





Stonehaven Flood Protection Scheme

Flood Risk Management Act (2009) Application

June 2015

Aberdeenshire Council



Stonehaven Flood Protection Scheme

Flood Risk Management Act (2009) Application

June 2015

Aberdeenshire Council

Carlton House, Arduthie Road, Stonehaven, AB39 2QP

Flood Risk Management Act (2009) Application



Issue and revision record

RevisionDateOriginatorCheckerApproverDescription030/06/2015M NekulaL CloadS RobertsonFRM Application

Information Class: Standard

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document contains confidential information and proprietary intellectual property. It should not be shown to other parties without consent from us and from the party which commissioned it.

Stonehaven Flood Protection Scheme

Flood Risk Management Act (2009) Application



Contents

Chapter	Title		
		_	
1	Application Documents	1	
Appendic	es	3	
Appendix A.	Stonehaven December 2012 Flood Event Review	4	
Appendix B.	Option Development and Economic Appraisal	5	
Appendix C.	Description of Operations	6	
Appendix D.	Description of Operations - Drawings	7	
Appendix E.	Environmental Summary Report	8	
Appendix F.	Hydrology and Hydraulic Modelling Report	9	
Appendix G.	River Carron Rock Armour Study	10	



1 Application Documents

This report is a collation of the documents being submitted for the proposed Stonehaven Flood Protection Scheme under the Flood Risk Management (Scotland) Act 2009. It comprises of five documents, each one included in a separate appendix.

Appendix A – Stonehaven December 2012 Flood Event Review

This report documents the December 2012 flood event and demonstrates the need for the flood prevention scheme and confirms the design flow used for the design of the scheme.

Appendix B - Option Development and Economic Appraisal

This report summarises the option development and economic appraisal undertaken for the Stonehaven Flood Protection Scheme. The report demonstrates that a range of options were considered and evaluated. The preferred scheme of flood walls and embankments through Stonehaven is recommended by this report. The design of the preferred scheme has been developed in more detail to form the Flood Protection Scheme as submitted.

Appendix C – Description of Operations

The report summarises the Operations to be carried out in terms of Stonehaven Flood Protection Scheme. The report covers Flood Operations and Ancillary Operations. Each Operation is referenced on drawings which are located in Appendix D.

Appendix D - Description and Operations - Drawings

The thirty three drawings are included in this Appendix to support the Operations document and show the works proposed.

Appendix E - Environmental Summary Report

The Environmental Summary Report outlines the proposed scope and methodology for the Environmental Assessment for the proposed Flood Protection Scheme. It identifies all relevant topics that are considered appropriate for inclusion within the Environmental Assessment, as well as identifying those topics which, based on sound reasoning and judgement, can be scoped out.

The scheme is outline at present and the full Environmental Assessment will be developed in association with the detailed design of the scheme.



Appendix F – Hydrology and Hydraulic Modelling Report

The Hydrology and Hydraulic Modelling Report presents a summary of the hydraulic modelling undertaken by Mott MacDonald to establish design flood water levels for the scheme. The work builds on the Option Development work documented in Appendix B taking the scheme forward from the initial wall and embankment scheme concept to the design presented in Appendix C and D.

Appendix G - River Carron Rock Armour Study

The study of the rock armour assesses the potential for wave propagation up the River Carron due to a combination of high sea level, high waves, and a flood event on the River Carron. The potential for wave propagation has been considered in the scheme development on the basis of this report and considering the likeliness of the combination of all factors that drive the predicted flood level. Coastal flood risk is not part of the Stonehaven Flood Protection Scheme as is being considered separately.

Stonehaven Flood Protection Scheme

Flood Risk Management Act (2009) Application



Appendices

Appendix A.	Stonehaven December 2012 Flood Event Review	∠
Appendix B.	Option Development and Economic Appraisal	5
Appendix C.	Description of Operations	6
Appendix D.	Description of Operations - Drawings	
Appendix E.	Environmental Summary Report	8
Appendix F.	Hydrology and Hydraulic Modelling Report	_ (
Appendix G.	River Carron Rock Armour Study	10



Appendix A. Stonehaven December 2012 Flood Event Review



Appendix B. Option Development and Economic Appraisal



Appendix C. Description of Operations



Appendix D. Description of Operations - Drawings



Appendix E. Environmental Summary Report



Appendix F. Hydrology and Hydraulic Modelling Report



Appendix G. River Carron Rock Armour Study