### Issued for Confirmation May 2018

	Pro Bit 195	Relevant Drawings by A						
		Area of Interest	Plans	Sections	Flood Extents		Works Area	Photomontage View
	Sallybrook & Kearney's Cross	Sallybrook & Kearney's Cross Roads Area	GR_201, GR_202, GR_203, GR_204, GR_205, GR_206.	GR_301, GR_302,	GR_104	GR_401	GR_501	n/a
GR 201	Roads Area	Hazelwood, Meadowbrook, Butlerstown Stream & Brooklodge Grove	GR_206, GR_207, GR_208, GR_209, GR_210,		GR_105	GR_402	GR_502	1, 2, 3, 4, 5.
GR 203		Downstream of St. Patrick's Mill, including Glanmire Bridge & Glanmire village.	GR_213, GR_214, GR_215.	GR_308,	GR_106	GR_403	GR_503	n/a
GR 204 GR 205								
GR 206								

STURY NO RESERVICED IN

Hazelwood, Meadowbrook, Butlerstown Stream & Brooklodge Grove



# including Glanmire Bridge & Glanmire village

ET S

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Location Plan



Scale 1:2,500 at A1 Scale 1:5,000 at A3

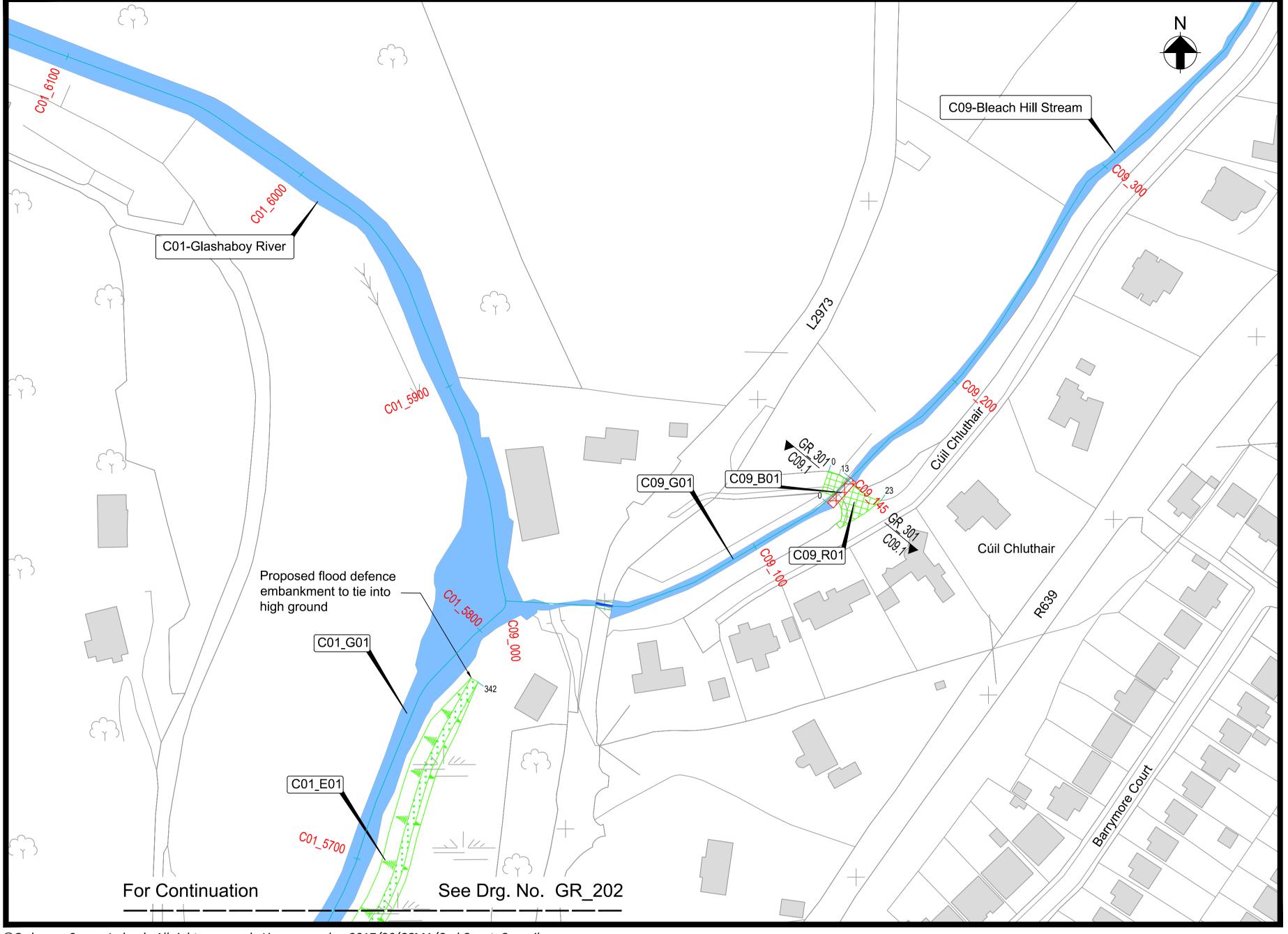
#### Drg. No. GR\_108 Overview of Drawings

ARUP	<b>JBA</b> consulting		OPPW Offere ar Offereda Politi the Office of Public Works
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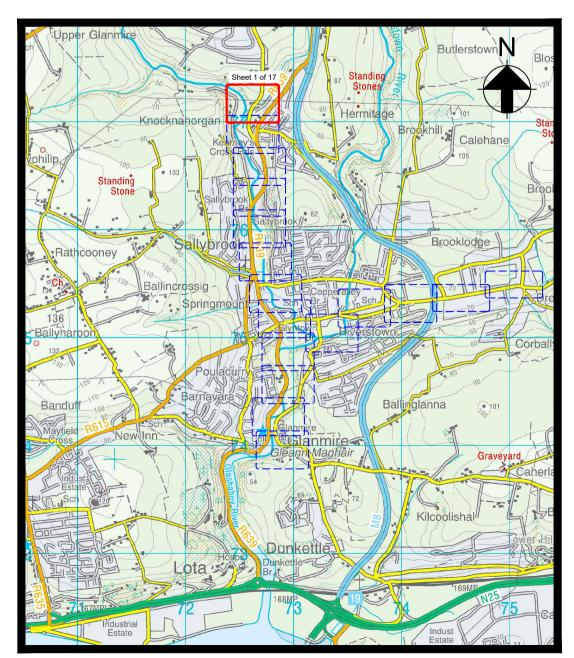
#### Notes:

Do not scale from drawing. 1.

This drawing should be read in conjunction with all other Glashaboy River (Glanmire/Sallybrook) Drainage Scheme Confirmation Drawings and Schedules.



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#### Key to Plan



C08\_B01 GR\_301 GR\_301 C01.1 C01.1 50

#### Watercourse

0 5 10

Channel Centreline, Reference (C08 Chainage (300m)

50 Metres

Interference Reference

- Location and Reference of Cross Se
- Proposed Works Chainage (m)

Key Plan

$\frown$		
$\parallel$ $\square$		

Interference

Reference

C09\_G01

C01\_G01

C09\_B01

C09\_R01

C01\_E01

Notes:

1.

Channel Chainage

0 to 155

1643 to 5815

132 to 145

129 to 146

5645 to 5781

Do not scale from drawing.

Drawings and Schedules.

Scale 1:1,000 at A1 Scale 1:2,000 at A3

	× × × × × ×	Proposed Flood Defence Embankment
98) and	<b>XXX</b>	Proposed Replacement Reinforced Concrete Culvert
		Existing Culvert to be Retained
ection		Proposed Regrading of Ground Levels

Drg. No. GR\_201 Proposed Flood Defences - Plan Layout (Sheet 1 of 17)

## Issued for Confirmation May 2018

Proposed Works Chainage (m)	General Description of Proposed Works
_	Channel maintenance, as and when necessary over a distance of 155m from the confluence of the Bleach Hill Stream and the Glashaboy River (C09_000) to 10m upstream of the proposed 2.6m wide by 2.4m high rectangular culvert (C09_155).
-	Channel maintenance, as and when necessary over a distance of 4172m from the confluence of the Glashaboy River with Mill Race 1 (C01_1643) to the confluence with Bleach Hill Stream (C01_5815).
0 to 13	Replace existing twin 0.9m diameter culverts with new 2.6m wide by 2.4m high rectangular culvert. Service diversions associated with the culvert reconstruction will be required locally.
0 to 23	Regrading of existing ground to facilitate the construction of the proposed new culvert. Ground levels to tie into existing levels on either side of the proposed culvert.
197 to 342	Proposed flood defence embankment to be constructed above flood defence level to 21.90mOD (typically 9m wide and to a height of 1.4m above existing ground levels) . Flood defence embankment to tie into high ground.

2. This drawing should be read in conjunction with all other Glashaboy River (Glanmire/Sallybrook) Drainage Scheme Confirmation

3. All sections on this drawing are taken looking downstream.



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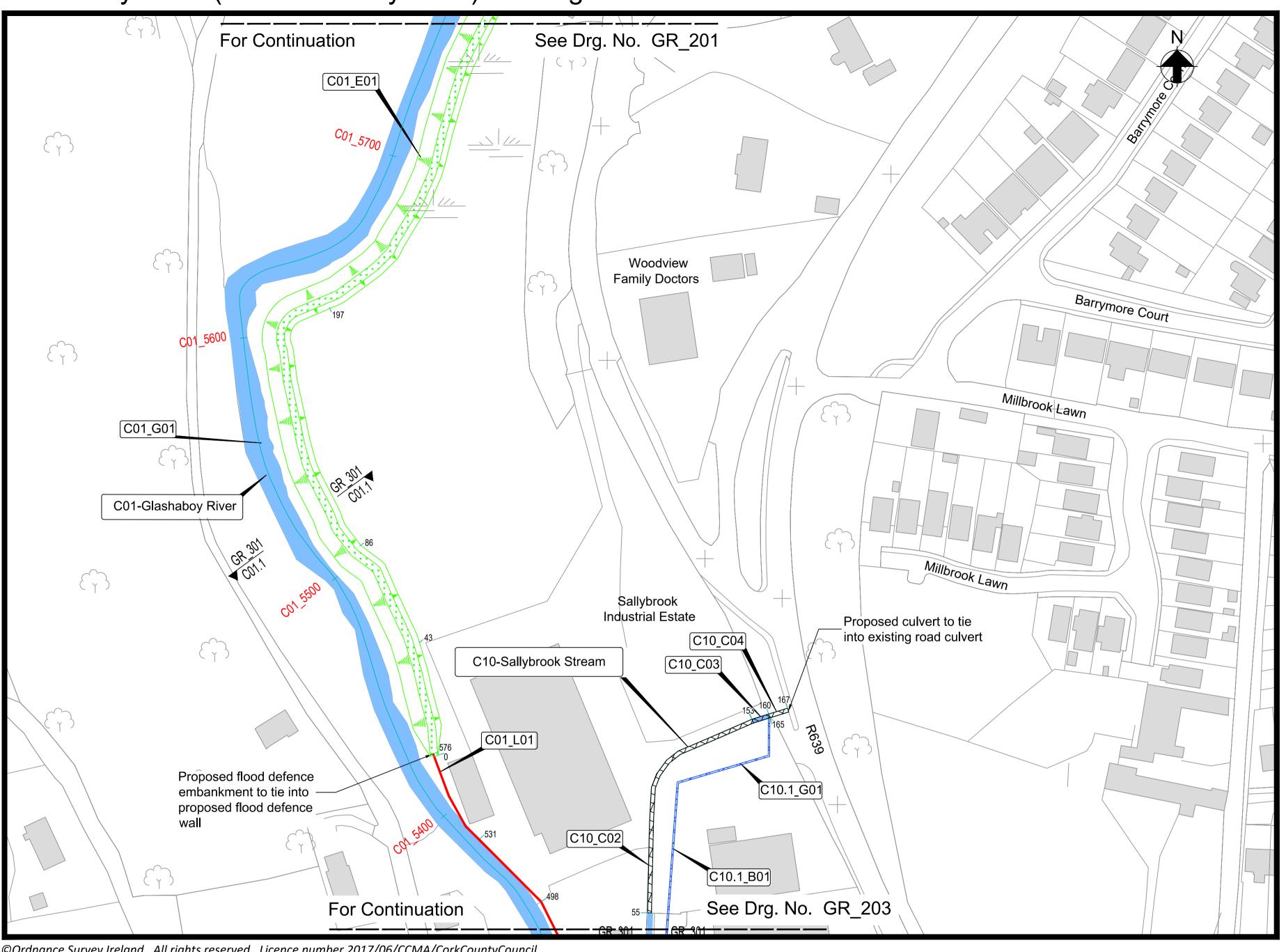


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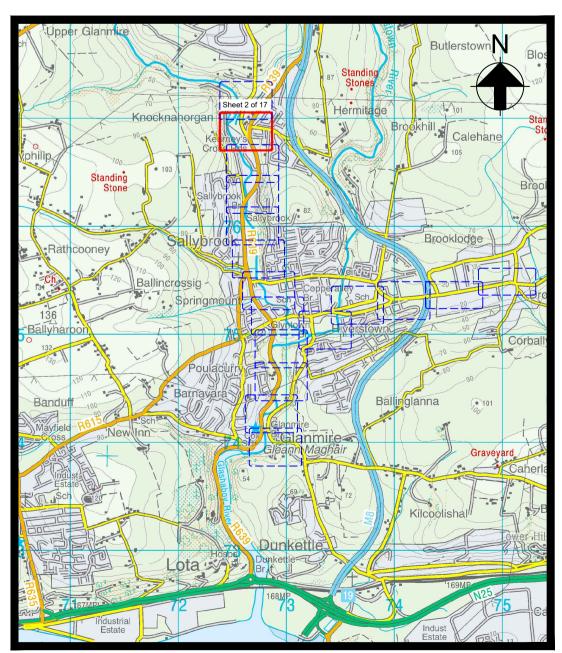


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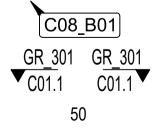


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#### Key to Plan





Watercourse

0 5 10

Channel Centreline, Reference (C08) Chainage (300m)

50 Metres

Interference Reference

- Location and Reference of Cross Section
- Proposed Works Chainage (m)

Key Plan

Interference Reference	Channel Chainage	Proposed Works Chainage (m)	General Description of Proposed Works
C01_G01	1643 to 5815	-	Channel maintenance, as and when necessary over a distance of 4172m from the confluence of the Glashaboy River with Mill Race 1 (C01_1643) to the confluence with Bleach Hill Stream (C01_5815).
C10.1_G01	0 to 165	-	Channel maintenance, as and when necessary over a distance of 165m from the outfall into the Glashaboy River (C01_5300) to tie into the culvert under the R639 (C10_165).
C01_E01	5645 to 5781	197 to 342	Proposed flood defence embankment to be constructed above flood defence level to 21.90mOD (typically 9m wide and to a height of 1.4m above existing ground levels) . Flood defence embankment to tie into high ground.
C01_E01	5501 to 5645	86 to 197	Proposed flood defence embankment to be constructed above flood defence level to 21.73mOD (typically 10m wide and to a height of 1.71m above existing ground levels).
C01_E01	5462 to 5501	43 to 86	Proposed flood defence embankment to be constructed above flood defence level to 21.40mOD (typically 12m wide and to a height of 1.97m above existing ground levels).
C01_E01	5420 to 5462	0 to 43	Proposed flood defence embankment to be constructed above flood defence level to 21.10mOD (typically 10m wide and to a height of 1.60m above existing ground levels). Flood defence embankment to tie into proposed flood defence wall.
C01_L01	5384 to 5424	531 to 576	Proposed steel sheet pile wall to be constructed to flood defence level of 21.02mOD. Finished wall height to be typically 1.53m above existing ground levels. Flood defence wall to tie into proposed flood defence embankment. All drainage outfalls to be fitted with non-return valves.
C01_L01	5352 to 5384	498 to 531	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 20.62mOD (typically 2.20m above existing ground levels). All drainage outfalls to be fitted with non-return valves.
C01_L01	5298 to 5352	442 to 498	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 20.34mOD (typically 1.80m above existing ground levels). All drainage outfalls to be fitted with non-return valves.
C10_C04	160 to 167	160 to 167	The existing culvert is to be extinguished. Flow to be diverted through C10.1_B01.
C10_C03	153 to 160	153 to 160	Upstream flow to be diverted through a proposed reinforced concrete sealed chamber to C10.1_B01.
C10_C02	3 to 153	3 to 153	The stretch of existing culvert is to be retained but will not form part of the Drainage Scheme. Upstream flow to be diverted through C10.1_B01.
C10.1_B01	0 to 165	0 to 165	Channel C10 to be realigned along the line of C10.1. The Stream is to be culverted in a 900mm diameter concrete culvert from chainage zero at the outfall into the Glashaboy River at C01_5300, which will be a free flowing outlet. The culvert will extend as far back as works chainage 165 where it will tie into the culvert which crosses under the R639. All drainage outfalls within the culvert will be fitted with a non-return valve.

Notes:

1. Do not scale from drawing.

Drawings and Schedules. 3. All sections on this drawing are taken looking downstream.

Scale 1:1,000 at A1 Scale 1:2,000 at A3

and	

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Proposed Flood Defence Embankment Proposed Flood Defence Wall Proposed Reinforced Concrete Culvert

Proposed Channel Works

## Issued for Confirmation May 2018

2. This drawing should be read in conjunction with all other Glashaboy River (Glanmire/Sallybrook) Drainage Scheme Confirmation

Drg. No. GR\_202 Proposed Flood Defences - Plan Layout (Sheet 2 of 17)



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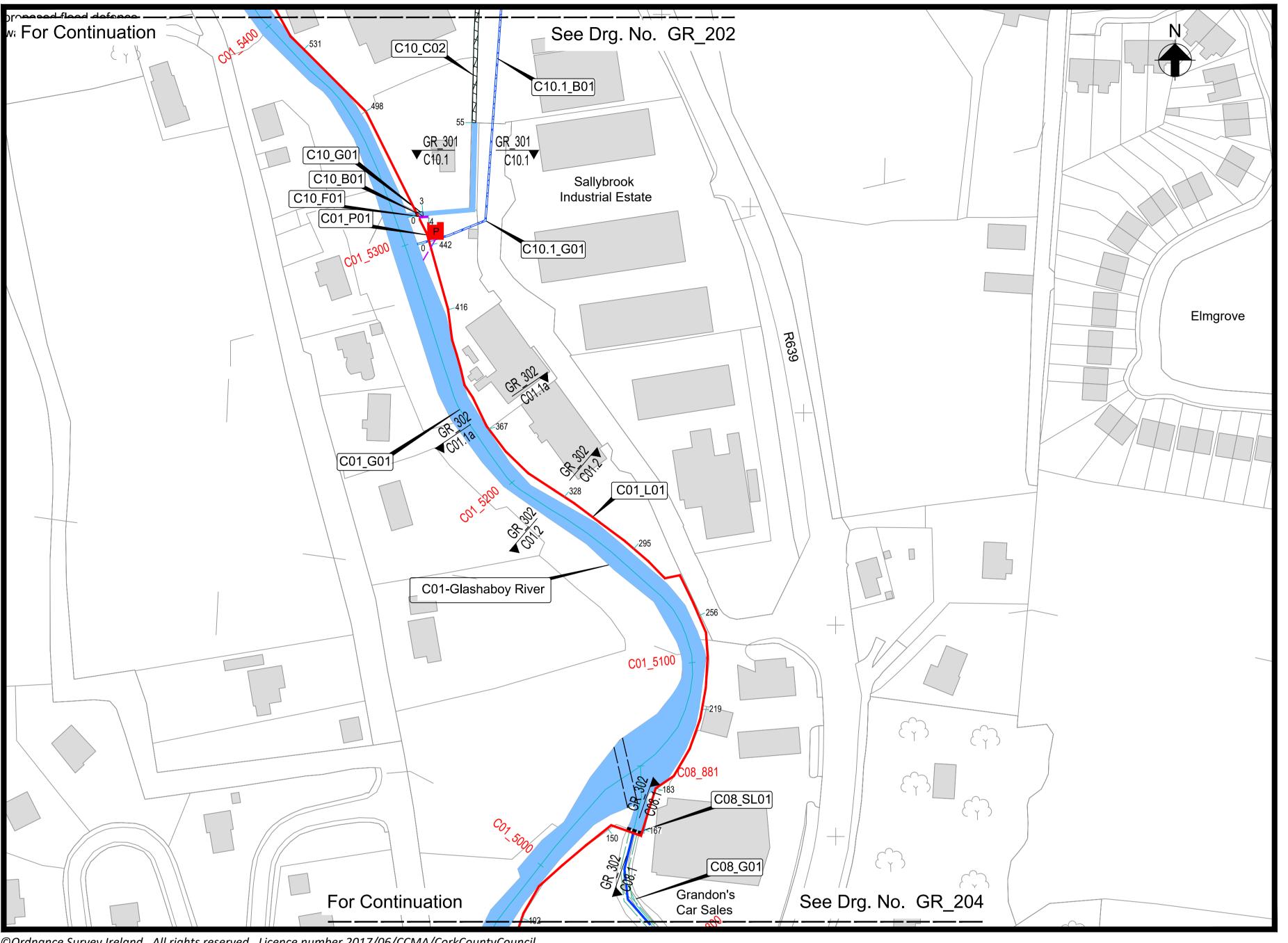
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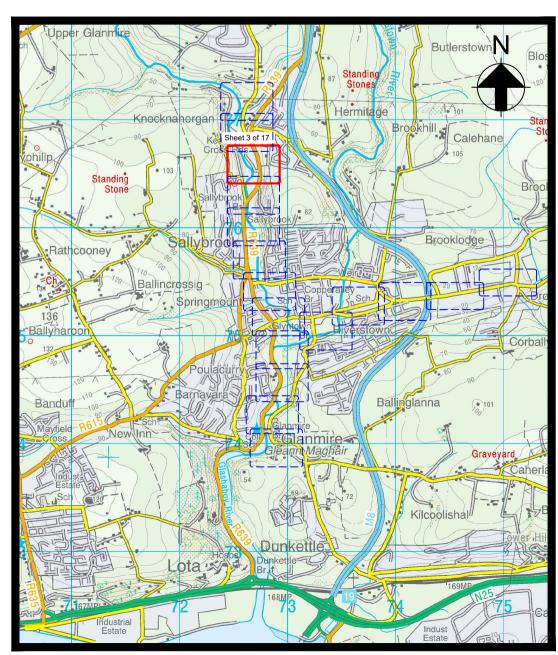
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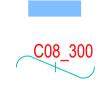
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#### Key to Plan



C08\_B01 GR\_301 GR\_301 C01.1 C01.1 50

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#### Watercourse

0 5 10

Proposed Flood Defence Wall Existing Culvert to be Retained Channel Centreline, Reference (C08) and Chainage (300m) Proposed Reinforced Concrete Culvert (XXX)Interference Reference Proposed Flow Control Structure ----Location and Reference of Cross Section Proposed Rising Main (Surface Water) Proposed Works Chainage (m) Proposed Pumping Station (Surface Water) Proposed Channel Works 

50 Metres

- Existing Weir to be retained

Key Plan

Interference Reference	Channel Chainage	Proposed Works Chainage (m)	General Description of Proposed Works	
C01_L01	5384 to 5424	531 to 576	Proposed steel sheet pile wall to be constructed to flood defence level of 21.02mOD. Finished wall height to be typically 1.53m above existing ground levels. Flood defence wall to tie into proposed flood defence embankment. All drainage outfalls to be fitted with non-return valves.	
C01_L01	5352 to 5384	498 to 531	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 20.62mOD (typically 2.20m above existing ground levels). All drainage outfalls to be fitted with non-return valves.	
C01_L01	5298 to 5352	442 to 498	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 20.34mOD (typically 1.80m above existing ground levels). All drainage outfalls to be fitted with non-return valves.	
C01_L01	5272 to 5298	416 to 442	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 20.05mOD (typically 1.30m above existing ground levels). All drainage outfalls to be fitted with non-return valves.	
C01_L01	5222 to 5272	367 to 416	Proposed steel sheet pile wall to be constructed to a flood defence level of 20.05mOD (typically 1.40m above existing ground levels). All drainage outfalls to be fitted with non-return valves.	
C01_L01	5182 to 5222	328 to 367	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 19.63mOD (typically 1.33m above existing ground levels). All drainage outfalls to be fitted with non-return valves.	
C01_L01	5149 to 5182	295 to 328	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 19.42mOD (typically 1.30m above existing ground levels). All drainage outfalls to be fitted with non-return valves.	
C01_L01	5116 to 5149	256 to 295	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 19.06mOD (typically 1.10m above existing ground levels). All drainage outfalls to be fitted with non-return valves.	
C01_L01	5083 to 5116	219 to 256	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 18.70mOD (typically 0.80m above existing ground levels). All drainage outfalls to be fitted with non-return valves.	
C01_L01	5030 to 5083	150 to 219	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 18.58mOD (typically 0.90m above existing ground levels). All drainage outfalls to be fitted with non-return values.	
C01_L01	4978 to 5030	102 to 150	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 18.50mOD (typically 1.60m above existing ground levels). All drainage outfalls to be fitted with non-return values.	
C01_L01	4936 to 4978	64 to 102	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 18.19mOD (typically 1.45m above existing ground levels). All drainage outfalls to be fitted with non-return values.	
C10_C02	3 to 153	3 to 153	The stretch of existing culvert is to be retained. Upstream flow to be diverted through C10.1_B01.	
C10_F01	3 to 7	0 to 4	Proposed boundary fence to be provided over proposed culvert. Proposed fence to tie into the proposed flood defence wall at western end.	
C10_B01	0 to 3	0 to 3	The existing stretch of open channel is to be culverted through a proposed 900mm diameter concrete culvert and will outfall into the Glashaboy River at C01_5311. All drainage outfalls to be fitted with non-return valves. Upstream flow to be diverted through C10.1_B01.	
C10.1_B01	0 to 165	0 to 165	Channel C10 to be realigned along the line of C10.1. The Stream is to be culverted in a 900mm diameter concrete culvert from chainage zero at the outfall into the Glashaboy River at C01_5300, which will be a free flowing outlet. The culvert will extend as far back as works chainage 165 where it will tie into the culvert which crosses under the R639. All drainage outfalls within the culvert will be fitted with a non-return valve.	
C01_P01	5300	-	Proposed local surface water pumping station, collector drain, manhole and rising main to be installed for operation during a flood event at C01_5300. All outlets to be fitted with non-return valves.	
C08_SL01	857	-	Proposed flow control structure on the Mill Race. The structure will be fitted with a penstock to facilitate maintenance of the Mill Race. A base flow will be maintained in the Mill Race at all times.	
C01_G01	1643 to 5815	-	Channel maintenance, as and when necessary over a distance of 4172m from the confluence of The Glashaboy River with Mill Race 1 (C01_1643)to the confluence with Bleach Hill Stream (C01_5815).	
C08_G01	0 to 881	-	Channel maintenance, as and when necessary over a distance of 881m from the confluence of the Glashaboy River and Mill Race 3 (C08_000) and the bifurcation of the Glashaboy River and Mill Race (C08_881).	
C10.1_G01	0 to 165	-	Channel maintenance, as and when necessary over a distance of 165m from the outfall into the Glashaboy River (C01_5300) to tie into the culvert under the R639 (C10_165).	
C10_G01	0 to 3	0 to 3	Channel maintenance, as and when necessary over a distance of 3m from the confluence of the Sallybrook Stream and the Glashaboy River (C01_5312) to the proposed culvert (C10_B01).	

Scale 1:1,000 at A1 Scale 1:2,000 at A3

Proposed Boundary Works

#### Notes:

Do not scale from drawing. 1.

2. This drawing should be read in conjunction with all other Glashaboy River (Glanmire/Sallybrook) Drainage Scheme Confirmation Drawings and Schedules.

3. All sections on this drawing are taken looking downstream, except C08.1 which is looking to the east.

## Issued for Confirmation May 2018

#### Drg. No. GR\_203 Proposed Flood Defences - Plan Layout (Sheet 3 of 17)



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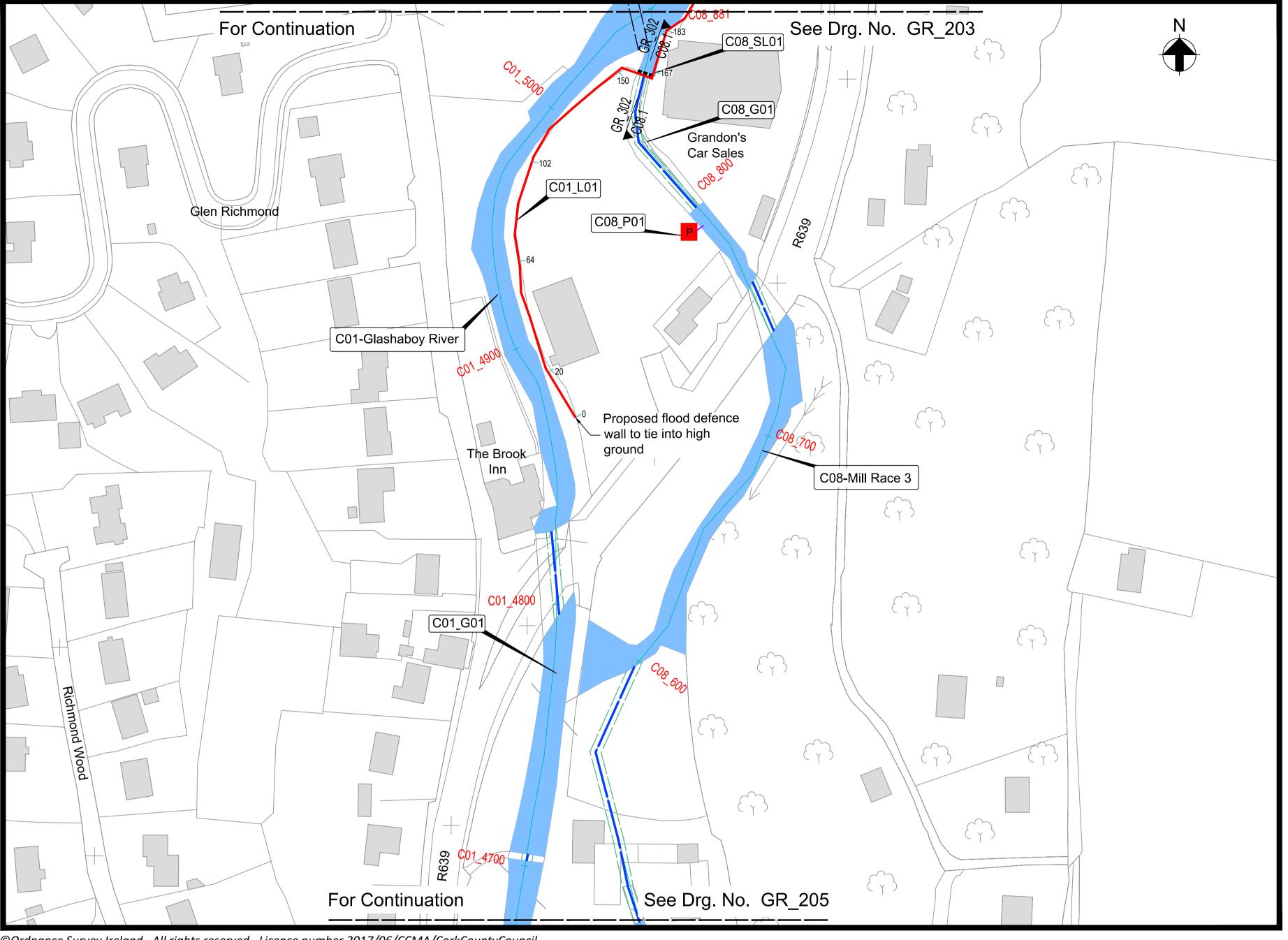
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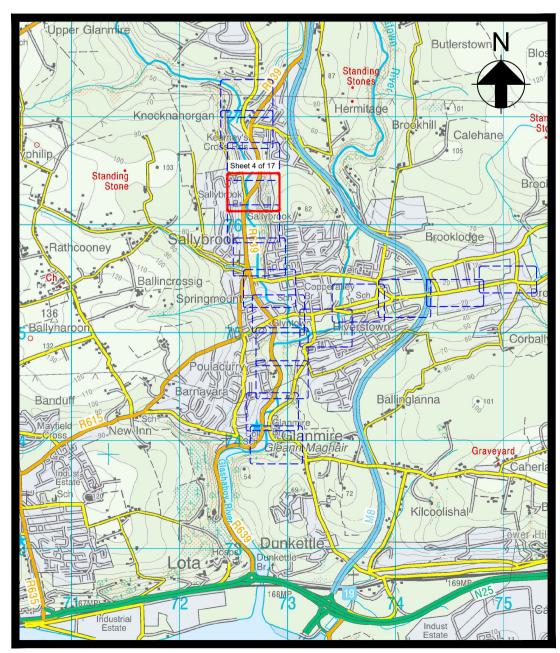
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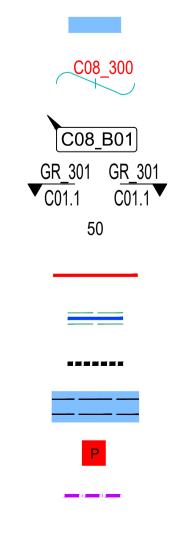
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#### Key to Plan



Watercourse

0 5 10

Channel Centreline, Reference (C08) and Chainage (300m) Interference Reference Location and Reference of Cross Section Proposed Works Chainage (m) Proposed Flood Defence Wall Existing Culvert to be Retained Proposed Flow Control Structure Existing Weir to be Retained

50 Metres

Proposed Pumping Station (Surface Water)

Proposed Rising Main (Surface Water)

Key Plan

Scale 1:1,000 at A1 Scale 1:2,000 at A3

Interference Reference	Channel Chainage	Proposed Works Chainage (m)	General Description of Proposed Works
C01_L01	5030 to 5083	150 to 219	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 18.58mOD (typically 0.90m above existing ground levels). All drainage outfalls to be fitted with non-return valves.
C01_L01	4978 to 5030	102 to 150	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 18.50mOD (typically 1.60m above existing ground levels). All drainage outfalls to be fitted with non-return valves.
C01_L01	4936 to 4978	64 to 102	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 18.19mOD (typically 1.45m above existing ground levels). All drainage outfalls to be fitted with non-return valves.
C01_L01	4886 to 4936	20 to 64	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 17.87mOD (typically 1.20m above existing ground levels). All drainage outfalls to be fitted with non-return valves.
C01_L01	4869 to 4886	0 to 20	Proposed reinforced concrete flood defence wall to be constructed to flood defence level of 17.55mOD (typically 0.80m above existing ground levels). All drainage outfalls to be fitted with non-return valves. Proposed flood defence wall to tie into high ground.
C08_SL01	857	-	Proposed flow control structure on the Mill Race. The structure will be fitted with a penstock to facilitate maintenance of the Mill Race. A base flow will be maintained in the Mill Race at all times.
C08_P01	790	-	Proposed local surface water pumping station, collector drain, manhole and rising main to be installed for operation during a flood event at C08_790. All outlets to be fitted with non-return valves.
C01_G01	1643 to 5815	-	Channel maintenance, as and when necessary over a distance of 4172m from the confluence of The Glashaboy River with Mill Race 1 (C01_1643) to the confluence with Bleach Hill Stream (C01_5815).
C08_G01	0 to 881	-	Channel maintenance, as and when necessary over a distance of 881m from the confluence of the Glashaboy River and Mill Race 3 (C08_000) and the bifurcation of the Glashaboy River and Mill Race 3 (C08_881).

Notes:

Do not scale from drawing.

- Drawings and Schedules.
- 3. Section C08.1 faces eastward.

Drg. No. GR\_204 Proposed Flood Defences - Plan Layout (Sheet 4 of 17)

## Issued for Confirmation May 2018

2. This drawing should be read in conjunction with all other Glashaboy River (Glanmire/Sallybrook) Drainage Scheme Confirmation



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