



**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**  
 IN ADDITION TO THE HAZARDS OR RISKS NORMALLY ASSOCIATED WITH TYPES OF WORK DETAILED ON THIS DRAWING, THE FOLLOWING SIGNIFICANT RESIDUAL RISKS SHOULD BE NOTED. FURTHER DETAILS ARE INCLUDED IN THE CDM DESIGN RISK MANAGEMENT REGISTER.

**CONSTRUCTION:**  
 S.5 Existing Structures: damage to and personal injury.  
 S.6 Risk of uncovering and/or damaging buried archaeology.

**MAINTENANCE, CLEANING AND OPERATION:**  
 S.5 Existing Structures: damage to and personal injury.  
 S.6 Risk of uncovering and/or damaging buried archaeology.

**DECOMMISSIONING OR DEMOLITION:**  
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 S.6 Risk of uncovering and/or damaging buried archaeology.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

**LEGEND**

- Existing channel
- Existing bridges to be retained
- Bridge to be buried/ removed
- Existing path
- Existing fences
- Gates

Project Number: 2150448

Project Title:  
**River Gadder Restoration**

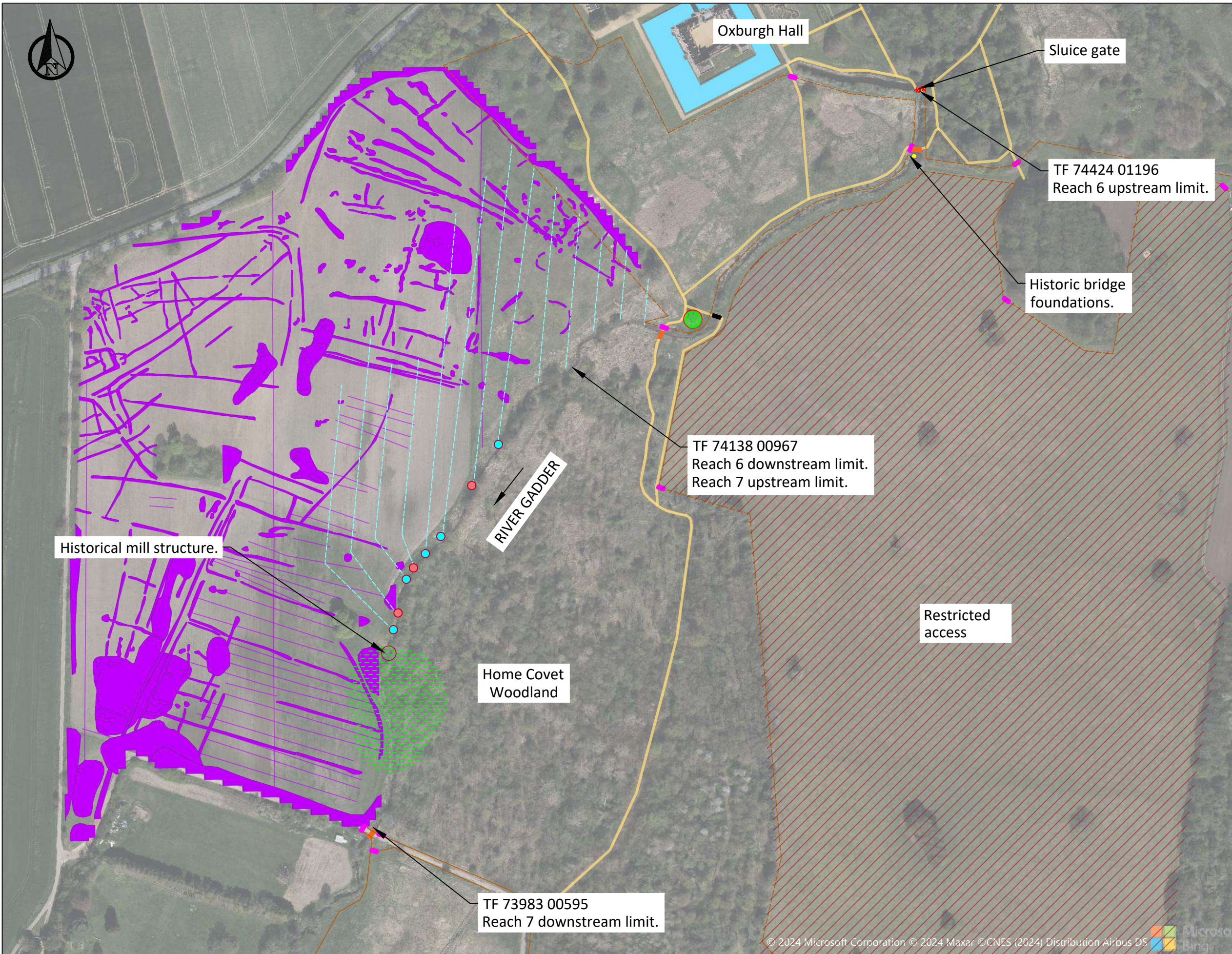
Drawing Title:  
**DETAILED DESIGN PLAN OVERVIEW**

Scale @ A3: 1:3,000  
 0 40 80 Meters  
 OSGB36 / British National Grid

Drawn	Date	Version
JI	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number:  
**240320\_2150448\_PO\_1**



**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**  
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**LEGEND**

	Existing channel
	Existing bridges to be retained
	Bridge to be buried/ removed
	Existing path
	Existing fences
	Gates
<b>Constraints</b>	
	Badger sett exclusion zone
	Root protection area
	Land drains
	Drain outfall unconfirmed/ buried
	Drain outfall confirmed/ present
	Possible/probable buried archaeology

*\*Utilities have been considered and they are outside of the restoration area.*

Project Number	2150448
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Project Title  
**River Gadder Restoration**

Drawing Title  
**DETAILED DESIGN CONSTRAINTS MAP**

Scale @ A3  
 1:3,000  
 0 40 80 Meters  
 OSGB36 / British National Grid

Drawn	Date	Version
Jl	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number  
**240320\_2150448\_R\_2**



**Bank regrading.** The banks of the channel will be regraded where they are currently steep, to help reconnect the river to its floodplain and naturalise the system. The excavated area will be left to regenerate naturally from the buried seedbank and colonisation of locally occurring species.

**Bank protection.** Pre-planted coir rolls along left bank toe and geotextile along regraded bank at the upstream extent of where the channel will be infilled to reinforce it and prevent reactivation of the old channel.

**Re-meandering of the Channel.** The channel will be re-meandered in the vicinity of to bypass the culverted bridge of heritage interest (Pedestrian Bridge 4). New channel substrate should have a D50 of 10 - 20 mm.

TF 74138 00967  
Reach 6 downstream limit.

TF 74424 01196  
Reach 6 upstream limit.

**Riffle Development.** The substrate of the channel will be augmented ~200 mm with gravels to create riffle features. Sediments size range from 2 to 40mm and D50 of 20 - 25 mm.

**In-Channel Benches.** In-channel bench features constructed along sections where the channel is overwide. These will sit slightly above the normal water level, helping to narrow the channel and increase flow and habitat diversity. Installation includes frontal brushwood fascines fixed in place using chestnut posts and backfilled with a mix of materials including branches, brash, wood and spoil obtained from site. Site won turves will be used to cap bench features depending on availability.

**Infill Existing Channel.** The existing channel will be infilled using spoil generated during works.

Culverted bridge of historical importance to be buried within the backfilled channel.

**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**  
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**LEGEND**

- Existing channel
- Existing bridges to be retained
- Bridge to be buried/ removed
- Existing path
- Existing fences
- Gates
- Root protection area

**Proposed Design**

- New realigned channel
- Infilled channel
- In-channel benches B1
- Riffle development G1
- Embankment lowering

Project Number 2150448

Project Title  
**River Gadder Restoration**

Drawing Title  
**DETAILED DESIGN  
PLAN VIEW - REACH 6**

Scale @ A3  
1:1,000  
0 12.5 25 Meters  
OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number  
**240320\_2150448\_PW\_3**



**Bank regrading.** The banks of the channel will be regraded where they are currently steep, to help reconnect the river to its floodplain and naturalise the system. The excavated area will be left to regenerate naturally from the buried seedbank and colonisation of locally occurring species.

**Bank protection.** Pre-planted coir rolls along left bank toe and geotextile along regraded bank at the upstream extent of where the channel will be infilled to reinforce it and prevent reactivation of the old channel.

**Re-meandering of the Channel.** The channel will be re-meandered in the vicinity of to bypass the culverted bridge of heritage interest (Pedestrian Bridge 4). New channel substrate should have a D50 of 10 - 20 mm.

TF 74424 01196  
Reach 6 upstream limit.

**Riffle Development.** The substrate of the channel will be augmented ~200 mm with gravels to create riffle features. Sediments size range from 2 to 40mm and D50 of 20 - 25 mm.

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Culverted bridge of historical importance to be buried within the backfilled channel.

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**DECOMMISSIONING OR DEMOLITION:**  
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 S.6 Risk of uncovering and/or damaging buried archaeology.

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**LEGEND**

- Existing channel
- Existing bridge
- Existing path
- Existing fences
- Existing gates
- Contours 50cm

**CUT FILL ANALYSIS**

	-1.5m to -1m	CUT total = -533m3* FILL total = +533m3** NET total = ZERO
	-1m to -0.5m	
	-0.5m to 0	
	0 to 0.5m	
	0.5m to 1m	
	1m to 1.5m	

\* Cut volume includes a 30% bulking factor.  
 \*\* Fill volume doesn't include imported material:  
 -Riffles development, D50 20-25mm = 6m3  
 -New channel substrate, D50 10-20mm = 42.9m3

Project Number: 2150448

Project Title:  
**River Gadder Restoration**

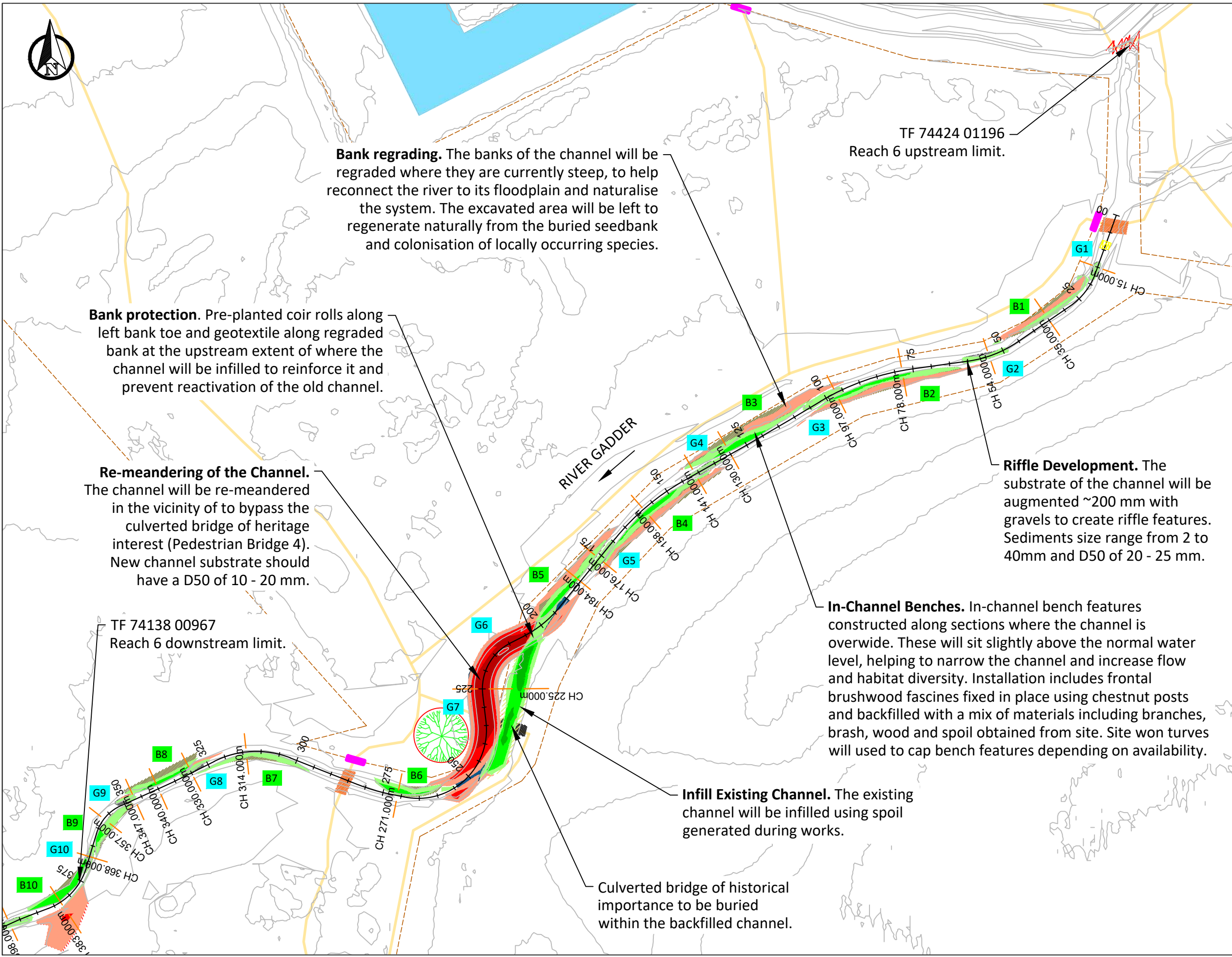
Drawing Title:  
**DETAILED DESIGN CUT FILL - REACH 6**

Scale @ A3: 1:1,000  
 OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number:  
**240320\_2150448\_CF\_4**





TF 74138 00967  
Reach 7 upstream limit.

**Bank regrading.** The banks of the channel will be regraded where they are currently steep, to help reconnect the river to its floodplain and naturalise the system. The excavated area will be left to regenerate naturally from the buried seedbank and colonisation of locally occurring species.

**Riffle Development.** The substrate of the channel will be augmented ~200 mm with gravels to create riffle features. Sediments size range from 2 to 40mm and D50 of 20 - 25 mm.

RIVER GADDER

**Embankment Lowering and Development of Wet Woodland.** A section of the true left bank will be lowered to enable high flows to enter Home Covert. Home Covert is seasonally wetted but disconnected from the River Gadder. Enabling high flows to enter Home Covert will promote its transition into wet woodland.

**In-Channel Benches.** In-channel bench features constructed along sections where the channel is overwide. These will sit slightly above the normal water level, helping to narrow the channel and increase flow and habitat diversity. Installation includes frontal brushwood fascines fixed in place using chestnut posts and backfilled with a mix of materials including branches, brush, wood and spoil obtained from site. Site won turves will be used to cap bench features depending on availability.

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**MAINTENANCE, CLEANING AND OPERATION:**  
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**LEGEND**

- Existing channel
- Existing bridges to be retained
- Bridge to be buried/ removed
- Existing path
- Existing fences
- Gates
- Root protection area

**Proposed Design**

- New realigned channel
- Infilled channel
- In-channel benches B1
- Riffle development G1
- Embankment lowering

Project Number 2150448

Project Title  
**River Gadder Restoration**

Drawing Title  
**DETAILED DESIGN  
PLAN VIEW - REACH 7 A**

Scale @ A3 1:1,000  
0 12.5 25 Meters  
OSGB36 / British National Grid

Drawn	Date	Version
Jl	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number  
**240320\_2150448\_PW\_5**



TF 74138 00967  
Reach 7 upstream limit.

**Bank regrading.** The banks of the channel will be regraded where they are currently steep, to help reconnect the river to its floodplain and naturalise the system. The excavated area will be left to regenerate naturally from the buried seedbank and colonisation of locally occurring species.

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**LEGEND**

- Existing channel
- Existing bridge
- Existing path
- Existing fences
- Existing gates
- Contours 50cm

**CUT FILL ANALYSIS**

	-1.5m to -1m	CUT total = -533m3* FILL total = +533m3** NET total = ZERO
	-1m to -0.5m	
	-0.5m to 0	
	0 to 0.5m	
	0.5m to 1m	
	1m to 1.5m	

\* Cut volume includes a 30% bulking factor.  
\*\* Fill volume doesn't include imported material:  
-Riffles development, D50 20-25mm = 6m3  
-New channel substrate, D50 10-20mm = 42.9m3

Project Number: 2150448

Project Title:  
**River Gadder Restoration**

Drawing Title:  
**DETAILED DESIGN  
CUT FILL - REACH 7 A**

Scale @ A3: 1:1,000  
0 12.5 25 Meters  
OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number:  
**240320\_2150448\_CF\_6**



**In-Channel Benches.** In-channel bench features constructed along sections where the channel is overwide. These will sit slightly above the normal water level, helping to narrow the channel and increase flow and habitat diversity. Installation includes frontal brushwood fascines fixed in place using chestnut posts and backfilled with a mix of materials including branches, brash, wood and spoil obtained from site. Site won turves will be used to cap bench features depending on availability.

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**Riffle Development.** The substrate of the channel will be augmented ~200 mm with gravels to create riffle features. Sediments size range from 2 to 40mm and D50 of 20 - 25 mm.

**Retain Culverted Access Track.** This track and culvert will be retained as continued access is required by the National Trust to move heavy machinery throughout the Oxburgh Hall estate.

TF 73983 00595  
Reach 7 downstream limit.

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**LEGEND**

- Existing channel
- Existing bridges to be retained
- Bridge to be buried/ removed
- Existing path
- Existing fences
- Gates
- Root protection area

**Proposed Design**

- New realigned channel
- Infilled channel
- In-channel benches **B1**
- Riffle development **G1**
- Embankment lowering

Project Number 2150448

Project Title  
**River Gadder Restoration**

Drawing Title  
**DETAILED DESIGN  
PLAN VIEW - REACH 7 B**

Scale @ A3 1:1,000  
0 12.5 25 Meters  
OSGB36 / British National Grid

Drawn	Date	Version
JI	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number  
**240320\_2150448\_PW\_7**



**In-Channel Benches.** In-channel bench features constructed along sections where the channel is overwide. These will sit slightly above the normal water level, helping to narrow the channel and increase flow and habitat diversity. Installation includes frontal brushwood fascines fixed in place using chestnut posts and backfilled with a mix of materials including branches, brash, wood and spoil obtained from site. Site won turves will be used to cap bench features depending on availability.

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TF 73983 00595  
Reach 7 downstream limit.

RIVER GADDER

**Bank regrading.** The banks of the channel will be regraded where they are currently steep, to help reconnect the river to its floodplain and naturalise the system. The excavated area will be left to regenerate naturally from the buried seedbank and colonisation of locally occurring species.

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**LEGEND**

- Existing channel
- Existing bridge
- Existing path
- Existing fences
- Existing gates
- Contours 50cm

**CUT FILL ANALYSIS**

	-1.5m to -1m	CUT total = -533m3* FILL total = +533m3** NET total = ZERO
	-1m to -0.5m	
	-0.5m to 0	
	0 to 0.5m	
	0.5m to 1m	
	1m to 1.5m	

\* Cut volume includes a 30% bulking factor.  
 \*\* Fill volume doesn't include imported material:  
 -Riffles development, D50 20-25mm = 6m3  
 -New channel substrate, D50 10-20mm = 42.9m3

Project Number: 2150448

Project Title: **River Gadder Restoration**

Drawing Title: **DETAILED DESIGN CUT FILL - REACH 7 B**

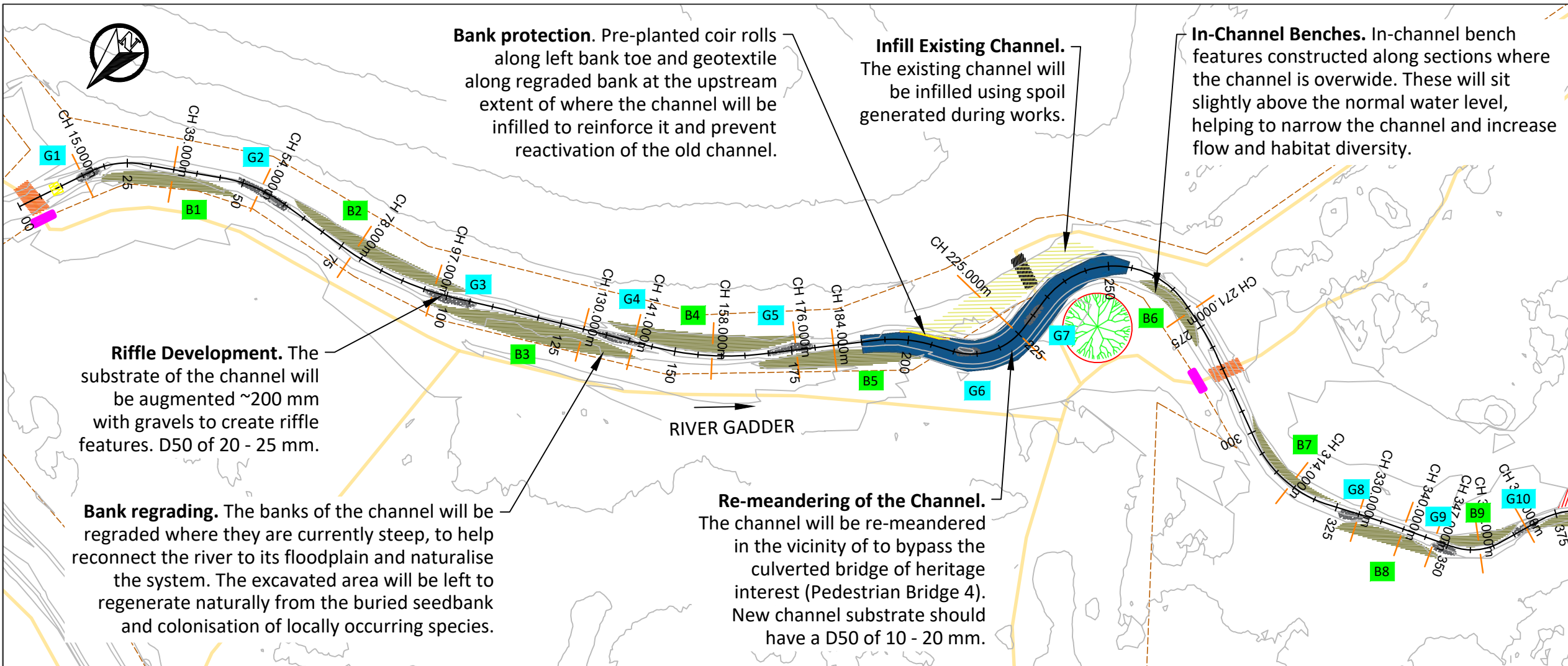
Scale @ A3: 1:1,000  
 0 12.5 25 Meters  
 OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number: **240320\_2150448\_CF\_8**





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**LEGEND**

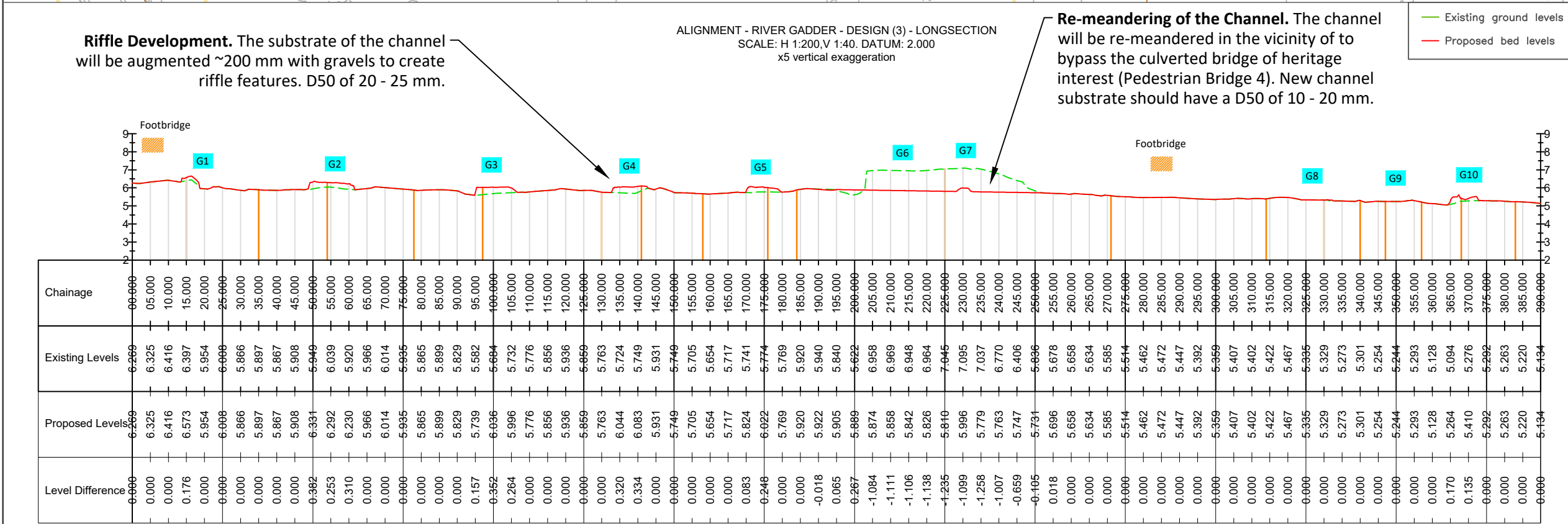
- Existing channel
- Existing bridges to be retained
- Bridge to be buried/ removed
- Existing path
- Existing fences
- Gates
- Root protection area

Proposed Design

- New realigned channel
- Infilled channel
- In-channel benches B1
- Riffle development G1
- Embankment lowering

\*NORTH is rotated in long profile views.

Project Number 2150448



Project Title  
**River Gadder Restoration**

Drawing Title  
**DETAILED DESIGN LONG PROFILE - R6**

Scale @ A3  
1:1,000  
0 12.5 25 Meters  
OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number  
**240320\_2150448\_LP\_9**

**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

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**DECOMMISSIONING OR DEMOLITION:**

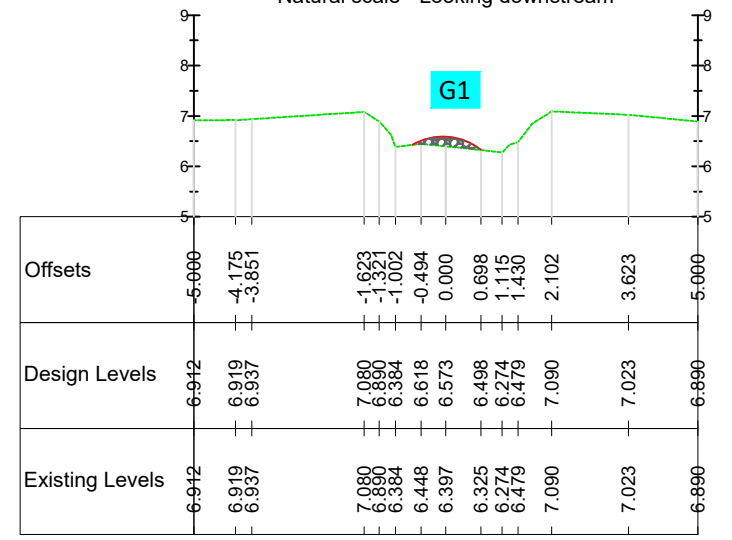
S.5 Existing Structures: damage to and personal injury.  
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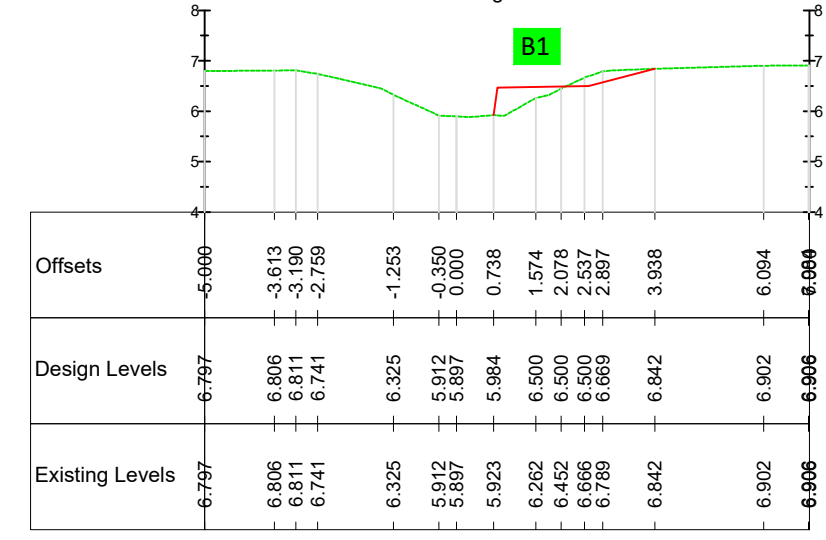
**LEGEND**

- Existing levels
- Proposed levels
- G1 Riffle development
- B1 In-channel benches

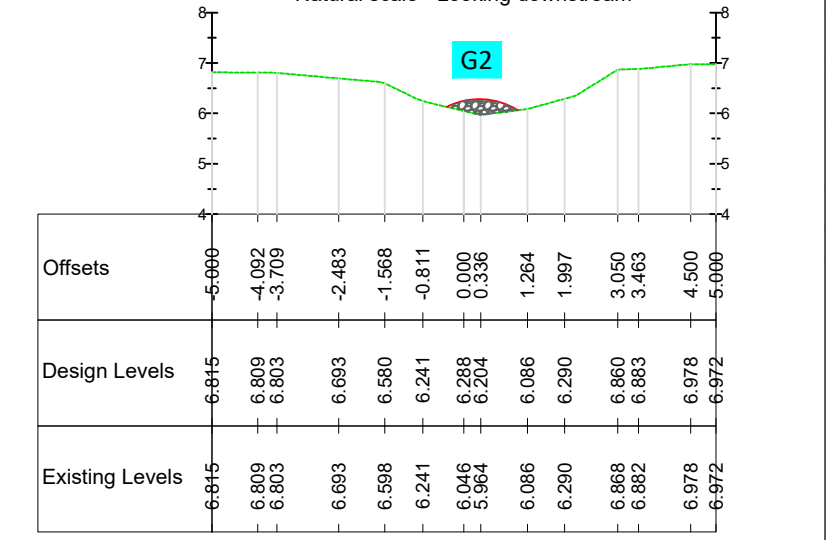
Chainage 15.000  
Natural scale - Looking downstream



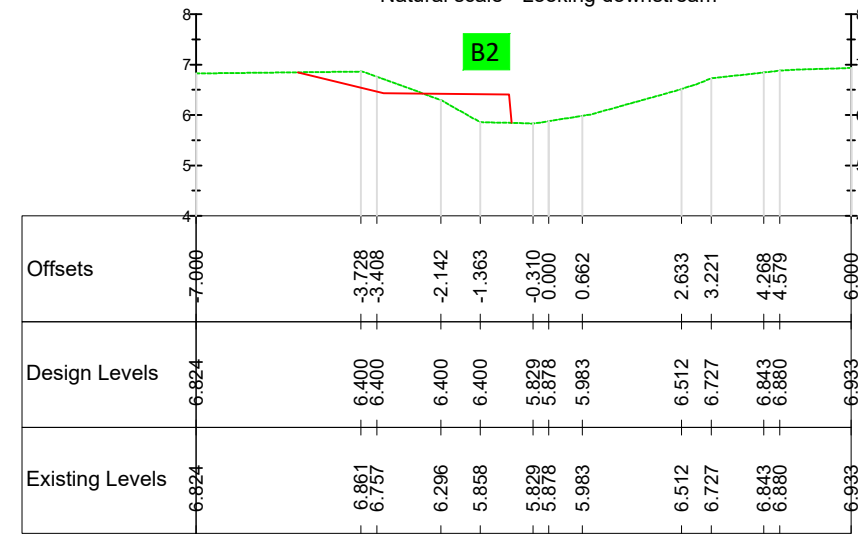
Chainage 35.000  
Natural scale - Looking downstream



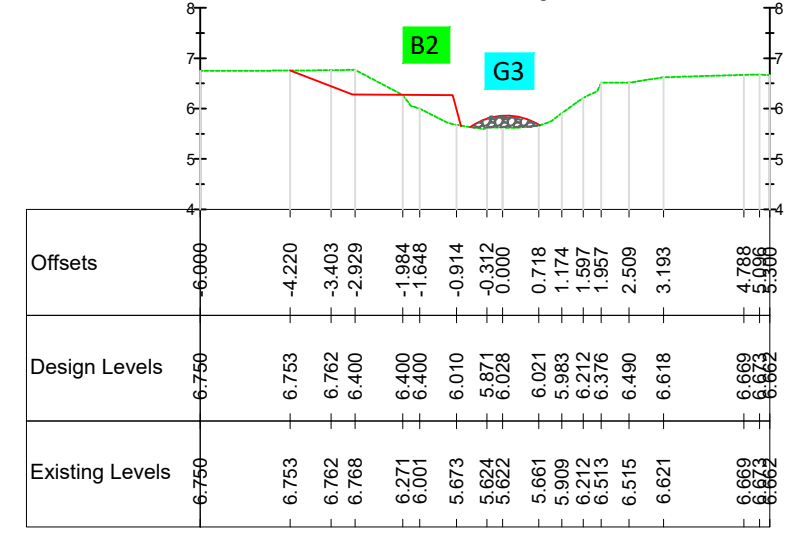
Chainage 54.000  
Natural scale - Looking downstream



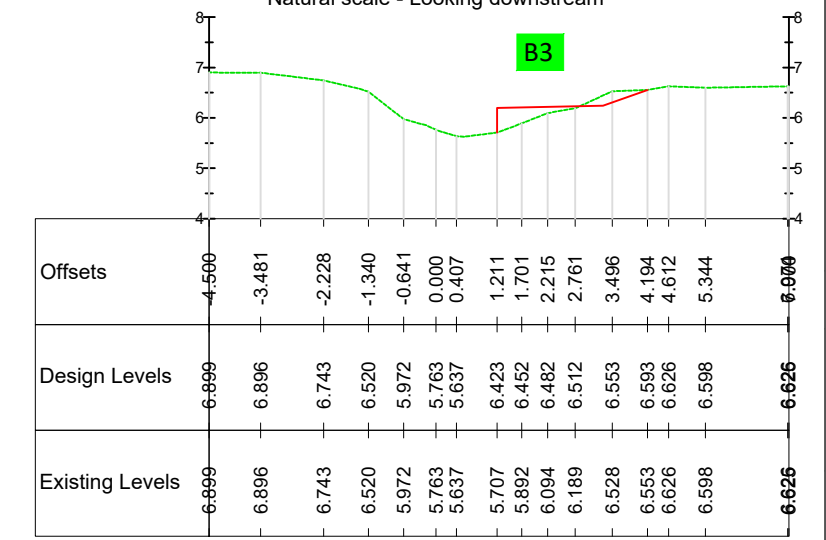
Chainage 78.000  
Natural scale - Looking downstream



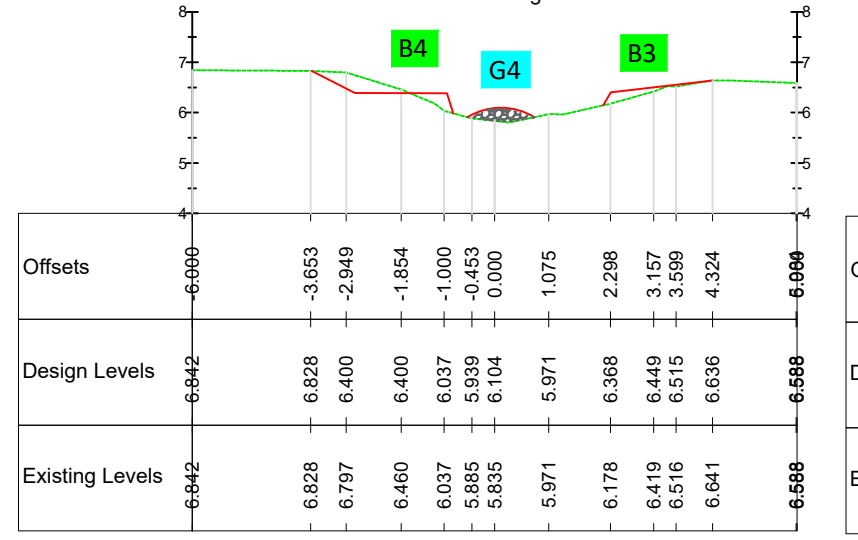
Chainage 97.000  
Natural scale - Looking downstream



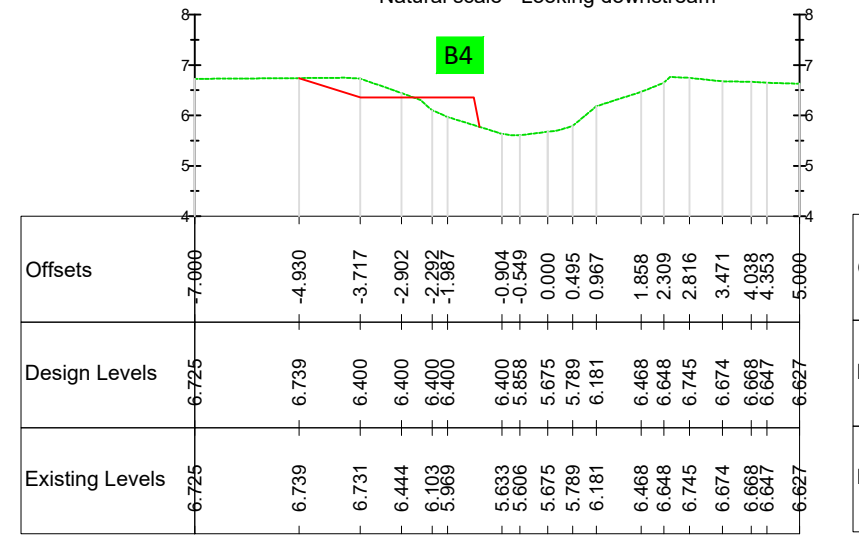
Chainage 130.000  
Natural scale - Looking downstream



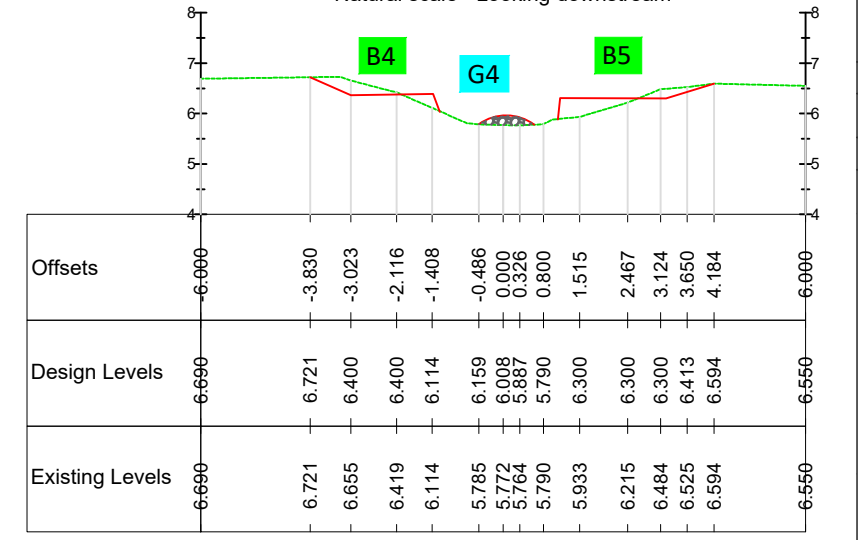
Chainage 141.000  
Natural scale - Looking downstream



Chainage 158.000  
Natural scale - Looking downstream



Chainage 176.000  
Natural scale - Looking downstream



Project Number: 2150448

Project Title: River Gadder Restoration

Drawing Title: DETAILED DESIGN CROSS SECTIONS - R6

Scale @ A3: 1:150  
OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number: 240320\_2150448\_CS\_10

**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

IN ADDITION TO THE HAZARDS OR RISKS NORMALLY ASSOCIATED WITH TYPES OF WORK DETAILED ON THIS DRAWING, THE FOLLOWING SIGNIFICANT RESIDUAL RISKS SHOULD BE NOTED. FURTHER DETAILS ARE INCLUDED IN THE CDM DESIGN RISK MANAGEMENT REGISTER.

**CONSTRUCTION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

**MAINTENANCE, CLEANING AND OPERATION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

**DECOMMISSIONING OR DEMOLITION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

**LEGEND**

- Existing levels
- Proposed levels
- G1 Riffle development
- B1 In-channel benches

**\*\* Construction details of design features are specified on drawings 240320\_2150448\_DD\_17 and 240320\_2150448\_DD\_18.**

Project Number: 2150448

Project Title: **River Gadder Restoration**

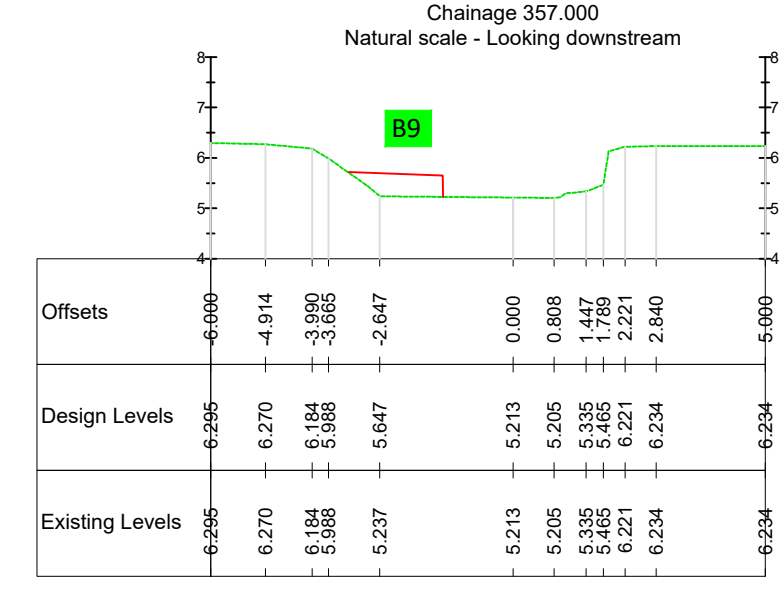
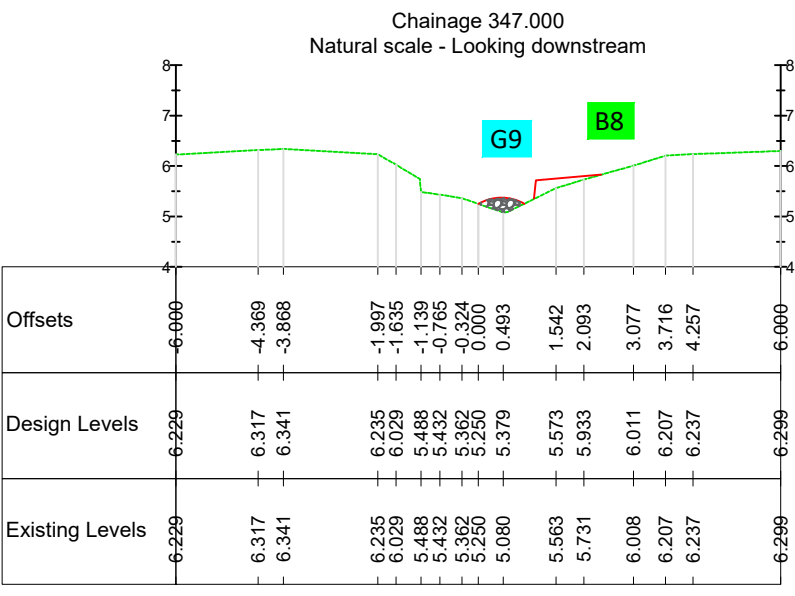
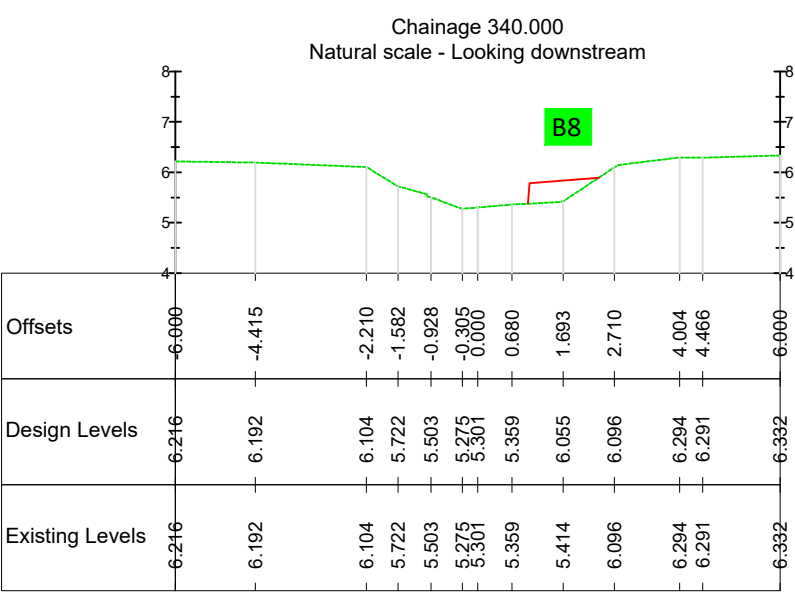
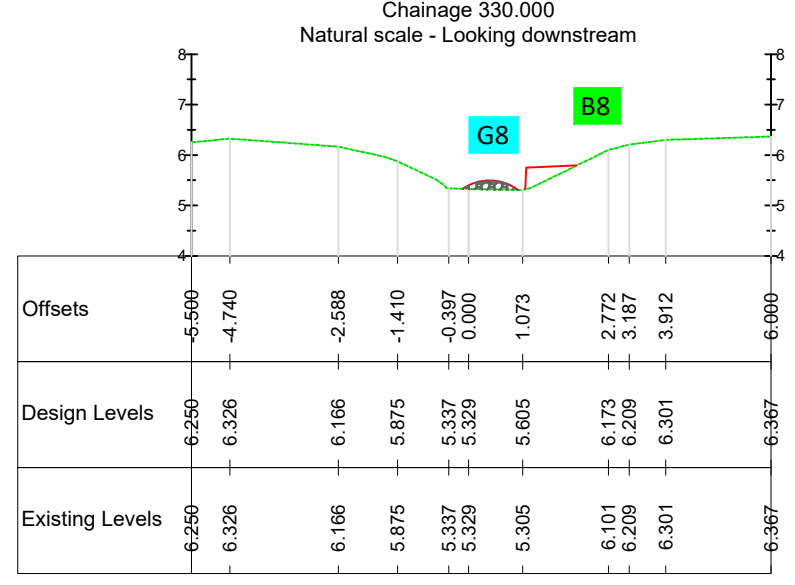
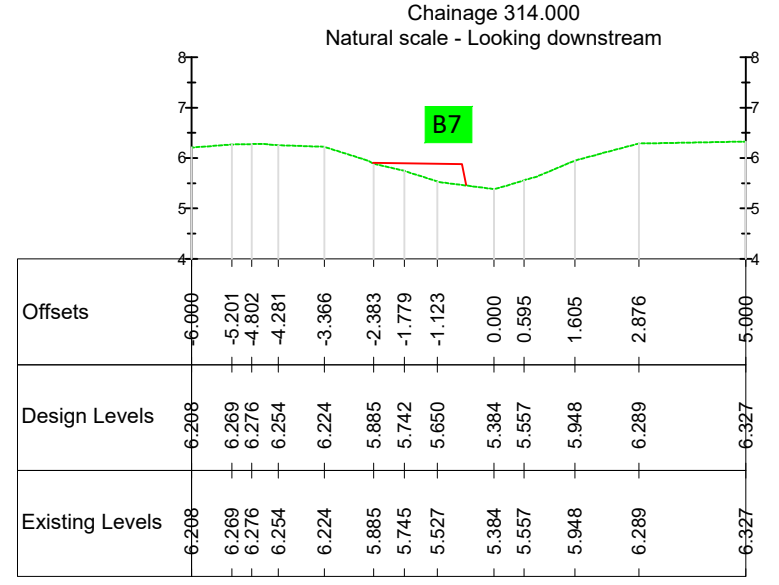
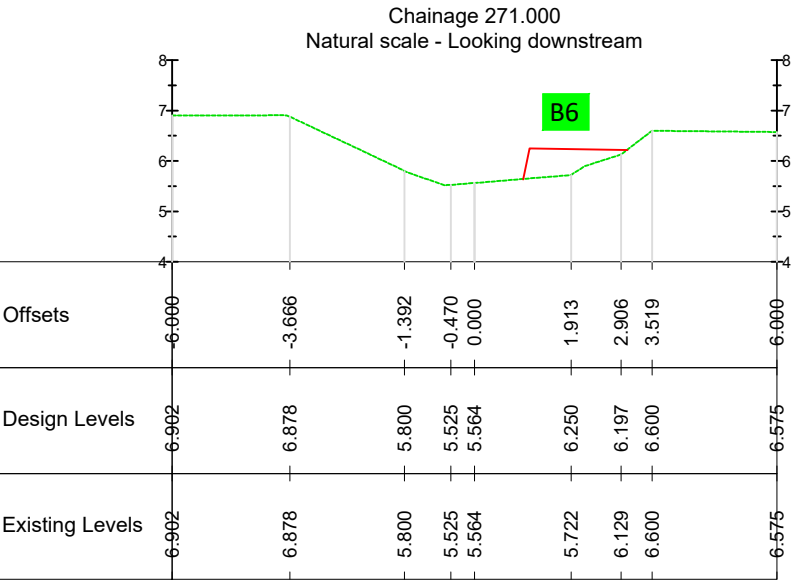
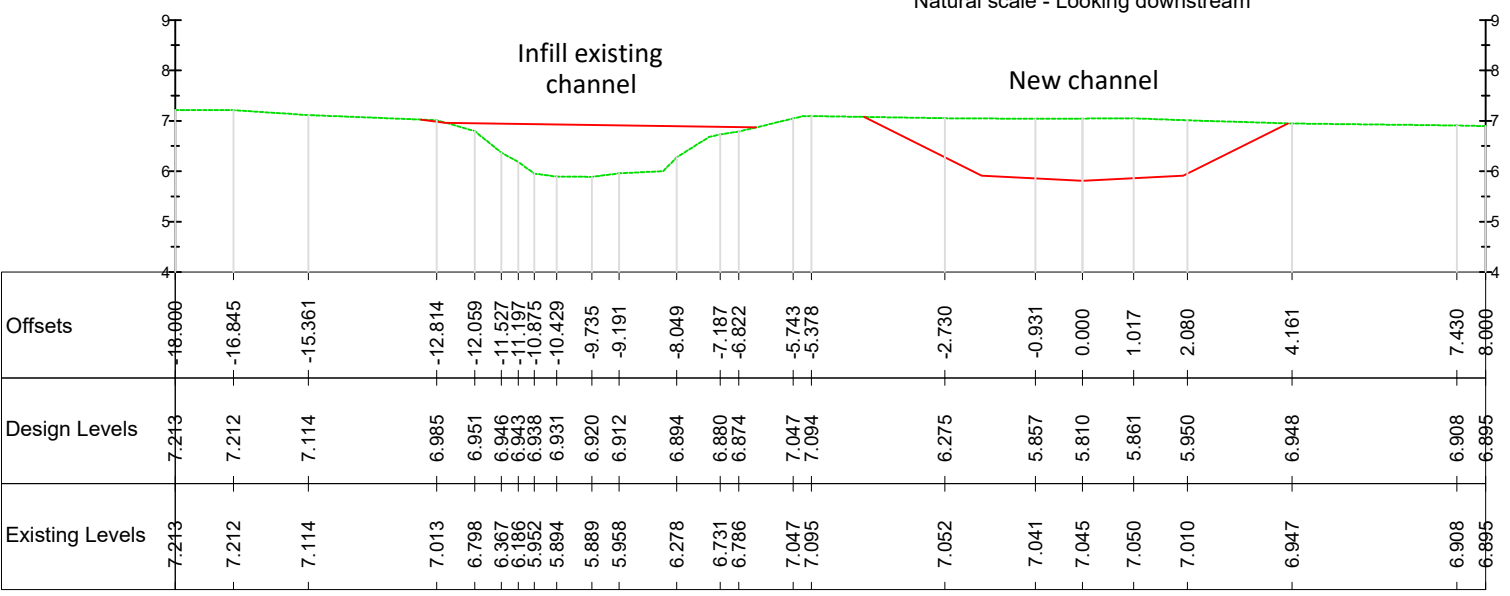
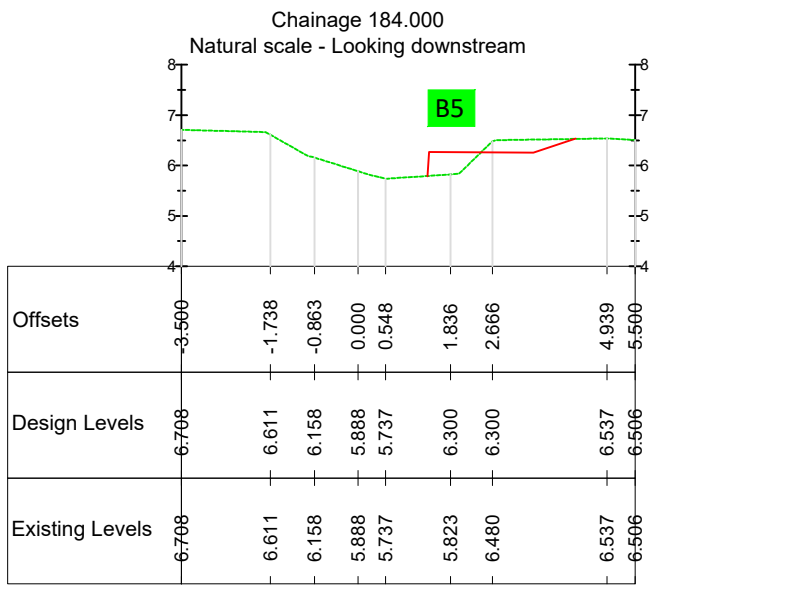
Drawing Title: **DETAILED DESIGN CROSS SECTIONS - R6**

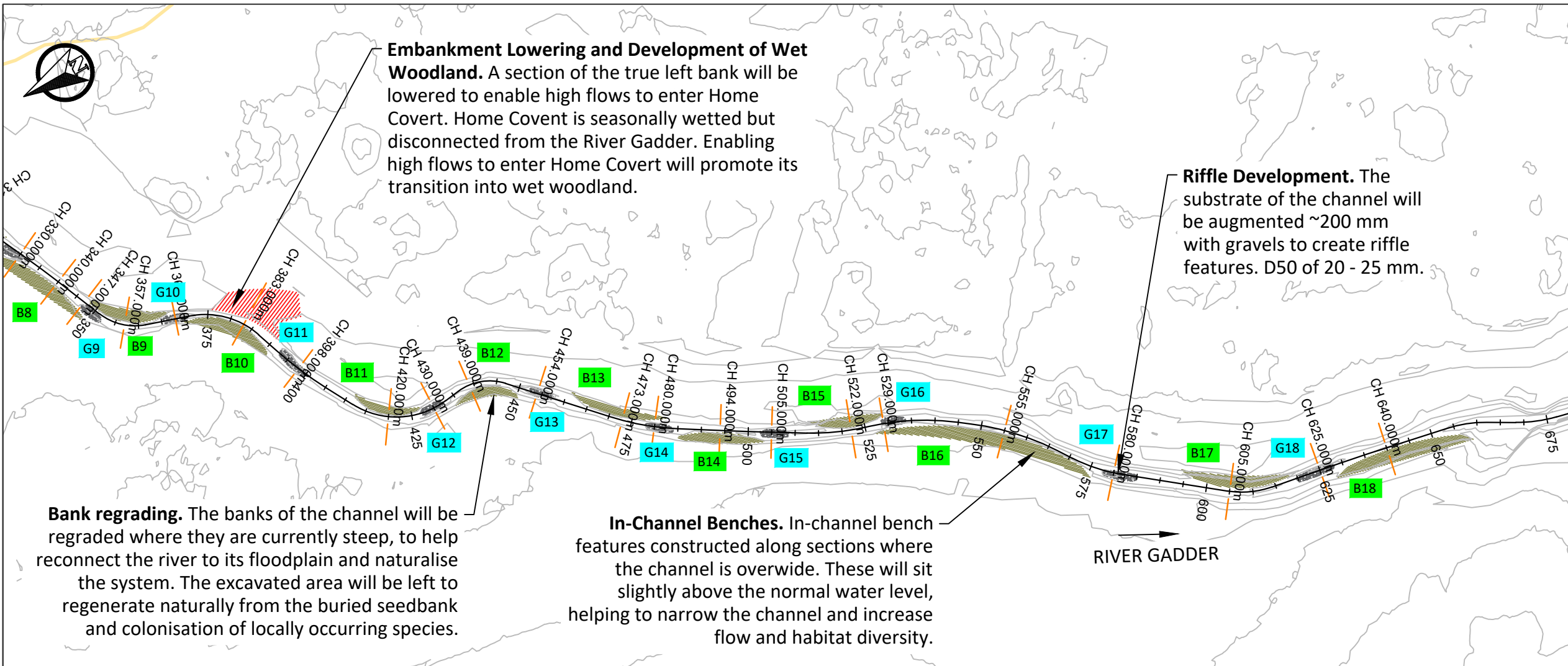
Scale @ A3: 1:150  
0 2 4 Meters  
OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number: **240320\_2150448\_CS\_11**





**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

IN ADDITION TO THE HAZARDS OR RISKS NORMALLY ASSOCIATED WITH TYPES OF WORK DETAILED ON THIS DRAWING, THE FOLLOWING SIGNIFICANT RESIDUAL RISKS SHOULD BE NOTED. FURTHER DETAILS ARE INCLUDED IN THE CDM DESIGN RISK MANAGEMENT REGISTER.

**CONSTRUCTION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

**MAINTENANCE, CLEANING AND OPERATION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

**DECOMMISSIONING OR DEMOLITION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

- LEGEND**
- Existing channel
  - Existing bridges to be retained
  - Bridge to be buried/ removed
  - Existing path
  - Existing fences
  - Gates
  - Root protection area
  - Proposed Design
  - New realigned channel
  - Infilled channel
  - In-channel benches **B1**
  - Riffle development **G1**
  - Embankment lowering

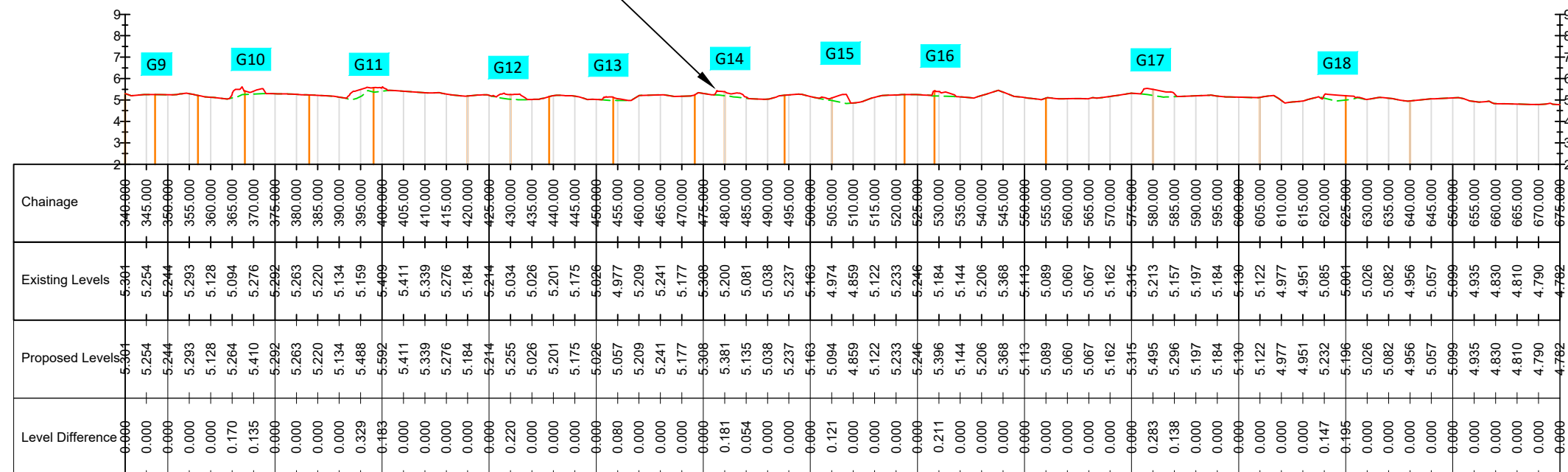
\*NORTH is rotated in long profile views.

Project Number	2150448
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ALIGNMENT - RIVER GADDER - DESIGN (3) - LONGSECTION (1)  
SCALE: H 1:200, V 1:40. DATUM: 2.000  
x5 vertical exaggeration

— Existing ground levels  
— Proposed bed levels

**Riffle Development.** The substrate of the channel will be augmented ~200 mm with gravels to create riffle features. D50 of 20 - 25 mm.



Project Title  
**River Gadder Restoration**

Drawing Title  
**DETAILED DESIGN  
LONG PROFILE - R7 A**

Scale @ A3  
1:1,000  
0 12.5 25 Meters  
OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number  
**240320\_2150448\_LP\_12**

**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

IN ADDITION TO THE HAZARDS OR RISKS NORMALLY ASSOCIATED WITH TYPES OF WORK DETAILED ON THIS DRAWING, THE FOLLOWING SIGNIFICANT RESIDUAL RISKS SHOULD BE NOTED. FURTHER DETAILS ARE INCLUDED IN THE CDM DESIGN RISK MANAGEMENT REGISTER.

**CONSTRUCTION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

**MAINTENANCE, CLEANING AND OPERATION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

**DECOMMISSIONING OR DEMOLITION:**

S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

**LEGEND**

- Existing levels
- Proposed levels
- G1 Riffle development
- B1 In-channel benches

*\*\* Construction details of design features are specified on drawings 240320\_2150448\_DD\_17 and 240320\_2150448\_DD\_18.*

Project Number: 2150448

Project Title: **River Gadder Restoration**

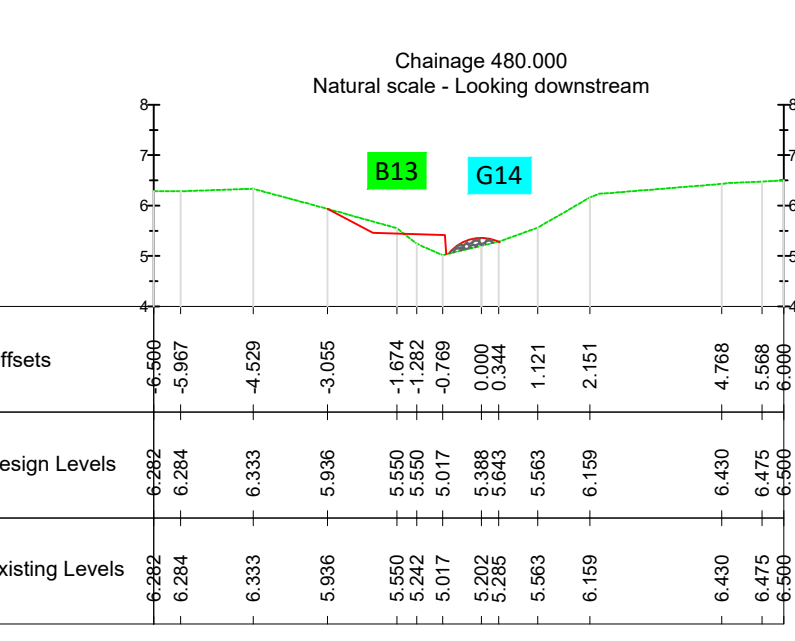
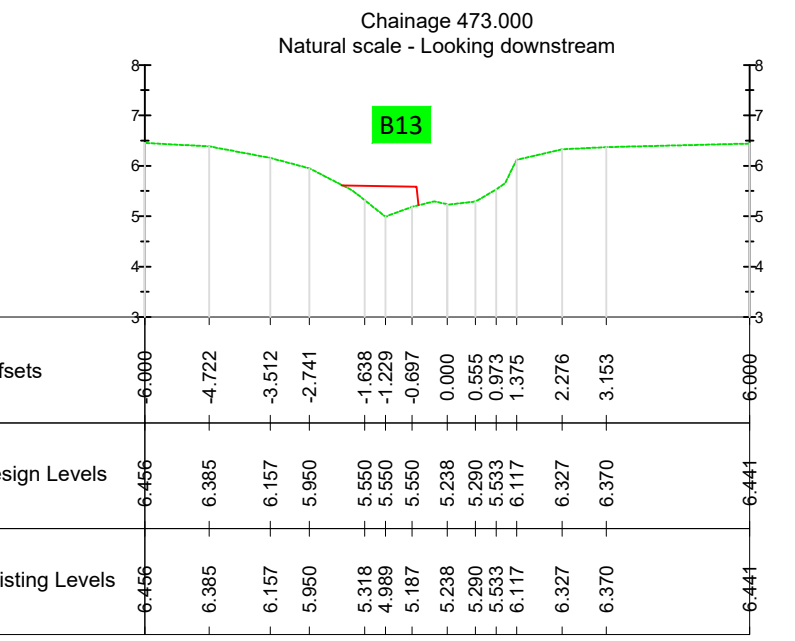
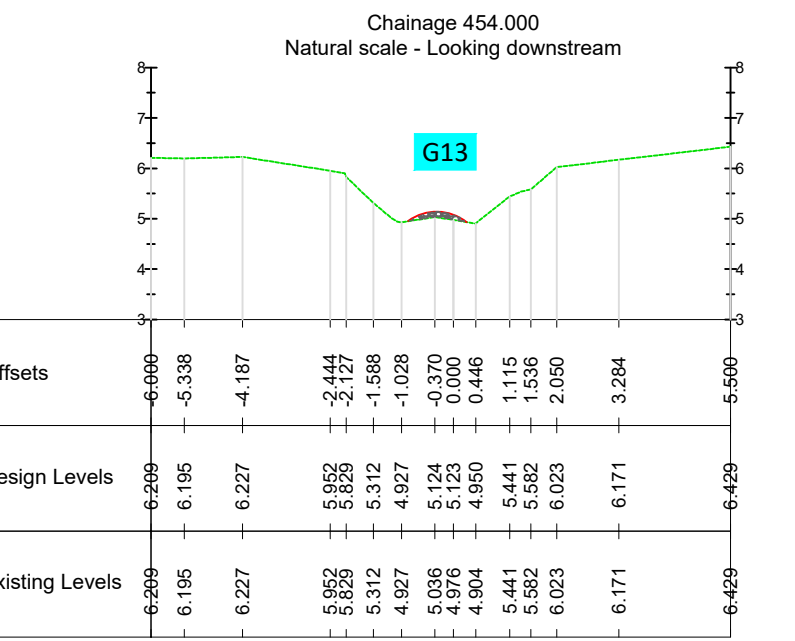
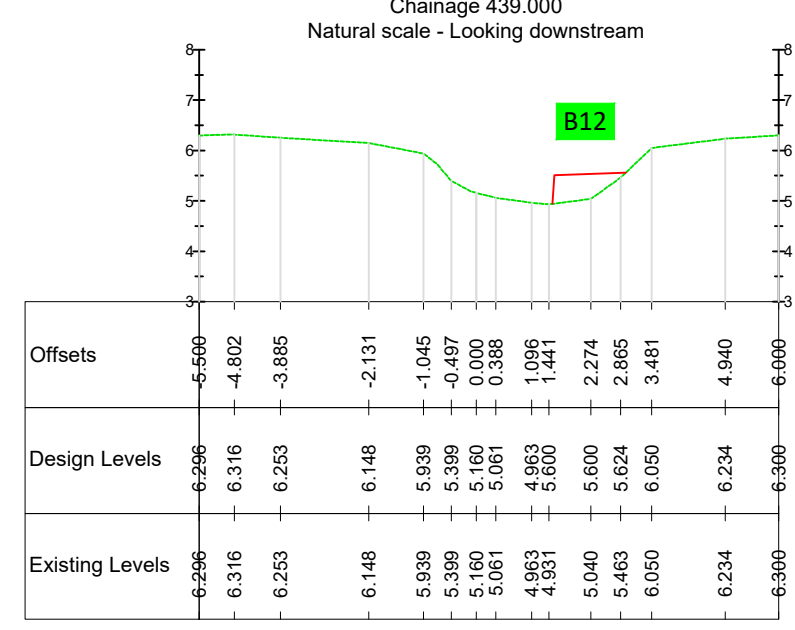
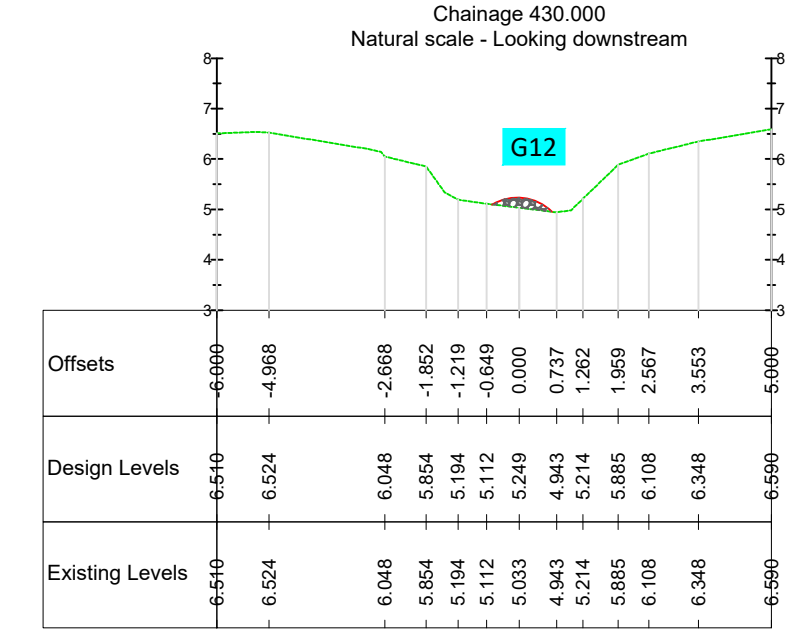
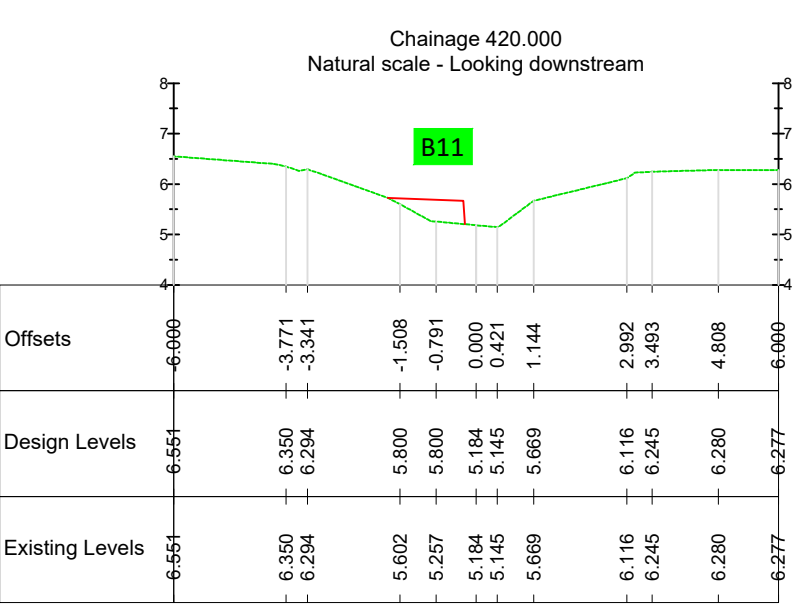
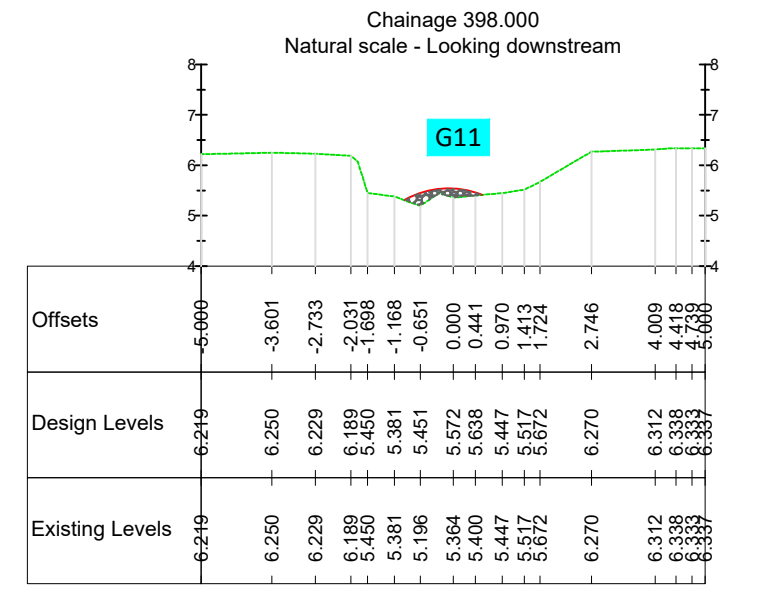
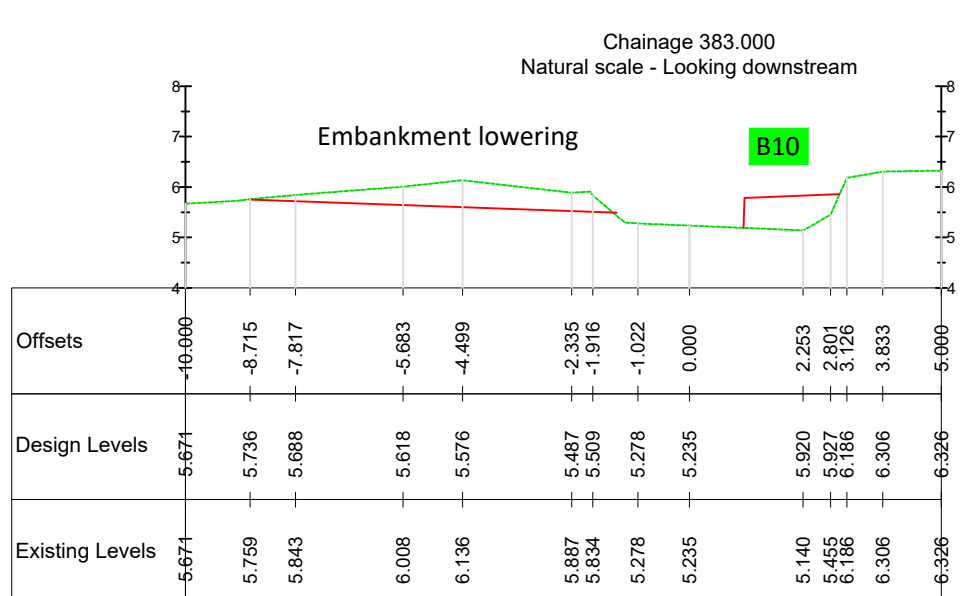
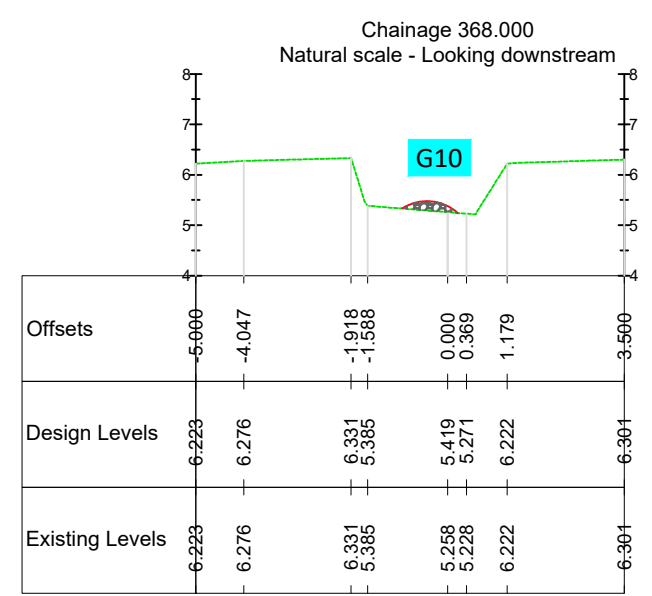
Drawing Title: **DETAILED DESIGN CROSS SECTIONS - R7 A**

Scale @ A3: 1:150  
OSGB36 / British National Grid

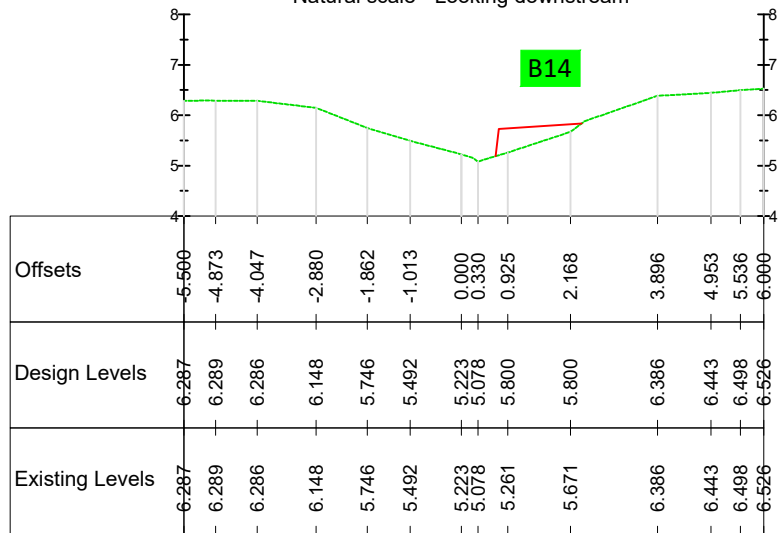
Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



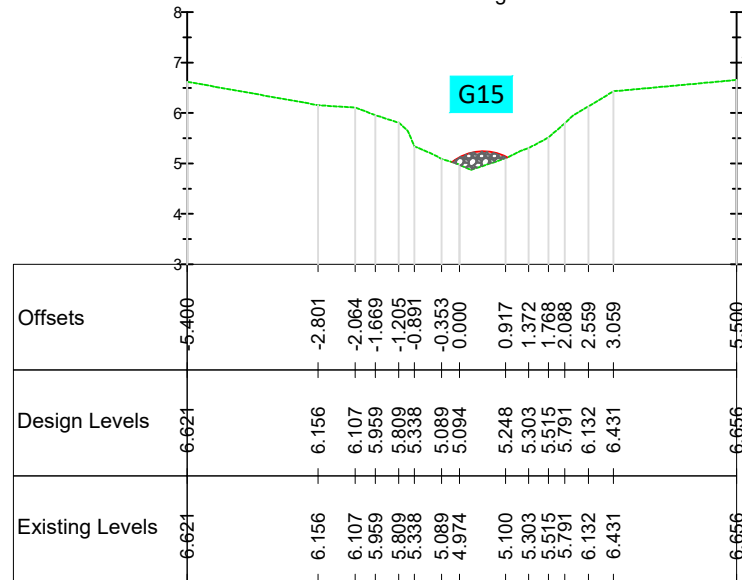
Drawing Number: **240320\_2150448\_CS\_13**



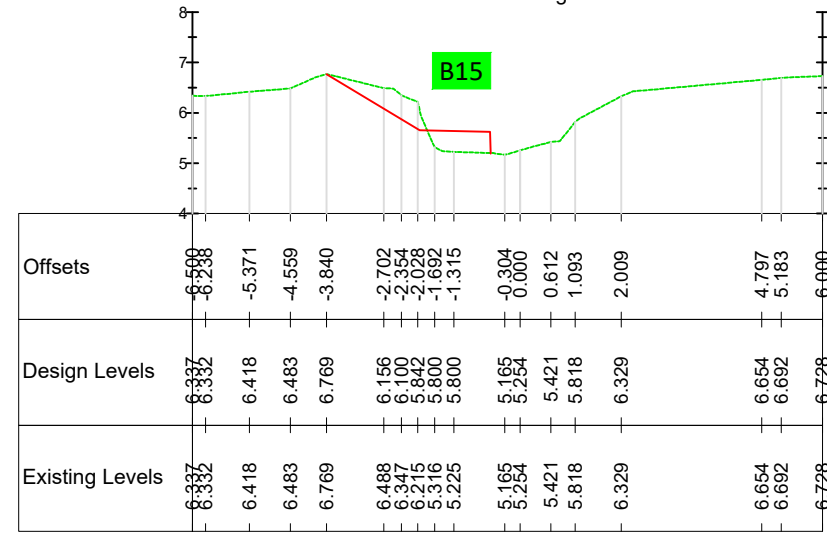
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Natural scale - Looking downstream



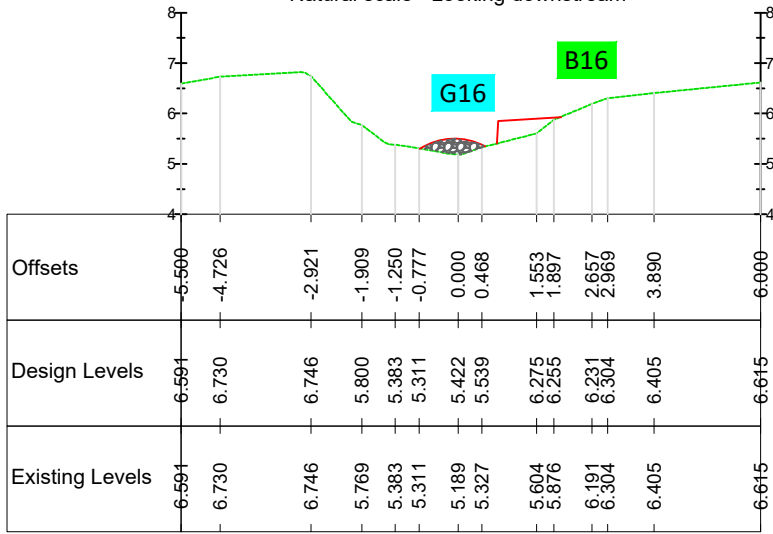
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Natural scale - Looking downstream



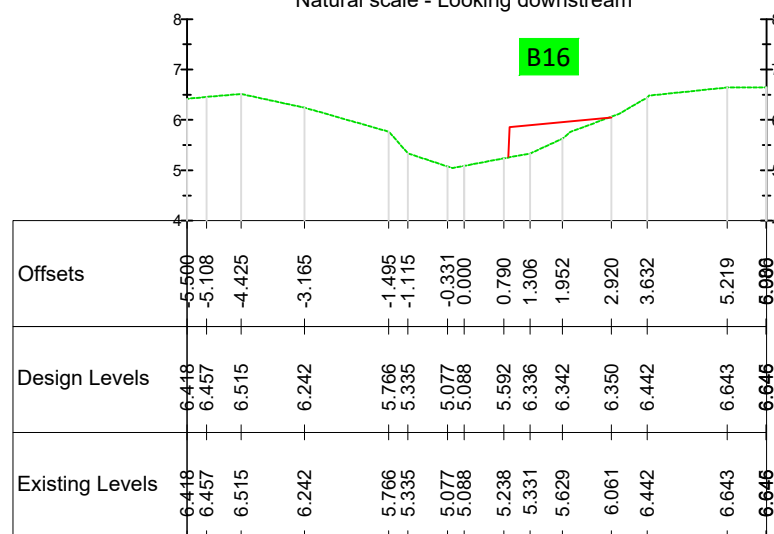
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Natural scale - Looking downstream



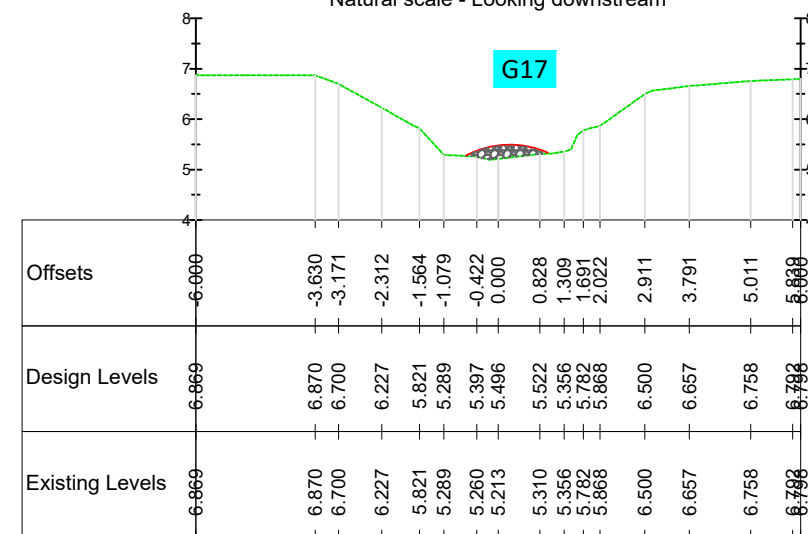
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Natural scale - Looking downstream



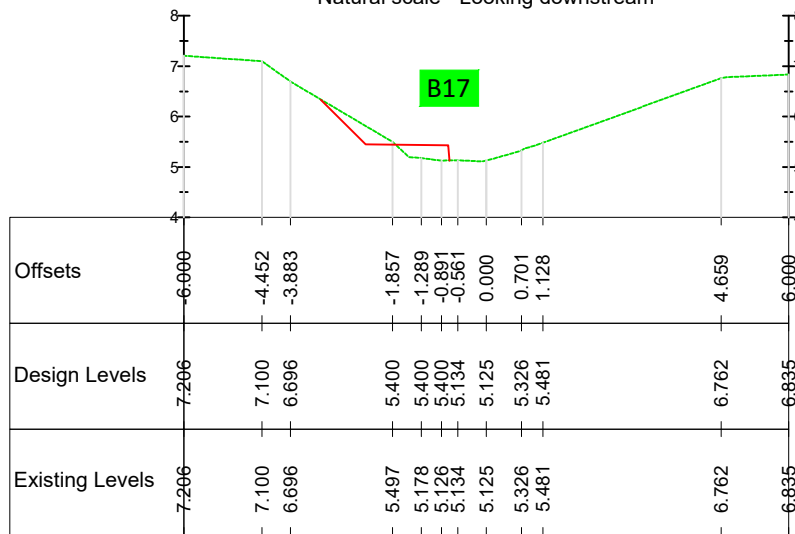
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Natural scale - Looking downstream



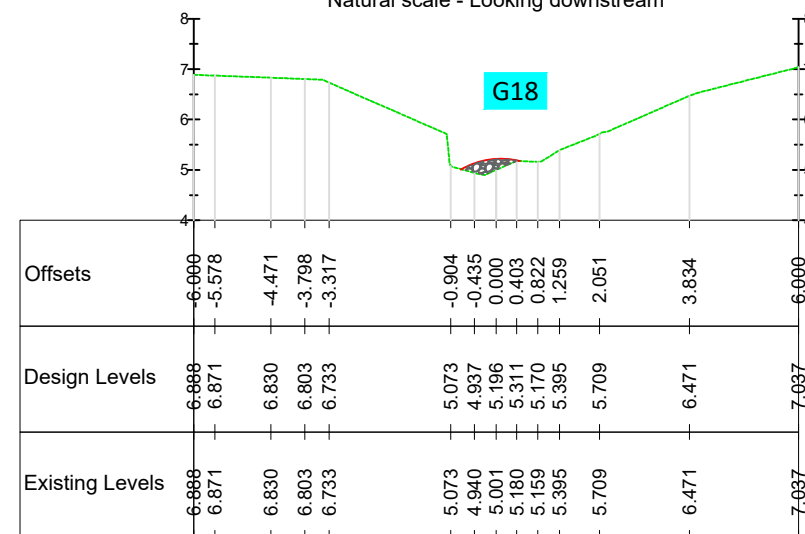
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Natural scale - Looking downstream



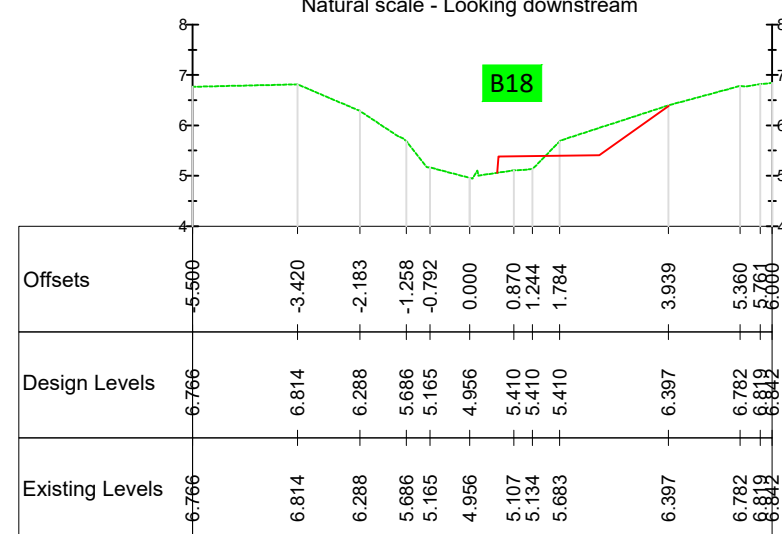
Chainage 605.000  
Natural scale - Looking downstream



Chainage 625.000  
Natural scale - Looking downstream



Chainage 640.000  
Natural scale - Looking downstream



**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**  
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**CONSTRUCTION:**  
 S.5 Existing Structures: damage to and personal injury.  
 S.6 Risk of uncovering and/or damaging buried archaeology.  
**MAINTENANCE, CLEANING AND OPERATION:**  
 S.5 Existing Structures: damage to and personal injury.  
 S.6 Risk of uncovering and/or damaging buried archaeology.  
**DECOMMISSIONING OR DEMOLITION:**  
 S.5 Existing Structures: damage to and personal injury.  
 S.6 Risk of uncovering and/or damaging buried archaeology.  
 It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

- LEGEND**
- Existing levels
  - Proposed levels
  - G1 Riffle development
  - B1 In-channel benches

*\*\* Construction details of design features are specified on drawings 240320\_2150448\_DD\_17 and 240320\_2150448\_DD\_18.*

Project Number: 2150448

Project Title  
**River Gadder Restoration**

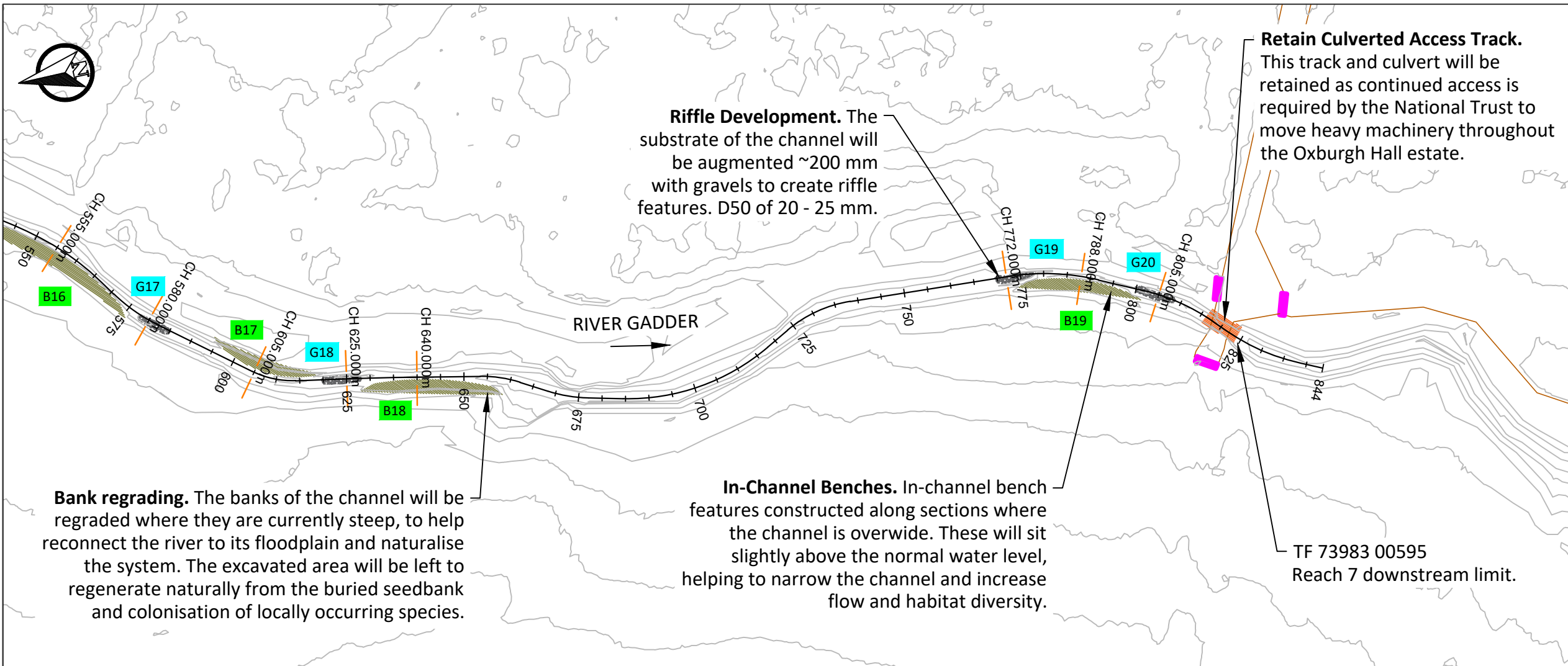
Drawing Title  
**DETAILED DESIGN CROSS SECTIONS - R7 A**

Scale @ A3  
1:150  
OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number  
**240320\_2150448\_CS\_14**



**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

IN ADDITION TO THE HAZARDS OR RISKS NORMALLY ASSOCIATED WITH TYPES OF WORK DETAILED ON THIS DRAWING, THE FOLLOWING SIGNIFICANT RESIDUAL RISKS SHOULD BE NOTED. FURTHER DETAILS ARE INCLUDED IN THE CDM DESIGN RISK MANAGEMENT REGISTER.

**CONSTRUCTION:**

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S.6 Risk of uncovering and/or damaging buried archaeology.

**MAINTENANCE, CLEANING AND OPERATION:**

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S.6 Risk of uncovering and/or damaging buried archaeology.

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S.6 Risk of uncovering and/or damaging buried archaeology.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

**LEGEND**

- Existing channel
- Existing bridges to be retained
- Bridge to be buried/ removed
- Existing path
- Existing fences
- Gates
- Root protection area

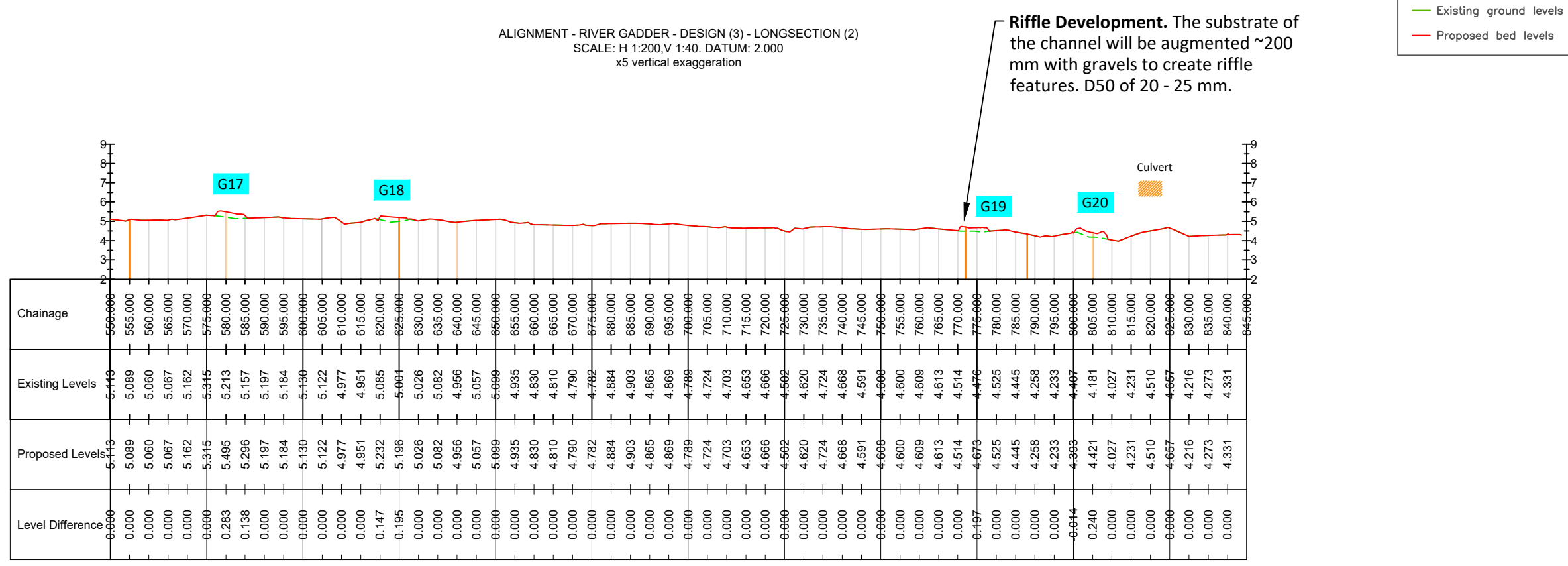
**Proposed Design**

- New realigned channel
- Infilled channel
- In-channel benches **B1**
- Riffle development **G1**
- Embankment lowering

\*NORTH is rotated in long profile views.

Project Number: 2150448

ALIGNMENT - RIVER GADDER - DESIGN (3) - LONGSECTION (2)  
SCALE: H 1:200, V 1:40. DATUM: 2.000  
x5 vertical exaggeration



Project Title: River Gadder Restoration

Drawing Title: DETAILED DESIGN LONG PROFILE - R7 B

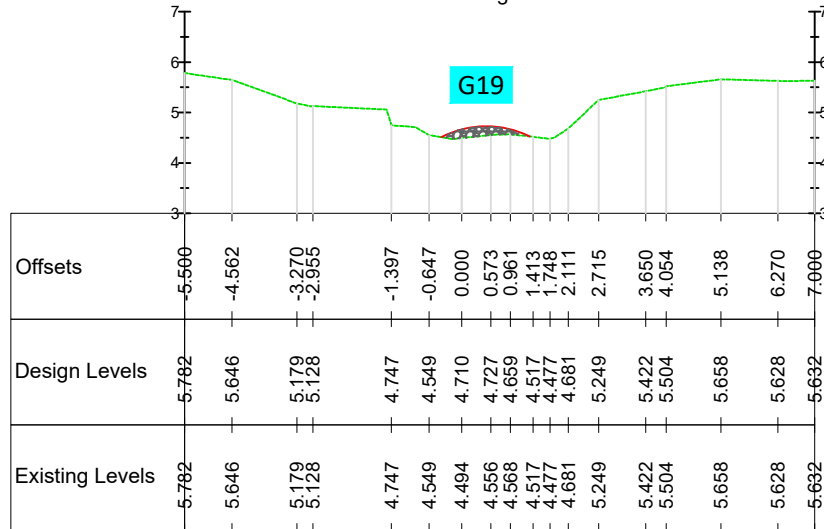
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OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW

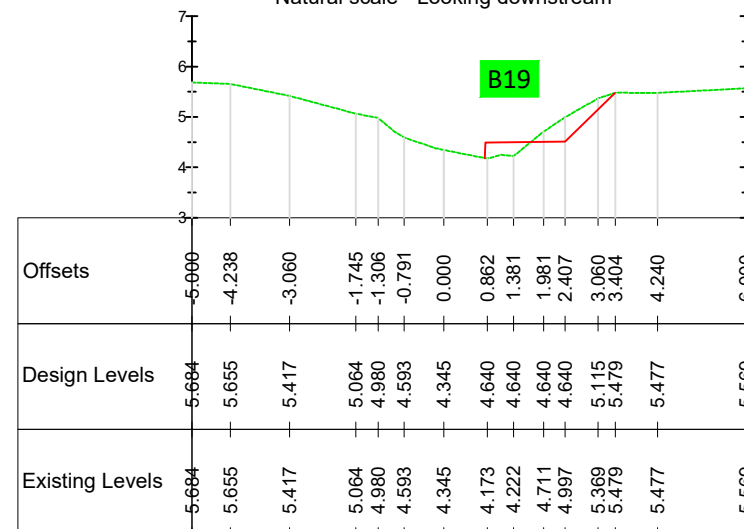


Drawing Number: 240320\_2150448\_LP\_15

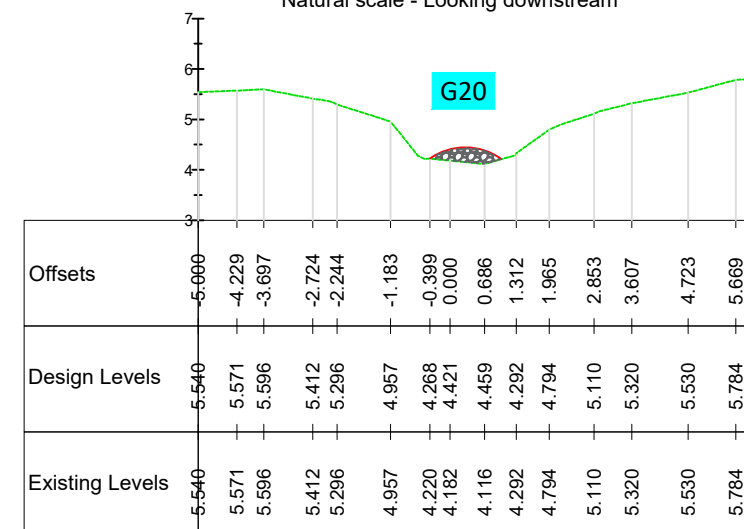
Chainage 772.000  
Natural scale - Looking downstream



Chainage 788.000  
Natural scale - Looking downstream



Chainage 805.000  
Natural scale - Looking downstream



**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**  
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**CONSTRUCTION:**  
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**MAINTENANCE, CLEANING AND OPERATION:**  
 S.5 Existing Structures: damage to and personal injury.  
 S.6 Risk of uncovering and/or damaging buried archaeology.

**DECOMMISSIONING OR DEMOLITION:**  
 S.5 Existing Structures: damage to and personal injury.  
 S.6 Risk of uncovering and/or damaging buried archaeology.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

- LEGEND**
- Existing levels
  - Proposed levels
  - G1 Riffle development
  - B1 In-channel benches

\*\* Construction details of design features are specified on drawings 240320\_2150448\_DD\_17 and 240320\_2150448\_DD\_18.

Project Number: 2150448

Project Title: **River Gadder Restoration**

Drawing Title: **DETAILED DESIGN CROSS SECTIONS - R7 B**

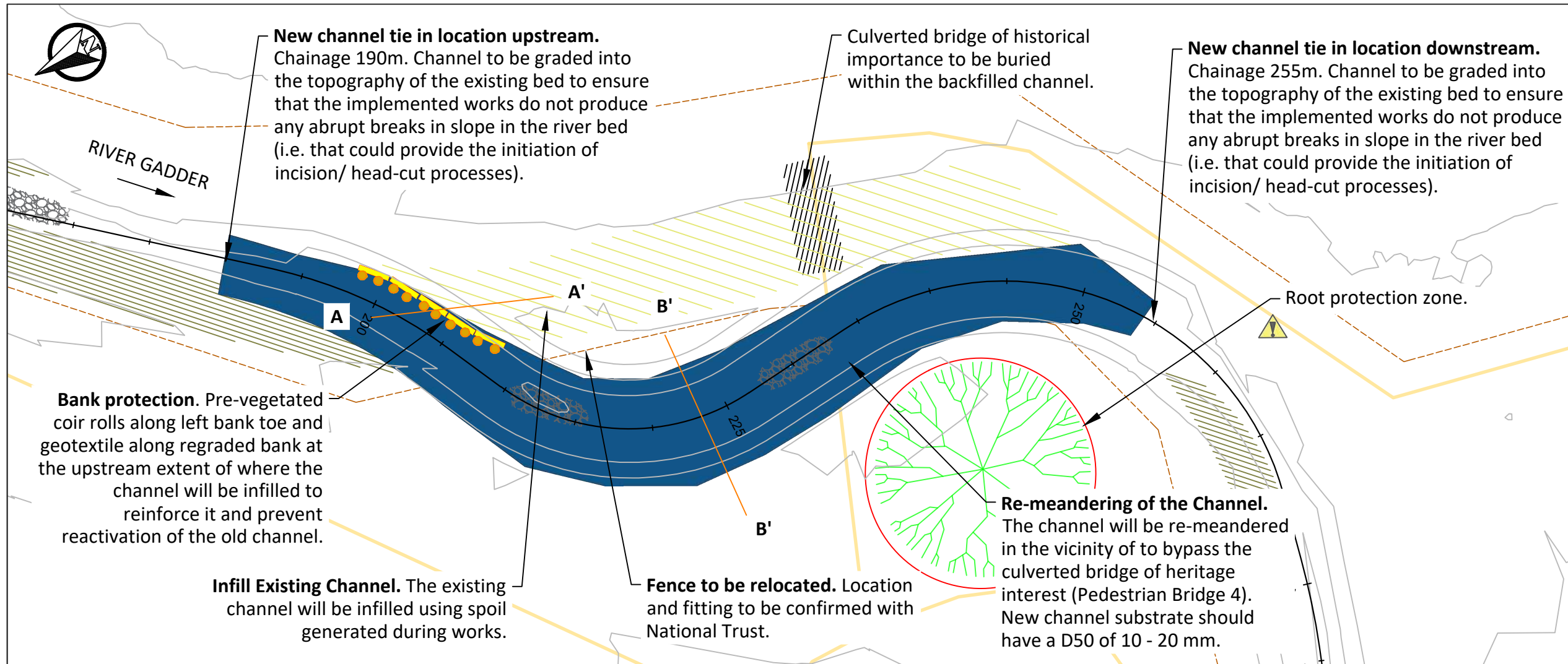
Scale @ A3: 1:150  
 OSGB36 / British National Grid

Drawn	Date	Version
Jl	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number: **240320\_2150448\_CS\_16**





**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

IN ADDITION TO THE HAZARDS OR RISKS NORMALLY ASSOCIATED WITH TYPES OF WORK DETAILED ON THIS DRAWING, THE FOLLOWING SIGNIFICANT RESIDUAL RISKS SHOULD BE NOTED. FURTHER DETAILS ARE INCLUDED IN THE CDM DESIGN RISK MANAGEMENT REGISTER.

**CONSTRUCTION:**  
S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

**MAINTENANCE, CLEANING AND OPERATION:**  
S.5 Existing Structures: damage to and personal injury.  
S.6 Risk of uncovering and/or damaging buried archaeology.

**DECOMMISSIONING OR DEMOLITION:**  
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S.6 Risk of uncovering and/or damaging buried archaeology.

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement.

**LEGEND**

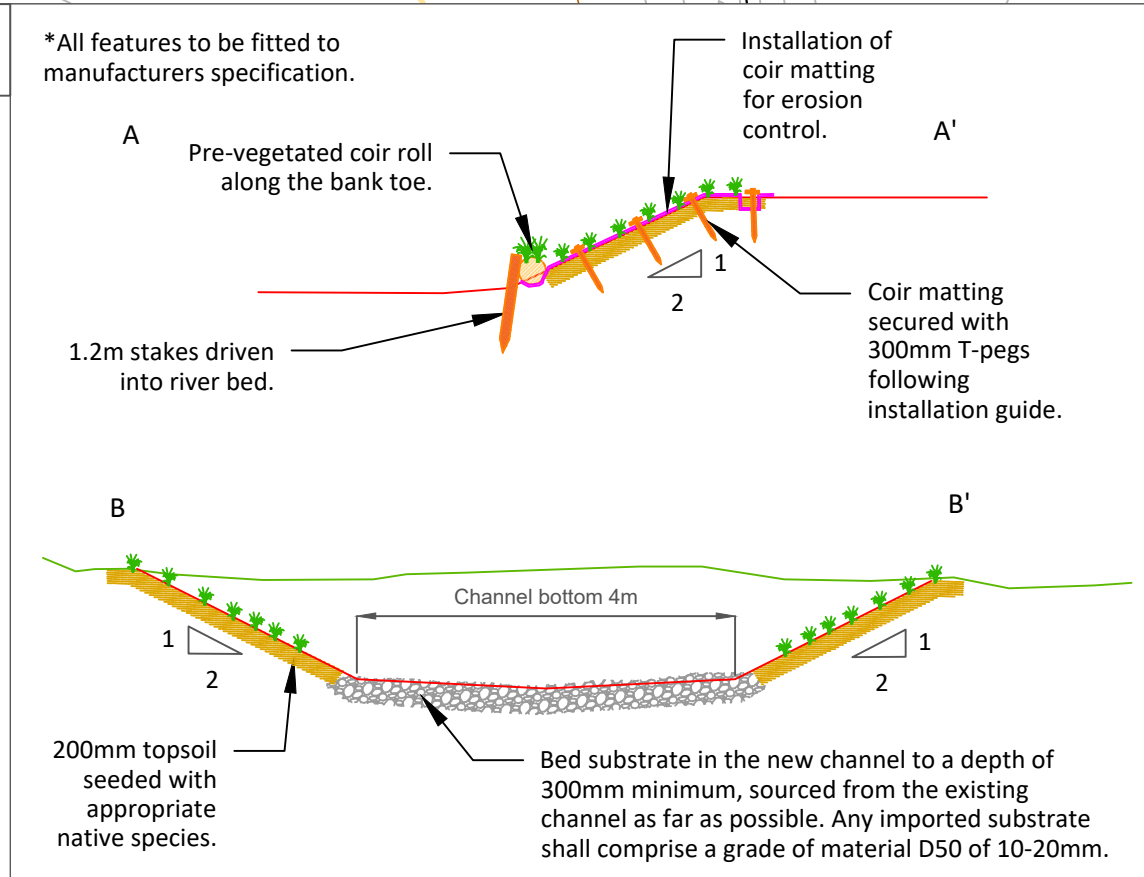
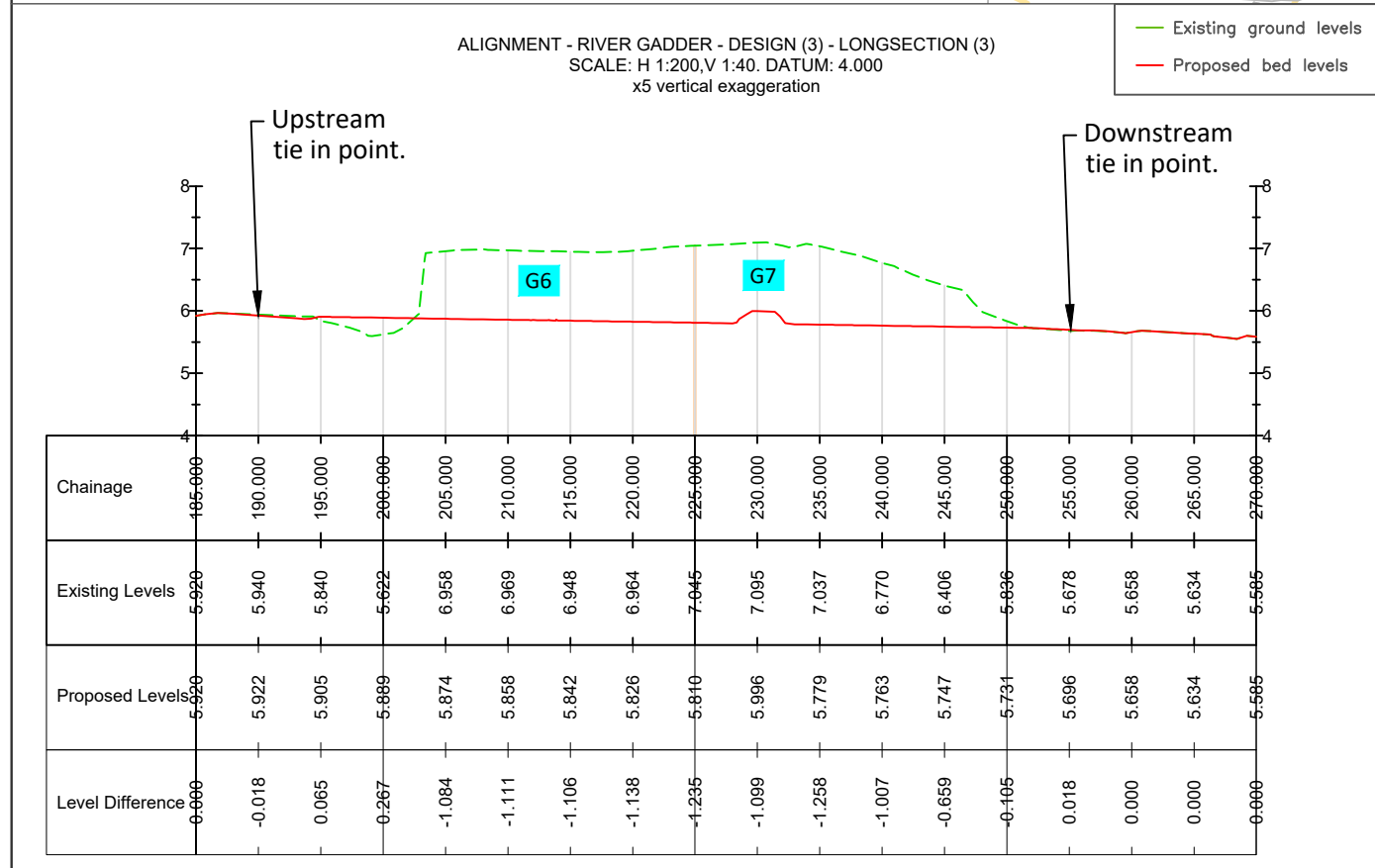
- Existing channel
- Existing bridges to be retained
- Bridge to be buried/ removed
- Existing path
- Existing fences
- Gates
- Root protection area

**Proposed Design**

- New realigned channel
- Infilled channel
- In-channel benches **B1**
- Riffle development **G1**
- Embankment lowering

**\*NORTH is rotated in long profile views.**

Project Number: 2150448



Project Title: River Gadder Restoration

Drawing Title: DETAILED DESIGN NEW CHANNEL DETAILS

Scale @ A3: 1:400  
OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number: 240320\_2150448\_DD\_17

**SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION**

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**CONSTRUCTION:**  
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**MAINTENANCE, CLEANING AND OPERATION:**  
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**DECOMMISSIONING OR DEMOLITION:**  
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**LEGEND**

-  Fascines
-  In-channel benches
-  Stakes

Project Number: 2150448

Project Title: **River Gadder Restoration**

Drawing Title: **DETAILED DESIGN BENCH DETAILS**

Scale @ A3: 1:200  
 OSGB36 / British National Grid

Drawn	Date	Version
JL	20/03/2024	8
Designed	Checked	Approved
JW	SM	JW



Drawing Number: **240320\_2150448\_DD\_18**

