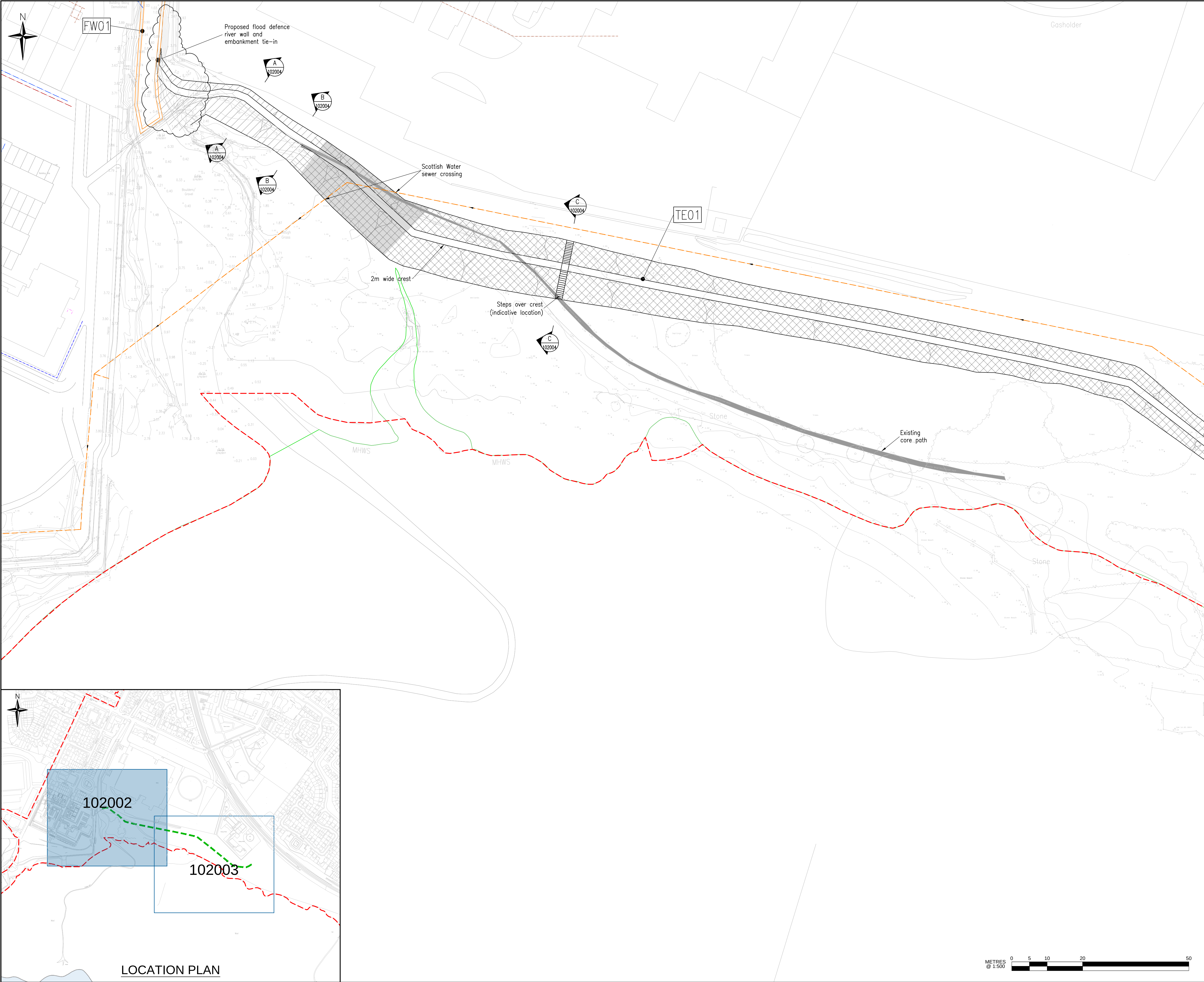




DO NOT SCALE FROM THIS DRAWING

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazard/risks normally associated with the types of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive. Refer to

CONSTRUCTION

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways

MAINTENANCE AND INSPECTION

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways

RESIDUAL DESIGN RISKS

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
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Existing Services Legend:

- Electricity High Voltage
- Water
- British Telecom
- Surface Drainage
- Combined Drainage

Embankment Legend:

- indicates 1:2 side slope
- indicates 1:3 side slope
- indicates 1:3 side slope with SW sewer crossing

Legend:

- TE01 Operation Reference
- Special Protection Area (SPA)
- Scheme Boundary

Notes:

- Services shown on this drawing has been generated from statutory record information only. No onsite detection has been carried out therefore the location of services shown within this drawing should be taken as approximate.
- Refer to drawing GBFAS-FRH-ZZ-DR-W-102004 for embankment sections.

P01.3	20/03/24	THIRD ISSUE	KAB	CMacD	SMcA
P01.2	11/03/24	SECOND ISSUE	KAB	CMacD	SMcA
P01.1	19/02/24	FIRST ISSUE	KAB	CMacD	SMcA
Rev	Date	Description	Drawn	Chkd	Appd

Drawing Status

For Information

West Dunbartonshire COUNCIL

Balfour Beatty FAIRHURST

SCAPE SCOTLAND CIVIL ENGINEERING

Project Title

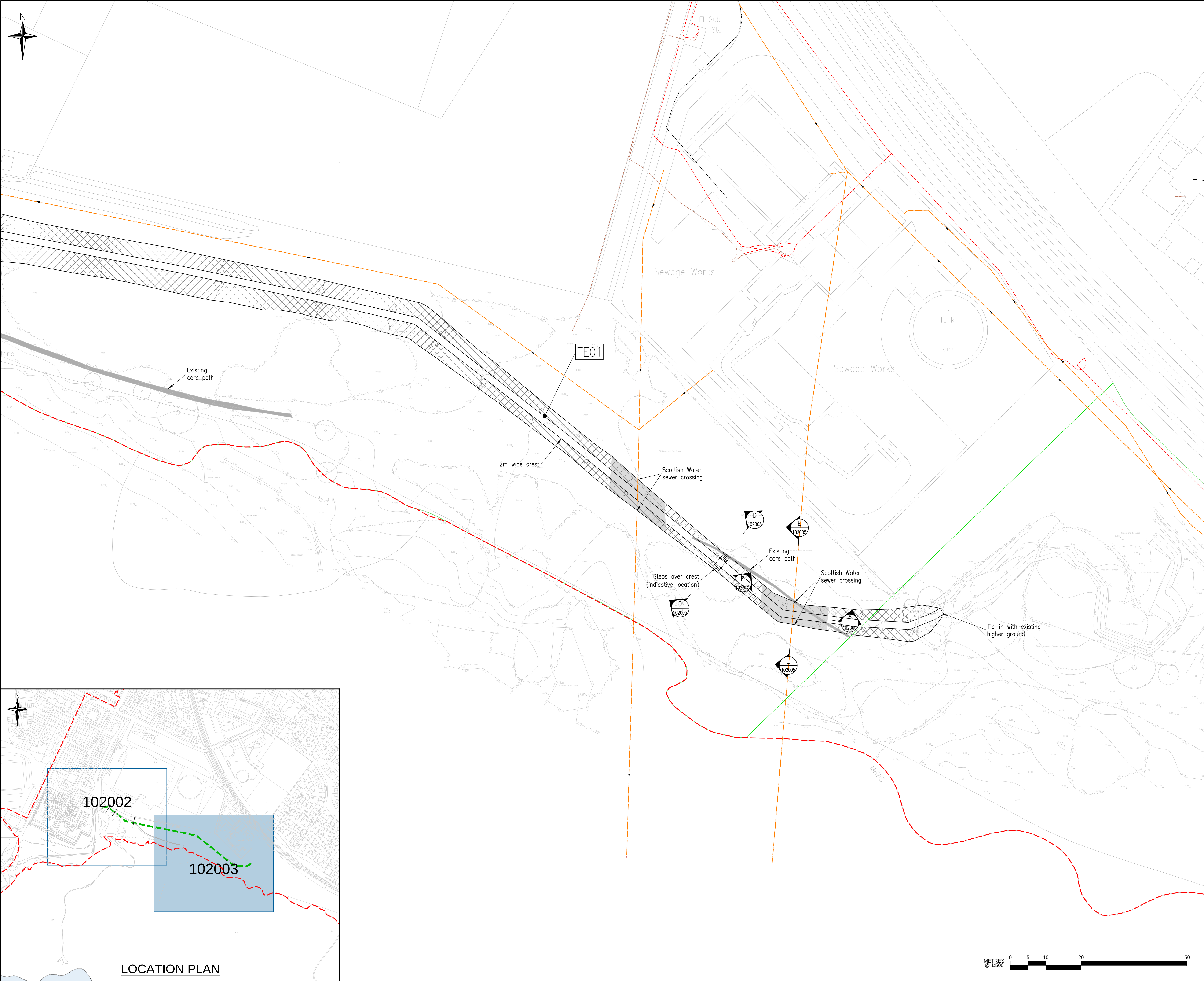
Gruggies Burn Flood Alleviation Scheme

Drawing Title

Tidal Embankment Plan Sheet 1 of 2

Drawn	Date	Designed	Date
KAB	15/02/24	CMacD	13/02/24
Checked	Date	Approved	Date
CMacD	19/02/24	SMcA	19/02/24
Size	Scale	Fairhurst Ref	
A1	1:500	153386-PW-2002	

Drawing Number	Status	Revision
GBFAS-FRH-ZZ-DR-W-102002	S2	P01.3



DO NOT SCALE FROM THIS DRAWING

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

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Risks listed here are not exhaustive.

Refer to

CONSTRUCTION

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways

MAINTENANCE AND INSPECTION

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways

RESIDUAL DESIGN RISKS

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways

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- British Telecom
- Surface Drainage
- Combined Drainage

Embankment Legend:

- indicates 1:2 side slope
- indicates 1:3 side slope
- indicates 1:3 side slope with SW sewer crossing

Legend:

- TE01 Operation Reference
- Special Protection Area (SPA)
- Scheme Boundary

Notes:

- Services shown on this drawing has been generated from statutory record information only. No onsite detection has been carried out therefore the location of services shown within this drawing should be taken as approximate.
- Refer to drawing GBFAS-FRH-ZZ-DR-W-102004 for embankment sections.

P01.3	20/03/24	THIRD ISSUE	KAB	CMacD	SMcA
P01.2	11/03/24	SECOND ISSUE	KAB	CMacD	SMcA
P01.1	19/02/24	FIRST ISSUE	KAB	CMacD	SMcA
Rev	Date	Description	Drawn	Chkd	Appd

Drawing Status

For Information

West Dunbartonshire COUNCIL

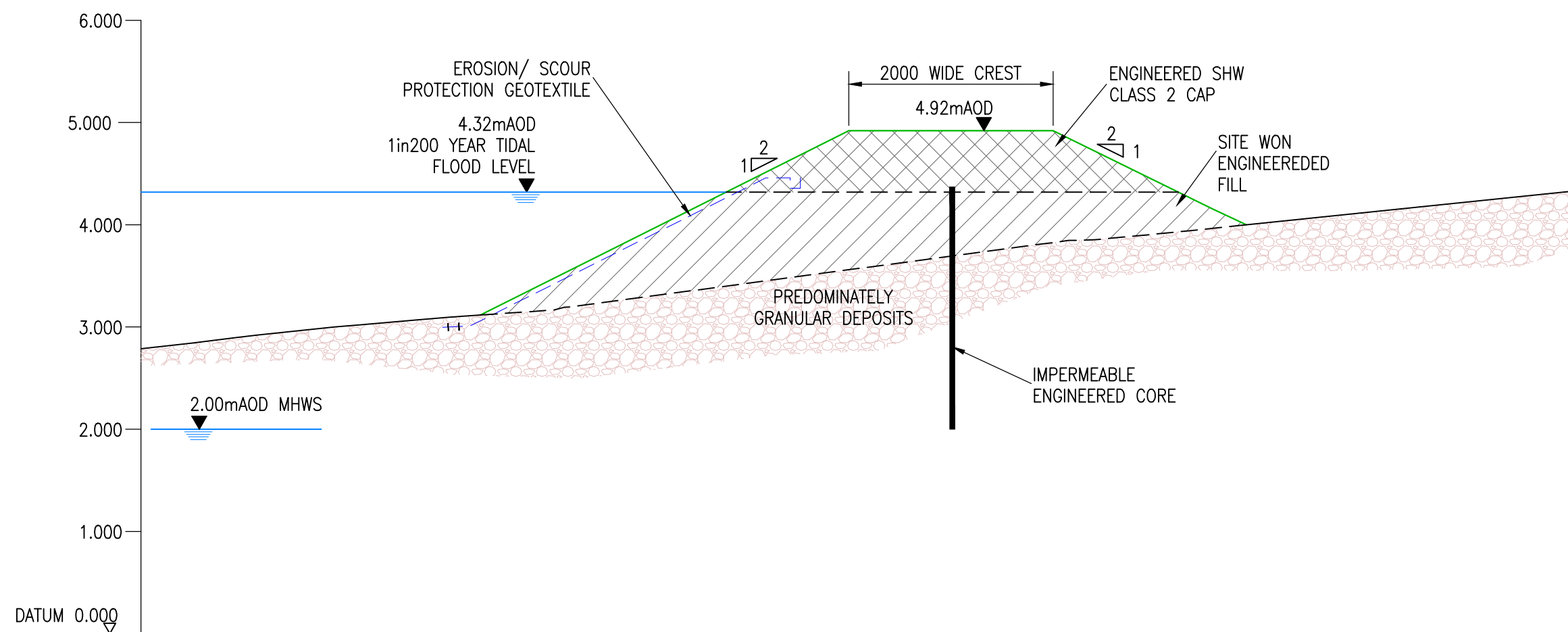
Balfour Beatty FAIRHURST

SCAPE SCOTLAND CIVIL ENGINEERING

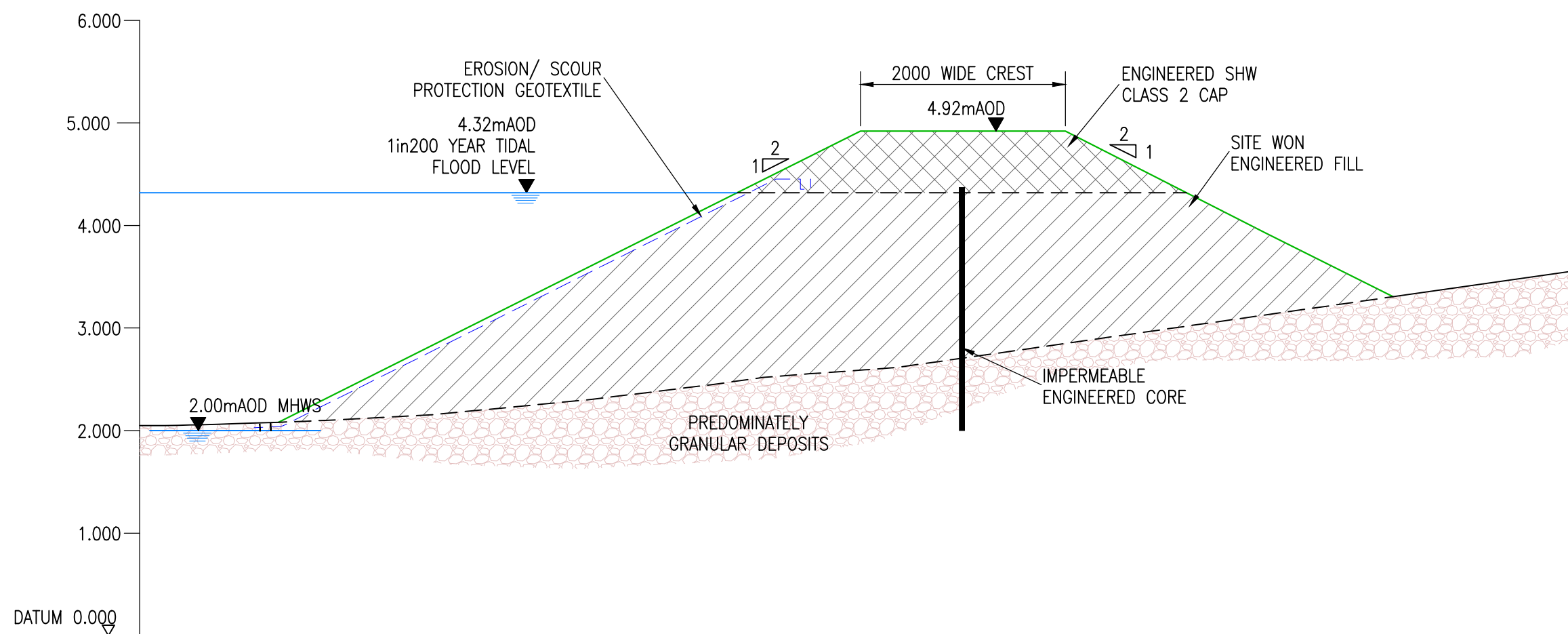
Gruggies Burn Flood Alleviation Scheme

Tidal Embankment Plan Sheet 2 of 2

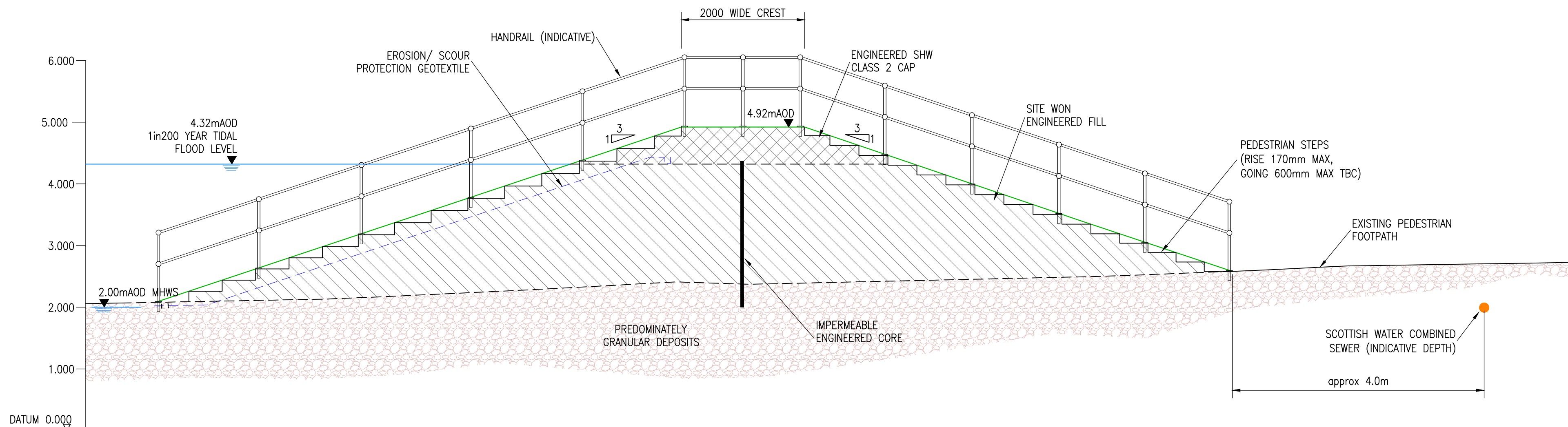
Drawn	Date	Designed	Date
KAB	15/02/24	CMacD	13/02/24
Checked	Date	Approved	Date
CMacD	19/02/24	SMcA	19/02/24
Size	Scale	Fairhurst Ref	
A1	1:500	153386-PW-2003	
Drawing Number	Status	Revision	
GBFAS-FRH-ZZ-DR-W-102003	S2	P01.3	



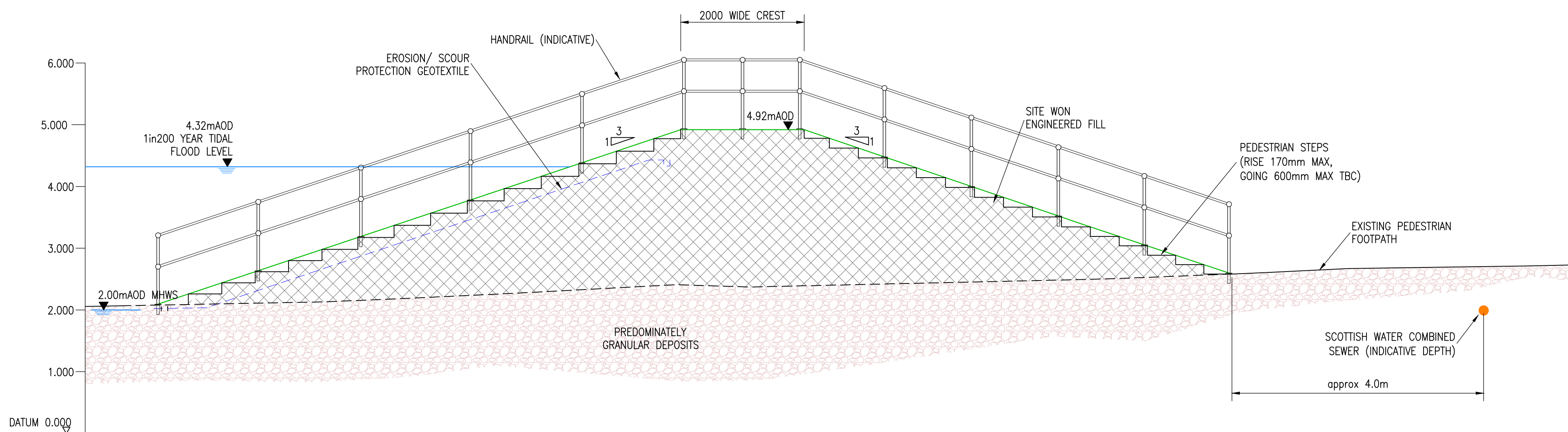
SECTION A-A
(Scale 1:50)



SECTION B-B
(Scale 1:50)



SECTION C-C (OPTION 1)
(Scale 1:50)



SECTION C-C (OPTION 2)
(Scale 1:50)

DO NOT SCALE FROM THIS DRAWING

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazard/risks normally associated with the types of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive. Refer to

CONSTRUCTION

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways



MAINTENANCE AND INSPECTION

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways

RESIDUAL DESIGN RISKS

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways



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Notes:

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- Refer to drawings GBFAS-FRH-ZZ-DR-W-102006 and 102007 for long section.
- Dimensions in millimetres unless stated otherwise.
- Embankment sections are indicative only and subject to detail design.

Legend:

- Existing ground level
- Proposed ground profile
- Proposed embankment fill (1 in 2 or 1 in 3 side slopes) - site won engineered fill with an impermeable core
- Proposed embankment fill (1 in 3 side slope) - low permeability (<10⁻⁷ m/s) shw class 2 fill

P01.3	20/03/24	THIRD ISSUE	KAB	CMacD	SMcA
P01.2	11/03/24	SECOND ISSUE	KAB	CMacD	SMcA
P01.1	19/02/24	FIRST ISSUE	KAB	CMacD	SMcA
Rev	Date	Description	Drawn	Chkd	Appd

For Information



Project Title
Gruggies Burn
Flood Alleviation Scheme

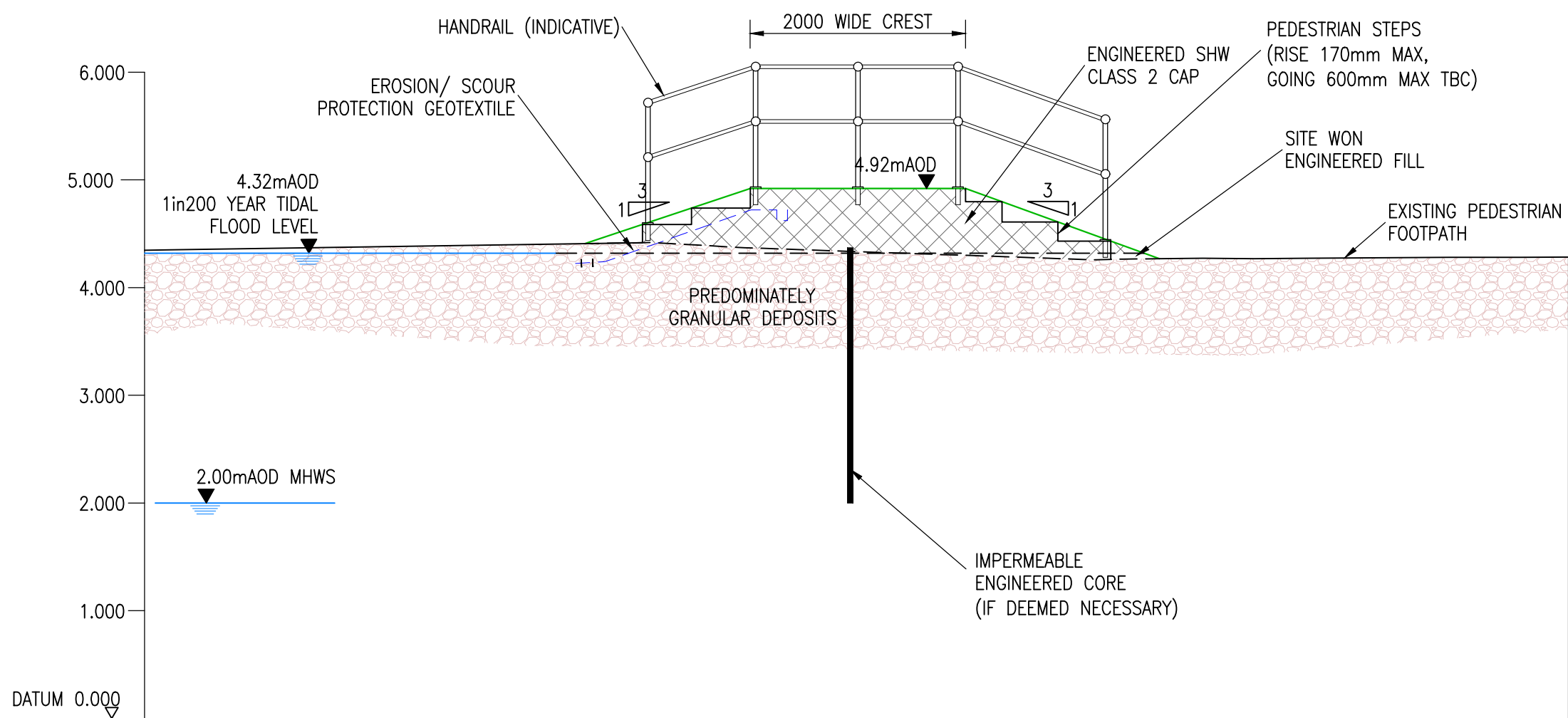
Drawing Title
Tidal Embankment Sections
Sheet 1 of 2

Drawn	Date	Designed	Date
KAB	15/02/24	CMacD	13/02/24
Checked	Date	Approved	Date
CMacD	19/02/24	SMcA	19/02/24

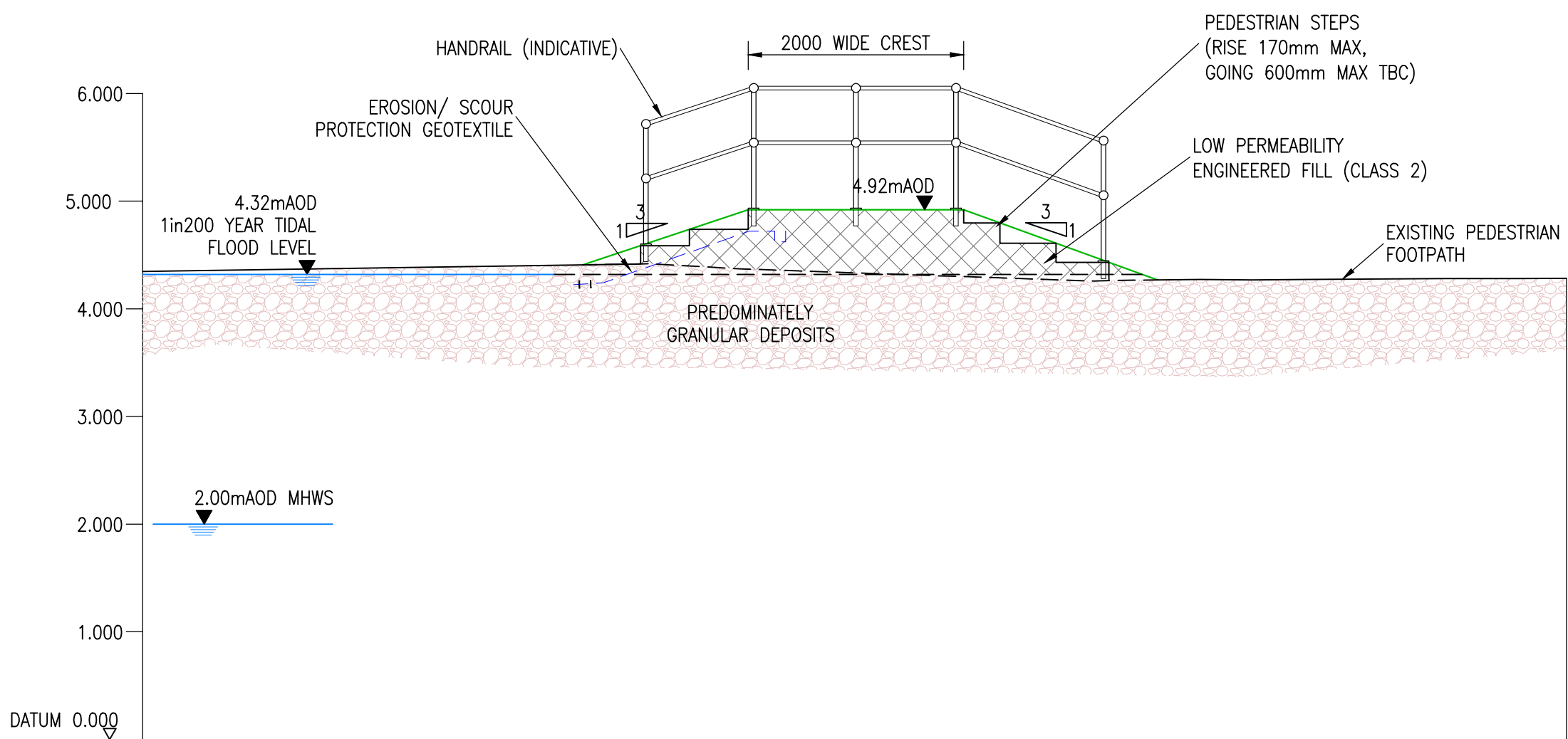
Size	Scale	Fairhurst Ref
A1	1:50	153386-PW-2004

Drawing Number	Status	Revision
GBFAS-FRH-ZZ-DR-W-102004	S2	P01.3

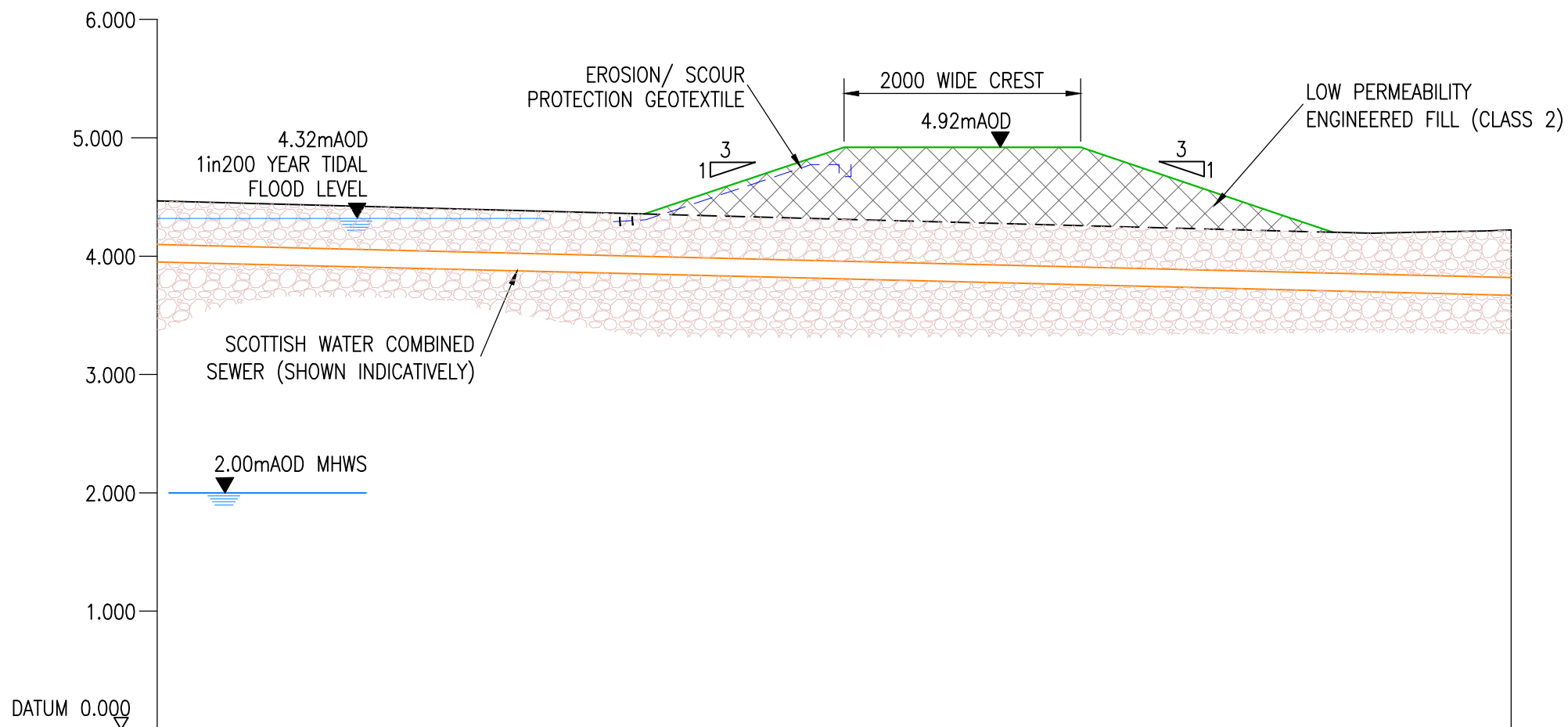




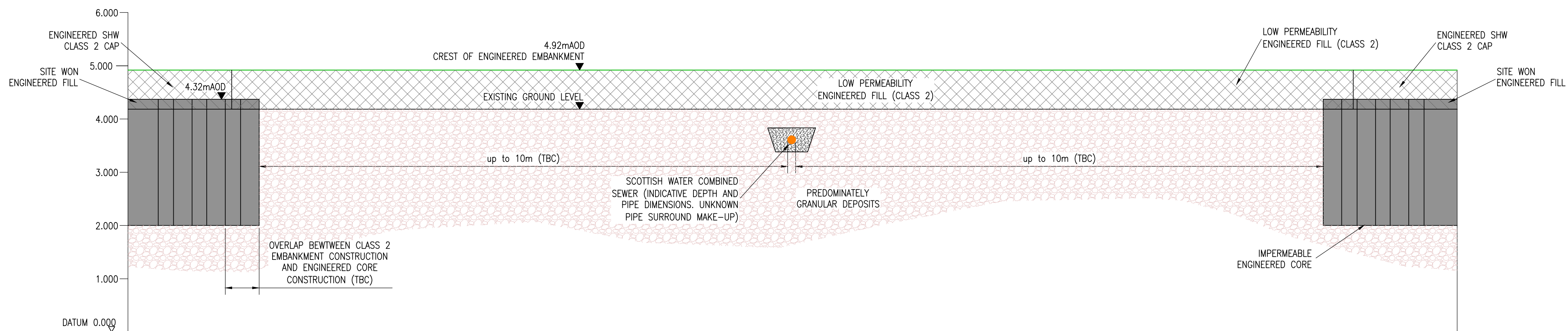
SECTION D-D (OPTION 1)
(Scale 1:50)



SECTION D-D (OPTION 2)
(Scale 1:50)



SECTION E-E
(Scale 1:50)



SECTION F-F
(Scale 1:50)



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SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

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Risks listed here are not exhaustive. Refer to

CONSTRUCTION

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways



MAINTENANCE AND INSPECTION

- Ground instability (soft ground)
- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways

RESIDUAL DESIGN RISKS

- Ground instability (soft ground)
- Groundwater and inundation
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Legend:

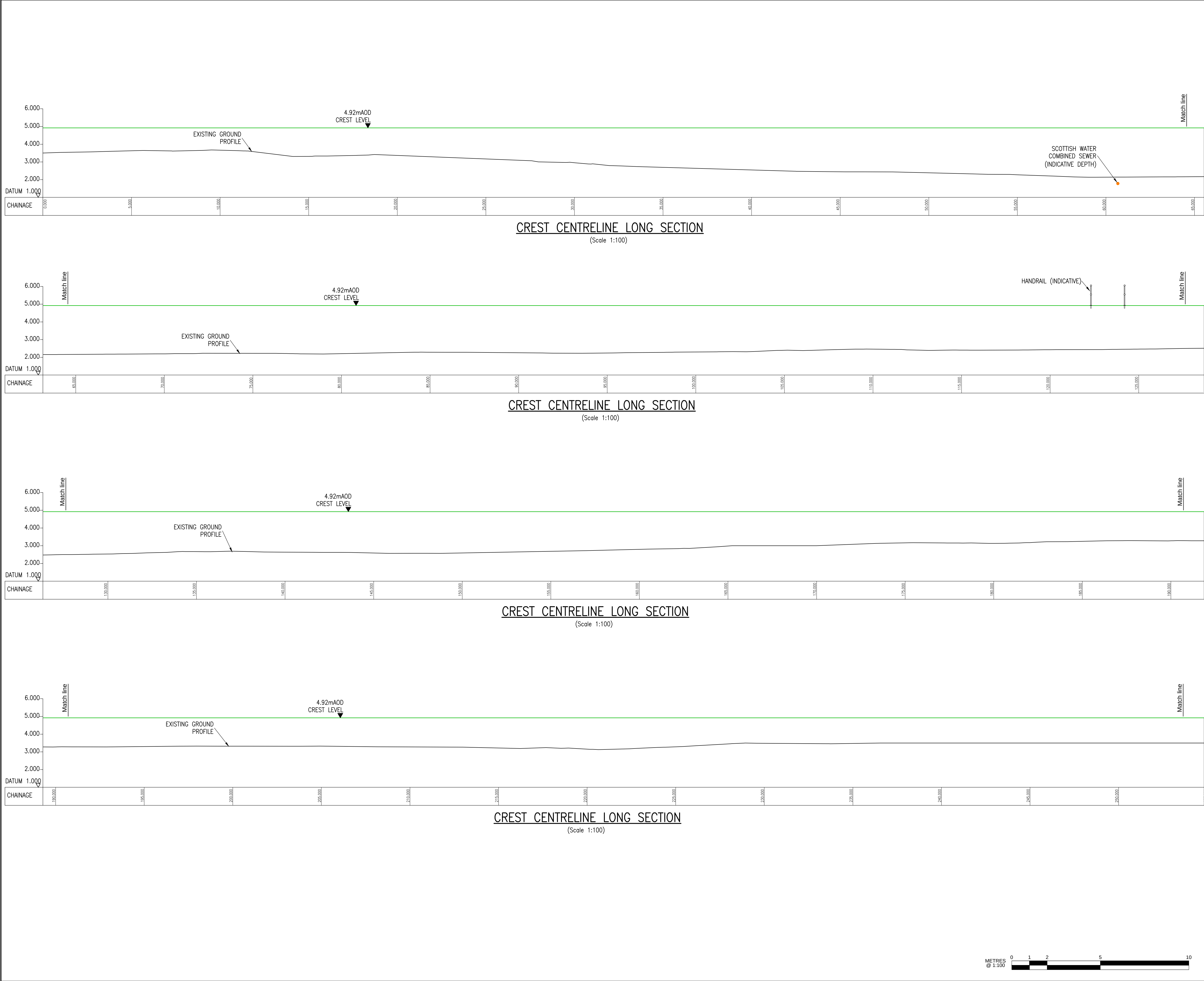
- Existing ground level
- Proposed ground profile
- Proposed embankment fill (1 in 2 or 1 in 3 side slopes) - site won engineered fill with an impermeable core
- Proposed embankment fill (1 in 3 side slope) - low permeability (<10⁻⁷ m/s) shw class 2 fill

Rev	Date	Description	Drawn	Chkd	Appd
P01.2	20/03/24	SECOND ISSUE	KAB	CMacD	SMcA
P01.1	11/03/24	FIRST ISSUE	KAB	CMacD	SMcA

For Information



Project Title			
Gruggies Burn Flood Alleviation Scheme			
Drawing Title			
Tidal Embankment Sections Sheet 2 of 2			
Drawn	Date	Designed	Date
KAB	11/03/24	CMacD	11/03/24
Checked	Date	Approved	Date
CMacD	11/03/24	SMcA	11/03/24
Size	Scale	Fairhurst Ref	
A1	1:50	153386-PW-2005	
Drawing Number	Status	Revision	
GBFAS-FRH-ZZ-DR-W-102005	S2	P01.2	



DO NOT SCALE FROM THIS DRAWING

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

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Refer to

CONSTRUCTION

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MAINTENANCE AND INSPECTION

RESIDUAL DESIGN RISKS

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- Refer to drawings GBFAS-FRH-ZZ-DR-W-102004 and 102005 for cross sections.
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Legend:

Existing ground level

Proposed ground profile

P01.2	20/03/24	SECOND ISSUE	KAB	CMacD	SMcA
P01.1	11/03/24	FIRST ISSUE	KAB	CMacD	SMcA
Rev	Date	Description	Drawn	Chkd	Appd

Drawing Status

For Information

West Dunbartonshire COUNCIL

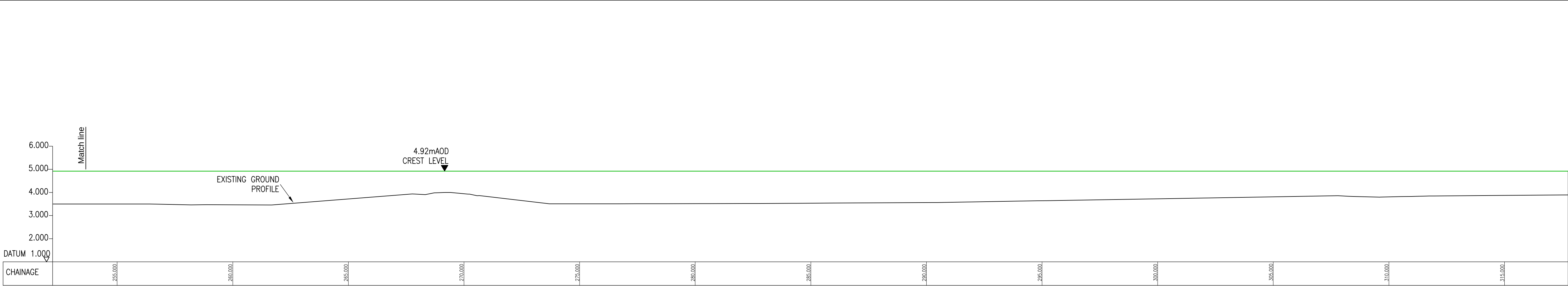
Balfour Beatty FAIRHURST

SCAPE SCOTLAND CIVIL ENGINEERING

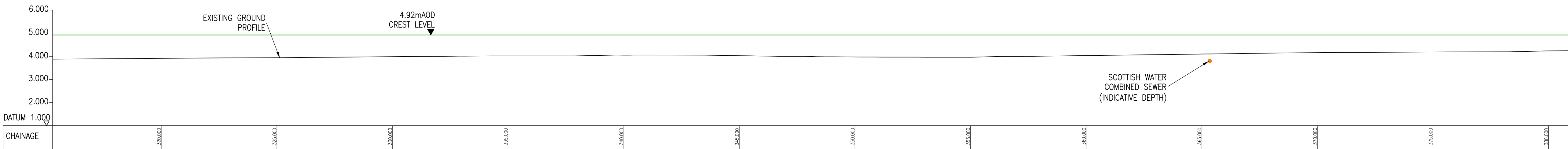
Gruggies Burn Flood Alleviation Scheme

Tidal Embankment Long Section Sheet 1 of 2

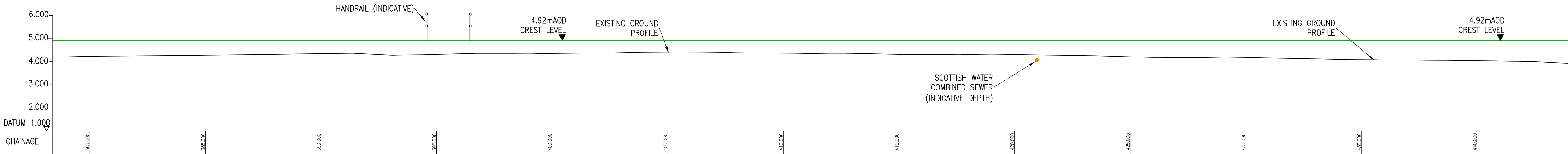
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Checked	Date	Approved	Date
CMacD	11/03/24	SMcA	11/03/24
Size	Scale	Fairhurst Ref	
A1	1:100	153386-PW-2006	
Drawing Number		Status	Revision
GBFAS-FRH-ZZ-ZZ-DR-W-102006		S2	P01.2



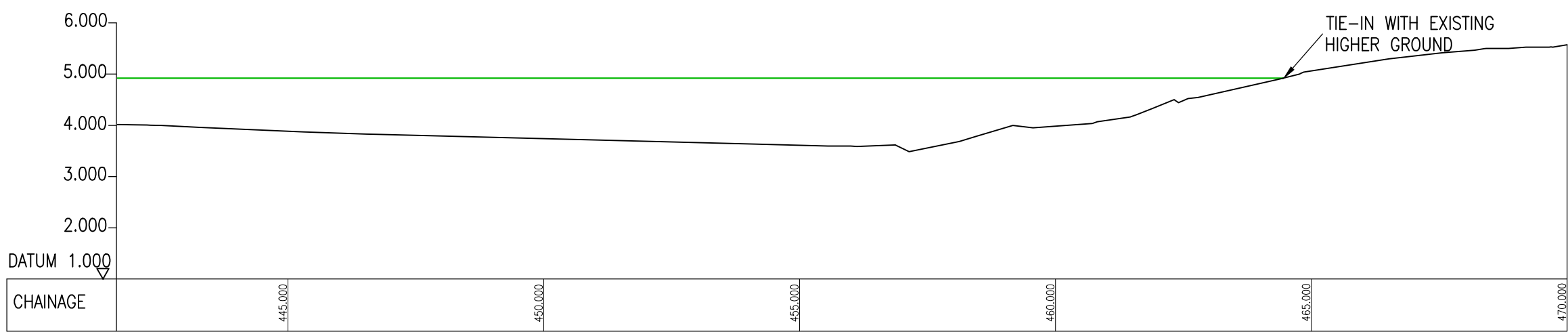
CREST CENTRELINE LONG SECTION
(Scale 1:100)



CREST CENTRELINE LONG SECTION
(Scale 1:100)



CREST CENTRELINE LONG SECTION
(Scale 1:100)



CREST CENTRELINE LONG SECTION
(Scale 1:100)



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- Groundwater and inundation
- Services and overhead cables (including SW sewers)
- Near to waterways
- Near to railways

MAINTENANCE AND INSPECTION

RESIDUAL DESIGN RISKS

- Ground instability (soft ground)
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Legend:

- Existing ground level
- Proposed ground profile

P01.2	20/03/24	SECOND ISSUE	KAB	CMacD	SMcA
P01.1	11/03/24	FIRST ISSUE	KAB	CMacD	SMcA
Rev	Date	Description	Drawn	Chkd	Appd

Drawing Status

For Information

West
Dunbartonshire
COUNCIL

Balfour Beatty FAIRHURST

SCAPE SCOTLAND
CIVIL ENGINEERING

Project Title					
Gruggies Burn Flood Alleviation Scheme					
Drawing Title					
Tidal Embankment Long Section Sheet 2 of 2					
Drawn		Date	Designed		Date
KAB		11/03/24	CMacD		11/03/24
Checked		Date	Approved		Date
CMacD			SMcA		
Size	Scale	Fairhurst Ref			
A1	1:100	153386-PW-2007			
Drawing Number			Status	Revision	
GBFAS-FRH-ZZ-ZZ-DR-W-102007			S2	P01.2	