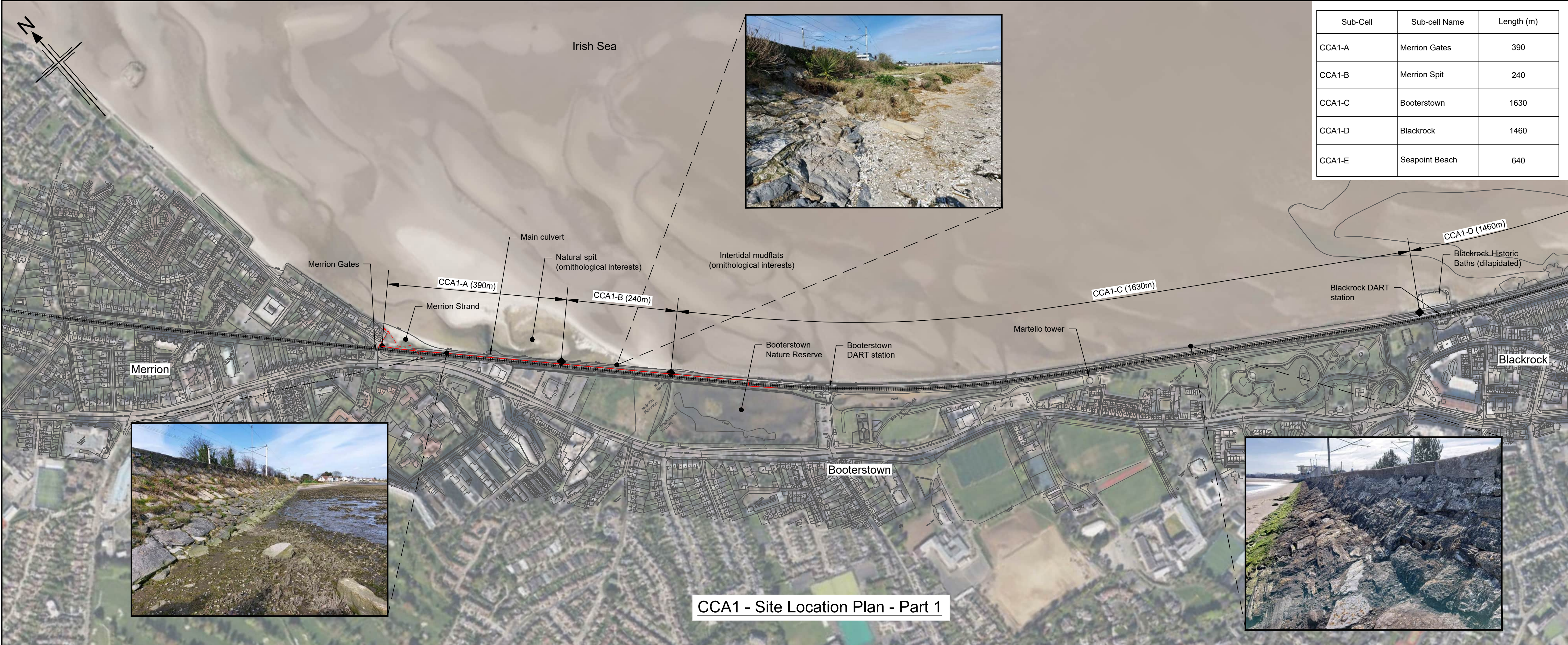




CCA1 - Site Location Plan - Part 1

Sub-Cell	Sub-cell Name	Length (m)
CCA1-A	Merrion Gates	390
CCA1-B	Merrion Spit	240
CCA1-C	Booterstown	1630
CCA1-D	Blackrock	1460
CCA1-E	Seapoint Beach	640



- NOTES**
- All levels are in mODM.
 - Do not scale from this drawing.
 - Size and location of all structures is indicative only and to be determined through design development.
 - The railway line is electrified through this cell with overhead power lines.

LEGEND

	Railway line
	110kV Power cable (buried)
	220kV Power cable (buried)
	38kV Power line



CCA1 - Site Location Plan - Part 2

Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Appr'd
V01	29.02.2024	Client Accepted	RM	JG	JG	DK
C	24.01.2024	Minor amendments	AE	JG	JJD	DK
B	21.12.2023	Comments Addressed	AE	JG	JJD	DK
P01.1	17.11.2023	Draft Issue For Information	PC	JG	JJD	DK

Client:

Designer:
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04R2C5. Tel: +44 (0)203 9802000
www.jacobs.com

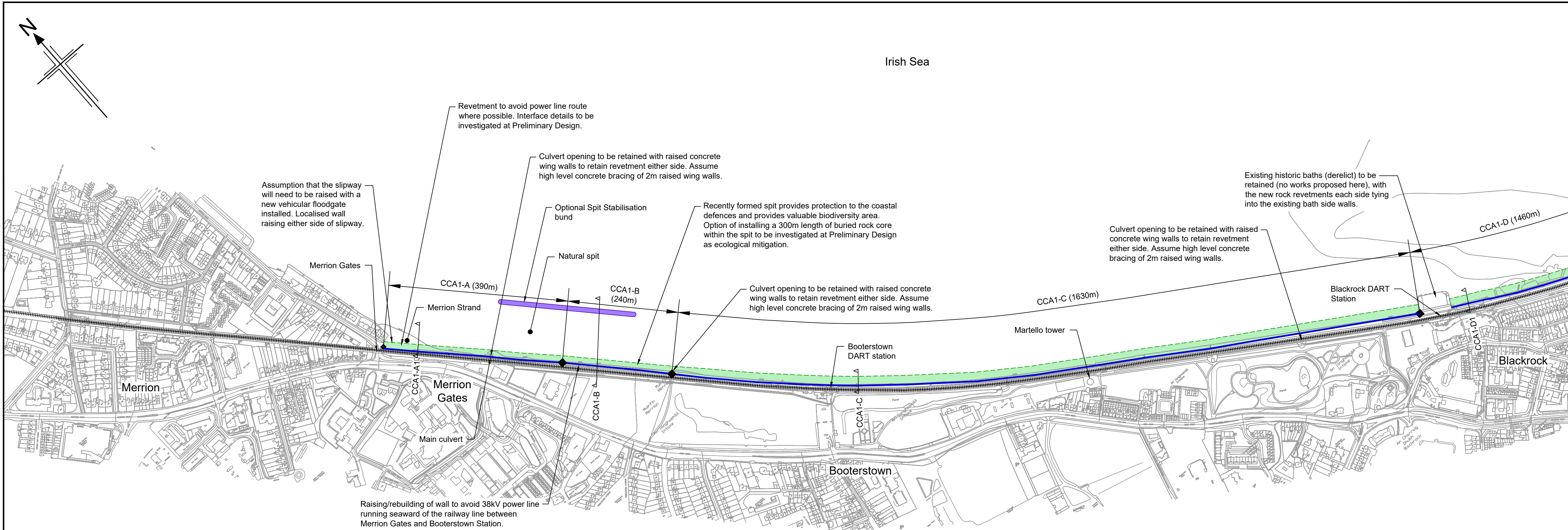
Project:

Drawing title: **CONCEPT DESIGN
CCA 1
SITE LOCATION PLAN**

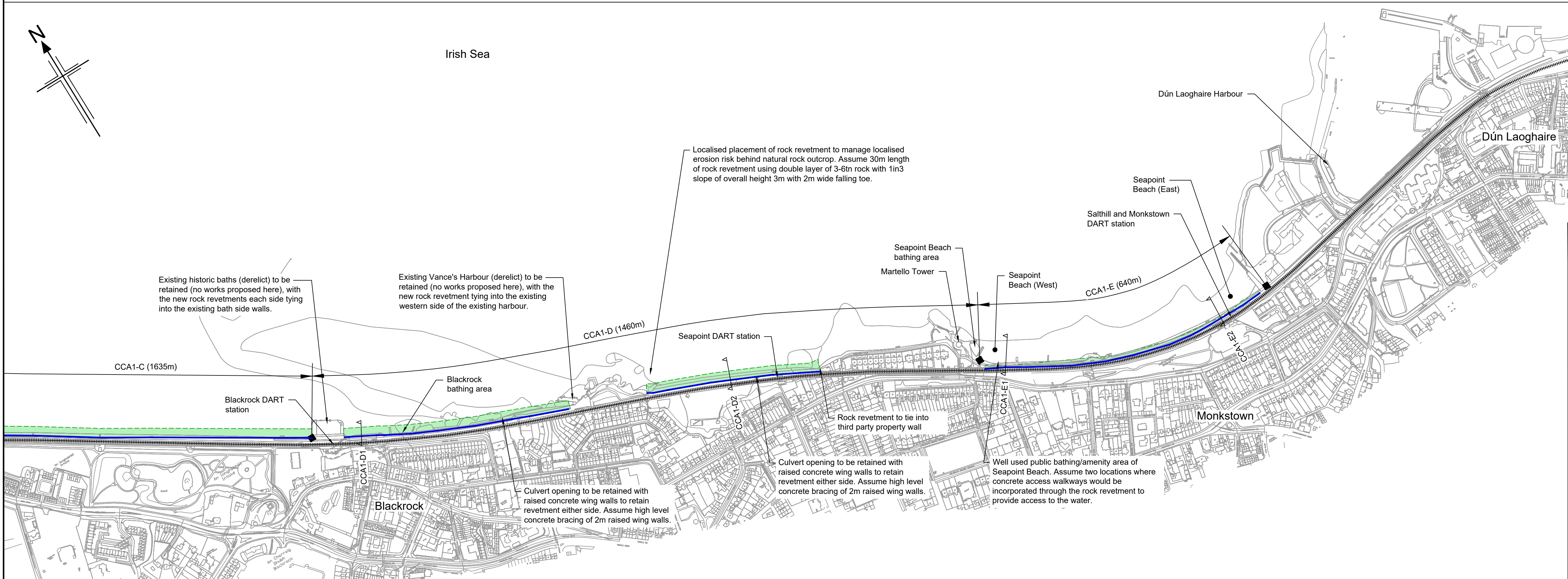
Drawing status: **Accepted**

State Code	Contract / Work Package 1		
Project Stage	Project Concept, Feasibility & Option Selection		
Scale	1:5000	DO NOT SCALE	
Jacobs No.	D3658300	Rev	V01
Client no.	7694		
Drawing number	7694- CCA1	Work Package	- P2 -
Type	DWG - CV	Discipline	- JAC
Originator		Number	- 0001

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CCA1 - Option A Plan - Part 1



CCA1 - Option A Plan - Part 2



NOTES

1. All levels are in mODM.
2. Do not scale from this drawing.
3. Size and location of all structures is indicative only and to be determined through design development.
4. The railway line is electrified through this cell with overhead power lines.

LEGEND

Section locations

Railway line

Proposed Works

Rock revetment

Wall raising

Optional spit stabilisation bund

V01	29.02.2024	Client Accepted	AE	RM	JG	DK
C	24.01.2024	Minor amendments	AE	JG	JJD	DK
B	21.12.2023	Comments Addressed	AE	JG	JJD	DK
P01.1	17.11.2023	Draft Issue For Information	PC	JG	JJD	DK
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd

Client: **larnród Éireann Irish Rail**

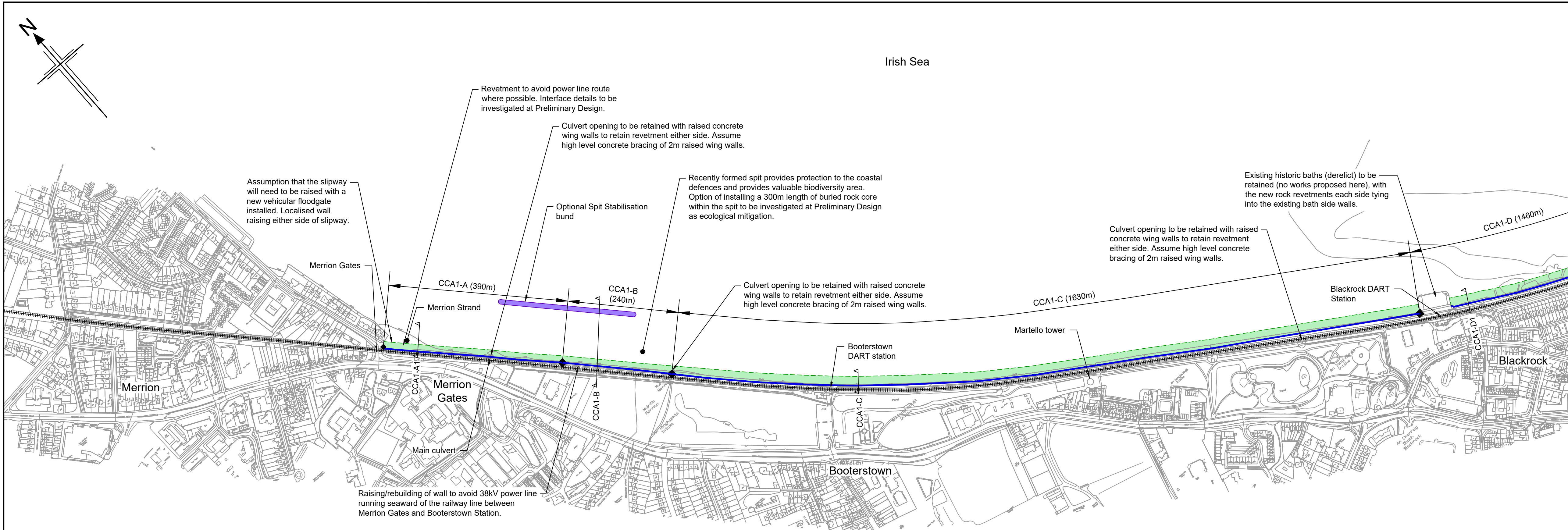
Designer: **Jacobs**
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04R2C5. Tel: +44 (0)203 9802000
www.jacobs.com

Project: **ECRIPP**
Ireland's Greenest Railway

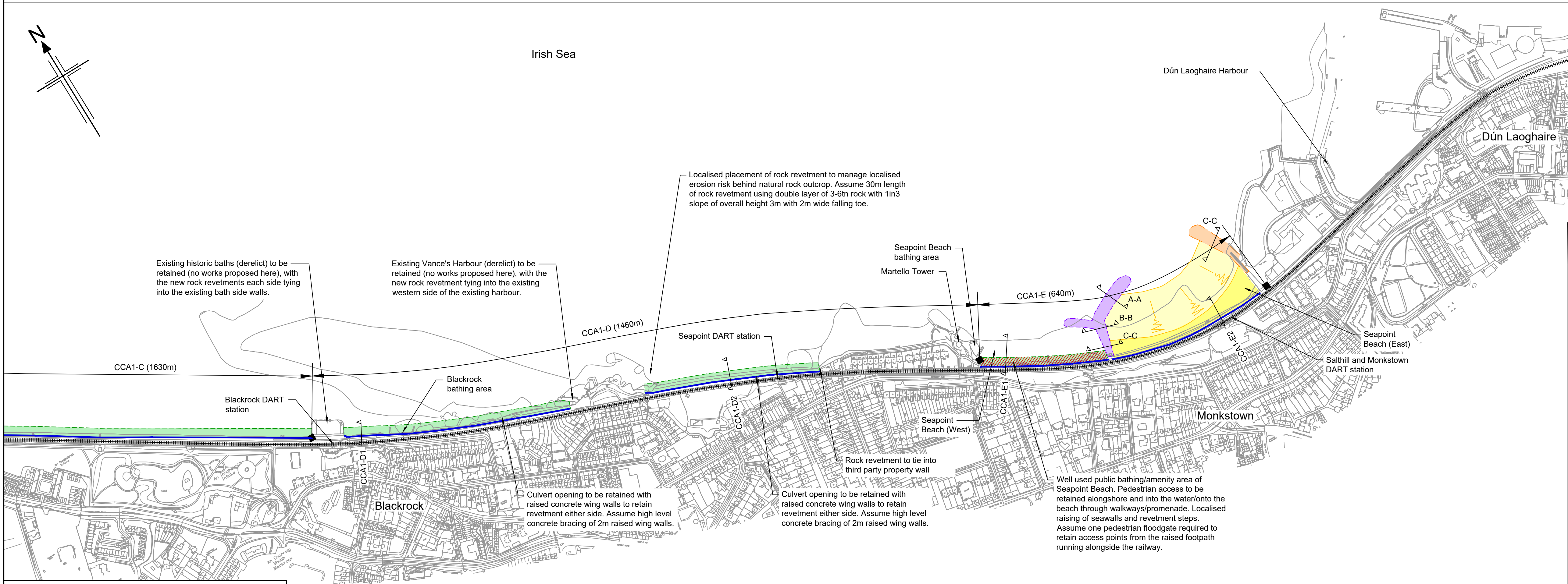
Drawing title: **CONCEPT DESIGN
CCA 1
OPTION A PLAN**

Drawing status		Accepted	
State Code	Contract / Work Package 1		
Project Stage	Project Concept, Feasibility & Option Selection		
Scale	1:5000	DO NOT SCALE	
Jacobs No.	D3658300	Rev	V01
Client no.	7694		
Drawing number	Project No	Work Package	Phase
	7694-	CCA1	- P2 -
	Type	Discipline	Originator
	DWG	CV	JAC
			Number
			- 0100

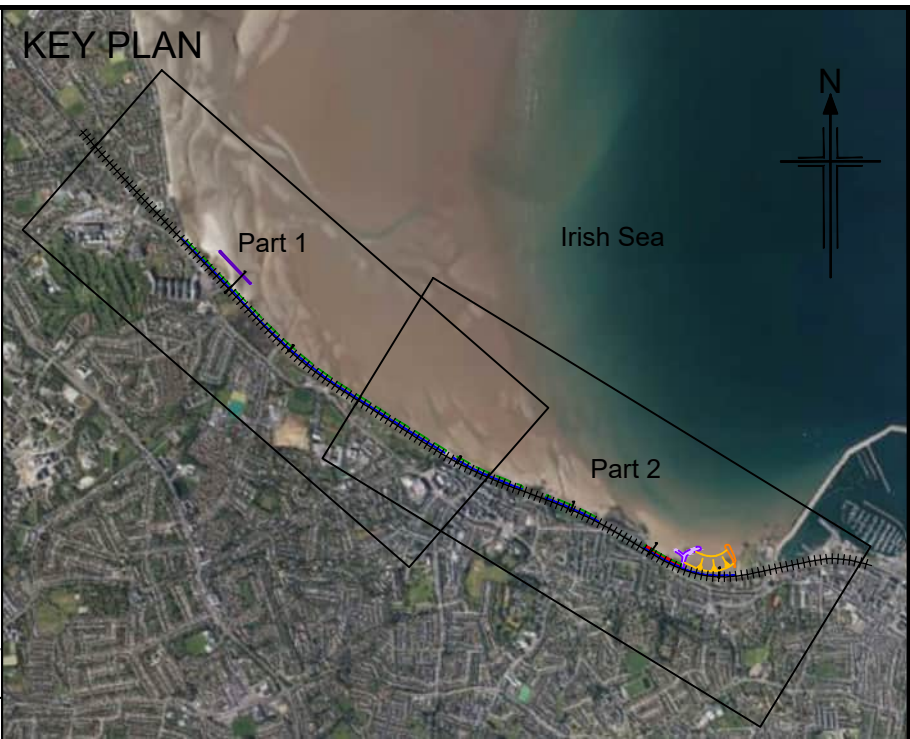
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CCA1 - Option B Plan - Part 1



CCA1 - Option B Plan - Part 2



NOTES

1. All levels are in mODM.
2. Do not scale from this drawing.
3. Size and location of all structures is indicative only and to be determined through design development.
4. The railway line is electrified through this cell with overhead power lines.

LEGEND

- △ Section locations
----- Railway line

Proposed Works

- Rock revetment
Stepped revetment
Groyne
Breakwater
Wall raising
Optional spit stabilisation bund
Beach nourishment

V01	29.02.2024	Client Accepted	AE	RM	JG	DK
C	24.01.2024	Minor amendments	AE	JG	JJD	DK
B	21.12.2023	Comments Addressed	AE	JG	JJD	DK
P01.1	17.11.2023	Draft Issue For Information	PC	JG	JJG	DK
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd

Client: **larnród Éireann Irish Rail**

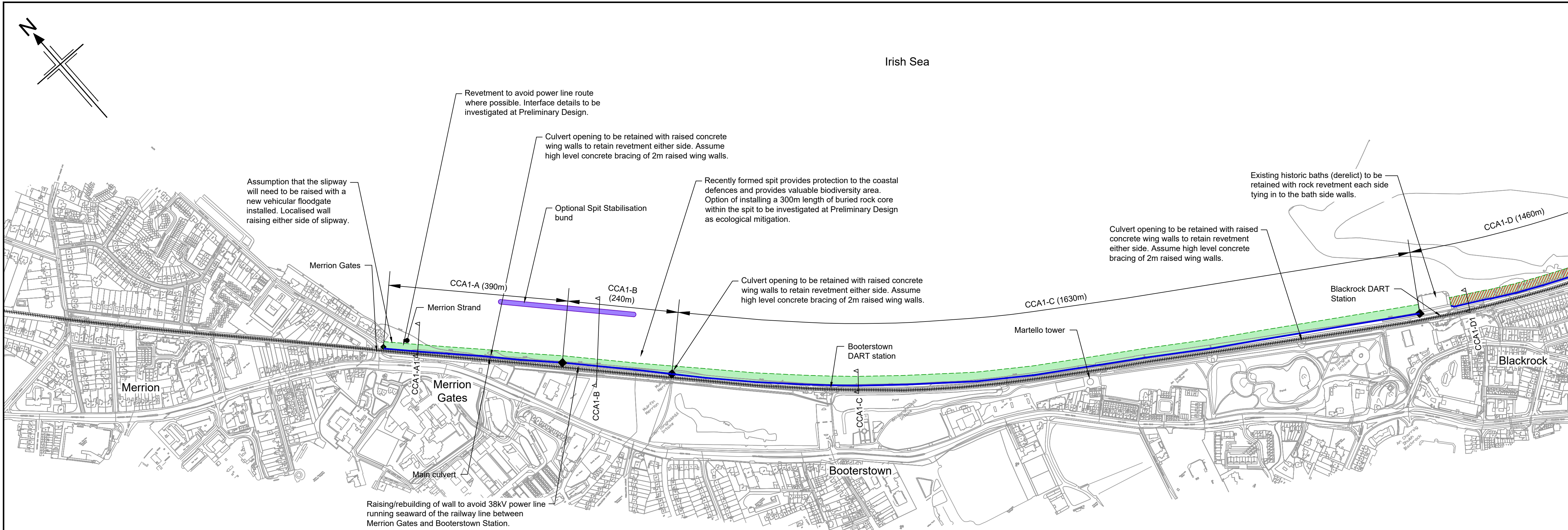
Designer: **Jacobs**
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04R2C5. Tel: +44 (0)203 9802000
www.jacobs.com

Project: **ECRIPP**
larnród Éireann

Drawing title: **CONCEPT DESIGN
CCA 1
OPTION B PLAN**

Drawing status	Accepted		
State Code	Contract / Work Package 1		
Project Stage	Project Concept, Feasibility & Option Selection		
Scale	1:5000	DO NOT SCALE	
Jacobs No.	D3658300	Rev	V01
Client no.	7694		
Drawing number	Project No	Work Package	Phase
	7694- CCA1	- P2	-
	Type	Discipline	Originator
	DWG- CV	- JAC	- 0101

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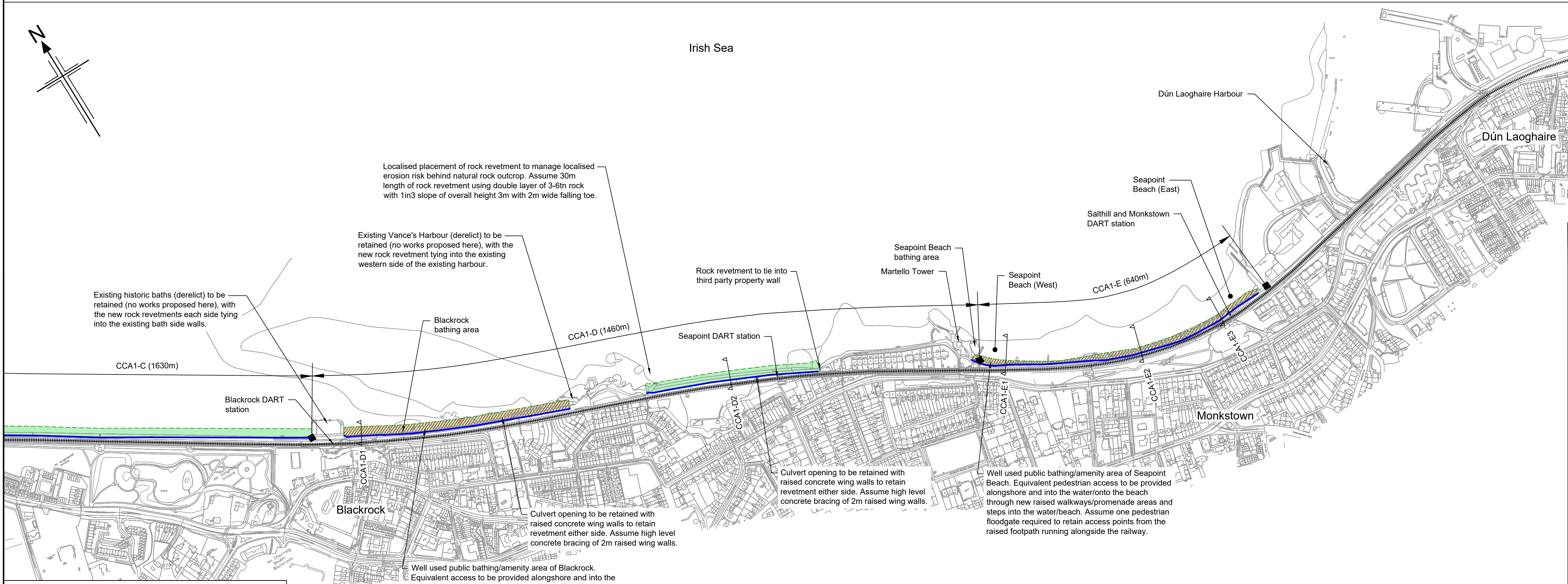


CCA1 - Option C Plan - Part 1



- NOTES**
1. All levels are in mODM.
 2. Do not scale from this drawing.
 3. Size and location of all structures is indicative only and to be determined through design development.
 4. The railway line is electrified through this cell with overhead power lines.

- LEGEND**
- Section locations
 - Railway line
 - Proposed Works
 - Rock revetment
 - Stepped revetment
 - Wall raising
 - Optional spit stabilisation bund



CCA1 - Option C Plan - Part 2

V01	29.02.2024	Client Accepted	AE	RM	JG	DK
C	24.01.2024	Minor amendments	AE	JG	JJD	DK
B	21.12.2023	Comments Addressed	AE	JG	JJD	DK
P01.1	17.11.2023	Draft Issue For Information	PC	JG	JJD	DK
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd

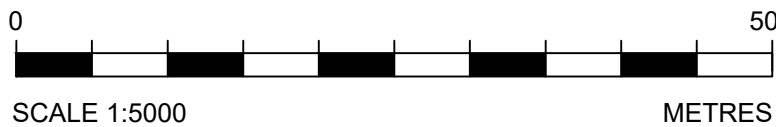
Client: **Iarnród Éireann Irish Rail**

Designer: **Jacobs**
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04R2C5. Tel: +44 (0)203 9802000
www.jacobs.com

Project: **ECRIPP**
Iarnród Éireann

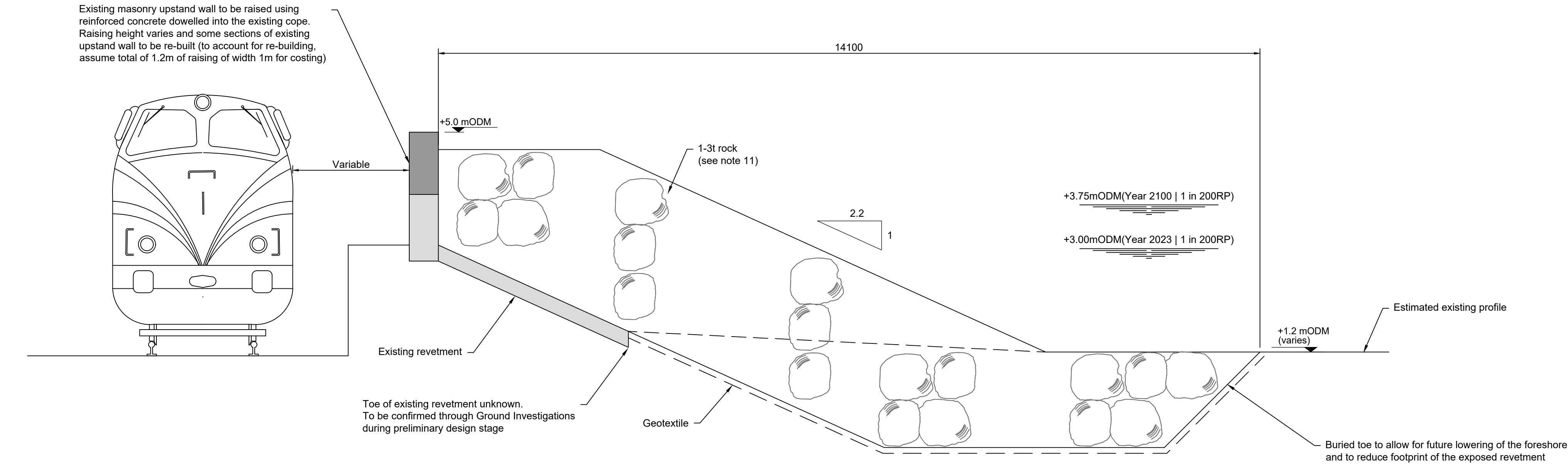
Drawing title: **CONCEPT DESIGN
CCA 1
OPTION C PLAN**

Drawing status	Accepted		
State Code	Contract / Work Package 1		
Project Stage	Project Concept, Feasibility & Option Selection		
Scale	1:5000	DO NOT SCALE	
Jacobs No.	D3658300	Rev	V01
Client no.	7694		
Drawing number	Project No	Work Package	Phase
	7694-	CCA1	-P2-
	Type	Discipline	Originator
	DWG	CV	JAC
			Number
			-0102



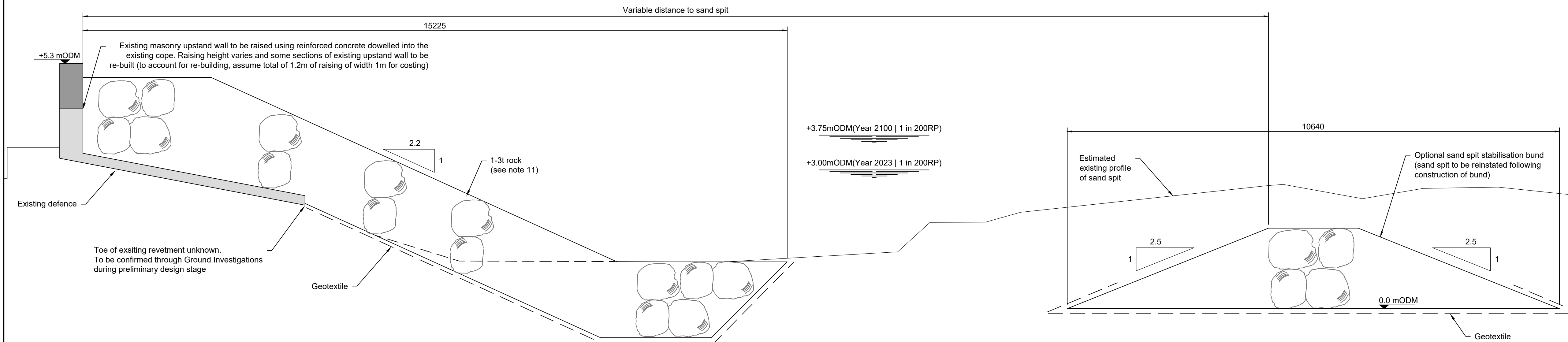
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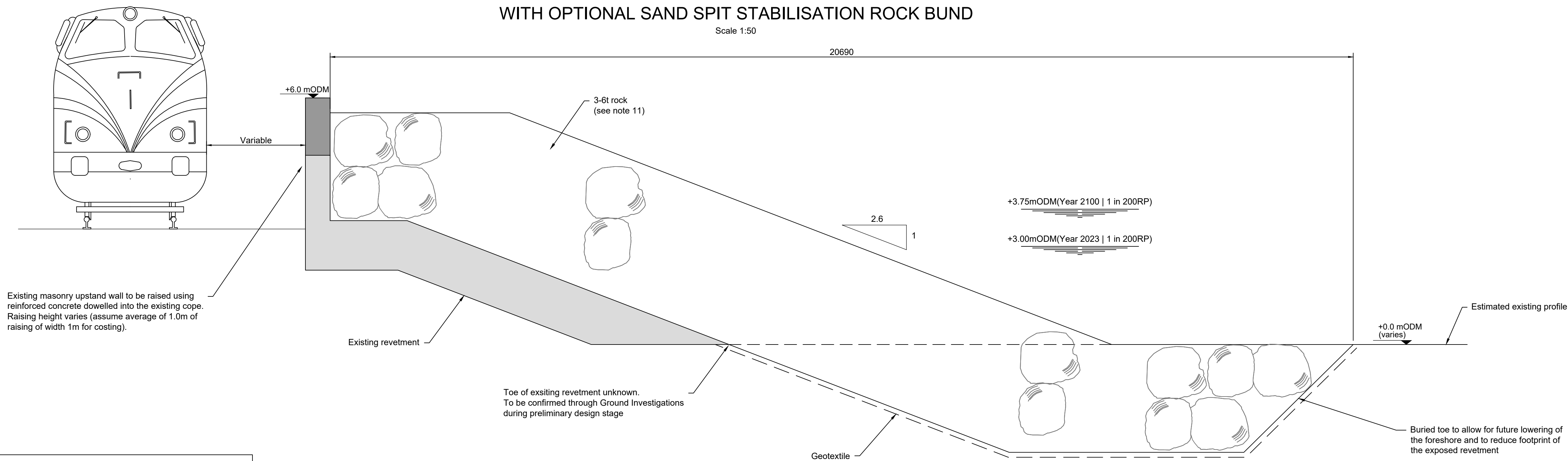
CCA1-A - TYPICAL CROSS SECTION ROCK REVETMENT OVERLAYING EXISTING STRUCTURE

Scale 1:50



CCA1-B ALL OPTIONS - TYPICAL CROSS SECTION ROCK REVETMENT OVERLAYING EXISTING STRUCTURE WITH OPTIONAL SAND SPIT STABILISATION ROCK BUND

Scale 1:50



CCA1-C - TYPICAL CROSS SECTION ROCK REVETMENT OVERLAYING EXISTING STRUCTURE



Notes:

- All levels are in mODM
- Do not scale from this drawing.
- Additional tide conversions are available for high and low water (spring and neap tides) at Secondary Ports of Dublin Bar, Dun Laoghaire, Greystones (high only) and Wicklow. High tides at CCA6 are typically 1.2m lower than at Dublin.
- Existing structure details are approximate only.
- Assumes wall raising of up to 1.0m can be placed on existing wall alignment. TBC following ground investigations.
- Rock Armour slope to match existing revetment slope. TBC.
- All levels and dimensions are approximate and to be confirmed through design development.
- Topography taken from UAV survey 25th September 2023, Murphy Geospatial, Preliminary results.
- For cross section locations refer to drawing 7694-CCA1-P2-DWG-CV-JAC-100, 101 and 102.
- Condition and stability of existing revetment under the rock armour to be assessed following Ground Investigations during preliminary design stage.
- The top profile of rock structures will be rough and will vary. Public should be kept off these structures as they will be slippery with potentially deep voids between individual rocks.

Legend

- Existing Structures
- New Reinforced Concrete Wall Raising
- Geotextile

mODM

+1.99 HAT

+1.59 MHWS

+0.89 MWHN

-0.11 MSL

-1.01 MLWN

-1.81 MLWS

-2.61 LAT

TIDE BAR
DUBLIN NORTH WALL
(STANDARD PORT)

Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd
V01	29.02.2024	Client Accepted	AE	RM	JG	DK
C	24-01-2024	Minor amendments	AE	JG	JJD	DK
B	21-12-2023	Comments Addressed	AE	JG	JJD	DK
P01.1	17-11-2023	Draft issue for information	AE	JG	JJD	DK

Client



Designer:

Jacobs
Merrion House, Merrion Rd, Dublin 4,
Ireland, D04R2C5. Tel: +44 (0)203 9802000
www.jacobs.com

Project



Drawing title

CCA1-A, CCA1-B & CCA1-C
CROSS SECTIONS
OPTIONS A, B & C

Drawing status

Accepted

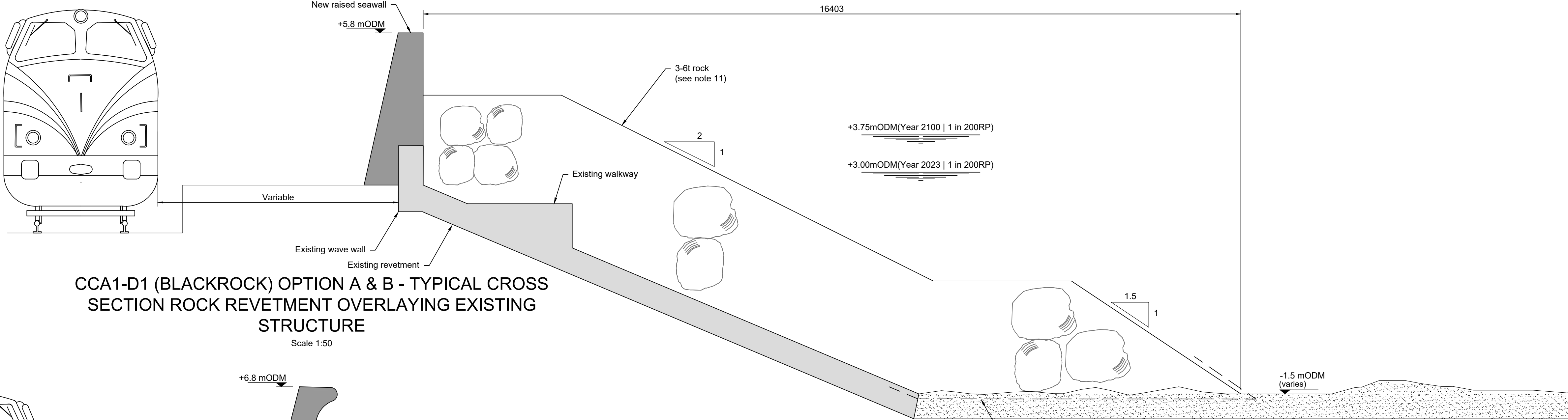
State Code	Contract / Work Package 1				
Project Stage	Project Concept, Feasibility & Option Selection				
Scale	1:50	DO NOT SCALE			
Jacobs No.	D3658300	Rev	V01		
Client no.	7694				
Drawing number	Project No	Work Package	Phase		
	7694-	CCA1	-P2-		
	Type	Discipline	Originator	Number	
	DWG-	CV	-JAC	-0200	

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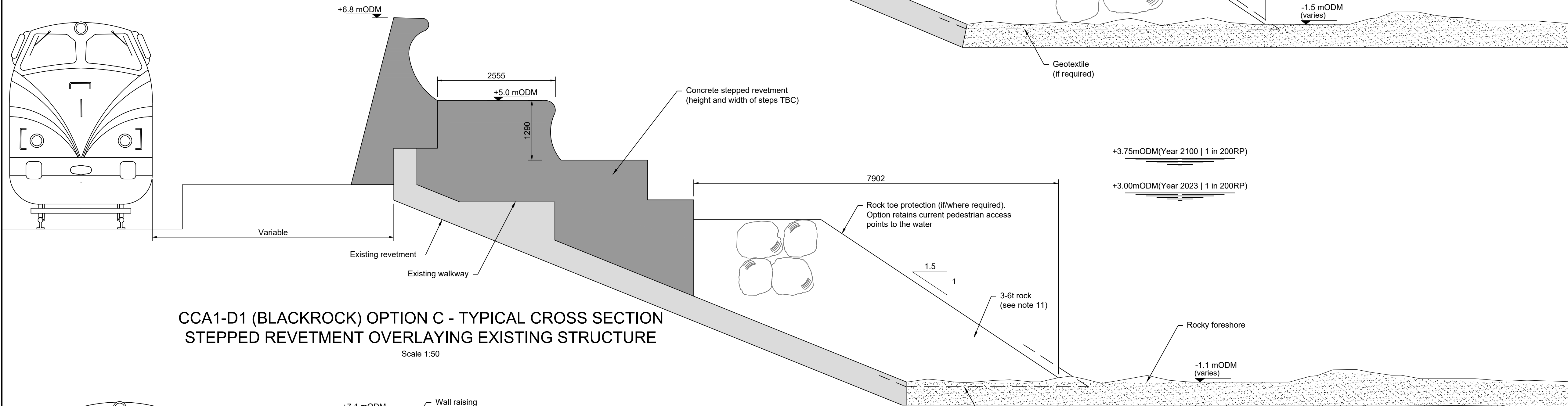
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C:\pwworking\jacobs-emea-01\60189014\7694-CCA1-P2-DWG-CV-JAC-0201.dwg - 29/02/2024 11:52:50 - A1Frame - RM059524

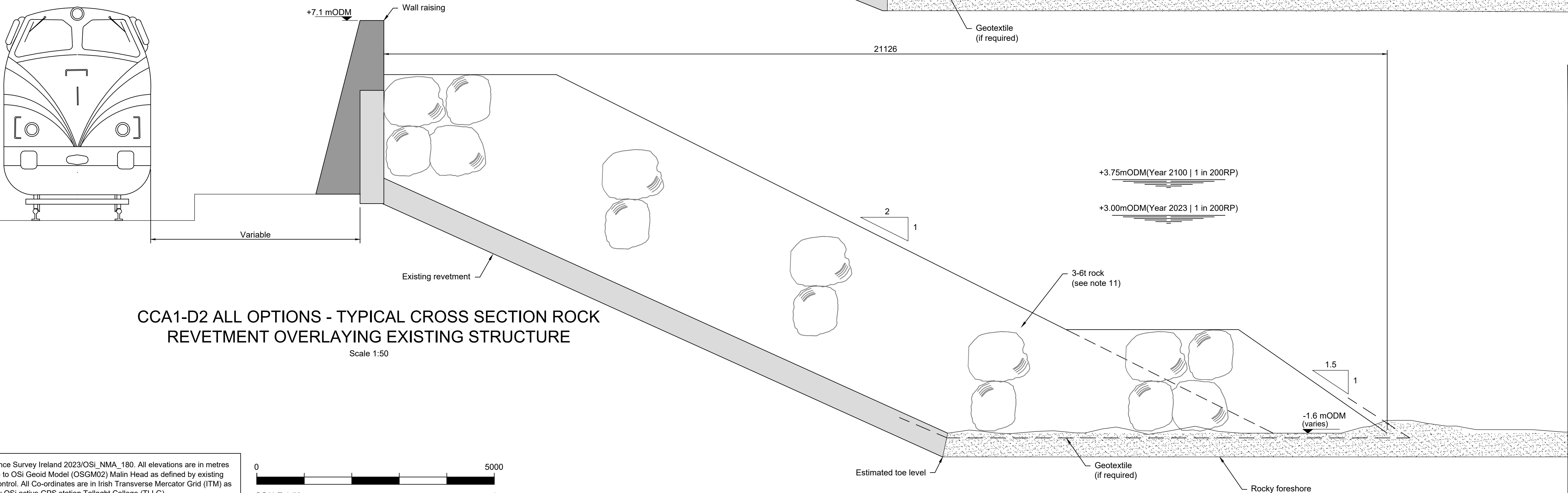
© Ordnance Survey Ireland 2023/OSi NMA 180. All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



CCA1-D1 (BLACKROCK) OPTION A & B - TYPICAL CROSS SECTION ROCK REVETMENT OVERLAYING EXISTING STRUCTURE
Scale 1:50



CCA1-D1 (BLACKROCK) OPTION C - TYPICAL CROSS SECTION STEPPED REVETMENT OVERLAYING EXISTING STRUCTURE
Scale 1:50



CCA1-D2 ALL OPTIONS - TYPICAL CROSS SECTION ROCK REVETMENT OVERLAYING EXISTING STRUCTURE
Scale 1:50

Notes:

- All levels are in mODM
- Do not scale from this drawing.
- Additional tide conversions are available for high and low water (spring and neap tides) at Secondary Ports of Dublin Bar, Dun Laoghaire, Greystones (high only) and Wicklow. High tides at CCA6 are typically 1.2m lower than at Dublin.
- Existing structure details are approximate only.
- Assumes wall raising of up to 1.0m can be placed on existing wall alignment. TBC following ground investigations.
- Rock Armour slope to match existing revetment slope. TBC.
- All levels and dimensions are approximate and to be confirmed through design development.
- Topography taken from UAV survey 25th September 2023, Murphy Geospatial, Preliminary results.
- For cross section locations refer to drawing 7694-CCA1-P2-DWG-CV-JAC-100, 101 and 102.
- Condition and stability of existing revetment under the rock armour to be assessed following Ground Investigations during preliminary design stage.
- The top profile of rock structures will be rough and will vary. Public should be kept off these structures as they will be slippery with potentially deep voids between individual rocks.

Legend

	Existing Structures
	New Reinforced Concrete Wall Raising
	Geotextile

mODM	
+1.99	HAT
+1.59	MHWS
+0.89	MWHN
-0.11	MSL
-1.01	MLWN
-1.81	MLWS
-2.61	LAT

TIDE BAR DUBLIN NORTH WALL (STANDARD PORT)

Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd
V01	29-02-2024	Client Accepted	AE	RM	JG	DK
C	24-01-2024	Minor amendments	AE	JG	JJD	DK
B	21-12-2023	Comments Addressed	AE	JG	JJD	DK
P01.1	17-11-2023	Draft issue for information	AE	JG	JJD	DK

Client	
--------	--

Designer:	 Merrion House, Merrion Rd, Dublin 4, Ireland, D04R2C5. Tel: +44 (0)203 9802000 www.jacobs.com
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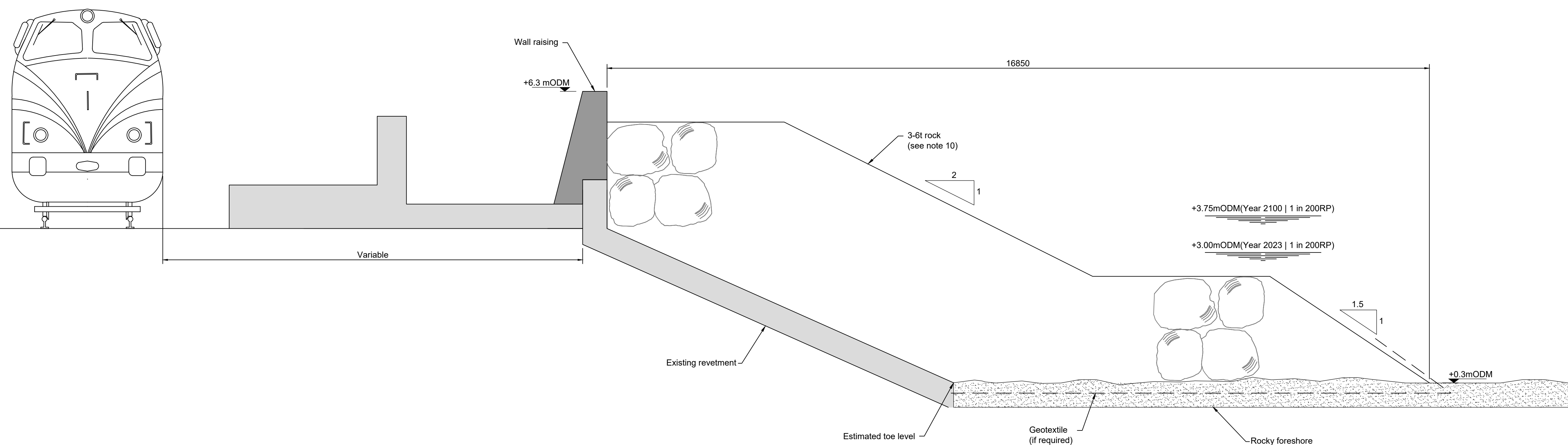
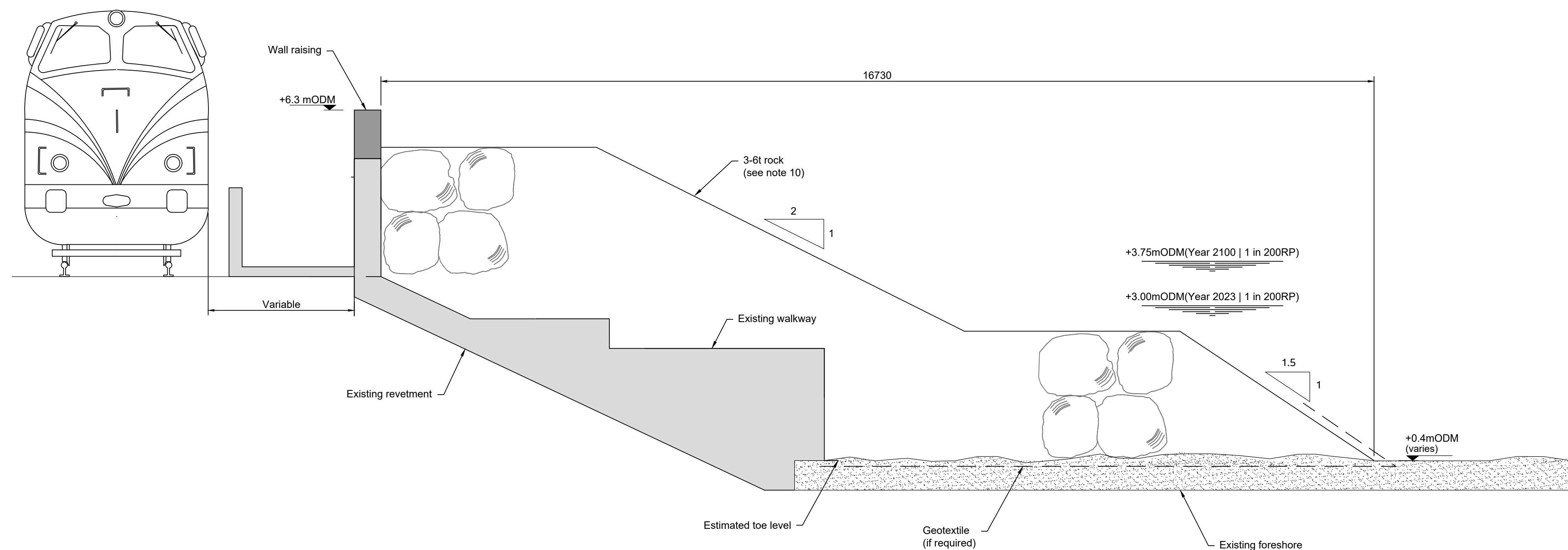
Project	
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Drawing title	CCA1-D CROSS SECTIONS OPTIONS A, B & C
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Drawing status	Accepted
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State Code	Contract / Work Package 1		
Project Stage	Project Concept, Feasibility & Option Selection		
Scale	1:50	DO NOT SCALE	
Jacobs No.	D3658300	Rev	V01
Client no.	7694		
Drawing number	7694- CCA1 - P2 -	Work Package	
Type	DWG - CV	Discipline	JAC
Originator		Number	- 0201

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Notes:

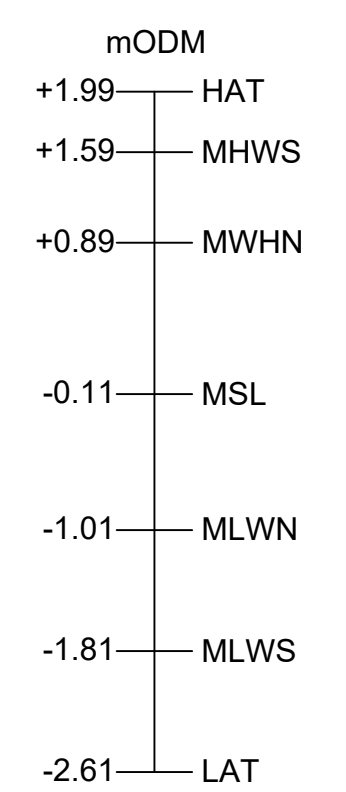
1. All levels are in mODM
2. Do not scale from this drawing.
3. Additional tide conversions are available for high and low water (spring and neap tides) at Secondary Ports of Dublin Bar, Dun Laoghaire, Greystones (high only) and Wicklow. High tides at CCA6 are typically 1.2m lower than at Dublin.
4. Existing structure details are approximate only.
5. Rock Armour slope to match existing revetment slope. TBC.
6. All levels and dimensions are approximate and to be confirmed through design development.
7. Topography taken from UAV survey 25th September 2023, Murphy Geospatial, Preliminary results.
8. For cross section locations refer to drawing 7694-CCA1-P2-DWG-CV-JAC-100.
9. Condition and stability of existing revetment under the rock armour to be assessed following Ground Investigations during preliminary design stage.
10. The top profile of rock structures will be rough and will vary. Public should be kept off these structures as they will be slippery with potentially deep voids between individual rocks.

Legend

Existing Structures

New Reinforced Concrete Wall Raising

Geotextile



TIDE BAR
DUBLIN NORTH WALL
(STANDARD PORT)

V01	29-02-2024	Client Accepted	AE	RM	JG	DK
C	24-01-2024	Minor amendments	AE	JG	JJD	DK
B	21-12-2023	Comments Addressed	AE	JG	JJD	DK
P01.1	17-11-2023	Draft issue for information	AE	JG	JJD	DK
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd

Client	
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Designer:



Project



Drawing title

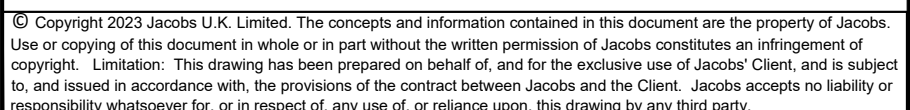
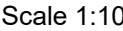
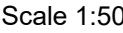
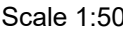
CCA1-E
CROSS SECTIONS
OPTION A (EAST & WEST)

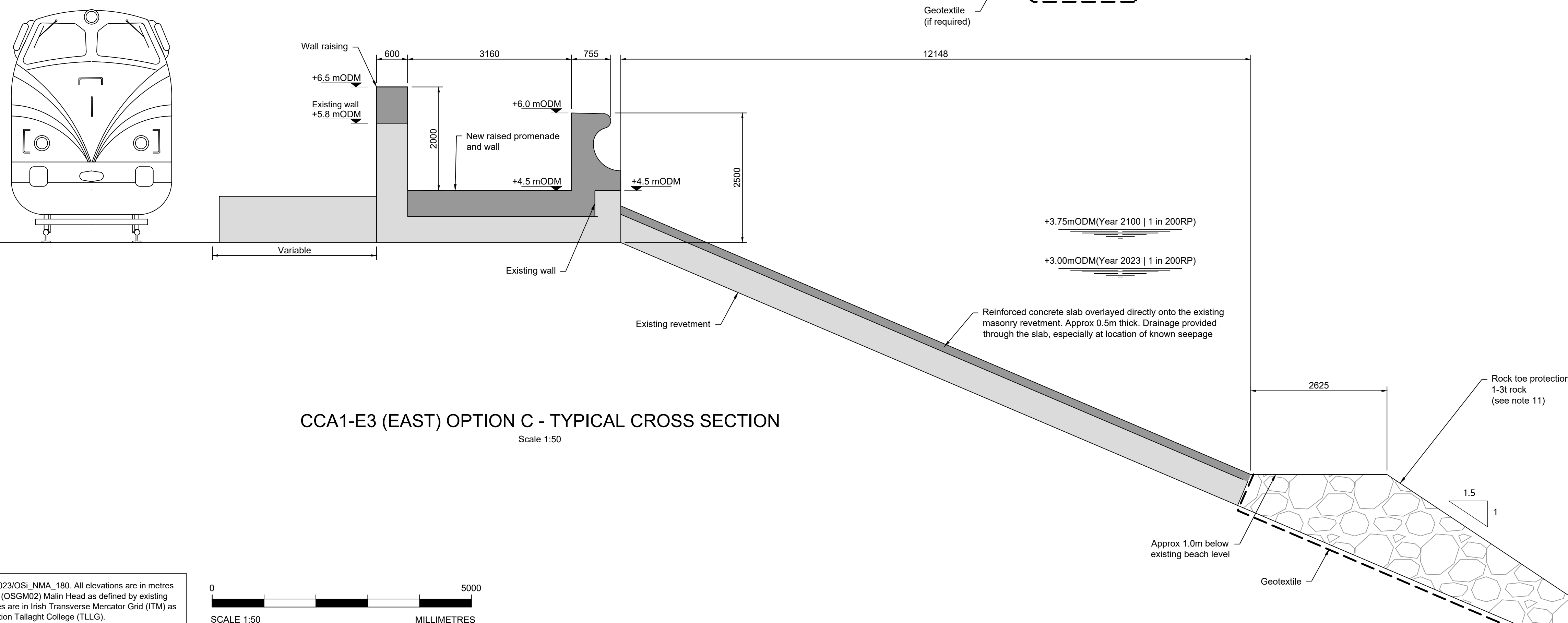
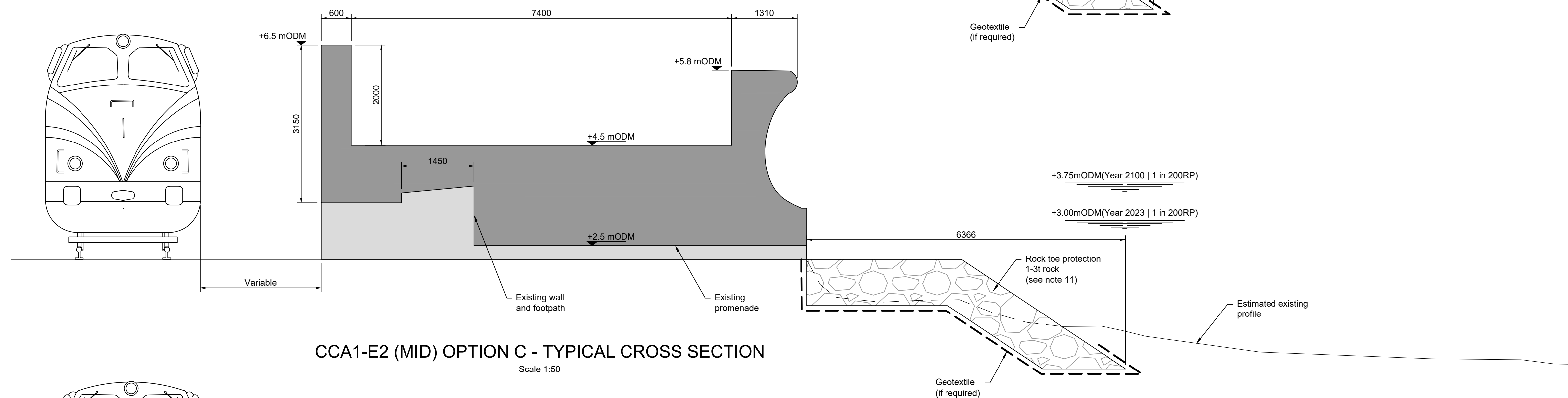
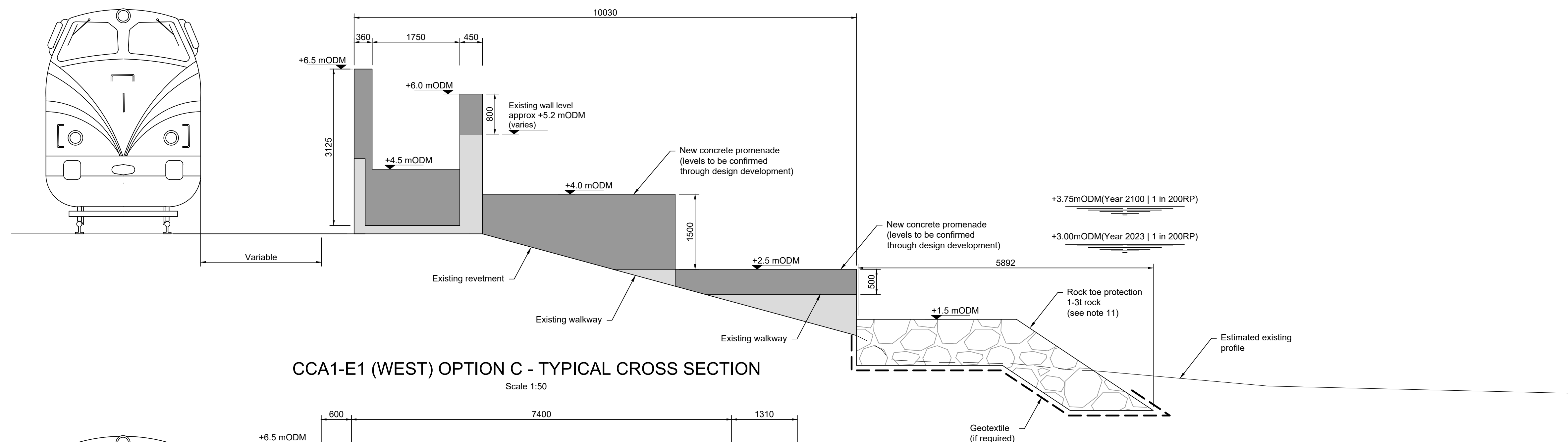
Drawing status	
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Accepted

State Code	Contract / Work Package 1		
Project Stage	Project Concept, Feasibility & Option Selection		
Scale	1:50	DO NOT SCALE	
Jacobs No.	D3658300	Rev	V01
Client no.	7694		
Drawing number	Project No	Work Package	Phase
	7694-	CCA1	P-2 -
	Type	Discipline	Originator
	DWG - CV	- JAC	-
			Number
			0202

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Notes:

1. All levels are in mODM
2. Do not scale from this drawing.
3. Additional tide conversions are available for high and low water (spring and neap tides) at Secondary Ports of Dublin Bar, Dun Laoghaire, Greystones (high only) and Wicklow. High tides at CCA6 are typically 1.2m lower than at Dublin.
4. Existing structure details are approximate only.
5. Assumes wall raising of up to 1.0m can be placed on existing wall alignment. TBC following ground investigations.
6. Rock Armour slope to match existing revetment slope. TBC.
7. All levels and dimensions are approximate and to be confirmed through design development.
8. Topography taken from UAV survey 25th September 2023, Murphy Geospatial, Preliminary results.
9. For cross section locations refer to drawing 7694-CCA1-P2-DWG-CV-JAC-102.
10. Condition and stability of existing revetment under the rock armour to be assessed following Ground Investigations during preliminary design stage.
11. The top profile of rock structures will be rough and will vary. Public should be kept off these structures as they will be slippery with potentially deep voids between individual rocks.

Legend

Existing Structures

New Reinforced Concrete Wall Raising

Geotextile

Method	mODM
HAT	+1.99
MHWS	+1.59
MWHN	+0.89
MSL	-0.11
MLWN	-1.01
MLWS	-1.81
LAT	-2.61

TIDE BAR
DUBLIN NORTH WALL
(STANDARD PORT)

V01	29-02-2024	Client Accepted	AE	RM	JG	DK
C	24-01-2024	Minor amendments	AE	JG	JJD	DK
B	21-12-2023	Comments Addressed	AE	JG	JJD	DK
P01.1	17-11-2023	Draft issue for information	AE	JG	JJD	DK
Rev	Rev. Date	Purpose of revision	Drawn	Checked	Rev'd	Apprv'd

Client



Designer	
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Project



Drawing title

CCA1-E
CROSS SECTIONS
OPTION C

Drawing status

Accepted

State Code	Contract / Work Package 1		
Project Stage	Project Concept, Feasibility & Option Selection		
Scale	1:50	DO NOT SCALE	
Jacobs No.	D3658300	Rev	V01
Client no.	7694		
Drawing number	Project No	Work Package	Phase
	7694-	CCA1	-P2-
	Type	Discipline	Originator
	DWG- CV	- JAC	- Number
			0204

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