

Sheet No. Sheet 1 of 1

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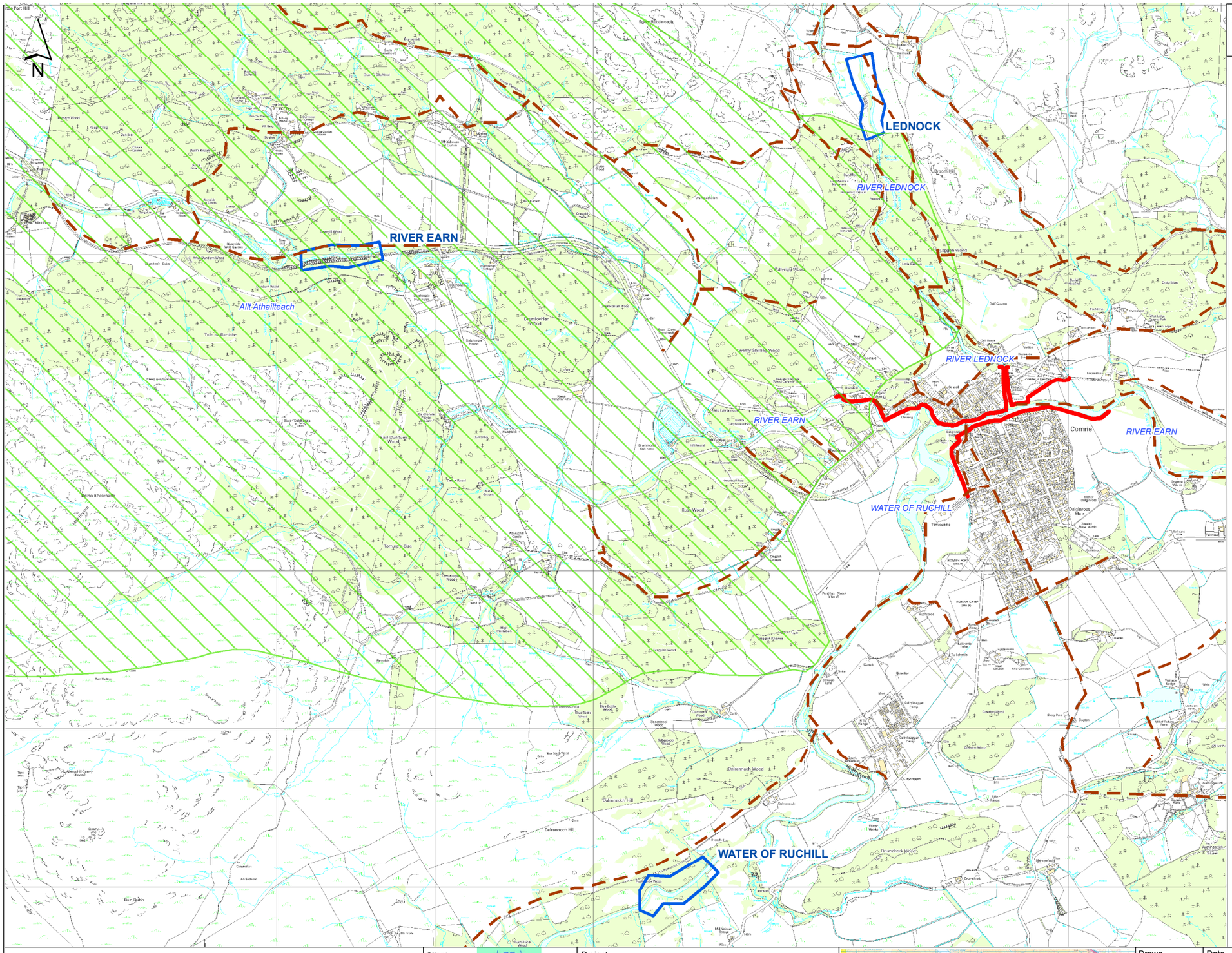

Legend

- Potential Flood Defence Wall
- Potential Flood Storage Area
- Core Path
- National Scenic Area

Client: PERTH & KINROSS COUNCIL

Project: Comrie Flood Protection Scheme

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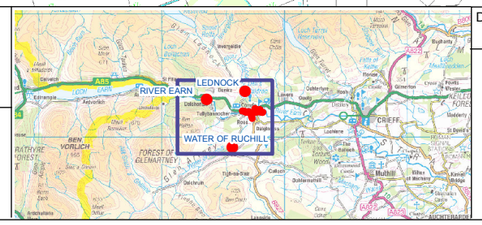
Title: SCHEME AND WIDER SETTING



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Drawing No. FIGURE 2

Issue 1

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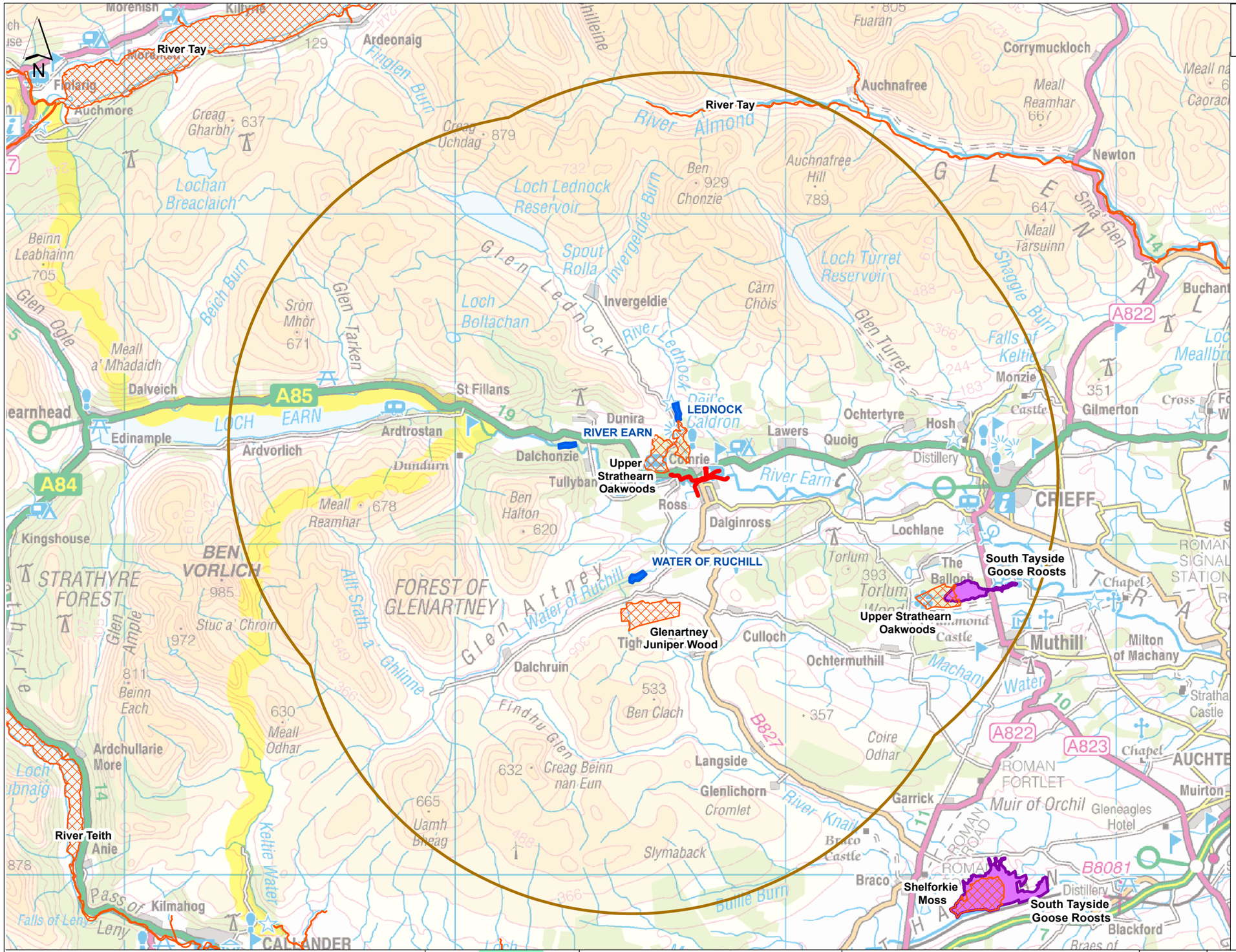

Legend

- Potential Flood Defence Wall
- Potential Flood Storage Area
- 10km Study Area
- RAMSAR
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)

Client: PERTH & KINROSS COUNCIL

Project: Comrie Flood Protection Scheme

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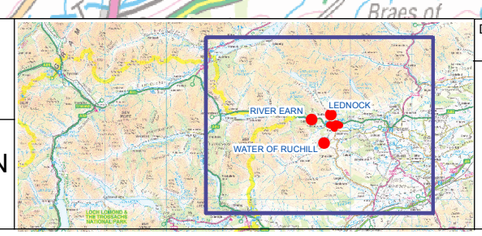
Title: INTERNATIONAL / EUROPEAN DESIGNATED SITES



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Job No. 1069622

Drawing No. FIGURE 3

Issue 1

Sheet No. Sheet 1 of 1

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Legend

- Potential Flood Storage Area
- 1km Study Area
- Site of Special Scientific Interest (SSSI)
- Ancient Woodland
- Semi Natural Ancient Woodland

DRUIM NA CILLE WOOD
YOUNG PLANTATION
TEYNRIACH/DRUMBUIE
CLUAN WOOD
SAWMILL WOOD
RIVER EARN
DUNDURN WOOD
DRUMLOCHAN WOOD
Allt Athailteach
Chambered Cairn
Cup-marked Rock
Cairn (remains of)
Mast
Drumbuie Wood
Drum na Cille Wood
Blar Dearg
Rough Craig
Dun Mor
Crow's Knowe
Wolf's Knowe
Burial Ground
Balsaig House
Dunmore Cottage
Dunira Garden House
Hoolie House
Whitehouse of Dunira
Maam Road (Track)
Reservoir
Cluan Wood
Sheepfold
Birk Knowe
Crappich Wood
Riverside Log Cabins
Fish Farm
Kindrochet House
Sluice
Riverside Wild Garden
Sawmill Wood
Bonaw Brae
West Dunduran Wood
Dundurn Wood
Timber Yard
Dalchonzie
Dalchonzie Fruit Farm
Dalchonzie House
Drumlochan Wood
East Lodge
Tom na Daoiche
Creag nan Sionnach
Bioran Dalchonzie Cairn
Dalchonzie Power Station
East Dundurn Wood
Wester Tullybannocher
Fish Heck
Dun Steis
Drummond Fish Farm
Sgorr R
Chapel Pass

Client: PERTH & KINROSS COUNCIL	Project: Comrie Flood Protection Scheme	Drawn: DAW	Date: JUNE 2016	Checked: JB	Date: JUNE 2016	Approved: RMc	Date: JUNE 2016
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					Drawing No. FIGURE 4a		Issue 1
					Sheet No. Sheet 1 of 1		

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Legend

- Potential Flood Storage Area
- 1km Study Area
- Site of Special Scientific Interest (SSSI)
- Ancient Woodland
- Semi Natural Ancient Woodland

LEDNOCK
RIVER LEDNOCK
Comrie Woods (SSSI)
Comrie Woods (SSSI)
LAGGAN WOOD
Craig More (SSSI)
Broom Hill
Laggan Wood
Drumnachoran
Cluan Wood
Drumlochlan Wood
Sgorr Racaineach
Crappich Hill
Kingarth
Balmuick Cottages
Water Works
Belmuick
Silver Hollow
Creag Bhalg
Cairns
Stone Circle (remains of)
Hut Circle and Field System
Sheep Pens
Golf Course
Sheepfold
East Lodge
Chapel Pass
Allt Sgaitnich Mhoir
Allt Eas an Aoin
Milton Burn
Lord Melville's Monument
Dun More

Client: PERTH & KINROSS COUNCIL

Project: Comrie Flood Protection Scheme

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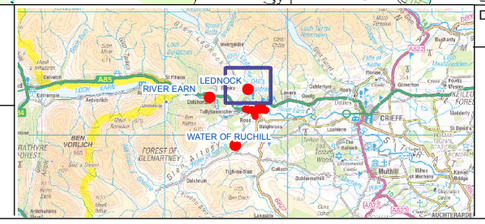
Title: SITES OF SPECIAL SCIENTIFIC INTEREST AND ANCIENT WOODLAND



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Drawing No. **FIGURE 4b**

Issue 1

Sheet No. **Sheet 1 of 1**

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Legend

- Potential Flood Storage Area
- 1km Study Area
- Site of Special Scientific Interest (SSSI)
- Ancient Woodland
- Semi Natural Ancient Woodland

DALRANNOCH WOOD

WATER OF RUCHILL

DRUMCHORK WOOD

Glenartney Juniper Wood (SSSI)

Client: PERTH & KINROSS COUNCIL	Project: Comrie Flood Protection Scheme		Drawn: DAW	Date: JUNE 2016	Checked: JB	Date: JUNE 2016	Approved: RMc	Date: JUNE 2016
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			Drawing No. FIGURE 4c			Issue 1		
			Sheet No. Sheet 1 of 1					

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Legend

- Potential Flood Defence Wall
- 1km Study Area
- Site of Special Scientific Interest (SSSI)
- Ancient Woodland
- Semi Natural Ancient Woodland

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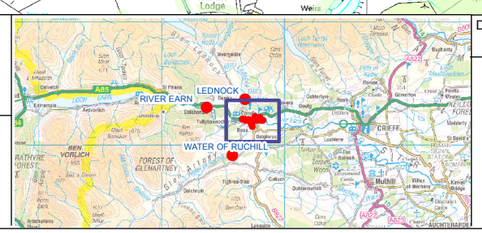

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Job No. 1069622

Drawing No. **FIGURE 4d** — Issue 1

Sheet No. **Sheet 1 of 1**

Legend

- Potential Flood Storage Area
- 200m Study Area
- Listed Building
- Scheduled Monument
- Conservation Area
- Garden and Designated Landscape

Path
Eriskay
DUNIRA
77m
75m
Sluice
Weir
Mill Lade
Saw Mill
Sawmill Wood
Bonaw Brae
Riverside Wild Garden
River Earn
Track
RIVER EARN
Path
72m
Issues
Path
Mast
Timber Yard
Dalchonzie
Dalchonzie Fruit Farm
Path
Dundurn Wood
Issues
Allt Athailteach
Issues
Allt Athailteach
Issues
Daoiche
Issues
Issues
Issues
W

RIVER EARN
LEDNOCK
CREFF
WATER OF RUCHILL
FOREST OF GLENARTNEY

Client: PERTH & KINROSS COUNCIL	Project: Comrie Flood Protection Scheme		Drawn: DAW	Date: JUNE 2016	Checked: JB	Date: JUNE 2016	Approved: RMc	Date: JUNE 2016
Issued only for purpose Indicated: INFORMATION	Title: CULTURAL HERITAGE ASSETS		Scale @ A3: 1:5,000 (0 15 30 60 90 120 150 Meters)					
			Job No.: 1069622					
			Drawing No.: FIGURE 5a			Issue: 1		
			Sheet No.: Sheet 1 of 1					

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Legend

- Potential Flood Storage Area
- 200m Study Area
- Listed Building
- Scheduled Monument
- Conservation Area

N

FB
FB
FB
Weir
Water Works
Track
161m
164m
Issues
Track
Track
Track
Drain
Issues
153m
Balmuick
LEDNOCK
153m
Path
Path
Deil's Caldron (Waterfall)
151m
Dun More
Lord Melville's Monument
Issues
RIVER LEDNOCK
Broom Hill
Path

Client: PERTH & KINROSS COUNCIL	Project: Comrie Flood Protection Scheme		Drawn: DAW	Date: JUNE 2016	Checked: JB	Date: JUNE 2016	Approved: RMc	Date: JUNE 2016
Issued only for purpose Indicated: INFORMATION	Title: CULTURAL HERITAGE ASSETS		Scale @ A3: 1:5,000 (0 15 30 60 90 120 150 Meters)					
			Job No.: 1069622					
			Drawing No.: FIGURE 5b			Issue: 1		
			Sheet No.: Sheet 1 of 1					

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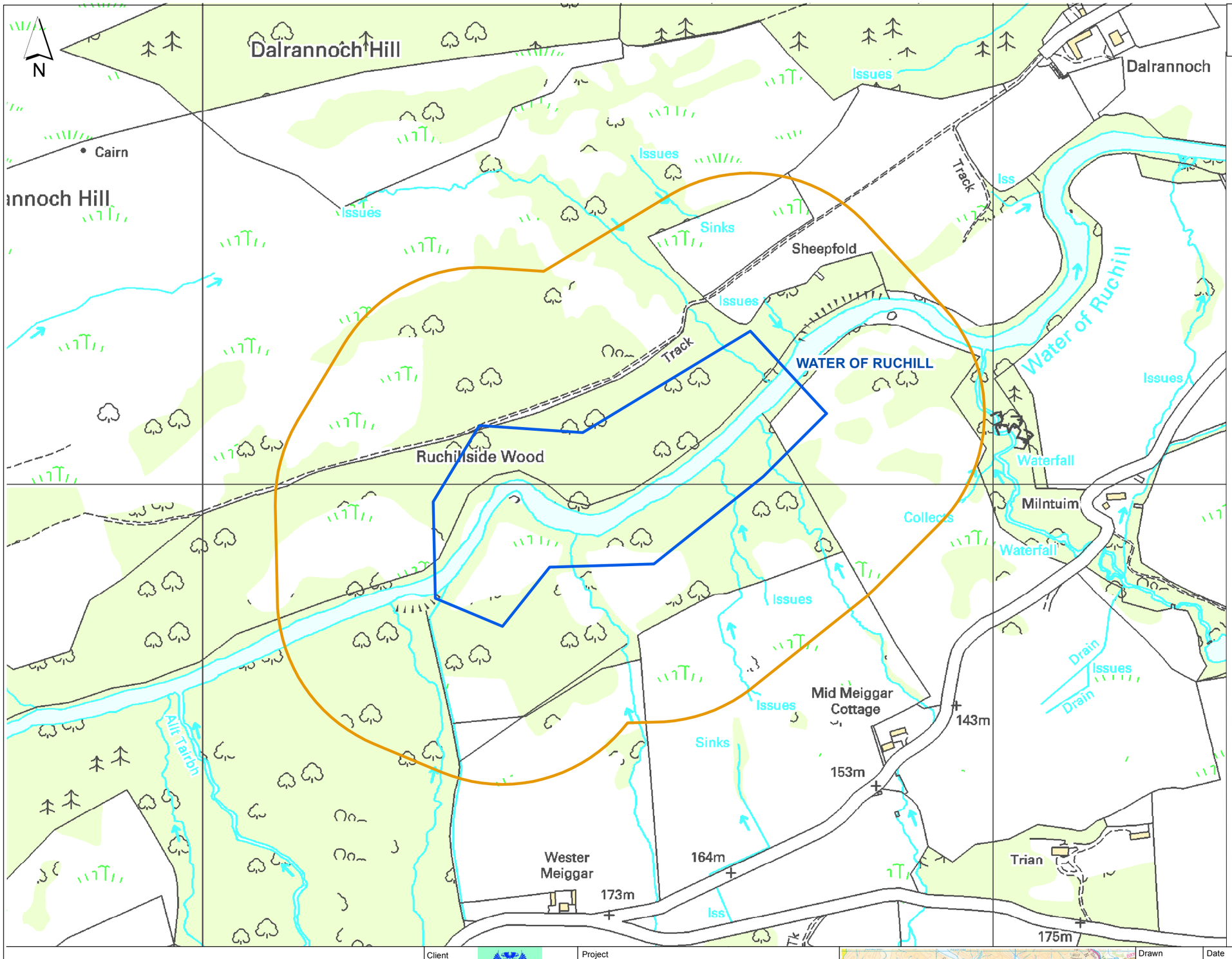

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Legend

- Potential Flood Storage Area
- 200m Study Area
- Listed Building
- Scheduled Monument
- Conservation Area

Client: PERTH & KINROSS COUNCIL	Project: Comrie Flood Protection Scheme		Drawn: DAW	Date: JUNE 2016	Checked: JB	Date: JUNE 2016	Approved: RMc	Date: JUNE 2016
Issued only for purpose Indicated: INFORMATION	Title: CULTURAL HERITAGE ASSETS		Scale @ A3: 1:5,000 (0 15 30 60 90 120 150 Meters)					
			Job No.: 1069622					
			Drawing No.: FIGURE 5c			Issue: 1		
			Sheet No.: Sheet 1 of 1					

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Legend

- Potential Flood Defence Wall
- 200m Study Area
- Listed Building
- Scheduled Monument
- Conservation Area
- Garden and Designated Landscape

Comrie
The Ross
Dalginross Muir
Easter Dalginross
Glasdale
Lechkin
Braehead
Twenty Shilling Wood Caravan Site
Comrie House
Club House
Recreation Ground
Comrie Holiday Park
Tomperran
Invermilton
Depot
Bridge of Ross
Bridge of Lednock
Dalginross Bridge
Tom Chastig
Sewage Works
Roundel Stone Circle
Cemetery
Muirend
Cowden
Craggish Farm
Craggish House
Craggish Cottages
Standing Stones (sites of)
Ruchilside
Tullichettle Lodge
Tomnagaske
ROMAN FORT (site of)
ROMAN CAMP (site of)
Roman Stone
Cup-marked Stone
ABERUCHILL CASTLE
RIVER LEDNOCK
RIVER EARN
WATER OF RUCHILL
Water Of Ruchill
Dismantled Railway
Dismantled Railway
Drain
Track
Issues
Sinks
Path
Pavilion
Car Park
Recn Gd
School
Liby
War Memil
Sta
Weir
Mast
Kinnell
Bellman Acre

Client	PERTH & KINROSS COUNCIL	Project	Comrie Flood Protection Scheme	Drawn	Date	Checked	Date / Approved / Date
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Scale @ A3 1:8,500 (0 25 50 100 150 200 250 Meters)

Job No. 1069622

Drawing No. FIGURE 5d

Issue 1

Sheet No. Sheet 1 of 1

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Environmental Screening Opinion

Delayed Office Opening for Employee Training
This Office will be closed from 8.45 am – 11.00 am on the 1st Thursday of each month

Planning and Regeneration
Interim Head of Planning Nick Brian

Pullar House 35 Kinnoull Street
Perth PH1 5GD
Tel 01738 475000 Fax 01738 475310

Mr Andrew Strang
c/o Craig McQueen
Via e-mail

Contact: Callum Petrie
Direct Dial: 01738 475353
E-mail: cpetrie@pkc.gov.uk

Our ref 16/01863/SCRN

Your ref

Date 21 November 2016

Dear Mr McQueen,

EIA Screening Opinion 16/01863/SCRN: Screening Opinion for proposed Flood Protection Scheme at Comrie.

As a schedule 2 Development under The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 your proposal is required to be screened to determine whether an Environmental Statement is necessary and whether this should form part of any deemed planning consent.

This process has been undertaken and I can inform you that the Council holds the view that an Environmental Statement **is required** in this instance. The Council has taken cognisance of the Scottish Government and The European Commission's screening checklist and determined that the proposed development is likely to have significant effects on the environment by virtue of factors such as its size, nature, and situation. A copy of the Council's Screening Opinion is attached for your perusal.

I hope the above is of assistance.

Yours sincerely

Callum Petrie
Planning Officer – Major Applications
Development Management

Encl.

PERTH & KINROSS COUNCIL

The Environment Service

Environmental Impact Assessment (Scotland) Regulations 2011

EIA SCREENING OPINION

Part I - Particulars of Screening Request/Planning Application

Applicant's Name & Address	Agent/Applicant's Name & Address
Andrew Strang C/o Craig McQueen Structure and Flooding team Perth and Kinross Council	**N/A**

Date Request/Application received	Application Ref. (if applicable)
02 November 2016	16/01863/SCRN

Site Location	Description of Proposal
In and around the Comrie area, centred on the river earn and Comrie village.	Flood protection scheme for the settlement of Comrie, including embankments and flood defence walls.

Part 2 - Particulars of Screening Decision

Perth and Kinross Council hereby give notice, in accordance with the provisions of The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 that the development referred to in Part I above is **likely** to have significant effects on the environment. The Council's reasons for reaching this conclusion are set out below.

1. Does the development fall within schedule 2, and if so, does the development meet the relevant thresholds and criteria in schedule 2?

The relevant extract from the table in schedule 2 is set out below and highlights the thresholds and criteria for the Infrastructure Projects:

10. *Infrastructure Projects*

(h) Urban development projects	(h) Inland-waterway construction not included in Schedule 1, canalisation and flood-relief works where the area of the works exceeds 1 hectare.

This proposal qualifies as a Schedule 2 Development under the above regulations, as the proposal is for flood protection measures on a site exceeding 1 hectare.

2. Does the development fall within a sensitive area?

In terms of the EIA Regulations "sensitive area" means any of the following:

Site of Special Scientific Interest
Land subject to Nature Conservation Orders
International Conservation Sites
National Scenic Areas
World Heritage Sites
Scheduled Ancient Monuments
National Parks

Circular 03/2011 advises that the likely environmental effects of Schedule 2 development will often be such as to require EIA if it is located in or close to sensitive sites. The circular advises that other statutory and non-statutory designations may also be relevant in determining whether EIA is needed, such as local landscape or biodiversity designations.

There are "sensitive areas" as defined by the EIA regulations within the site itself, including part of the River Earn National Scenic Area and associated sensitivities close by.

3. Is the development likely to have a significant effect(s) on the environment?

Paragraph 39 of Circular 3/2011 sets out the considerations that are required to be taken into account in determining whether EIA is needed, it states:

"The regulations reflect the requirement in the Directive to determine whether the proposed development is likely to have a significant effect(s) on the

environment by virtue of factors such as 'its nature, size or location'. The word 'or' suggests the EIA may be required by reason of just one of these factors."

Paragraph 40 states that:

"For many types of development, perhaps the majority, it will be necessary to consider the characteristics of the development in combination with its proposed location in order to identify the potential for interactions between a development and its environmental effects. In determining whether a particular development is likely to have such effects, authorities must take account of the selection criteria in Schedule 3 of the Regulations (Annex A of the Circular). Three categories of criteria are listed:

- *Characteristics of Development*
- *Location of development*
- *Characteristics of the potential impact"*

The Scottish Government and The European Commission have prepared checklists. Cognisance has been taken of these checklists in the assessment of the characteristics and location of the development.

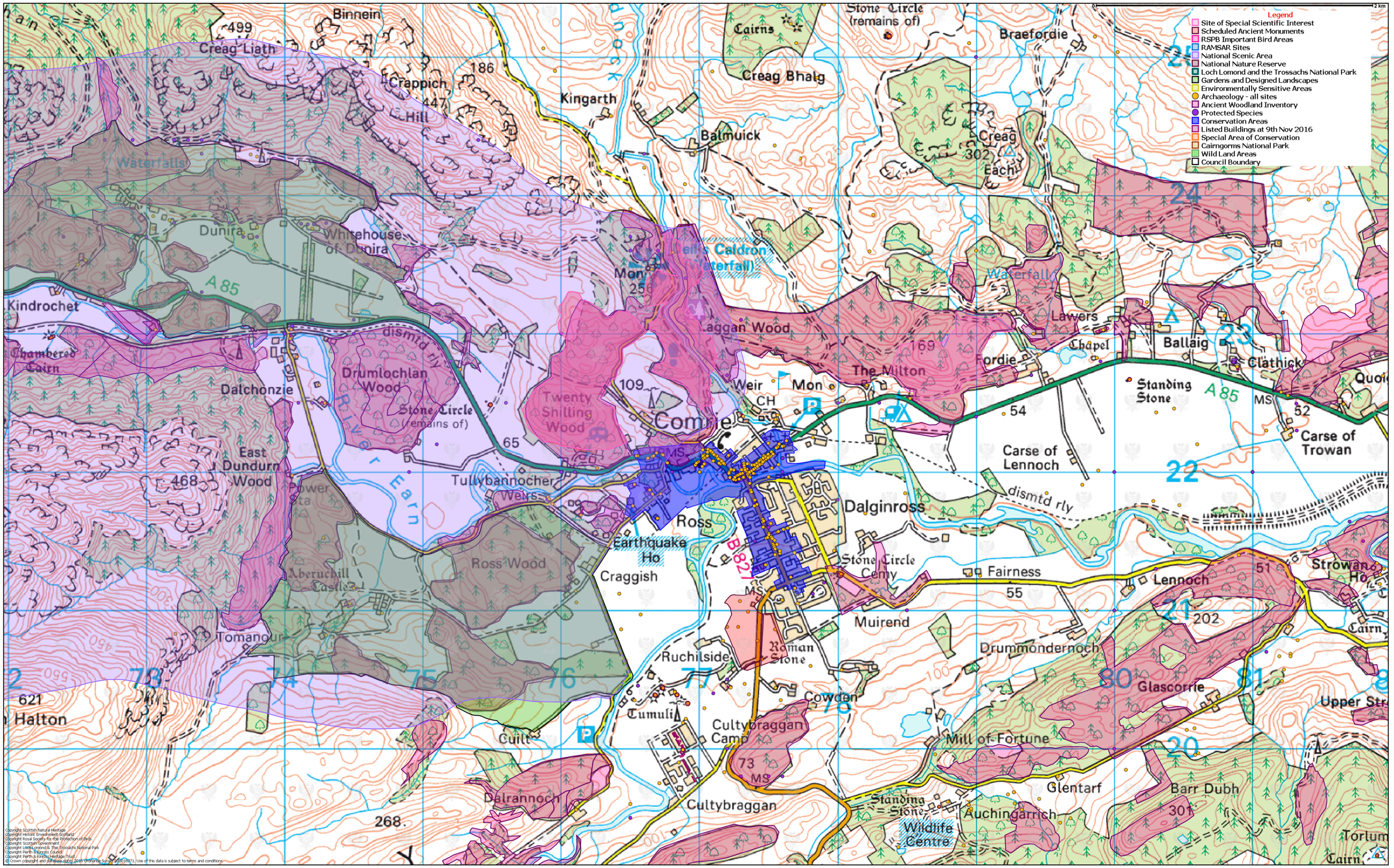
The potential impacts upon the environment are identified in the **attached Checklist**. The planning authority have evaluated the potential significance of each environmental effect which is designed to help decide whether the interactions identified between the development and location are likely to be significant.

It is the opinion of the planning authority, having taken account of the characteristics of the potential impact of the development, in terms of extent, scale, magnitude, complexity, probability, duration and frequency (including vehicle movements) that it is **likely** to have a significant effect on the environment. A detailed study through an **EIA is therefore required**.

pp

Interim Head of Planning
Planning and Regeneration
The Environment Service
Perth and Kinross Council

Dated: 21 November 2016



PKC Planning Authority

Scale 1:17857

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Comrie Flood Protection (screening)

Baseline Environmental Parameters

PERTH & KINROSS COUNCIL

Created by Callum Petrie on 21 November 2016