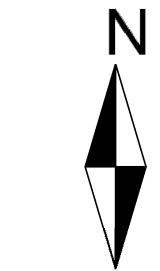
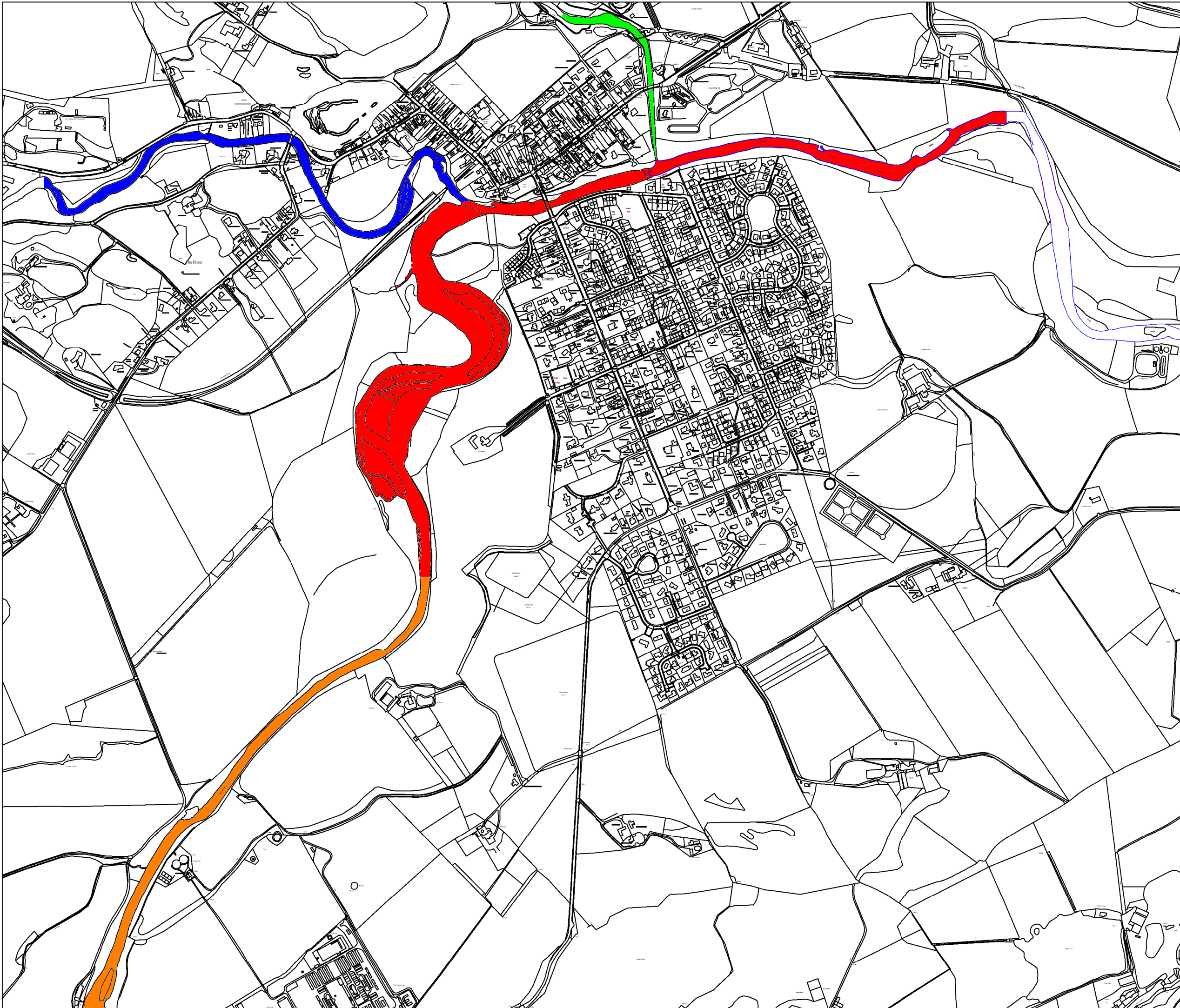

APPENDIX K – Primary and Secondary Option Figures



Notes:

Key:

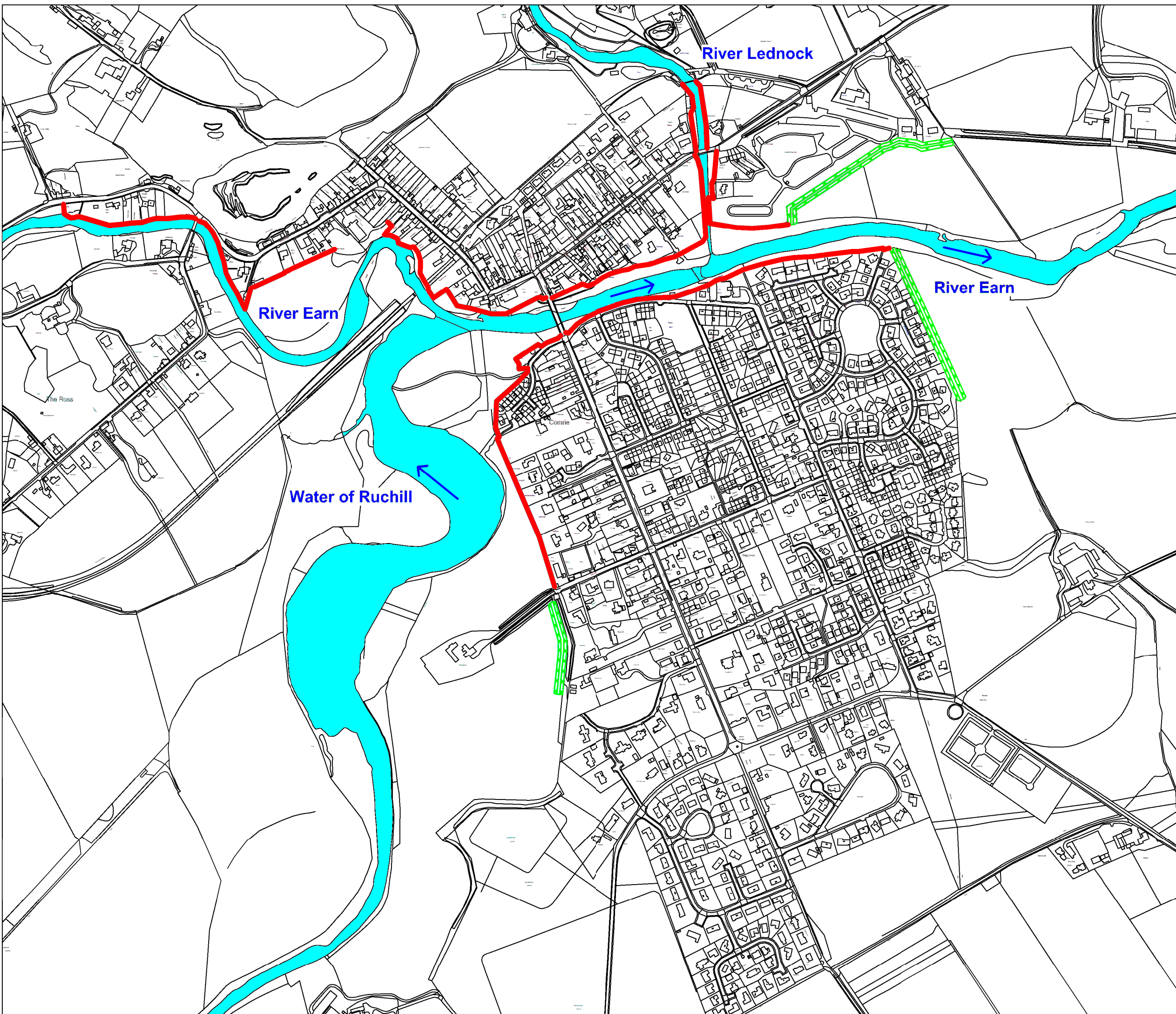
- Dredging - 5 metres depth, 2450 metres extent
- Re-profiling of the Water of Ruchill, 1400 metres
- Re-profiling of the River Earn, 1400 metres
- Re-profiling of the River Lednock, 500 metres

Scale:

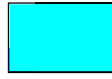





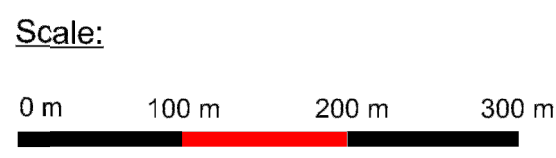
Comrie and Dalginross Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 13 - Option P1 - Dredging



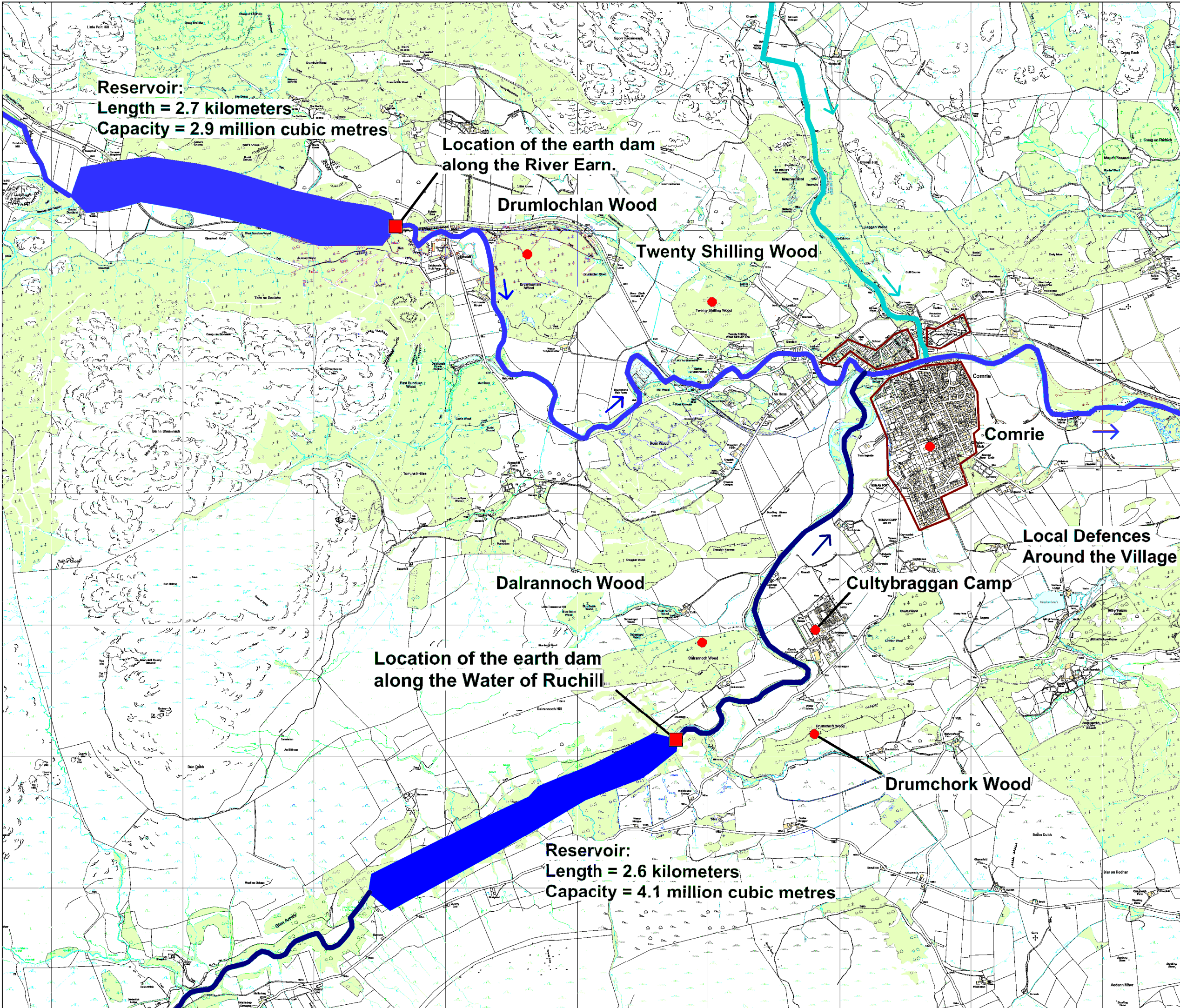
Notes:
 The location of the defences shown is approximate and the precise alignment of the defences will have to be confirmed in the next phase of the project.

- Key:**
-  Locations of Watercourses
 -  River Flow Direction
 -  Wall Flood Defences
 -  Embankment Flood Defences



Comrie and Dalginross Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 14 - Option P2 - Walls and Embankments



Reservoir:
Length = 2.7 kilometers
Capacity = 2.9 million cubic metres

**Location of the earth dam
 along the River Earn.**

Drumlochlan Wood

Twenty Shilling Wood

Comrie

**Local Defences
 Around the Village**

Cultybraggan Camp

**Location of the earth dam
 along the Water of Ruchill**

Dalrannoch Wood







Drumchork Wood

Reservoir:
Length = 2.6 kilometers
Capacity = 4.1 million cubic metres



Notes:

Key:

-  Location of Comrie
-  Upstream Storage Areas
-  Proposed Dam Locations
-  River Earn
-  Water of Ruchill
-  River Lednock

Scale:

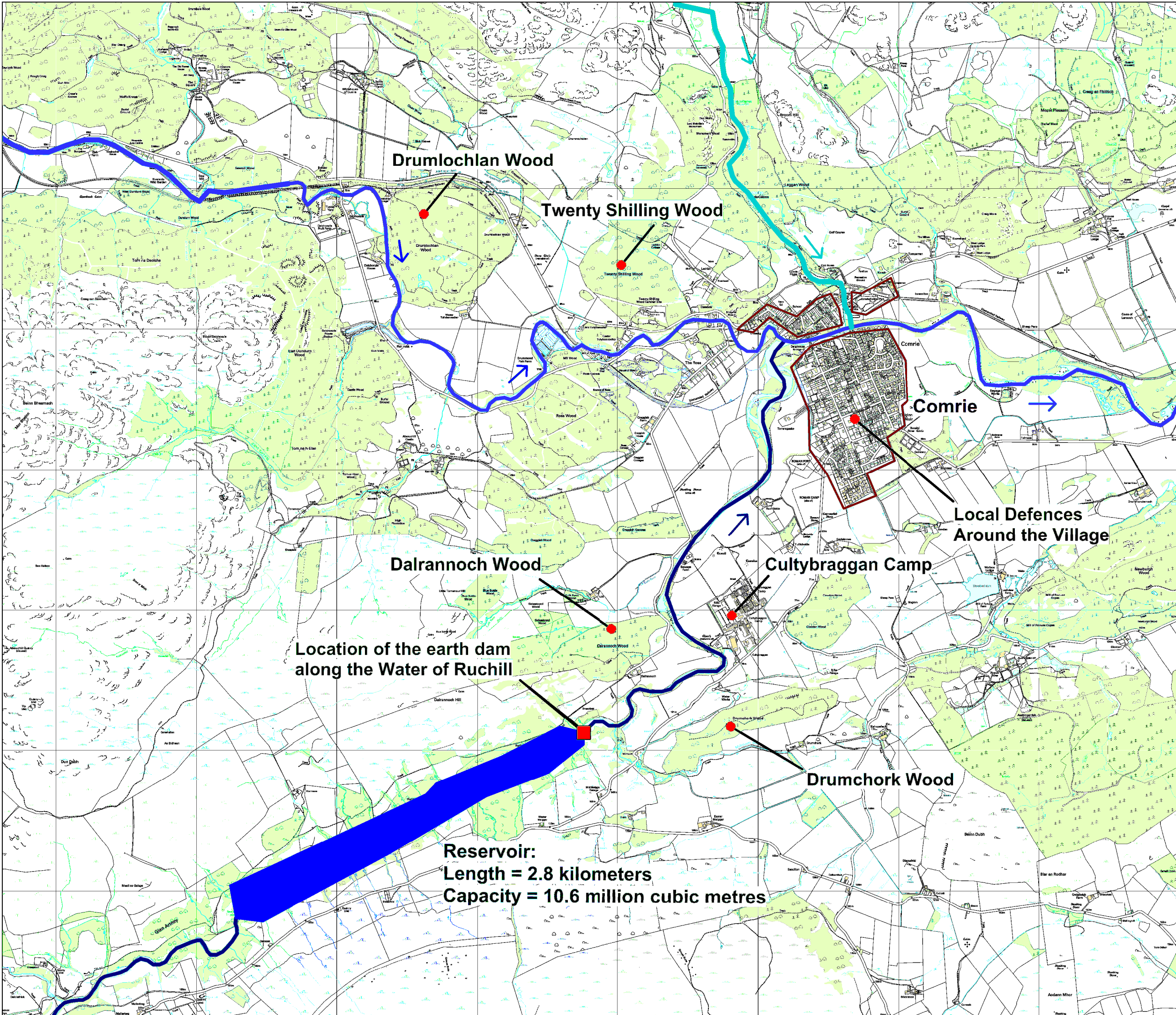


Comrie and Dalginross Flood Protection Scheme

Feasibility Report - Draft v2

Date: May 2017

Figure 15 - Option P3 - Upstream Storage Only



Drumlochlan Wood

Twenty Shilling Wood

Dalrannoch Wood

Comrie

Cultybraggan Camp

Drumchork Wood

**Location of the earth dam
along the Water of Ruchill**







**Reservoir:
Length = 2.8 kilometers
Capacity = 10.6 million cubic metres**

**Local Defences
Around the Village**



Notes:

Key:

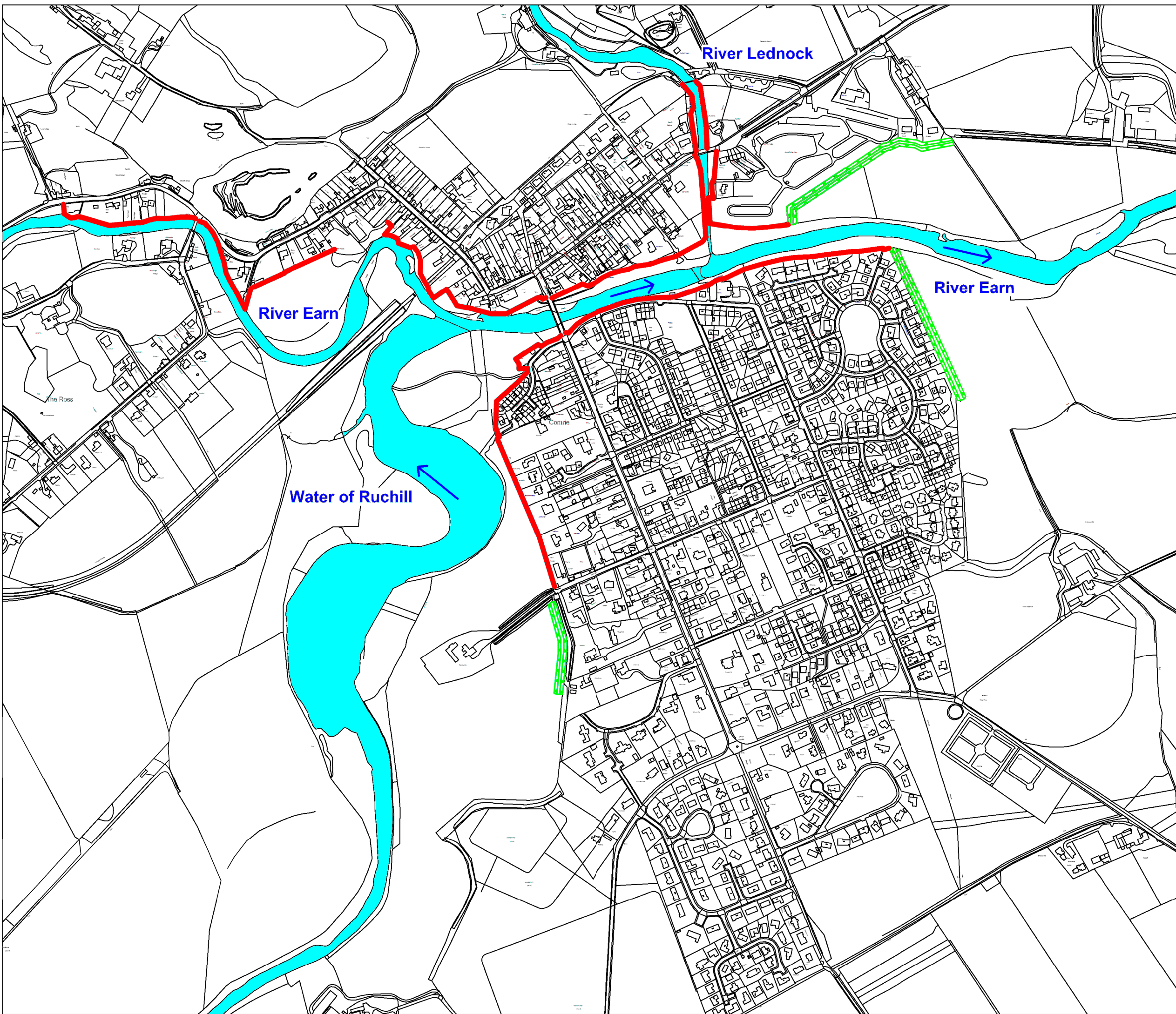
-  Location of Comrie
-  Upstream Storage Areas
-  Proposed Dam Locations
-  River Earn
-  Water of Ruchill
-  River Lednock

Scale:

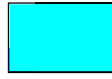





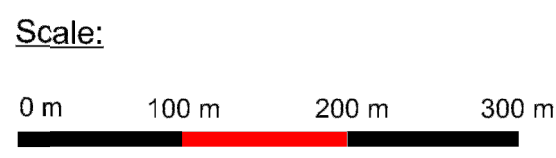
Comrie and Dalginross Flood Protection Scheme
Feasibility Report - Draft v2
Date: May 2017

Figure 16 - Option P4 - Local Defences & Upstream Storage on Water of Ruchill



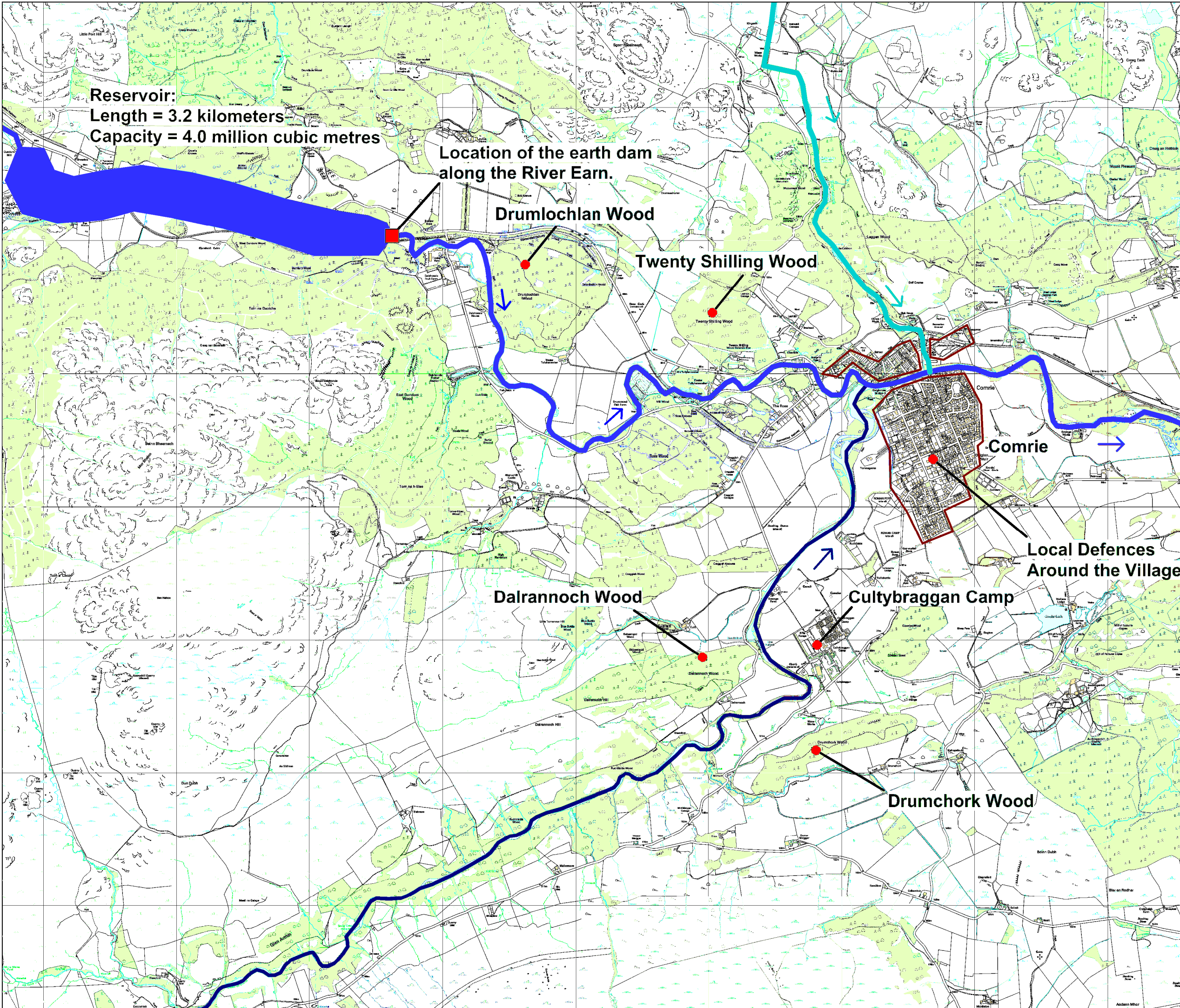
Notes:
 The location of the defences shown is approximate and the precise alignment of the defences will have to be confirmed in the next phase of the project.

- Key:**
-  Locations of Watercourses
 -  River Flow Direction
 -  Wall Flood Defences
 -  Embankment Flood Defences



Comrie and Dalginross Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 17 - Option P4 - Walls and Embankments PLUS Upstream Storage on the Waters of Ruchill



Reservoir:
 Length = 3.2 kilometers
 Capacity = 4.0 million cubic metres

Location of the earth dam
 along the River Earn.

Drumlochlan Wood

Twenty Shilling Wood

Comrie

**Local Defences
 Around the Village**

Dalrannoch Wood

Cultybraggan Camp

Drumchork Wood



Notes:

Key:

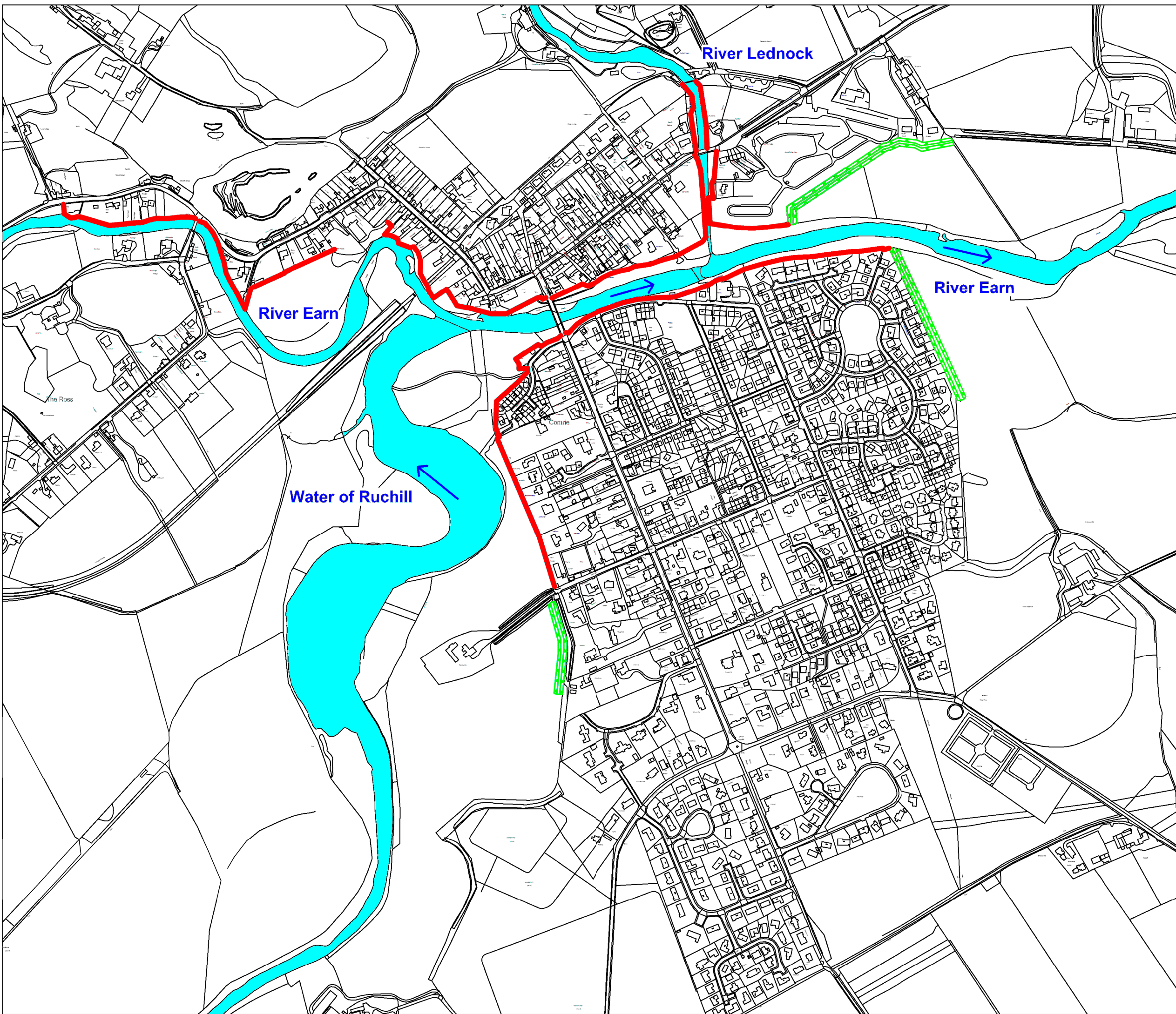
- Location of Comrie
- Upstream Storage Areas
- Proposed Dam Locations
- River Earn
- Water of Ruchill
- River Lednock

Scale:

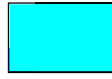





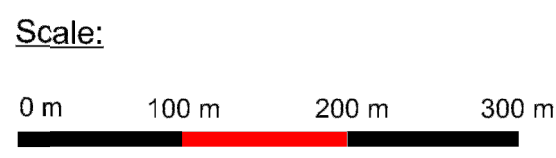
Comrie Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

**Figure 18 - Option P5 - Local
 Defences & Upstream Storage
 on The River Earn**



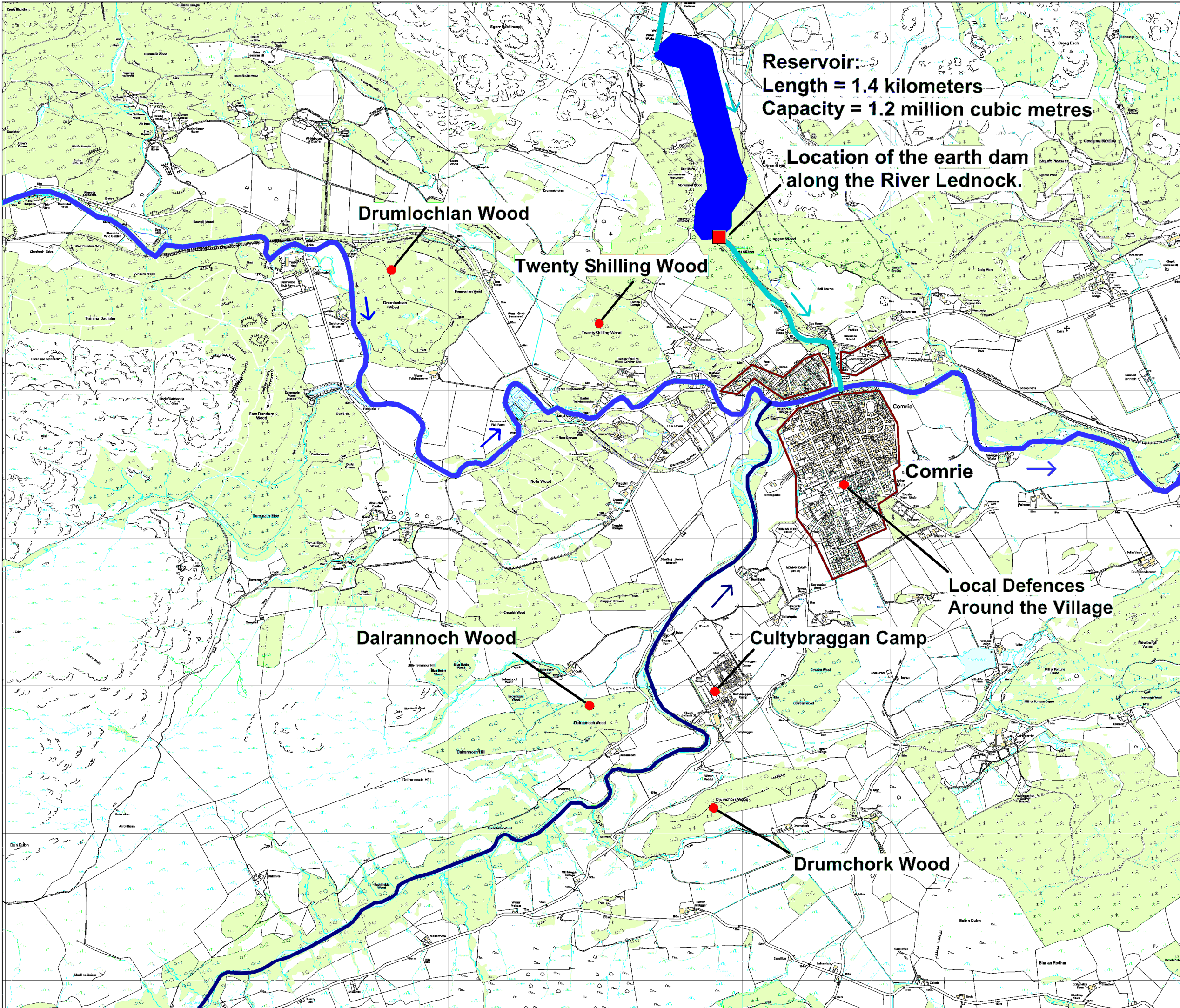
Notes:
 The location of the defences shown is approximate and the precise alignment of the defences will have to be confirmed in the next phase of the project.

- Key:**
-  Locations of Watercourses
 -  River Flow Direction
 -  Wall Flood Defences
 -  Embankment Flood Defences



Comrie and Dalginross Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 19 - Option P5 - Walls and Embankments PLUS Upstream Storage on the River Earn



Reservoir:
 Length = 1.4 kilometers
 Capacity = 1.2 million cubic metres

**Location of the earth dam
 along the River Lednock.**

Drumlochlan Wood

Twenty Shilling Wood

Comrie

**Local Defences
 Around the Village**

Cultybraggan Camp

Dalrannoch Wood

Drumchork Wood



Notes:

Key:

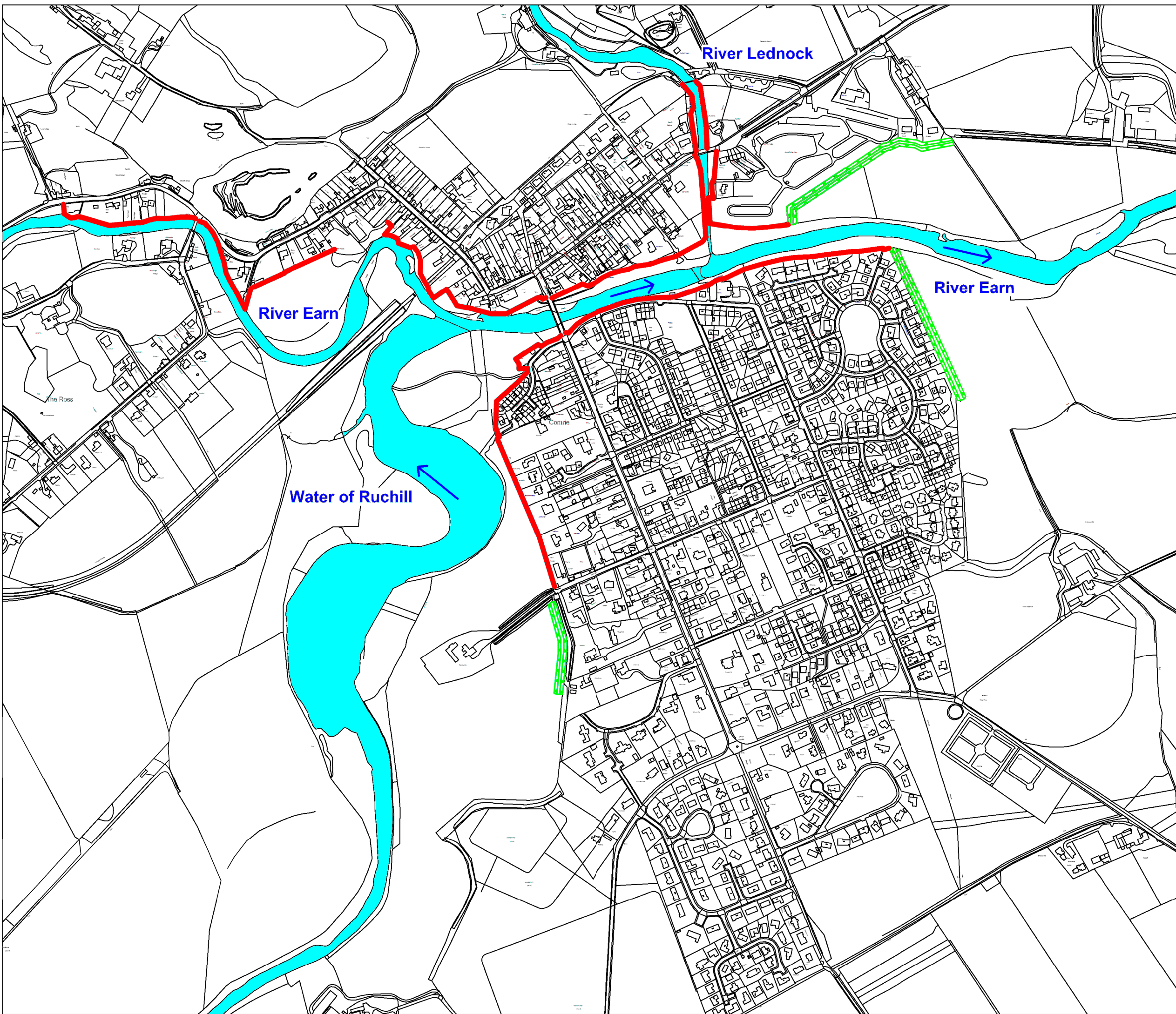
- Location of Comrie
- Upstream Storage Areas
- Proposed Dam Locations
- River Earn
- Water of Ruchill
- River Lednock

Scale:

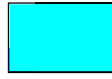





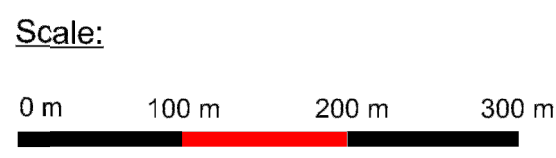
Comrie and Dalginross Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

**Figure 20 - Option P6 - Local
 Defences & Upstream Storage
 on The River Lednock**



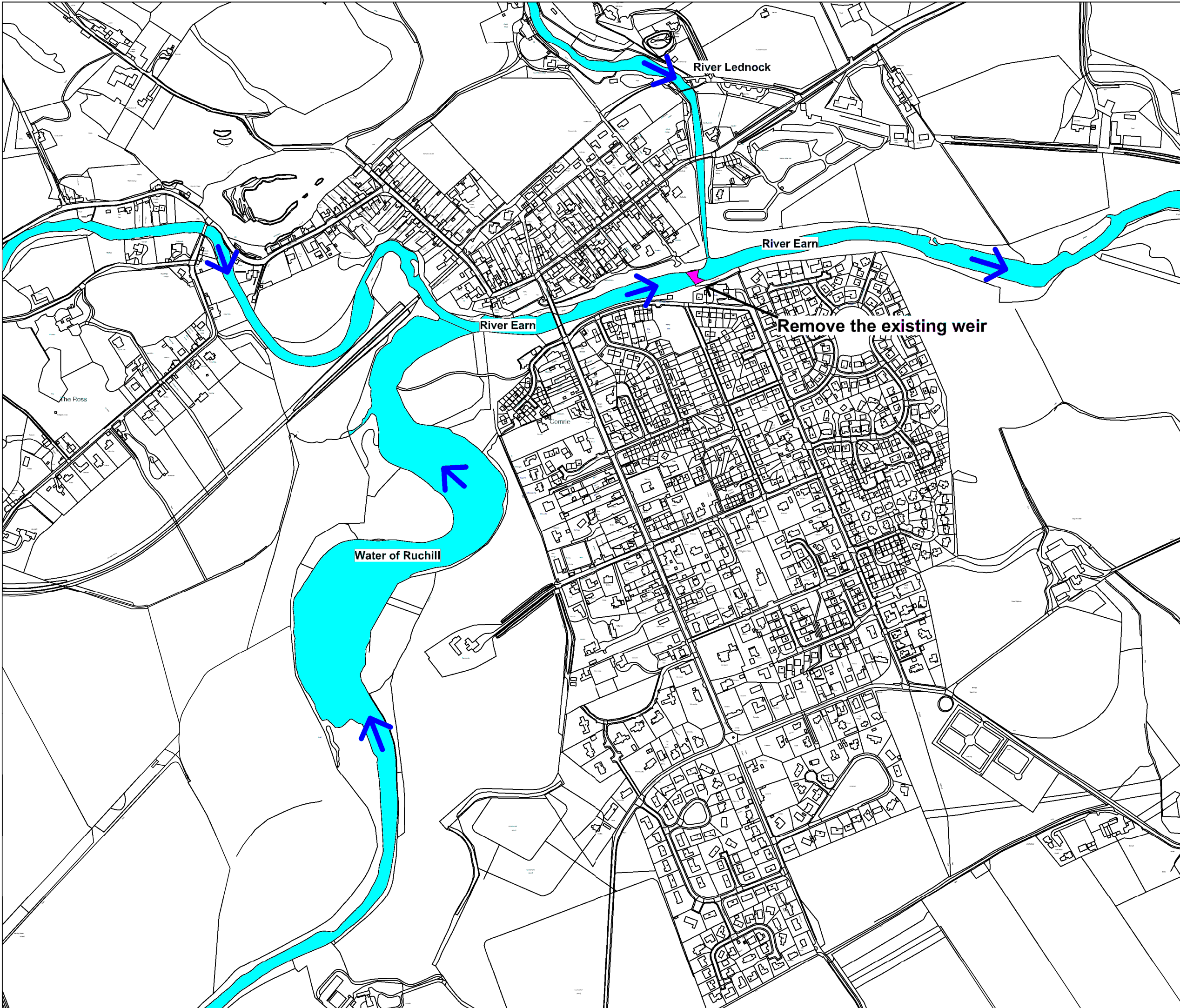
Notes:
 The location of the defences shown is approximate and the precise alignment of the defences will have to be confirmed in the next phase of the project.

- Key:**
-  Locations of Watercourses
 -  River Flow Direction
 -  Wall Flood Defences
 -  Embankment Flood Defences



Comrie and Dalginross Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 21 - Option P6 - Walls and Embankments PLUS Upstream Storage on the River Lednock



Notes:

Key:

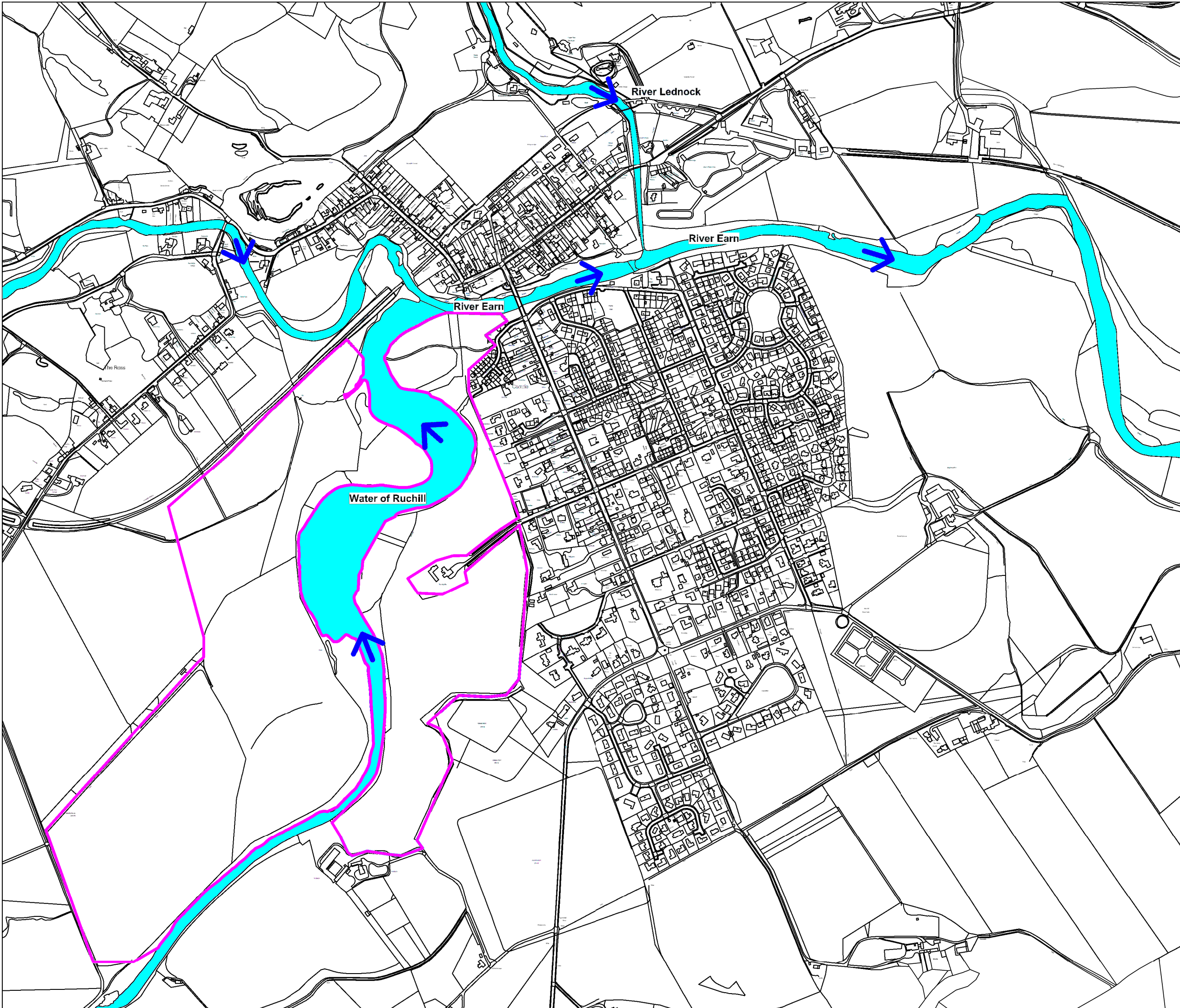
- Locations of Watercourses
- Location of Existing Weir
- River Flow Direction

Scale:






Comrie Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 22 - Option S1 - Removal of Weir



Notes:

Key:

-  Locations of Watercourses
-  Increased Floodplain Storage Areas
-  River Flow Direction

Scale:




Comrie Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 23 - Option S2 - Maximising the Floodplain Storage



Notes:

Key:

 Dredging - 1 metres depth, 2450 metres extent

Scale:

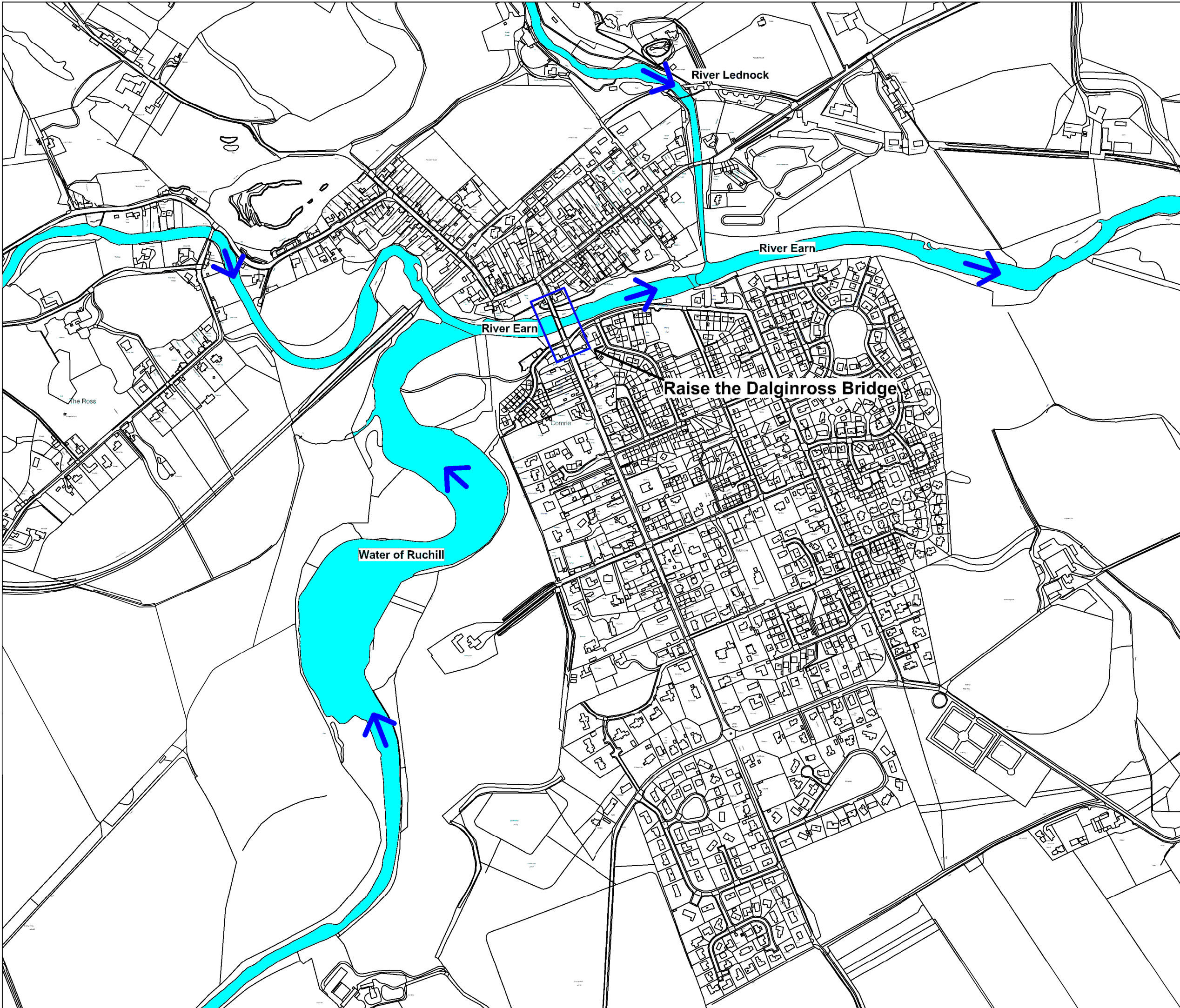


Comrie Flood Protection Scheme

Feasibility Report - Draft v2




Date: May 2017

Figure 24 - Option S3 - Dredging



Notes:

Key:

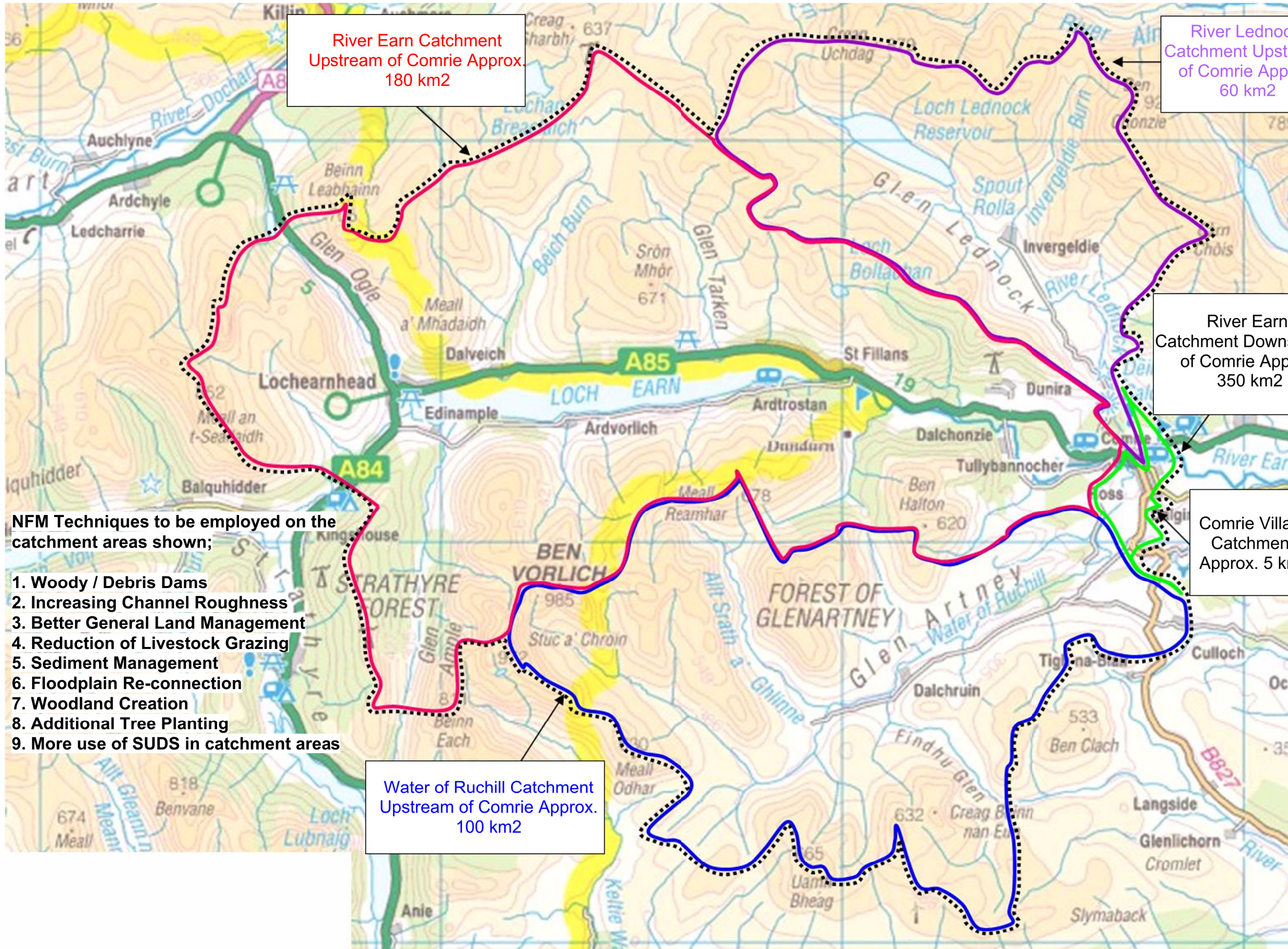
-  Locations of Watercourses
-  Location of Dalginross Bridge
-  River Flow Direction

Scale:



Comrie Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 25 - Option S4 - Raise the Dalginross Bridge



River Eam Catchment
Upstream of Comrie Approx.
180 km²

River Lednock
Catchment Upstream
of Comrie Approx.
60 km²

River Eam
Catchment Downstream
of Comrie Approx.
350 km²

Comrie Village
Catchment
Approx. 5 km²

Water of Ruchill Catchment
Upstream of Comrie Approx.
100 km²

- NFM Techniques to be employed on the catchment areas shown;**
1. Woody / Debris Dams
 2. Increasing Channel Roughness
 3. Better General Land Management
 4. Reduction of Livestock Grazing
 5. Sediment Management
 6. Floodplain Re-connection
 7. Woodland Creation
 8. Additional Tree Planting
 9. More use of SUDS in catchment areas

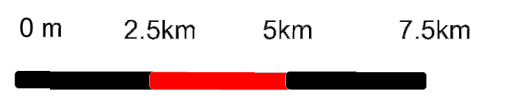


Notes:

Key:

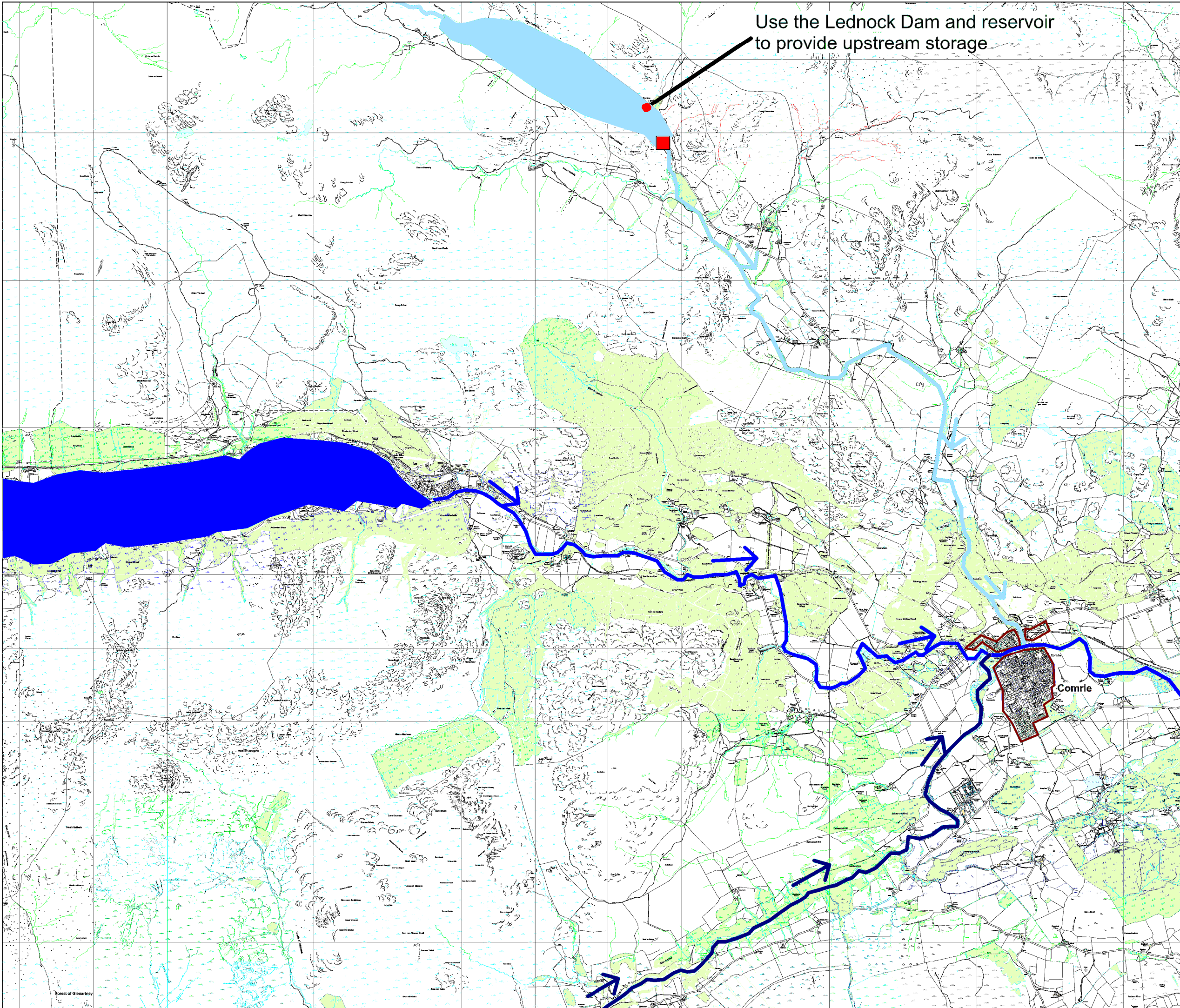
- - - River Eam Catchment Downstream of Comrie
- Water of Ruchill Catchment
- River Eam Catchment
- River Lednock Catchment
- Comrie Village Catchment

Scale:



Comrie Flood Protection Scheme
Feasibility Report - Draft v2
Date: May 2017

Figure 26 - Option S5 - Natural Flood Management Techniques


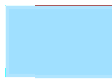




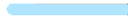


Use the Lednock Dam and reservoir to provide upstream storage



Notes:

Key:

-  Location of Comrie
-  Lednock Reservoir
-  Loch Earn
-  Existing Lednock Dam Location
-  River Earn
-  Water of Ruchill
-  River Lednock

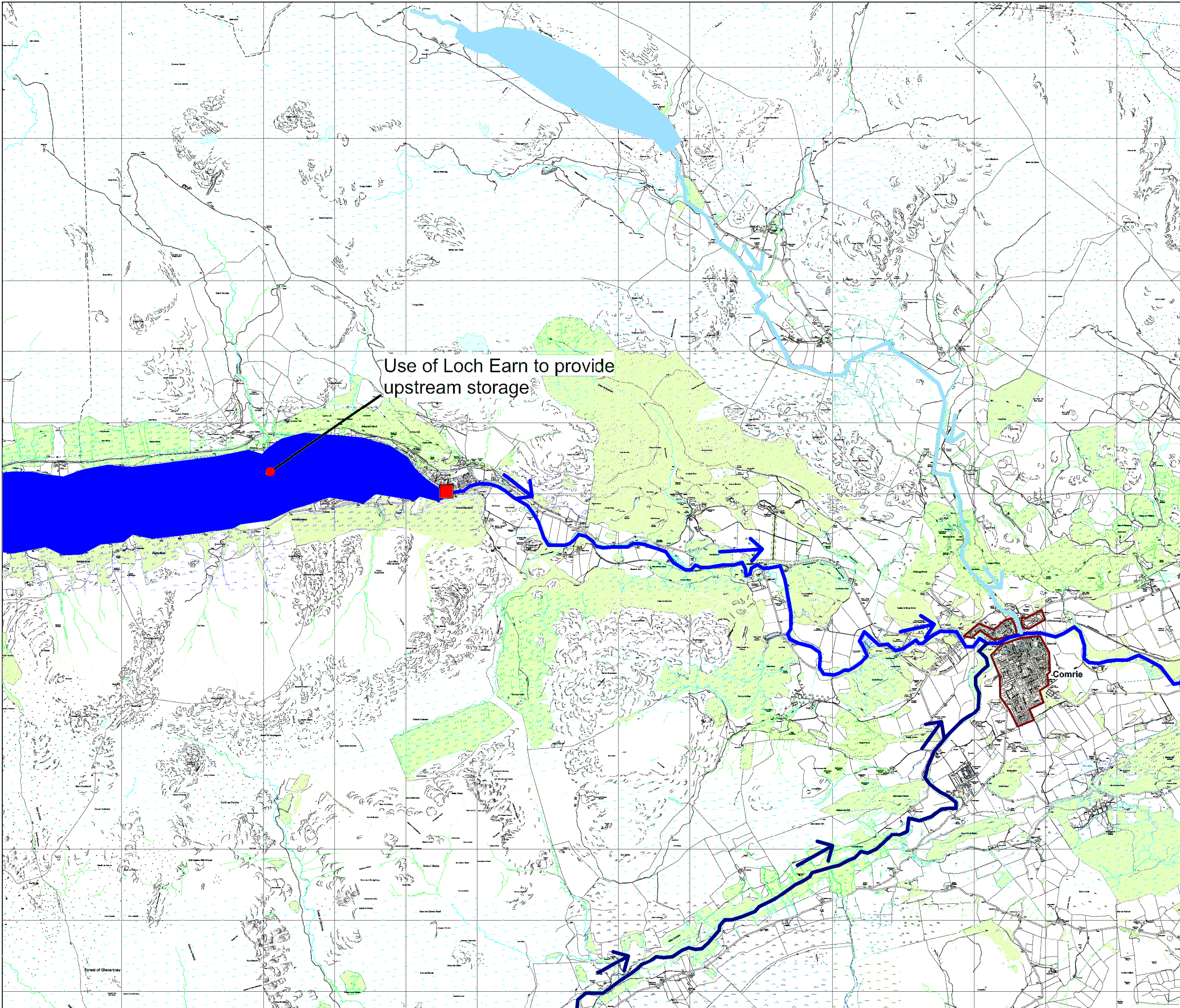
Scale:

0 m 1000 m 2000 m 3000 m



Comrie Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 27 - Option S6 - Use of the Existing Lednock Dam to Provide Upstream Storage



Notes:

Key:

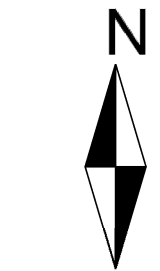
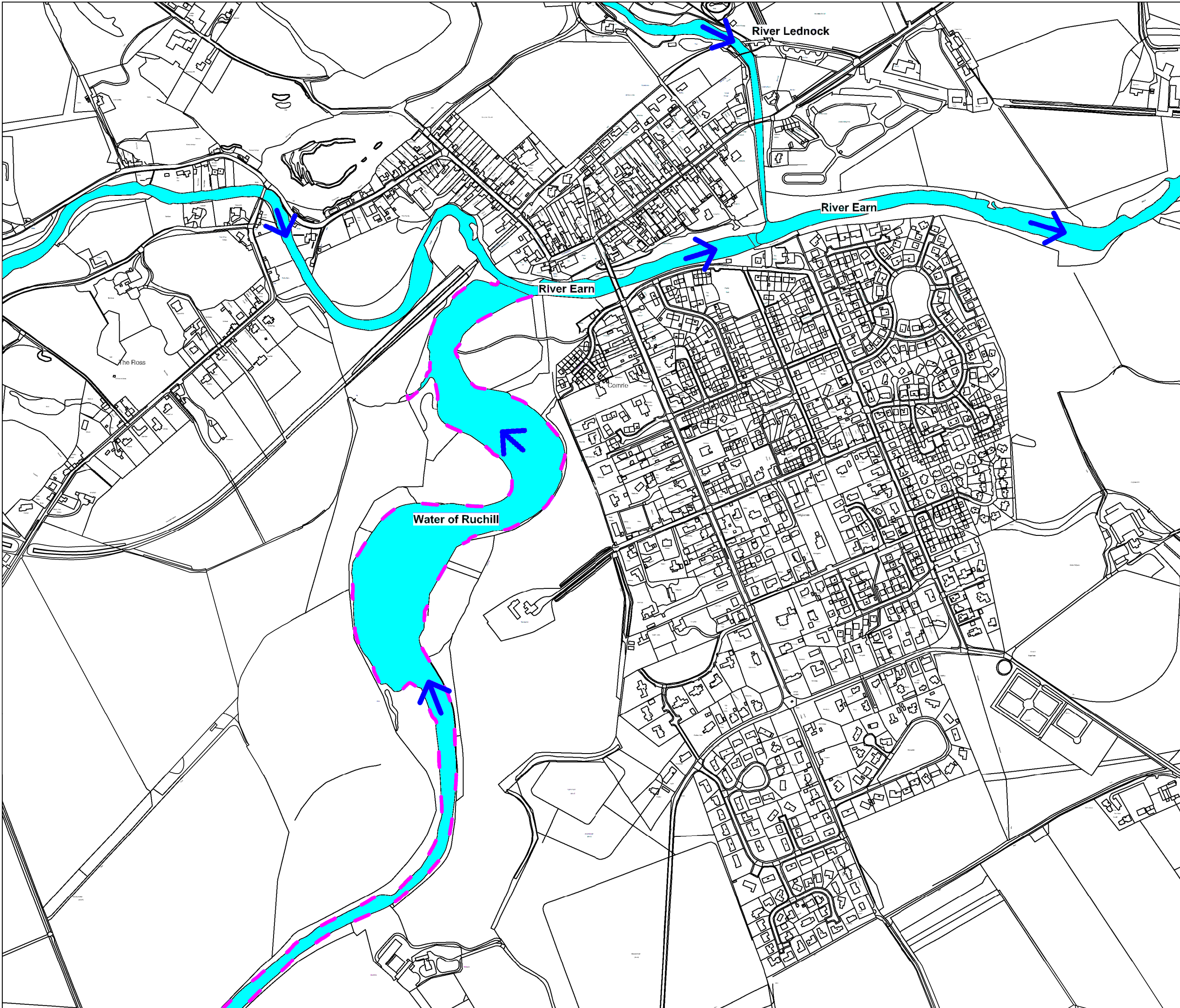
- Location of Comrie
- Lednock Reservoir
- Loch Earn
- Proposed Loch Earn Control Structure
- River Earn
- Water of Ruchill
- River Lednock

Scale:





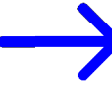
Comrie Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 28 - Option S7 - Use of Loch Earn to Provide Upstream Storage



Notes:

Key:

-  Locations of Watercourses
-  Location of River Stabilisation Measures
-  River Flow Direction

Scale:

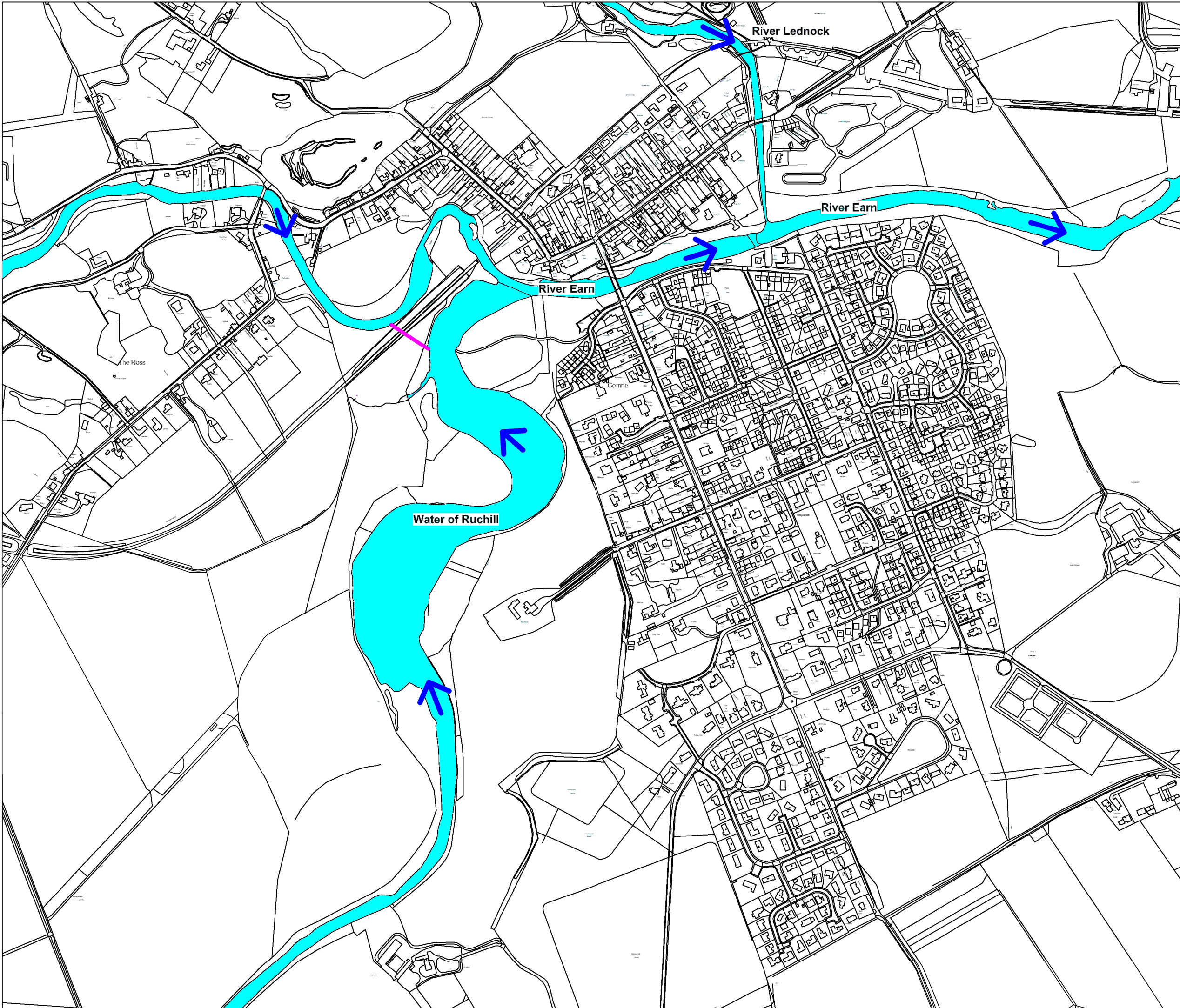


Comrie Flood Protection Scheme

Feasibility Report - Draft v2

Date: May 2017

Figure 29 - Option S8 - Water of Ruchill Stabilisation Techniques



Notes:

Key:

- Locations of Watercourses
- Location of Diversion Channel
- River Flow Direction

Scale:



Comrie Flood Protection Scheme
 Feasibility Report - Draft v2
 Date: May 2017

Figure 30 - Option S9 - Diversion Channel