Public Consultation Report - Short Version

Comrie Flood Protection Scheme

Perth & Kinross Council

Sweco UK Limited
Suite 4.2, City Park
368 Alexandra Parade
Glasgow, G31 3AU
+44 141 414 1700

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1 Introduction

A public exhibition was held in Comrie in April and May 2019 to present the proposed outline design for the Comrie Flood Protection Scheme to the local community.

The purpose of this report is to provide information on the public consultation exercise that has taken place to date. The report summarises the recent public exhibition and;

i) records all of the comments provided by the local community to the Council and the design team prior to, at, and subsequent to, the exhibition;
ii) identifies common themes amongst those comments and;
iii) provides responses to any concerns raised.

2 Consultation

Public consultation is a key to the successful delivery of any flood scheme. The Council aims to encourage public engagement when developing a flood scheme with the intention of allowing the community to inform and 'buy in' to the final proposals.

Overall, this should lead to better decision making and to the establishment of on-going dialogue and relationships with the community well in advance of 'publishing' the scheme or the future construction works. This should lead to better level of satisfaction within the community and a greater chance of successfully implementing the scheme for the good of the local residents and businesses.

An overview of the public consultation activity undertaken to date is provided below.

2.1 Previous Consultation (Feasibility Stage)

A public exhibition was previously held in Comrie during the feasibility stage of the project. This was held in Comrie Community Centre from 2-8pm on 1st and 8th September 2016.

Representatives from the Scottish Environmental Protection Agency (SEPA) and the Scottish Flood Forum (SFF) attended these events to help raise awareness of flooding, to encourage sign up to flood warnings, and to help inform the local community how to become more prepared and resilient to deal with flooding.

These events also provided an opportunity for the Council to inform local residents as to the current understanding of flood risk in Comrie at that time. The Council's consulting engineers, Mouchel, were available to describe the wide range of potential options they had considered for managing flood risk in Comrie. Information on the preferred option (involving walls and embankments) was also provided.

The exhibition was very well attended by the local community demonstrating a high level of interest in the flood scheme proposals. An estimated 120-150 people attended over the two days.

Feedback from the consultation confirmed that the community recognised the need for a flood protection scheme and were generally in favour of the preferred option put forward by the Council's consulting engineers, Mouchel.

A community Question and Answer (Q & A) document was produced following the exhibition. This document and the display materials are still available to view online at: www.pkc.gov.uk/article/20202/Comrie-Flood-Protection-Scheme-Feasibility-study

2.2 Outline Design

Following the completion of the feasibility phase, consulting engineers, Sweco, were appointed to develop the Council's preferred flood scheme. Their work involves developing the proposed outline design in sufficient detail to allow the scheme to be published under the Flood Risk Management (Scotland) Act 2009.

As the scheme has developed throughout the outline design process, various on-going consultations have taken place. Individual meetings and discussions have been held with major interest groups.

The Council has consulted the vast majority of affected landowners but there are still (at the time of writing) a few that we have unfortunately not managed to meet with. This may because the landowner has decided not to meet with us or may live remotely from the Perth and Kinross Council area. The Council will continue to attempt to discuss the flood scheme proposals with those parties.

As well as the various meetings, the Council has also tried to keep the wider community up to date via a dedicated webpage and by issuing community newsletters at key stages in the project.

2.3 Outline Design Public Exhibition Events - 30th April & 8th May 2019

A public exhibition, displaying the proposed outline design, was held in the Comrie Community Centre (known locally as the 'White Church') on 30th April & 8th May 2019. The events were scheduled between 2pm – 8pm on both days.
The local community was invited to attend the exhibition through the distribution of newsletters, personal letters/emails to interested parties and also through advertising posters displayed at local locations. The Council prepared a press release with details of the event appearing in 'The Courier' and on the Council's Twitter and Facebook pages.

The exhibition itself comprised the following:

- A central display comprising 11 poster boards explaining the proposed outline design in detail and the legal process;

- A full set of the proposed scheme outline design drawings;
- Proposed scheme computer-generated visualizations at key locations
- Flood maps showing the river modelling results for the current (baseline) situation and with the proposed scheme in place;
- A looped power point presentation by the Council providing background information on other action to raise awareness of flood risk and improve flood resilience in Comrie.

Tables were also set up to allow those attending to sit and view the available information and to discuss the proposals with the officers present. Members of staff from Perth & Kinross Council's flooding team were available to discuss the proposals; as were members of staff from Sweco. On the 8th May event, SEPA and the Scottish Flood Forum were also in attendance and participated in advisory discussions with the community.

Both exhibitions were well attended, with approximately 80 attendees each day.
At the close of the consultation event, the posters and flood maps comprising the central display were left at the White Church to give the community an opportunity to view them if they had been unable to attend on 30th April and 8th May. Additionally, the materials presented at the exhibition events have been available to view on the Council's project webpage since 30 April.

The project webpage is updated regularly as and when new project information becomes available: www.pkc.gov.uk/comriefloodscheme

The Council also made use of its new Consultation Hub for the public consultation: https://consult.pkc.gov.uk

Information from the public exhibition, along with a link to the Council's Consultation Hub, can be found at:
www.pkc.gov.uk/article/20203/Comrie-flood-protection-scheme-Outline-design

3 Local Community Feedback

In general, the impression received from the public consultation was that the local community continues to support the flood scheme. It was understood that an 'outline' design has been consulted on at this stage and that further detail has yet to be defined. Many discussions were held with members of the community on the direction in which the scheme is likely to progress during the subsequent detailed design.

The Council and Sweco have collated all the comments provided at the public exhibition, in any subsequent meetings and through direct discussions. A number of questions, comments and concerns were recorded, and the key issues are summarised within this section of the report as 'themes'. A general response to each theme is provided below. This allows those with an interest in the scheme to

understand the key issues raised by the community and to see the Council's response to each.

This section identifies the key issues or themes that were raised in the community responses to the public consultation.

Please note, a full version of this consultation report is available on request and provides the Council's response to specific questions raised by the community as well fuller responses on the general themes.

No	Themes	Comments	Response
3.1	Access to the River (Boulevard area)	• **Ramps** were felt to be intrusive and cited a preference for flood gates. • **If Access ramps** must be provided in this area, that there would be a strong preference to have them as hidden from view as possible. • Access requirements for **wheelchair users** including the potential problems associated with unsurfaced paths. • Access to **Comrie Fortnight** event.	The 1:20 pedestrian **access ramp** that had been proposed at Commercial Lane has been relocated. We have also removed the road access hump proposed at Ancaster Lane. The Council's revised proposal is to use the existing access from Bridge Street located at the west side of Dalginross Bridge. This area will be altered and re-landscaped to improve access for **wheelchairs, bikes and buggies** to the riverbank and the boulevard area. The proposals still include a stepped pedestrian access at the bottom of Commercial Lane, but this has been relocated further away from adjacent properties to help reduce its visual impact and also maintain the privacy of those properties by ensuring that they won't be overlooked by those using the steps. The path proposed for this area will now also have a sealed surface. The vehicle access, which is required to ensure Scottish Water can continue to maintain their equipment by the weir, has been relocated and will now be provided at the end of Manse Lane. **Comrie Fortnight** These proposed changes will still not allow public vehicular access to the boulevard area. This is required at present for events during the Comrie Fortnight. The Comrie Fortnight committee has been consulted on this matter and are willing to re-locate their events from the 'boulevard' to Legion Park on the understanding that the vehicular access to Legion Park will be improved and that a hard-standing area will be provided here for future events.
3.2	Biodiversity and Tree loss	• **Numbers of trees** which may need to be removed to accommodate the proposed flood scheme.	While some tree loss is necessary, this will be mitigated with compensatory planting. The current proposal is **to plant three times the number** of trees that will be lost during construction. Where appropriate, greenspace areas will be planted for wildlife and include glades that are sown with wildflowers to encourage butterflies and other insects. The proposed project will ensure that otters, birds and bats are all encouraged to remain and thrive in the area once the flood scheme is complete.
3.3	Climate Change	• Impacts of **climate change** may reduce the effectiveness of the flood scheme in the	Climate change is predicted to result in more frequent and severe flooding in the future. The Council and Sweco are aware that there is a balance to be found between reducing flood risk and the potential impacts on the local community and landscape. It is therefore considered appropriate for the

No	Themes	Comments	Response
		long term.	Scheme to continue with the current proposed (1 in 200 year) standard of protection without a further allowance for climate change. This will provide a high level of protection for the village and is consistent with the public consultation carried out at the feasibility stage of the project in September 2016. This same scheme was also approved by the Council's Environment, Enterprise and Infrastructure Committee in 2017.
3.4	Economics and Funding	• **Estimated cost** of the proposed flood scheme to increase in future were submitted and what the Council's plans would be if costs escalated.	**Cost-benefit analysis (CBA**) is used to justify spending money on flood schemes. A number of factors such as design changes, inflation or unforeseen issues could potentially increase the cost of the flood scheme. The proposed flood scheme in Comrie is currently estimated to have a benefit/cost ratio of 1.6. This means that the benefits will outweigh the cost. **Funding is in place** to deliver the flood scheme. The Scottish Government will fund 80% of the capital cost of the flood scheme (based upon the costs for the design, professional fees and the construction tender) and the Council will fund the remaining costs. Both the Council and the Scottish Government have committed the funds required for this project, subject to the Scheme securing the necessary statutory approvals. The amount of funding required is reviewed on a regular basis.
3.5	Feasibility Stage	• Reasoning behind why certain **ideas had been discounted.**	The feasibility stage of the project explored a wide range of potential flood management options including dredging, walls and embankments, upstream storage, and natural flood management. Walls and embankments were recommended for various reasons with the other options being ruled out. More information on the feasibility study and its outcomes can be found on the Council's website at www.pkc.gov.uk/comriefloodscheme
3.6	Height of the flood embankments (South of Camp Road)	• Why the proposed flood embankment needs to be higher than the existing one? • Potential **impact on views** and proposed fence lines.	The existing flood embankment in this location was built in the 1960's. This embankment is therefore nearing the end of its design life. Flood modelling work has confirmed that in a larger flood event, there remains a risk that the current flood embankment could be overtopped resulting in flooding to the residential area behind it. The existing embankment will therefore have to be raised to provide the required (1 in 200 year) standard of flood protection consistent with the wider flood scheme. Unfortunately, the current arrangement of these flood defences does not allow them simply to be raised. New flood defences are therefore required in this location. These will be of a more modern, higher and more robust embankment with an improved standard of flood protection.

No	Themes	Comments	Response
			The Council is aware that introducing flood defences will potentially **impact on views** in certain locations. The visual impact of the flood scheme has been considered as part of the Environmental Impact Assessment and appropriate mitigation measures will be taken. This includes landscaping proposals, including the provision of new planting, and the specification of high-quality finishes to mitigate the visual impact of the proposed flood defences. There are a few locations where the available forms of mitigation are limited and there are few options available to the Council if we are to deliver on the primary aim of the flood scheme to protect homes from flooding.
3.7	Landscaping and visual	• Preference for whinstone **finishes on the flood walls** in the vicinity of the River Lednock rather than the pink sandstone that had been proposed. • Reason for **Traffic calming measures** being installed on Strowan Road. • Potential **loss of views** in some locations.	**Finishes on the flood walls** The design team will review the design with respect to the proposed stone cladding and wall finishes. This will be subject to the current arrangement and condition of these defences in the planning consent for the flood scheme. The design team will liaise with the Council's Conservation Officer and the Planning Service to select the most appropriate finishes at each location. We will look to take into account the views we have received on this from the community at this stage. **Traffic Calming** The proposal will enhance the overall design of the flood scheme as it is intended to: (i) help protect the flood wall from potential vehicle collision; (ii) provide small areas of improved drainage; and (iii) soften the visual impact of the proposed flood wall by incorporating some new planting. **Loss of Views** Loss of views can be a sensitive issue. The Council is aware that introducing flood defences will potentially impact on views in certain locations. The Council has therefore worked with Sweco and local residents to **reach a balance between** reducing flood risk, the proposed flood defence heights and the potential impact on properties within the village.
3.8	Maintenance	• **Maintenance of walls, fences** and other scheme-related structures.	Once the proposed flood scheme is built. the Council will have a duty to maintain and repair the defences under the Flood Risk Management (Scotland) Act 2009. Regular routine inspections of the flood defences will be conducted and operation and maintenance procedures will be implemented. Inspections will also

No	Themes	Comments	Response
			be carried out following flood events and repairs and maintenance works will be carried out as required. Most areas of garden ground will be returned to homeowners to maintain. For fence lines, maintenance responsibilities will be mixed. If the fence is new and has been built for the purposes of the Scheme only, then the Council will maintain it. Where a new fence is proposed to replace an existing fence or hedge then it may return to the landowner to maintain as part of their garden. This will be discussed residents and landowners individually at detailed design stage.
3.9	Natural Flood Management	• Use of **Natural Flood Management** has been considered as part of the proposed flood scheme.	Natural flood management (NFM) typically involves using natural features in the landscape to slow or store flood water. When used in the upper catchment areas of watercourses, this can reduce peak flows in the urban areas downstream. Such works are normally carried out at a small scale; however, a large number of separate sites and actions can be implemented to build up a cumulative effect. This is true even in small catchments. In larger catchments, such as those in Comrie, the effect of NFM on flood levels during extreme events is very difficult to estimate and its effectiveness is still hard to quantify. As part of the initial feasibility work for the flood scheme, the Council's consulting engineers estimated the potential impact these techniques could have on the catchment in terms of reducing flood risk. They found that even extensive work in the catchment would not to reduce flood levels significantly for large flood events and that other flood defences would still be required. Furthermore, it would take a number of years to implement these measures and their benefit would not be realised for some time. The three river catchments at Comrie are relatively large and are very steep and so NFM measures were discounted from inclusion as part of the flood scheme.
3.10	River Bank Erosion	• Concern about the ongoing **erosion.** • Green matting with plants unlikely to be effective in preventing erosion.	The primary responsibility for addressing river bank erosion rests with the riparian landowner. River bank erosion is present to some degree on the Water of Ruchill, the River Earn and the River Lednock. This is part of the natural river behavior and results in river bed material being transported downstream and deposited in other parts of the river. In the case of the Water of Ruchill, the river is braided and has changed its position many times. The proposed flood protection scheme **is not intended to prevent, or interfere with**, these natural processes as it is better to work with nature, rather than against it. This is one of the reasons why the

No	Themes	Comments	Response
			flood defences have been set back away from the river, where possible. Erosion protection has only been incorporated into the proposals where it is thought necessary to protect the proposed flood defence structures as well as the adjacent river bed and banks. The proposed use of '**green matting'** on the north bank of the River Earn is only designed to protect the river bank. The matting will allow the new riverside planting to become established and to prosper. Tree roots will eventually bind the river bank together providing a natural and robust means of erosion protection.
3.11	River Modelling	• Flood extents displayed on the flood mapping. • **Calibration** of hydraulic model. • **Flood maps** presented at the public exhibition were not the same as shown on SEPA's indicative flood map. • Existing **weir on the River Earn** is exacerbating the flooding problems. • Changes **in risk up/downstream**	Hydraulic modelling of the three watercourses in Comrie has been carried out based on ground and river survey data. A large amount of data was gathered and input to ensure that the model accurately represents the actual local conditions. The **model has been checked, audited and calibrated against observed flooding and local conditions**. SEPA's flood maps provide an indication of the flood hazard across the country. The wide scale national approach required to produce the maps carries some assumptions and inherent uncertainty. The maps are therefore strategic in nature and apply at a community level and are not appropriate for assessing the flood risk to individual properties or for the development of a flood scheme. The maps produced for the scheme should be consider the most accurate forecast of flood extents. Scottish Water have a sewer that crosses the River Earn in the vicinity of the boulevard. The sewer is located beneath the **weir**. In flood conditions, the weir is 'drowned' and has little effect on river flood levels up or down stream. It is not exacerbating flooding and its removal, or works to lower it, would have no wider benefits in terms of flood risk. This was examined during the earlier feasibility work carried out by the Councils previous assessments. Sweco have fully considered the **upstream and downstream impacts** of the flood scheme on potential water levels, velocities and flows. In general, the flood scheme will significantly reduce flood risk to properties in the area. However, where flood risk is shown to have increased in any location that may

No	Themes	Comments	Response
			affect property, the Council has agreed to undertake works to mitigate these impacts as part of the scheme. There are only a small number of properties affected by the proposed scheme in this way and the impacts are small. The Council has already approached all of those concerned directly. The rivers have large flood plain areas upstream and downstream of Comrie and these can cope with a very large volume of water. There is no significant change in flood levels in these floodplain areas. The Council will write to the relevant landowners to confirm this.
3.12	Surface Water	• Ponding from drainage along roads in Comrie.	Placing a new flood defence between the river and the village can create a barrier for rain water which would normally flow overland to the river. Surface water could gather behind defences and therefore put more pressure on the drainage systems in the town. The proposed flood defences will therefore include additional drainage to collect and discharge this water to the river. This drainage will be located just behind, i.e. on the dry side of, the flood defences. This will help to reduce the risk of unwanted surface water ponding at the defences. However, this drain will only be effective in the vicinity of the flood defences and is not intended to remove all of the localised surface water that may currently exist in other areas of the village. Surface Water flooding issues reported along the A85 for instance, will remain the responsibility of BEAR Scotland and are outwith the scope of the proposed flood scheme to address.
3.13	Timescales	• **When** will construction start? • **How long** will it take?	The Council must first 'publish' the Scheme and seek for it to be 'confirmed' under the Flood Risk Management (Scotland) Act 2009. Once the Scheme is approved (or 'confirmed') the Council will have the legal power to build it and will be able to proceed with securing the remaining statutory consents (such as tree felling licenses, environmental licenses, listed building consents etc.) and to commence the detailed design. This detailed design and consents phase is expected to take approximately 12 months. Tendering and construction will follow on from this. Due to the large number of issues to be considered, such as the statutory requirements and the complexity of the engineering work, at this stage it is difficult to provide a fully detailed programme for the works. At present it is hoped that the main construction works **will commence during the 2021/2022**

No	Themes	Comments	Response
			financial year. It is anticipated that the main construction works will take between 18 and 24 months to complete with landscaping continuing thereafter. An indicative project timeline is available on the Councils website at www.pkc/gov/uk/comriefloodscheme.
3.14	Wall alignments and positioning of defences	• Proposed **locations and positioning** of the flood defences. • Defences move **closer to the river.**	The proposed locations of the flood defences have been optimised using a number of criteria. The Council does not want to segregate people from the river and so the outline design of the flood scheme has been developed so as to maintain connectivity between the town and the river. This approach has the added advantage of working with and making space for the rivers in times of flood. It is also important to maintain the height of the defences at a relatively continuous level. Even if the adjacent ground levels in an area vary, the flood defences still need to be at a continuous height to keep the water out of the town. As such the outline design has located the defences at changes in the natural contours and breaks in slope were possible. Locating flood walls closer to the riverbank would mean that they would cross these natural slopes as the banks drop towards the river. The alignment of flood walls have also been set as to minimise any tree loss and visual impact were possible. Providing some space around the flood defences also provides access for future maintenance works.

4 Conclusion

A public exhibition on the proposals was held in Comrie on 30 April and 8 May 2019. The exhibition was well attended (approximately 150 people over the two days), demonstrating a high level of interest in the proposed flood scheme. Perth & Kinross Council would like to thank those residents who took the time to attend and provide feedback.

The response to the exhibition was generally positive with the majority of the community being supportive of the proposed outline design for the flood scheme. Some concerns were raised and these have been summarised and addressed in this report. The Council and Sweco have responded in writing to any concerns that have been raised and, where possible, amendments have been made to the proposed outline design. Details of the revised outline design are available to the community at the scheme's website.

The proposed Comrie Flood Protection Scheme is therefore to be published under the Flood Risk Management (Scotland) Act 2009, in order to secure the necessary statutory consent. Once this is in place, the detailed design of the scheme can proceed.

The Council will continue to consult with the local community and particularly with those landowners who may be directly affected by the proposed scheme.

If anyone wishes to discuss further any aspects of the proposed scheme, then please contact:

Craig McQueen
Engineer (Flooding)
Structures & Flooding
Perth & Kinross Council
Pullar House
35 Kinnoull Street
Perth
PH1 5GD

Telephone: *01738 475000*
Email: *Comriefloodscheme@pkc.gov.uk*