Gruggies Burn Flood Alleviation Scheme

Scheme Statement

March 2024









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1. General

In exercise of the powers conferred upon them by Part 4 of the Flood Risk Management (Scotland) Act 2009, (hereinafter referred to as "the Act") West Dunbartonshire Council (hereinafter referred to as "the Council") hereby make the following Flood Alleviation Scheme (hereinafter referred to as "the Scheme"), the purpose of which is to mitigate the flooding of residential, non-residential and commercial land in the Dumbarton East region of the town of Dumbarton.

The intention to make this scheme is aligned with the Flood Risk Management Plan for the Clyde and Loch Lomond Local Plan District published by the Scottish Environment Protection Agency on 22nd December 2021 and the associated Local Flood Risk Management Plan 2022 – 2028 (Cycle 2) published by Glasgow City Council (the Lead Local Authority) in December 2022, as outlined in Section 36 of the Act. In accordance with Section 60(2) (c), all aspects of the Scheme contribute to the implementation of the measures identified in the Clyde and Loch Lomond Local Plan District Local Flood Risk Management Plan to reduce the risk of river and tidal flooding in Dumbarton East.

The dimensions and level information contained within this document are approximate based on the best data currently available.

The regulations referred to are the Flood Risk Management (Flood Protection Schemes, Potentially Vulnerable Areas And Local Plan Districts) (Scotland) Regulations 2010 (As Amended).



2. Terms of the scheme

The terms of the Scheme are as detailed in Sections 3 to 8 hereunder.



3. Site of the Flood Protection Operations

For the purposes of regulation 11(1)(c), the site at which the Flood Protection Operations (hereinafter referred to as "the Operations") are to be carried out in terms of the Scheme are situated at Dumbarton East and shown on the plan numbered GBFAS-FRH-ZZ-ZZ-DR-W-100001, Flood Alleviation Scheme Layout Plan, annexed and executed as relative hereto.



4. Description of the Operations

For the purposes of regulation 11 (1) (a), the Operations to be carried out in terms of the Scheme are as shown on the plan(s) marked, annexed and executed as relative hereto, which are in conformance with regulation 11(2) and are as follows:

Table 1: Plans

| Plan Reference | Title |
|-----------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-100001 | Flood Alleviation Scheme, Layout Plan |
| GBFAS-FRH-ZZ-ZZ-DR-W-100002 | Land Affected by the Operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100100 | Site Wide Existing Services |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | Existing Services, Culvert Route 1/4 |
| GBFAS-FRH-ZZ-ZZ-DR-W-100161 | Existing Services, Culvert Route 2/4 |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | Existing Services, Culvert Route 3/4 |
| GBFAS-FRH-ZZ-ZZ-DR-W-100163 | Existing Services, Culvert Route 4/4 |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | Existing Services, Flood Walls 1/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-100165 | Existing Services, Flood Walls 2/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-100166 | Existing Services, Tidal Embankment 1/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-100167 | Existing Services, Tidal Embankment 2/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-100168 | Existing Services, Flood Gate |
| GBFAS-FRH-ZZ-ZZ-DR-W-102002 | Tidal Embankment Plan 1/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102003 | Tidal Embankment Plan 2/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102004 | Tidal Embankment Sections 1/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102005 | Tidal Embankment Sections 2/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102006 | Tidal Embankment Long Section 1/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102007 | Tidal Embankment Long Section 2/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102101 | Plan on Culvert Route 1/4 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102102 | Plan on Culvert Route 2/4 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102103 | Plan on Culvert Route 3/4 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102104 | Plan on Culvert Route 4/4 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102105 | Culvert Route, Long Section 1/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102106 | Culvert Route, Long Section 2/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102151 | Existing Plan/General Arrangement, Culvert and Headwall |
| GBFAS-FRH-ZZ-ZZ-DR-W-102152 | Proposed Plan/General Arrangement Culvert and Headwall |



| Plan Reference | Title |
|-----------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-102153 | Culvert Sections and Details |
| GBFAS-FRH-ZZ-ZZ-DR-W-102201 | Existing Plan/General Arrangement, Flood Walls |
| GBFAS-FRH-ZZ-ZZ-DR-W-102202 | Proposed Plan/General Arrangement, Flood Walls |
| GBFAS-FRH-ZZ-ZZ-DR-W-102203 | Existing and Proposed Sections, Flood Walls 1/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102204 | Existing and Proposed Sections, Flood Walls 2/2 |
| GBFAS-FRH-ZZ-ZZ-DR-W-102205 | Sheet Pile Flood Walls with Cladding Details |
| GBFAS-FRH-ZZ-ZZ-DR-W-102301 | Existing Plan/General Arrangement, Flood Gate |
| GBFAS-FRH-ZZ-ZZ-DR-W-102302 | Proposed Plan/General Arrangement, Flood Gate |
| GBFAS-FRH-ZZ-ZZ-DR-W-102303 | Flood Gate Details |
| GBFAS-FRH-ZZ-ZZ-DR-W-102401 | Inlet Structure, Plan |
| GBFAS-FRH-ZZ-ZZ-DR-W-102402 | Inlet Structure, Sections |
| GBFAS-FRH-ZZ-ZZ-DR-W-102501 | Outfall Structure, Plan |
| GBFAS-FRH-ZZ-ZZ-DR-W-102502 | Outfall Structure, Sections |

All areas, directions, distances, lengths, widths, depths and heights as stated in any below description of Operations or lands shall be construed as if the words "or thereby" were inserted after each such area, direction, distance, length, width, depth and height.

4.1 Flow Diversion Weir

FDW01

Construction of a 29 m long raised weir in Gruggies Burn to control the flow of water downstream and divert flood flows into a flow diversion culvert, as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102401
- GBFAS-FRH-ZZ-ZZ-DR-W-102402

A pass-forward flow control flume will allow natural flows to continue downstream but control higher flows which could cause flooding to Dumbarton East. Exceedance control spillways will allow water to pass over in events which are more extreme than the design flood.

4.2 Flow Diversion Culvert

FDC01

Construction of a new culvert inlet on the Gruggies Burn, as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102401
- GBFAS-FRH-ZZ-ZZ-DR-W-102402



FDC02

Construction of a culvert 1430 m long from a point on the Gruggies Burn immediately north of the A82 Stirling Road via Greenhead Road, National Cycle Route 7, Oaktree Gardens and Dogs Loan to the River Clyde downstream of the railway bridge near the existing Hunter's Burn culvert outlet to divert peak flows and thereby reduce the risk of flooding from fluvial sources within Dumbarton East.

As shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102101
- GBFAS-FRH-ZZ-ZZ-DR-W-102102
- GBFAS-FRH-ZZ-ZZ-DR-W-102103
- GBFAS-FRH-ZZ-ZZ-DR-W-102104
- GBFAS-FRH-ZZ-ZZ-DR-W-102105
- GBFAS-FRH-ZZ-ZZ-DR-W-102106
- GBFAS-FRH-ZZ-ZZ-DR-W-102151
- GBFAS-FRH-ZZ-ZZ-DR-W-102152
- GBFAS-FRH-ZZ-ZZ-DR-W-102153
- GBFAS-FRH-ZZ-ZZ-DR-W-100160
- GBFAS-FRH-ZZ-ZZ-DR-W-100161
- GBFAS-FRH-ZZ-ZZ-DR-W-100162
- GBFAS-FRH-ZZ-ZZ-DR-W-100163

FDC03

Construction of a new culvert outfall to the River Clyde south of Dogs Loan, as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102501
- GBFAS-FRH-ZZ-ZZ-DR-W-102502
- GBFAS-FRH-ZZ-ZZ-DR-W-100163

4.3 Flood Walls

FW01

Construction of 1120 m new or replacement walls to the Gruggies Burn between Glasgow Road and a point above the River Clyde shoreline normal tide levels to reduce the risk of flooding from extreme tidal flood events within Dumbarton East, as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102201
- GBFAS-FRH-ZZ-ZZ-DR-W-102202
- GBFAS-FRH-ZZ-ZZ-DR-W-102203
- GBFAS-FRH-ZZ-ZZ-DR-W-102204
- GBFAS-FRH-ZZ-ZZ-DR-W-102205
- GBFAS-FRH-ZZ-ZZ-DR-W-100164



GBFAS-FRH-ZZ-ZZ-DR-W-100165

4.4 Tidal Embankments

TE01

Construction of a 470 m embankment from the east side of the Gruggies Burn above the River Clyde shoreline normal tides levels eastward towards the Hunter's Burn outfall to reduce the risk of extreme tidal flood events within Dumbarton East and specifically properties on the south side of the rail line, as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102002
- GBFAS-FRH-ZZ-ZZ-DR-W-102003
- GBFAS-FRH-ZZ-ZZ-DR-W-102004
- GBFAS-FRH-ZZ-ZZ-DR-W-102005
- GBFAS-FRH-ZZ-ZZ-DR-W-102006
- GBFAS-FRH-ZZ-ZZ-DR-W-102007
- GBFAS-FRH-ZZ-ZZ-DR-W-100166
- GBFAS-FRH-ZZ-ZZ-DR-W-100167

TE02

Construction of a 13 m embankment south of Dogs Loan at the outfall of Hunter's Burn and the flow diversion culvert to reduce the risk of extreme tidal flood events within Dumbarton East, as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102501
- GBFAS-FRH-ZZ-ZZ-DR-W-102502

4.5 Tidal Flood Gate

TFG01

Construction of a removable or swing tidal gate on Castle Road immediately to the south of Castlegate Avenue and the entrance to Dumbarton Football Stadium to reduce the risk of extreme tidal flood events resulting in water passing northward towards Dumbarton, as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102301
- GBFAS-FRH-ZZ-ZZ-DR-W-102302
- GBFAS-FRH-ZZ-ZZ-DR-W-102303
- GBFAS-FRH-ZZ-ZZ-DR-W-100168



TFG02

Construction of a wall to the west of Castle Road linking the tidal gate to higher ground to reduce the risk of extreme tidal flood events resulting in water passing northward towards Dumbarton as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102301
- GBFAS-FRH-ZZ-ZZ-DR-W-102302
- GBFAS-FRH-ZZ-ZZ-DR-W-102303
- GBFAS-FRH-ZZ-ZZ-DR-W-100168

TFG03

Construction of a wall to the east of Castle Road linking the tidal gate to higher ground to reduce the risk of extreme tidal flood events resulting in water passing northward towards Dumbarton as shown on the drawings:

- GBFAS-FRH-ZZ-ZZ-DR-W-102301
- GBFAS-FRH-ZZ-ZZ-DR-W-102302
- GBFAS-FRH-ZZ-ZZ-DR-W-102303
- GBFAS-FRH-ZZ-ZZ-DR-W-100168



5. Land

For the purposes of Regulation 11(1) (b), the land which will be affected by the Operations and the land upon which entry is required for the purpose of carrying out the Operations and of executing temporary works is as shown on the said plan(s) and numbered respectively:

• GBFAS-FRH-ZZ-ZZ-DR-W-100002



6. Diversion and Protection of Services/Public Utilities

For the purposes of regulation 11 (1) (a), the following ancillary operations shall/may be undertaken.

6.1 Flow Diversion Culvert

Table 2: Flow Diversion Culvert Diversion or Protection of services

| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP1 | Water Main infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP2 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP3 | Gas IP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP4 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP5 | Gas LP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP7 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP8 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP10 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP11 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP12 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP13 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP14 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP15 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP16 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP17 | Electricity Distribution infrastructure to be protected or diverted during the operations |



| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP19 | Water Main infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP21 | Gas IP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP22 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP23 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP24 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP25 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP26 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP27 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP28 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP29 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP30 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP31 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP32 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP33 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP34 | Water Main infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP35 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP36 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP37 | BT Comms infrastructure to be protected or diverted during the operations |



| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP38 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP39 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP40 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP42 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP43 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP44 | Water Main infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100160 | DP45 | Gas LP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100161 | DP46 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100161 | DP47 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100161 | DP48 | Gas LP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100161 | DP49 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100161 | DP50 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP51 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP52 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP53 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP54 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP55 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP56 | Electricity Distribution infrastructure to be protected or diverted during the operations |



| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP57 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP58 | Foul Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP59 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP60 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP61 | Water Main infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP62 | Gas LP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP63 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP64 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP65 | Gas IP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP66 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP67 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP68 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP69 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP70 | Gas IP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP71 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP74 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP75 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP77 | BT Comms infrastructure to be protected or diverted during the operations |



| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-100163 | DP78 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP84 | Natural Watercourse infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100162 | DP85 | Natural Watercourse infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100163 | DP90 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100163 | DP91 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100163 | DP92 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100163 | DP93 | Natural Watercourse infrastructure to be protected or diverted during the operations |

6.2 Flood Walls

Table 3: Flood Walls Diversion or Protection of services

| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|--|
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP100 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP101 | Gas LP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP102 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP103 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP104 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP105 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP106 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP107 | Surface Drainage infrastructure to be protected or diverted during the operations |



| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP108 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP109 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP110 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP111 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP112 | Surface Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP113 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP114 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP115 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP116 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP117 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP118 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP119 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP120 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP121 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP122 | CTV Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP123 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP124 | Gas LP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP125 | Electricity HV infrastructure to be protected or diverted during the operations |



| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|---|
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP126 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP127 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP128 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP129 | Water Main infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP130 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100164 | DP131 | Electricity Distribution (6No) infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100165 | DP132 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100165 | DP133 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100165 | DP134 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100165 | DP135 | Electricity Distribution infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100165 | DP136 | Surface Drainage infrastructure to be protected or diverted during the operations |

6.3 Tidal Embankments

Table 4: Tidal Embankments Diversion or Protection of services

| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|--|
| GBFAS-FRH-ZZ-ZZ-DR-W-100166 | DP150 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100166 | DP151 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100167 | DP152 | Combined Drainage infrastructure to be protected or diverted during the operations |



6.4 Tidal Flood Gate

Table 5: Tidal Flood Gate Diversion or Protection of services

| Plan Reference | Operation Reference | Ancillary Operations Required |
|-----------------------------|------------------------|--|
| GBFAS-FRH-ZZ-ZZ-DR-W-100168 | DP160 | Combined Drainage infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100168 | DP161 | Gas LP infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100168 | DP162 | BT Comms infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100168 | DP163 | Water Main infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100168 | DP164 | Water Main infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100168 | DP165 | Electricity HV infrastructure to be protected or diverted during the operations |
| GBFAS-FRH-ZZ-ZZ-DR-W-100168 | DP166 | Electricity HV infrastructure to be protected or diverted during the operations |

6.5 General

A significant number of locations have been identified where the Scheme conflicts with the existing services and as these are in close proximity to residential and industrial areas, there may be additional locations or alterations to those identified.

- Any operations to existing water mains will be in association with Scottish Water or other organisation as appropriate.
- Any operations to existing sewer mains will be in association with Scottish Water or other organisations as appropriate.
- Any operations to existing gas mains will be in association with SGN or other organisations as appropriate.
- Any operations to existing telecoms will be in association with British Telecommunication or other organisations as appropriate.
- Any operations to existing power cables will be in association Scottish Power or other organisation as appropriate.
- Any operations to street lighting in association with West Dunbartonshire Council



7. Powers

The Scheme is a Flood Protection Scheme for the purposes of Section 60 and Schedule 2 of the Flood Risk Management (Scotland) Act 2009 and shall be implemented in reliance upon the powers conferred by Section 56 and otherwise as specified in Part 4 of the Act.

Insofar as the Scheme involves development in terms of the Town and Country Planning (Scotland) Act 1997, Scottish Ministers must direct that planning permission under Section 57 of the Town and Country Planning (Scotland) Act 1997 shall be deemed to be granted, either upon their confirming the Scheme or following a request by the local authority where they have confirmed the Scheme, the deemed planning permission shall be subject to such conditions (if any) as may be specified in the direction.



8. Cost

For the purpose of regulation 11 (3), the estimated cost of the Operations at the date hereof is Thirty Seven Million pounds (£37,000,000) sterling.

| Made by West Dunbartonshire Council on the22 day ofMarch | 2024 |
|--|---------|
| G Macfarlane | Council |
| 22/03/24 | Dated |



