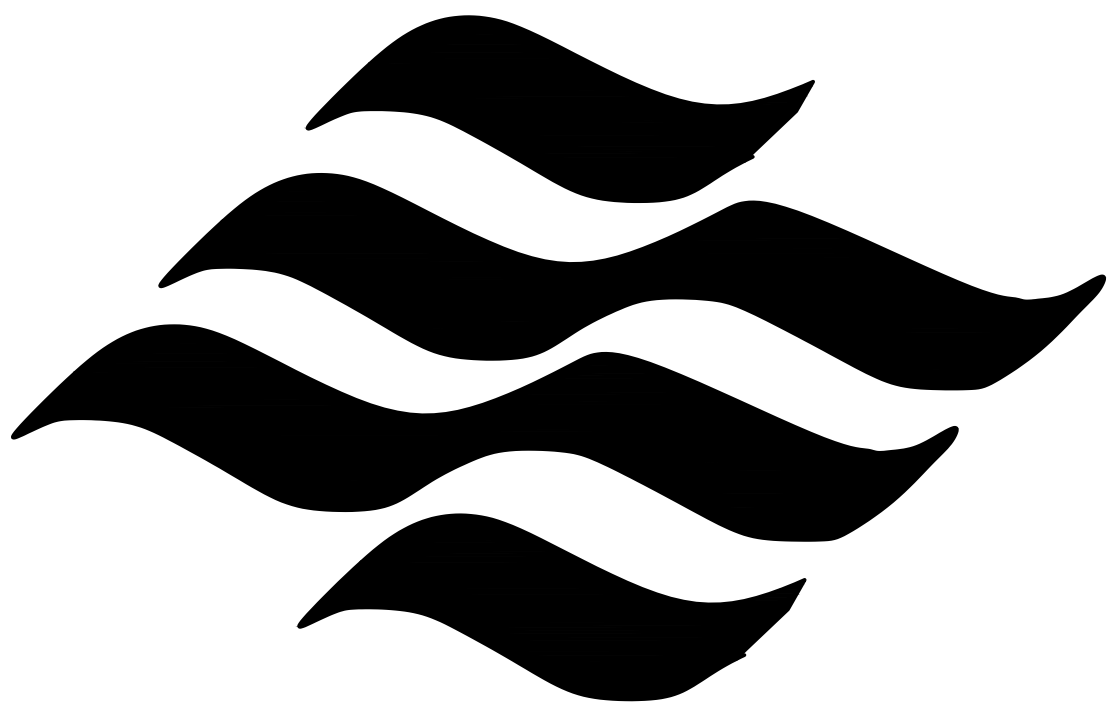


MAI ENG # XXX
CBCL PROJECT # 192479.45
REF/WBS # 2019-6.1.3.2

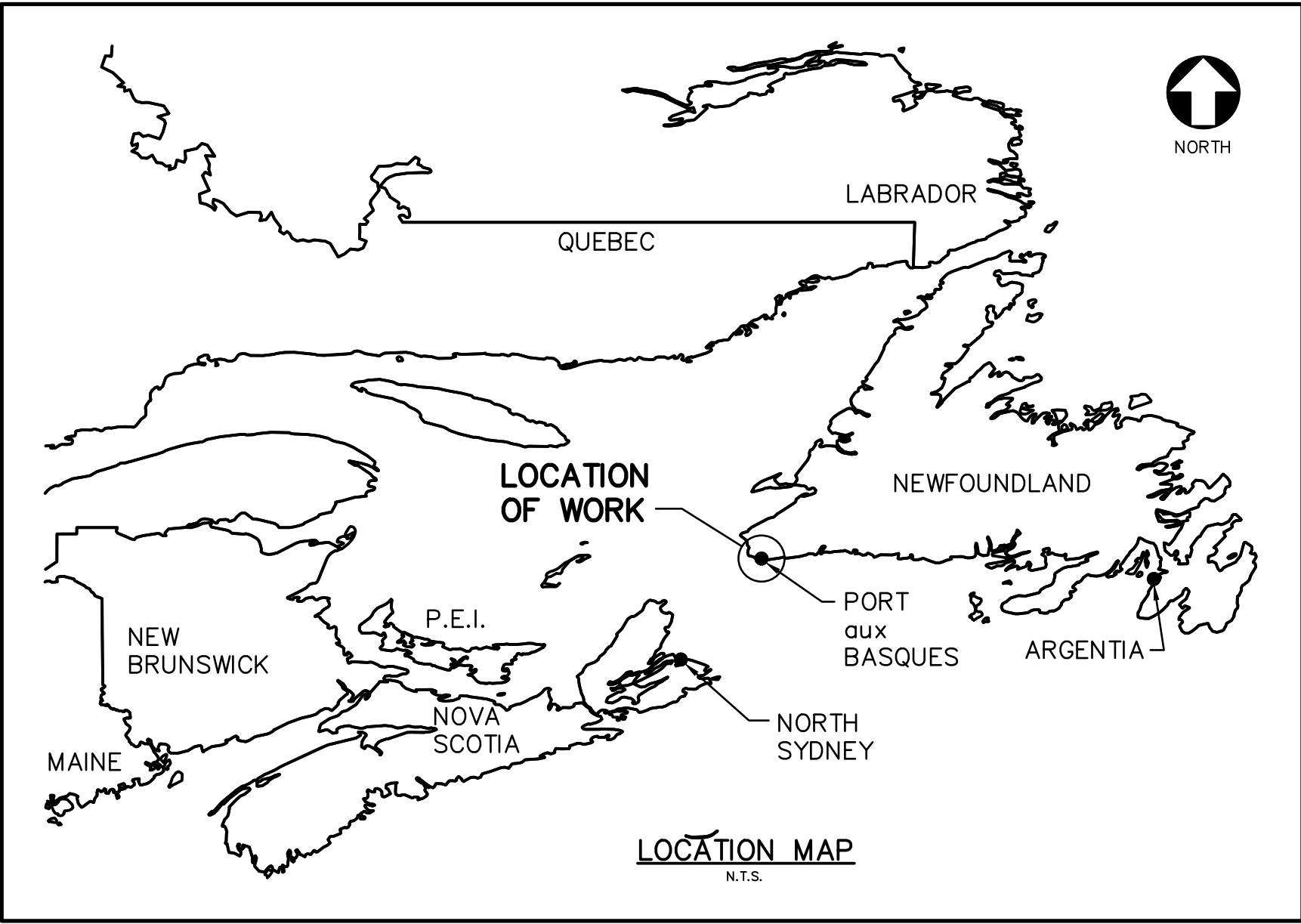
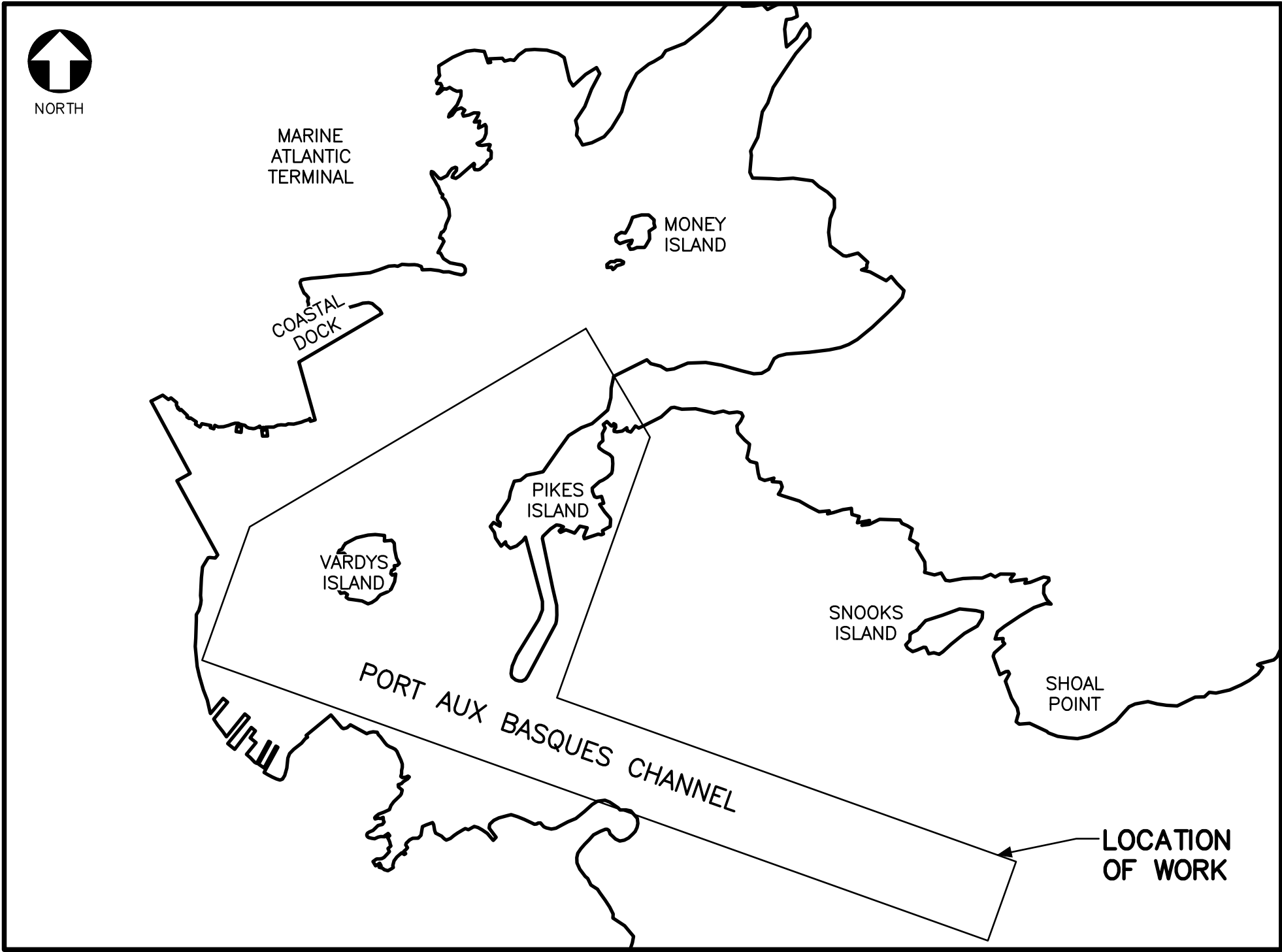
LIST OF DRAWINGS

DRAWING No.	DRAWING TITLE
CIVIL	
C00	COVER SHEET
C01	PLAN/PROFILE
C02	SECTIONS
C03	SECTIONS
C04	SECTIONS
C05	SECTIONS
C06	DREDGE ZONE A VARDYS ISLAND PLAN
C07	DREDGE ZONE A VARDYS ISLAND SECTIONS
C08	DREDGE ZONE A VARDYS ISLAND SECTIONS
C09	PIKES ISLAND REPAIRS PLAN & SECTIONS
C10	PIKES ISLAND REPAIRS SECTIONS
C11	PIKES ISLAND REPAIRS SECTIONS
C12	PIKES ISLAND REPAIRS SECTIONS
C13	PIKES ISLAND REPAIRS SECTIONS
C14	PIKES ISLAND INFILL PLAN & SECTION
C15	PIKES ISLAND INFILL SECTIONS



Marine Atlantic Marine Atlantique

PAB NAVIGATION IMPROVEMENT PROJECT PORT aux BASQUES, NL



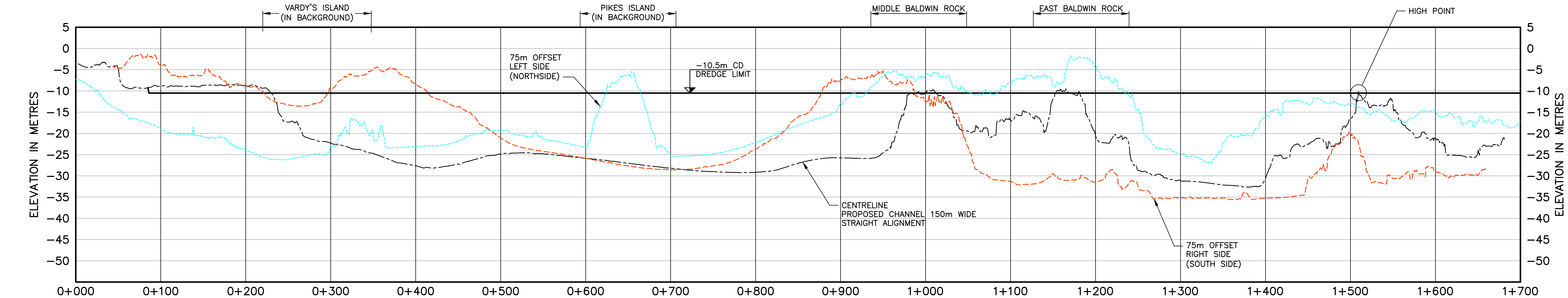
ENGINEERING CONSULTANT:
CBCL **CBCL LIMITED**
Consulting Engineers

PRELIMINARY
NOT FOR CONSTRUCTION

ISSUED FOR INFORMATION

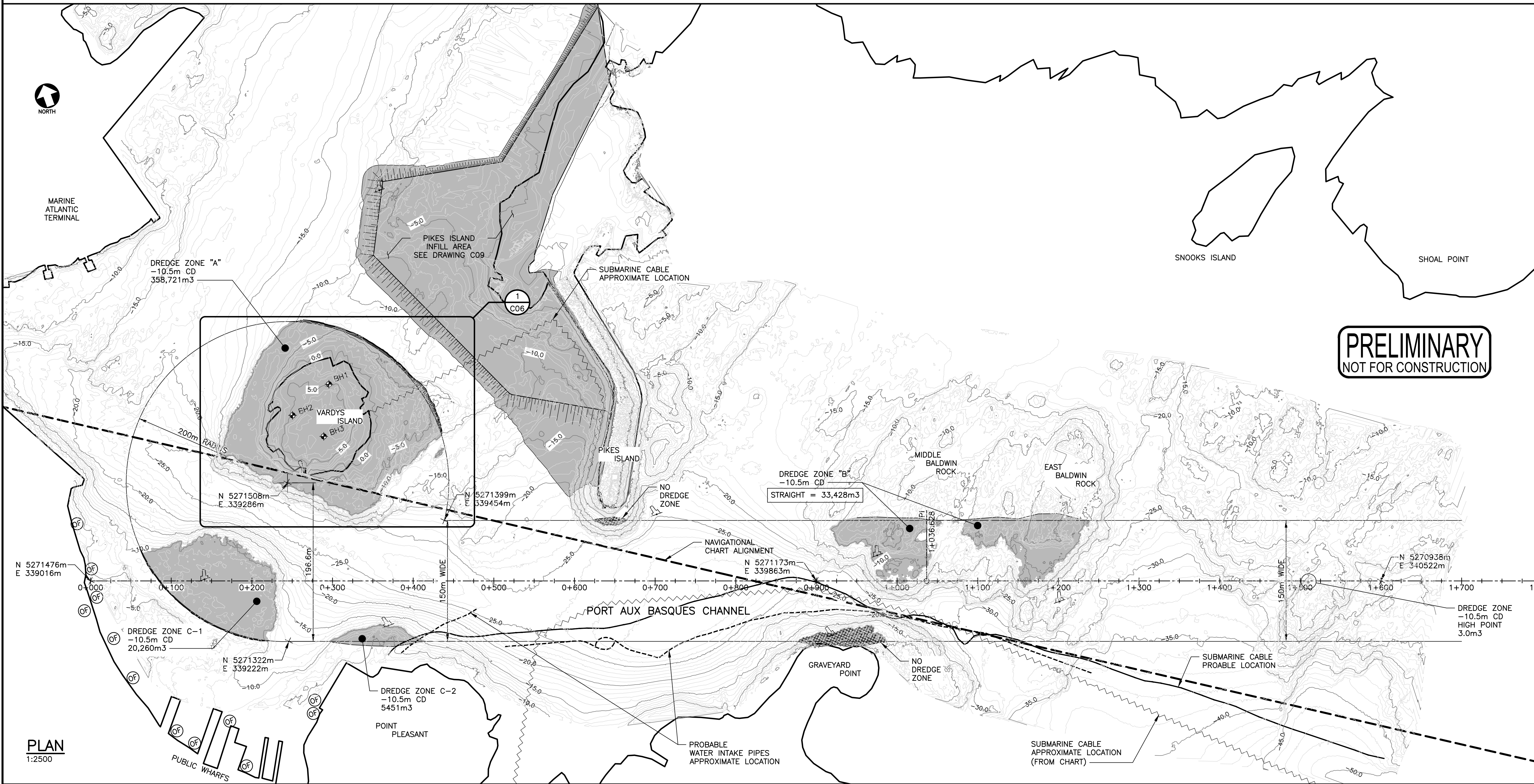
DATE: JANUARY 22, 2021

DRAWING NAME: Y:\STONEY\DATA\2011\12479.00 MAR PROJ\MAN\192479.45 - 2019-06-13.2 PAB VARDY'S ISLAND - INITIAL PLANNING AND PM - PRELIMINARY DESIGN AND REGULATORY PROCESS\CD\01 CIVIL\192479.45 - SOUNDINGS.DWG ABOUT NAME: 011 BLUT DATE: January 22, 2021 9:03:16 AM CAD OPERATOR: PAULC



GRADE ELEVATION	-2.48	-7.42	-8.23	-7.36	-19.95	-25.50	-28.38	-23.05	-5.14	-9.42	-31.09	-31.76	-36.83	-37.58	-39.91	-48.76	-10.500
	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500	-10.500

PROFILE
1:2500 [H] 1:500 [V]



PLAN
1:2500

Client
Marine Atlantic
Marine Atlantique
PORT aux BASQUES, NL

Prime-Consultant
CBCL **CBCL LIMITED**
Consulting Engineers

Sub-Consultant

NOTES:

HORIZONTAL DATUM: NAD 83 CSRS
PROJECTION: UTM ZONE 21
VERTICAL DATUM: CHART DATUM
CHS MONUMENT 90F9004, ELEVATION 3.506m

SOUNDING SURVEY CONDUCTED JANUARY 2020
BY CSR GEOSURVEYS LTD.

TOPOGRAPHIC PLAN OF SURVEY CONDUCTED
MAY 2020 BY YATES AND WOODS LTD.
NEWFOUNDLAND LAND SURVEYORS.

LEGEND

.....DREDGE AREAS
.....EXISTING CONTOURS
.....SUBMARINE CABLES
.....NAVIGATIONAL AIDS
.....APPROXIMATE OUTFALL
.....INTAKE PIPES

DREDGE ZONE -10.5m CD	
LOCATION	INSITU VOLUME m3
A - VARDYS	358,721
B - BALDWINS	33,428
C-1 PANCAKE	20,260
C-2	5,451
TOTAL	417,860
VARDYS % OF TOTAL VOL:	87% 86%
BULKING FACTOR	+50% 626,790m ³

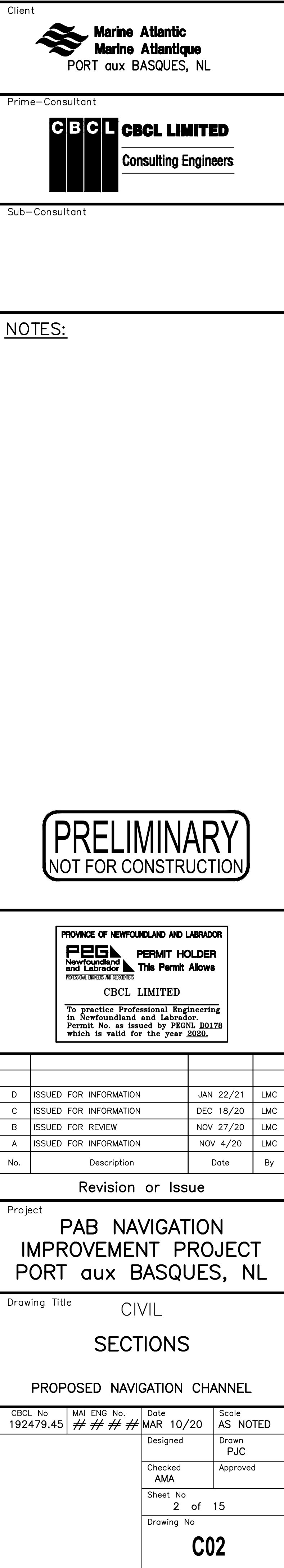
PROVINCE OF NEWFOUNDLAND AND LABRADOR
PERMIT HOLDER
Newfoundland and Labrador
This Permit Allows
PRACTICE PROFESSIONAL ENGINEERING
IN NEWFOUNDLAND AND LABRADOR
Permit No. as issued by PEGNL D0178
which is valid for the year 2020.

CBCL LIMITED

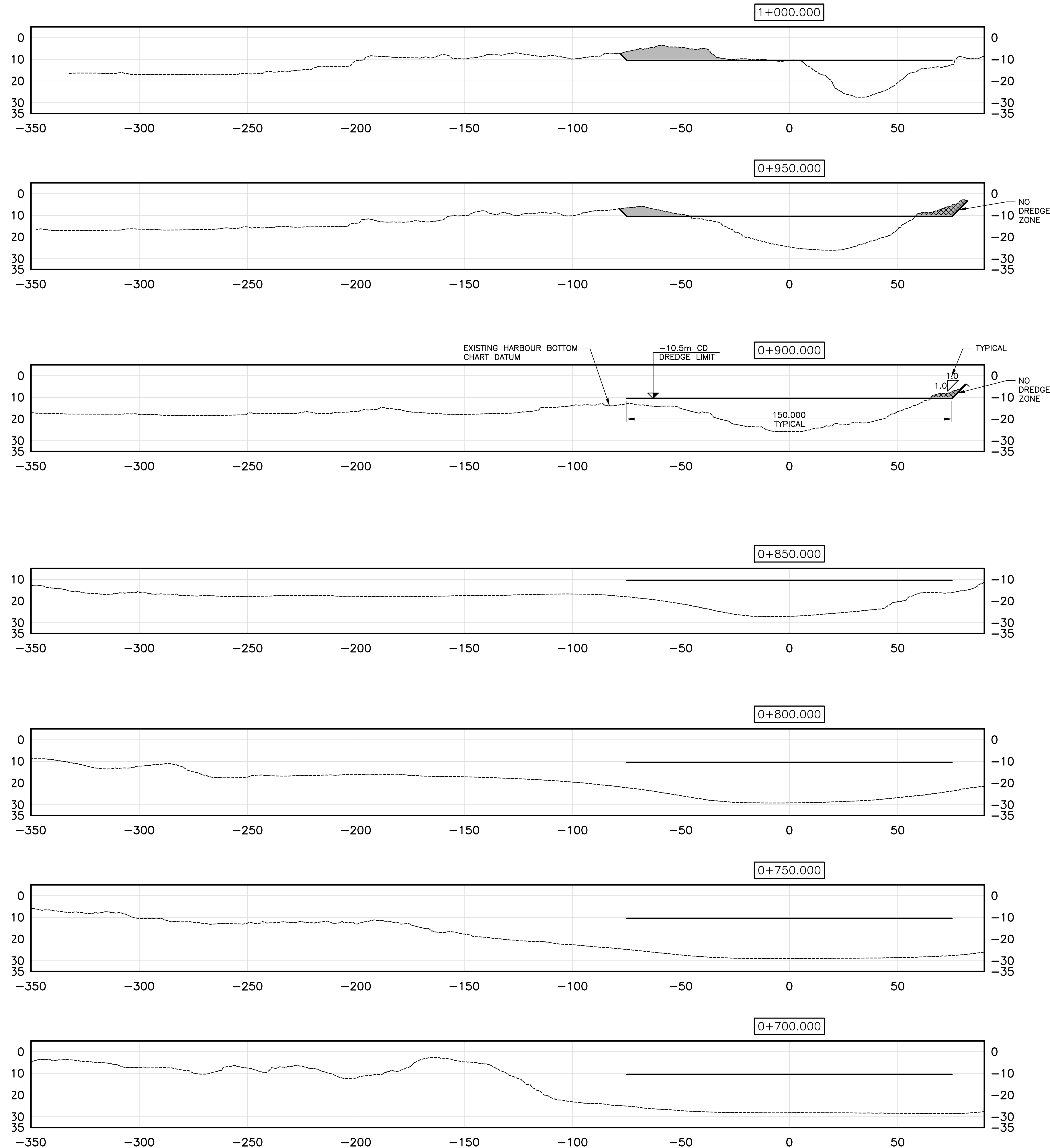
No.	Description	Date	By
D	ISSUED FOR INFORMATION	JAN 22/21	LMC
C	ISSUED FOR INFORMATION	DEC 18/20	LMC
B	ISSUED FOR REVIEW	NOV 27/20	LMC
A	ISSUED FOR INFORMATION	NOV 4/20	LMC

Revision or Issue	
Project	PAB NAVIGATION IMPROVEMENT PROJECT PORT aux BASQUES, NL

Drawing Title		CIVIL PLAN/PROFILE	
PROPOSED NAVIGATION CHANNEL			
CBCL No. 192479.45	MAI ENG No. ## ## ##	Date MAR 10/20	Scale AS NOTED
Designed		Drawn PJC	
Checked AMA		Approved	
Sheet No. 1 of 15			
Drawing No. C01			



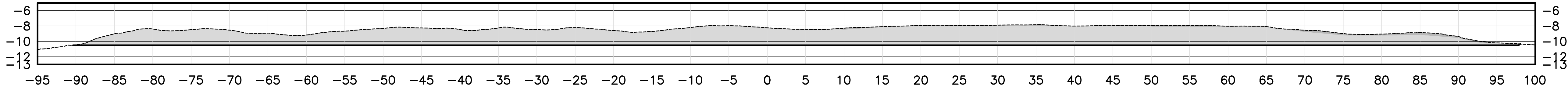




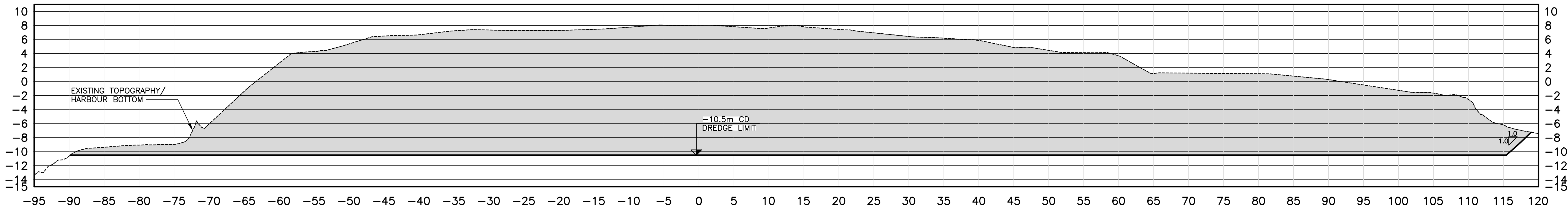
C04

1:1000 [H] 1:1000 [V]

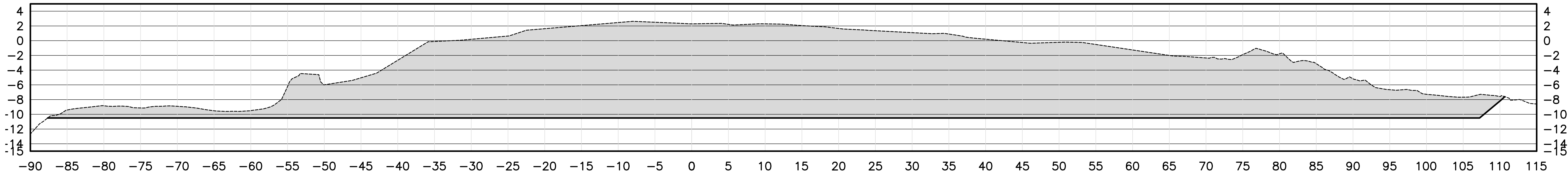
DRAWING NAME: Y:\STONEY\DATA\2011\12479.00 MAI PROJ MAN\192479.45 - 2019-6-13.2 PAB VARDY'S ISLAND - INITIAL PLANNING AND PM - PRELIMINARY DESIGN AND REGULATORY PROCESS\CAD\01 CIVIL\192479.45 - 037-C06-C09-C10.DWG LAYOUT NAME: 037_PLOT DATE: January 22, 2021 9:44:13 AM CAD OPERATOR: PAULC



C SECTION— TYPICAL
C06 1:300 [H] 1:300 [V]



B SECTION— TYPICAL
C06 1:300 [H] 1:300 [V]



A SECTION— TYPICAL
C06 1:300 [H] 1:300 [V]

Client
Marine Atlantic
Marine Atlantique
PORT aux BASQUES, NL

Prime-Consultant
CBCL LIMITED
Consulting Engineers

Sub-Consultant

NOTES:

HORIZONTAL DATUM: NAD 83 CSRS
PROJECTION: UTM ZONE 21
VERTICAL DATUM: CHART DATUM

SOUNDING SURVEY CONDUCTED JANUARY 2020
BY CSR GEOSURVEYS LTD.

TOPOGRAPHIC PLAN OF SURVEY CONDUCTED
MAY 2020 BY YATES AND WOODS LTD.
NEWFOUNDLAND LAND SURVEYORS.

PRELIMINARY
NOT FOR CONSTRUCTION

PROVINCE OF NEWFOUNDLAND AND LABRADOR
PERMIT HOLDER
PERMIT ALLOWS
To practice Professional Engineering
in Newfoundland and Labrador
Permit No. as issued by PEGNL D0178
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CBCL LIMITED

No.	Description	Date	By
D	ISSUED FOR INFORMATION	JAN 22/21	LMC
C	ISSUED FOR INFORMATION	DEC 18/20	LMC
B	ISSUED FOR REVIEW	NOV 27/20	LMC
A	ISSUED FOR INFORMATION	NOV 4/20	LMC

Revision or Issue

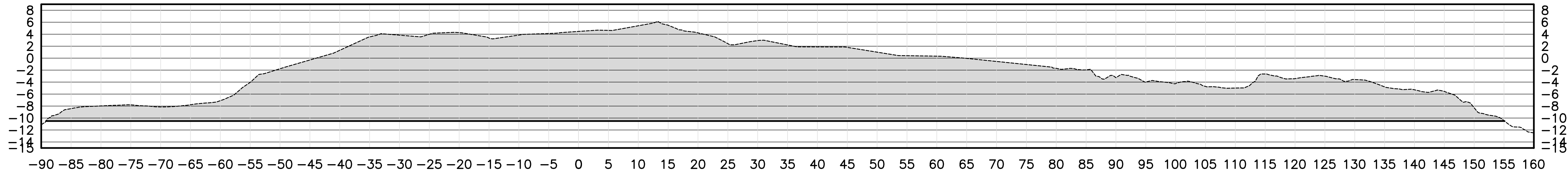
Project
**PAB NAVIGATION
IMPROVEMENT PROJECT
PORT aux BASQUES, NL**

Drawing Title
**DREDGE ZONE A
VARDY'S ISLAND
SECTIONS
PROPOSED NAVIGATION CHANNEL**

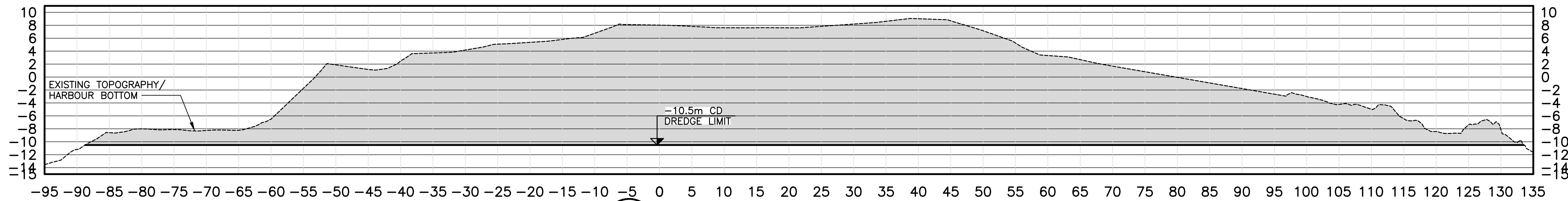
CBCL No.	MAI ENG No.	Date	Scale
192479.45	## ## ##	MAR 10/20	AS NOTED
	Designed	Drawn	PJC
	Checked AMA	Approved	
	Sheet No	7	of 15
	Drawing No		

C07

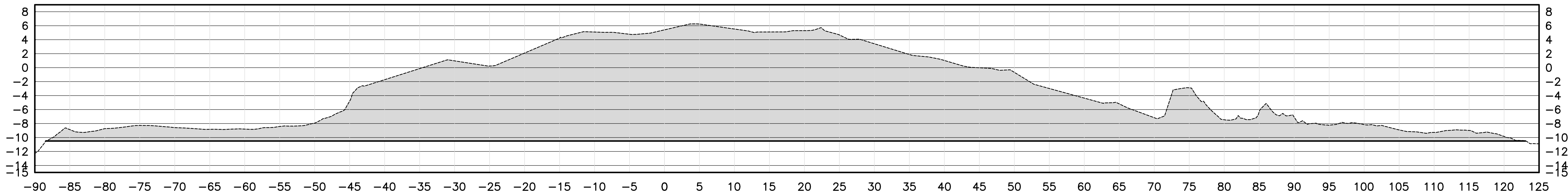
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F SECTION - TYPICAL
C06 1:400 [H] 1:400 [V]



E SECTION - TYPICAL
C06 1:400 [H] 1:400 [V]



D SECTION - TYPICAL
C06 1:300 [H] 1:300 [V]

Client
Marine Atlantic
Marine Atlantique
PORT aux BASQUES, NL

Prime-Consultant
CBCL LIMITED
Consulting Engineers

Sub-Consultant

NOTES:
HORIZONTAL DATUM: NAD 83 CSRS
PROJECTION: UTM ZONE 21
VERTICAL DATUM: CHART DATUM
SOUNDING SURVEY CONDUCTED JANUARY 2020
BY CSR GEOSURVEYS LTD.
TOPOGRAPHIC PLAN OF SURVEY CONDUCTED
MAY 2020 BY YATES AND WOODS LTD.
NEWFOUNDLAND LAND SURVEYORS.

PRELIMINARY
NOT FOR CONSTRUCTION

PROVINCE OF NEWFOUNDLAND AND LABRADOR
PERMIT HOLDER
This Permit Allows
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in Newfoundland and Labrador
Permit No. as issued by PEGNL D0178
which is valid for the year 2020.
CBCL LIMITED

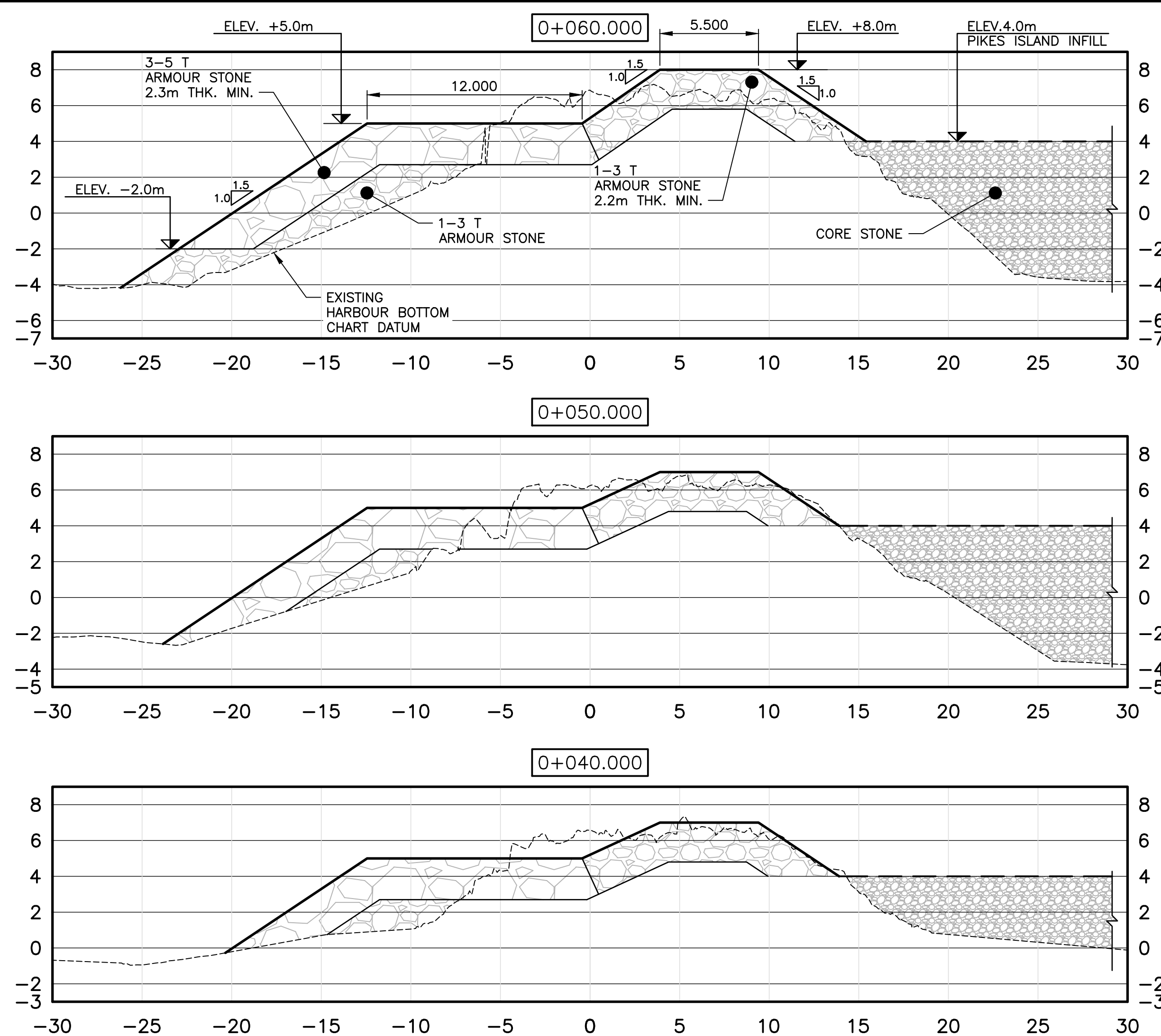
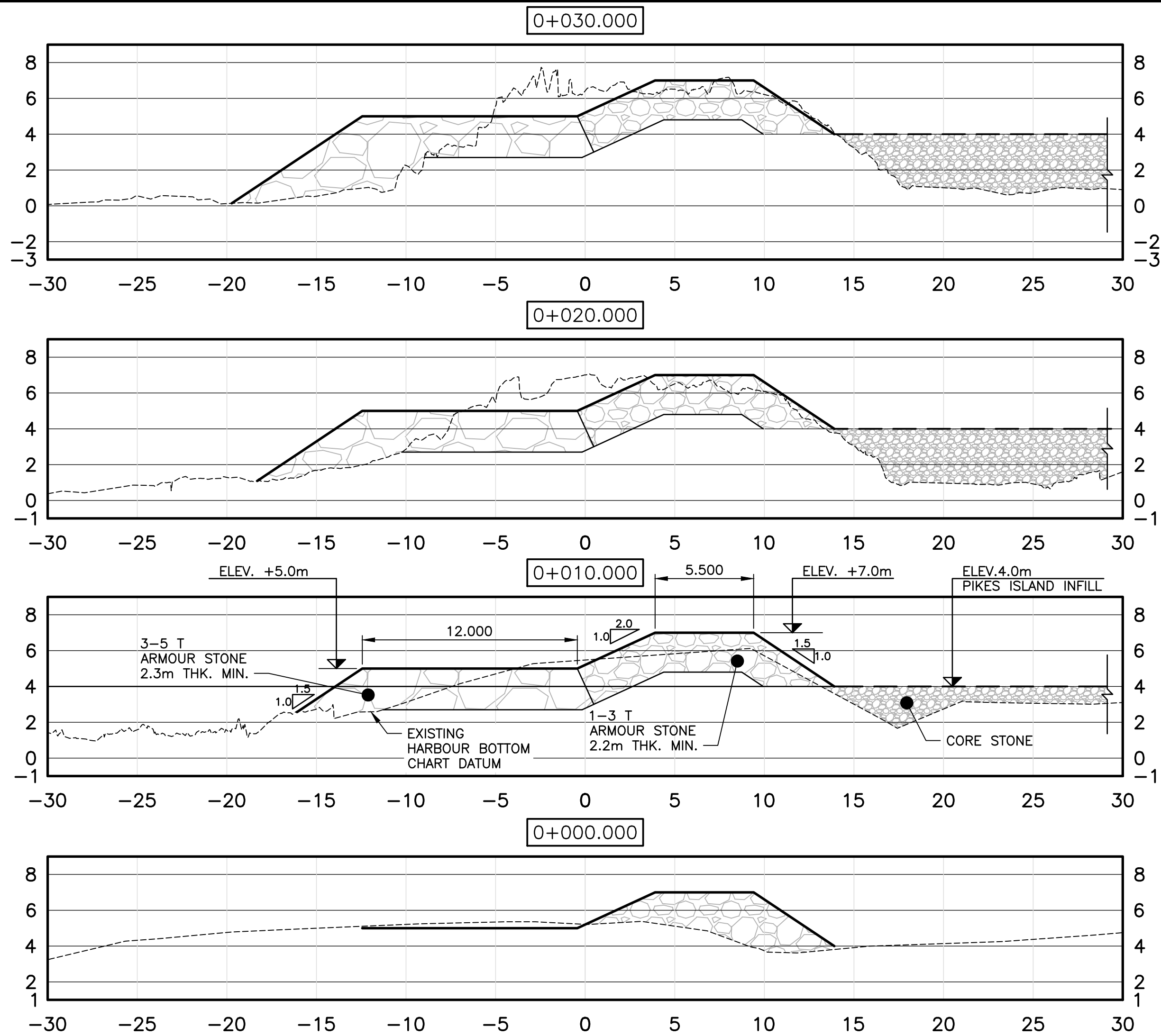
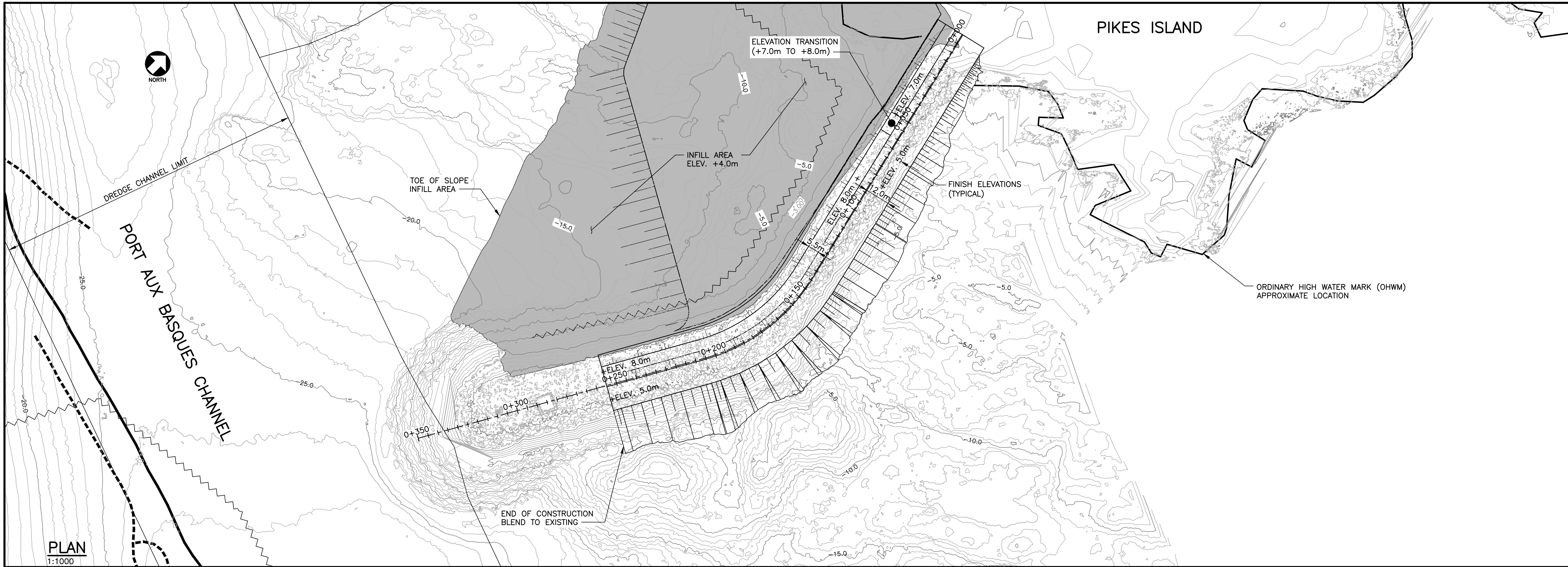
No.	Description	Date	By
D	ISSUED FOR INFORMATION	JAN 22/21	LMC
C	ISSUED FOR INFORMATION	DEC 18/20	LMC
B	ISSUED FOR REVIEW	NOV 27/20	LMC
A	ISSUED FOR INFORMATION	NOV 4/20	LMC

Revision or Issue
Project
**PAB NAVIGATION
IMPROVEMENT PROJECT
PORT aux BASQUES, NL**

Drawing Title
**DREDGE ZONE A
VARDY'S ISLAND
SECTIONS
PROPOSED NAVIGATION CHANNEL**

CBCL No.	MAI ENG No.	Date	Scale
192479.45	## ## ##	MAR 10/20	AS NOTED
	Designed	Drawn	
	Checked AMA	Approved	
	Sheet No 8 of 15		
	Drawing No C08		

DRAWING NAME: Y:\STOREY\DATA\2011\12479.00 MAI PROJ MAINT 192479.05 - 2019-06-13.2 PAB VARIO'S ISLAND - INITIAL PLANNING AND PM - PRELIMINARY DESIGN AND REGULATORY PROCESS\CAD\01 CIVIL\192479.05 - PIKES ISLANDING ACQUISITION\09 BLOT DATE: January 22, 2021 9:26:48 AM CAD DESIGNED: PAULC



Client

Marine Atlantic

Marine Atlantic

PORT aux BASQUES, NL

Prime-Consultant

CBCL

CBCL LIMITED

Consulting Engineers

Sub-Consultant

NOTES:

HORIZONTAL DATUM: NAD 83 CSRS
PROJECTION: UTM ZONE 21
VERTICAL DATUM: CHART DATUM

PORT AUX BASQUES CHANNEL SURVEY
CONDUCTED JANUARY 2020 BY CSR GEOSURVEYS LTD.

PIKES ISLAND BREAKWATER DRONE SURVEY
CONDUCTED JUNE 2018 BY RESOURCE INNOVATIONS INC.

PRELIMINARY
NOT FOR CONSTRUCTION

PROVINCE OF NEWFOUNDLAND AND LABRADOR

PERMIT HOLDER

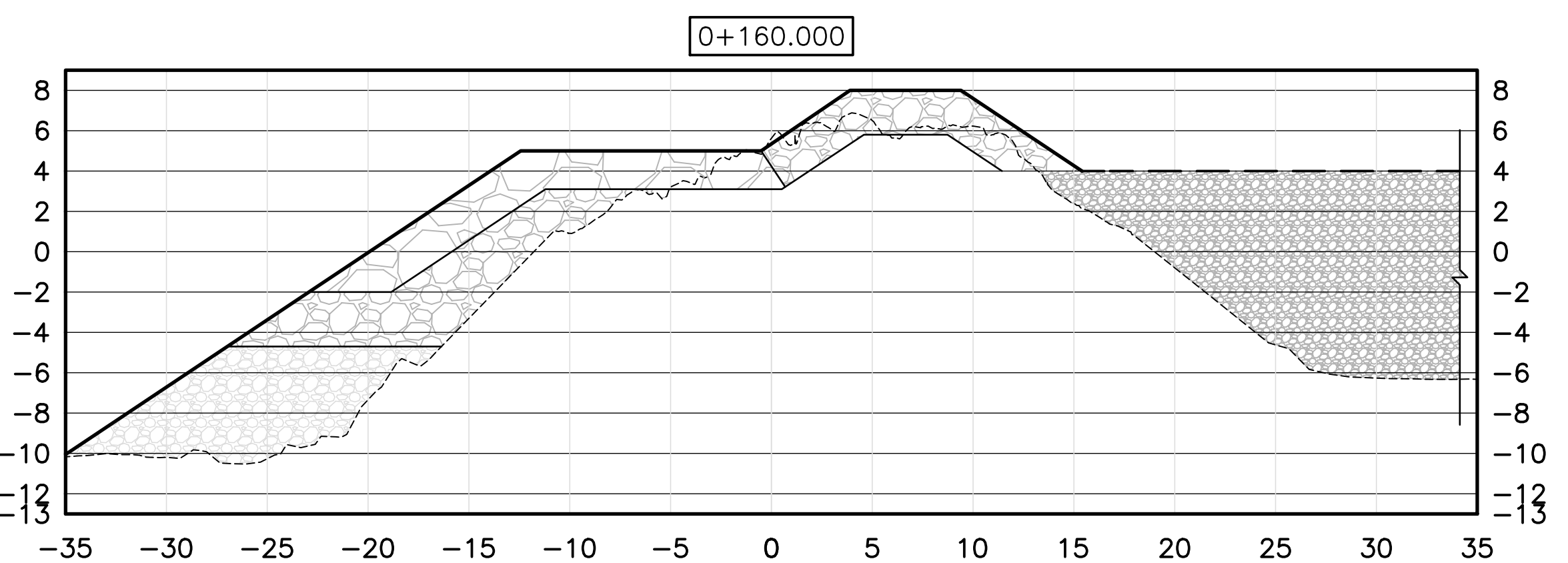
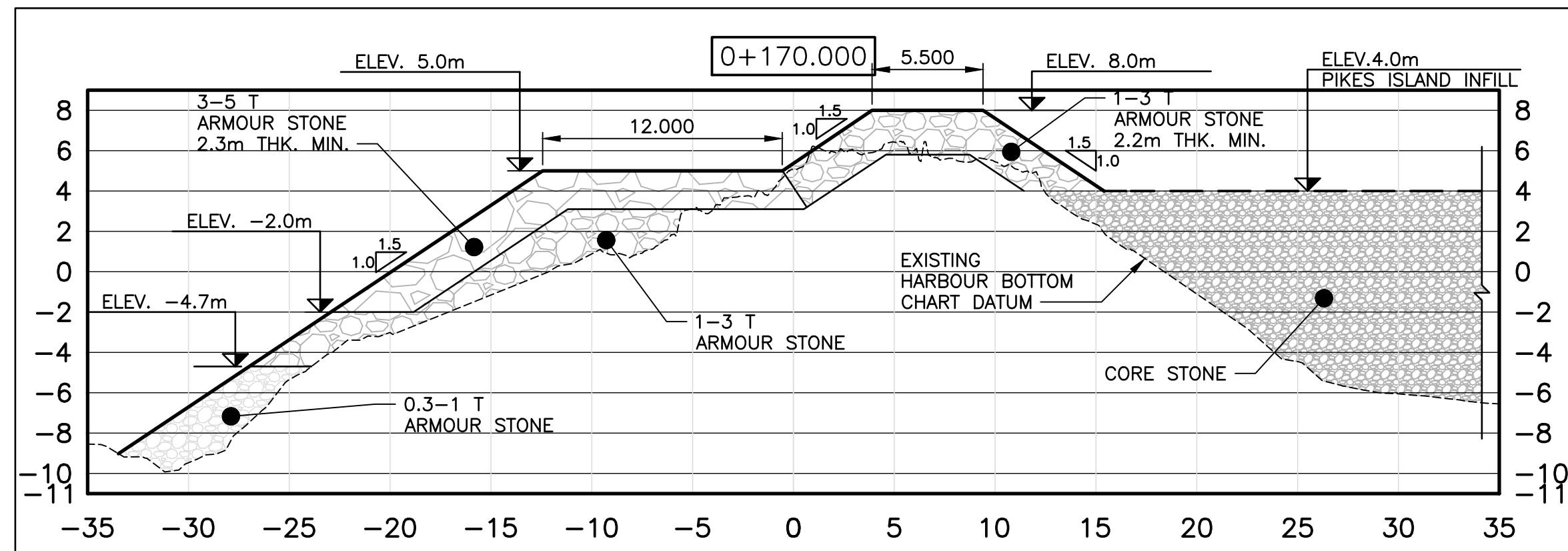
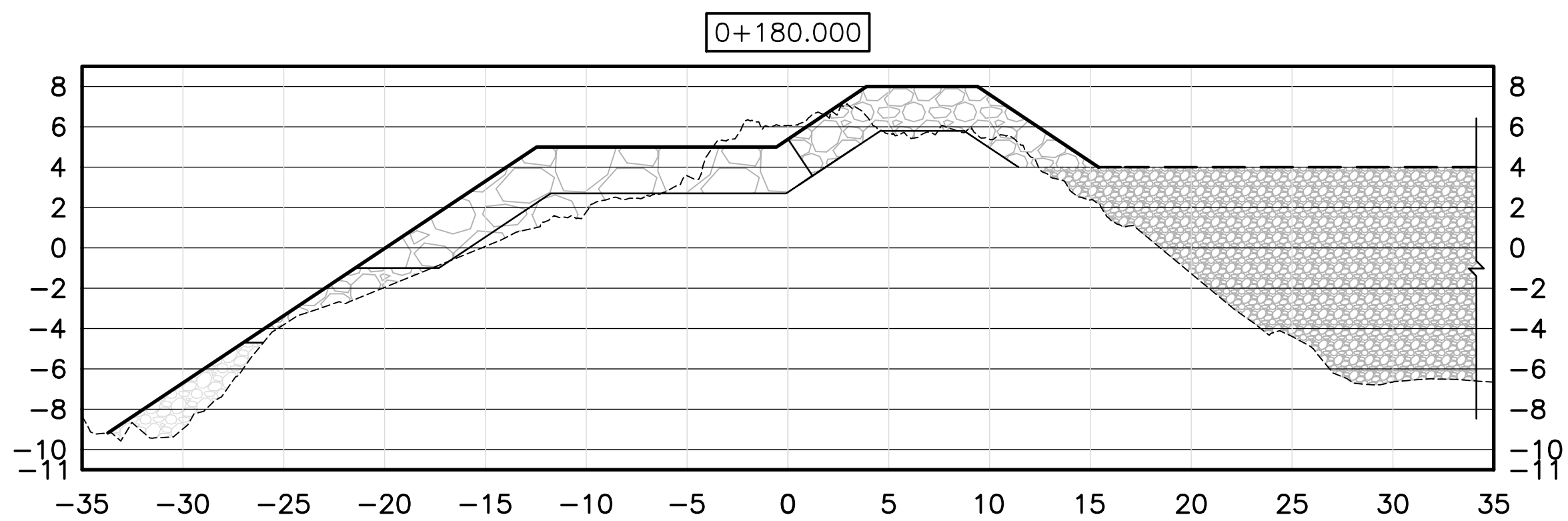
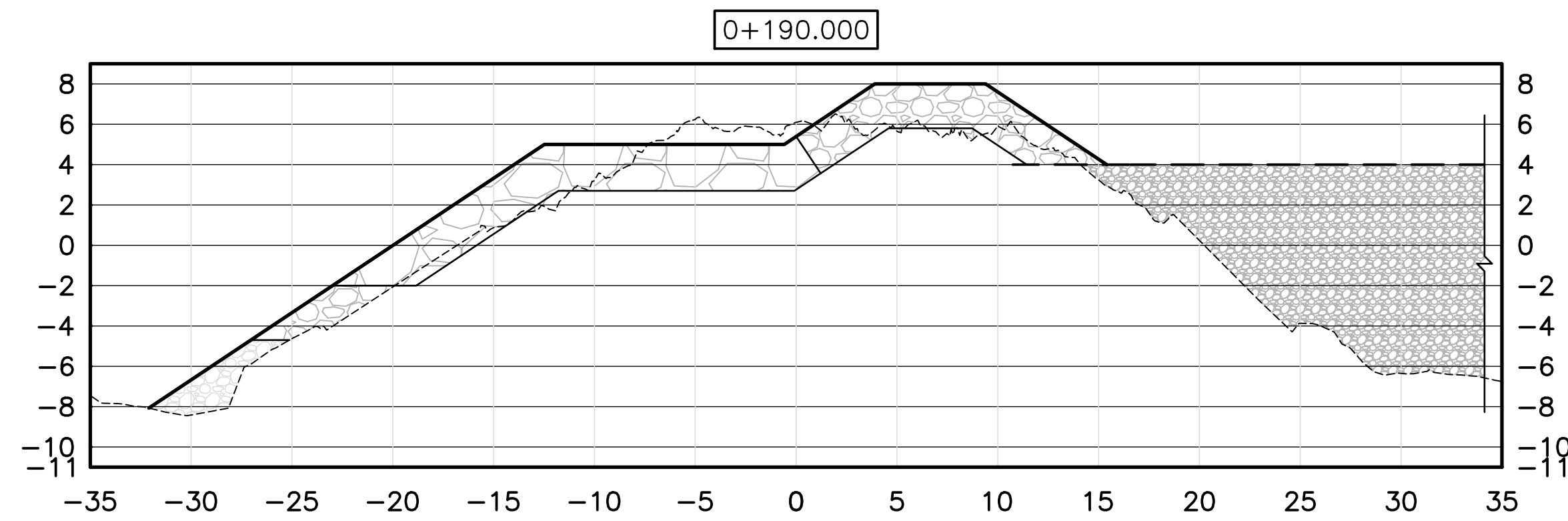
This Permit Allows

CBCL LIMITED

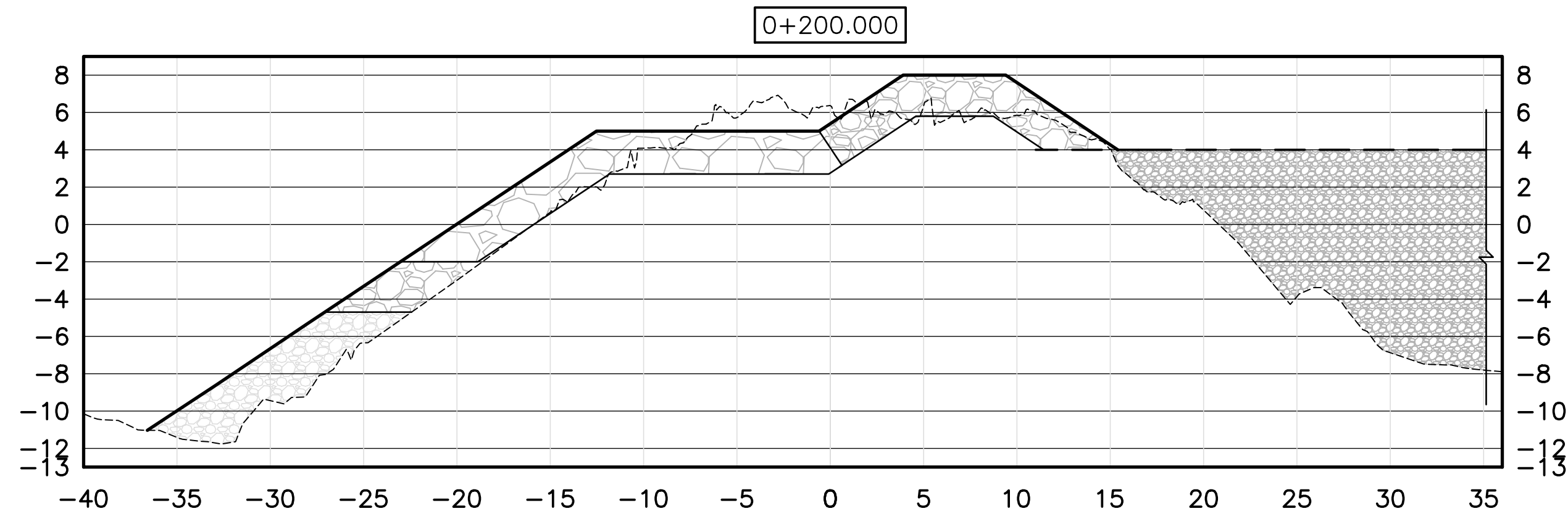
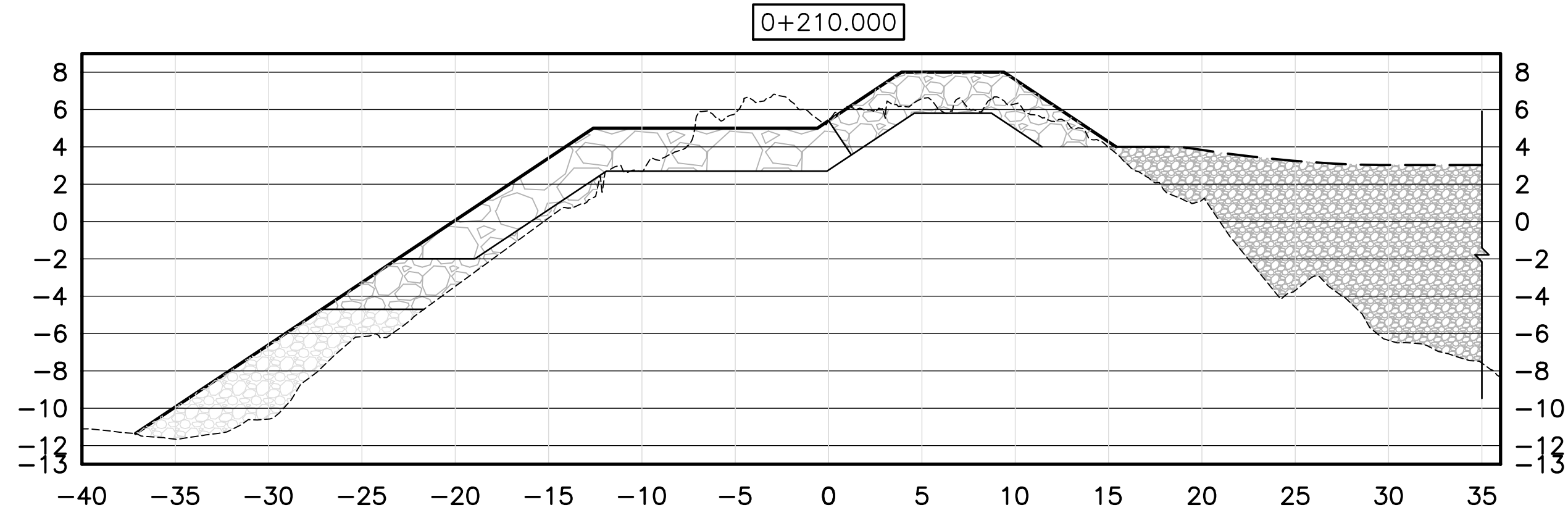
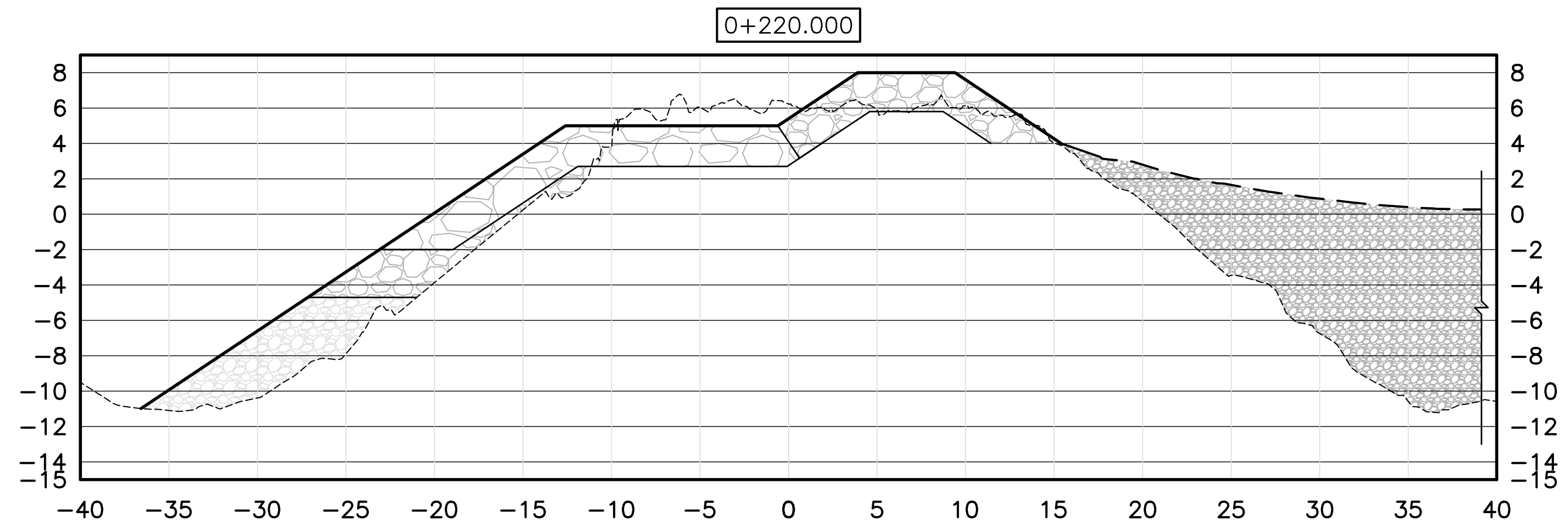
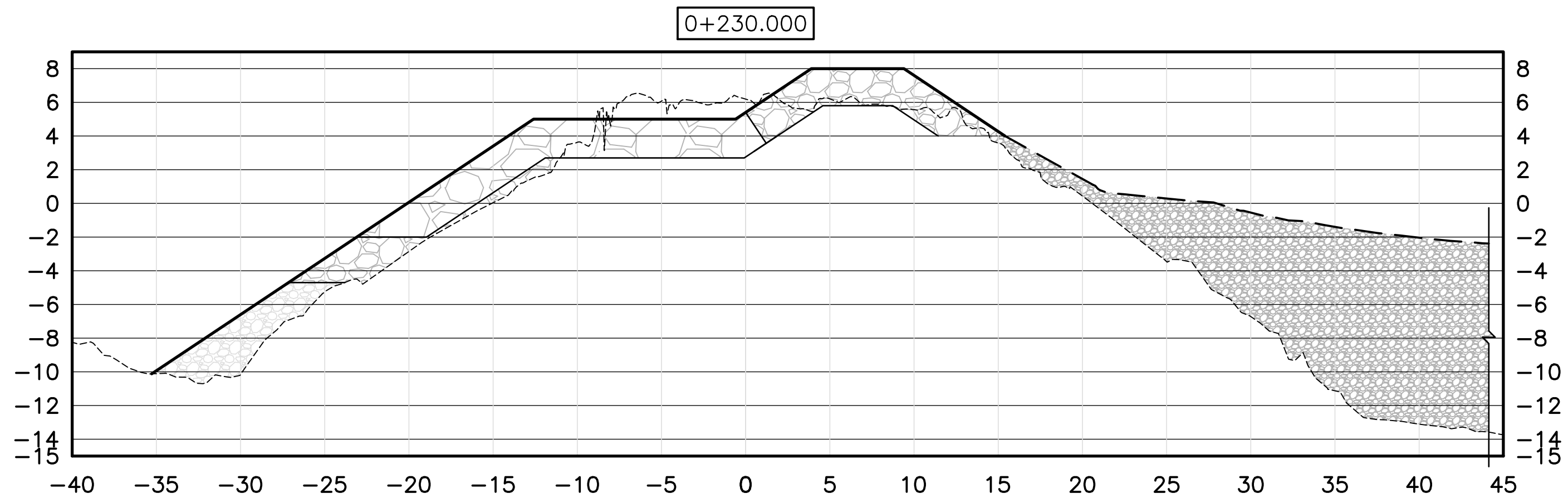
To practice Professional Engineering in Newfoundland and Labrador Permit No. as issued by PEGNL D0178 which is valid for the year 2020.

E	ISSUED FOR INFORMATION	JAN 22/21	LMC
D	ISSUED FOR INFORMATION	DEC 18/20	LMC
C	ISSUED FOR REVIEW	NOV 27/20	LMC
B	GENERAL REVISIONS	NOV 13/20	LMC
A	ISSUED FOR INFORMATION	NOV 4/20	LMC
No.	Description	Date	By
Revision or Issue			
Project			
PAB NAVIGATION IMPROVEMENT PROJECT PORT aux BASQUES, NL			
Drawing Title			
CIVIL PIKES ISLAND REPAIRS PLAN & SECTIONS PROPOSED NAVIGATION CHANNEL			
CBCL No. 192479.45	MAI ENG No. ## ## ##	Date JUNE 19/20	Scale AS NOTED
Designed AMA		Drawn PJC	
Checked AMA		Approved	
Sheet No 9 of 15			
Drawing No		C09	

DRAWING NAME: Y:\STONEY\DATA\2011\12479.45 - 2019-06-13.2 PAB VARIO'S ISLAND - INITIAL PLANNING AND PM - PRELIMINARY DESIGN AND REGULATORY PROCESS\CAD\01 CIVIL\192479.45 - PICES ISLANDING\ASOUT\NAME C11 ELEV.DWG January 22, 2021 9:29:39 AM CAD PREPARED: PAUL C



SECTIONS
1:250 [H] 1:250 [V]



Client
Marine Atlantic
Marine Atlantique
PORT aux BASQUES, NL

Prime-Consultant
CBCL **CBCL LIMITED**
Consulting Engineers

Sub-Consultant

NOTES:

PRELIMINARY
NOT FOR CONSTRUCTION

PROVINCE OF NEWFOUNDLAND AND LABRADOR
PERMIT HOLDER
PERMIT This Permit Allows
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in Newfoundland and Labrador
Permit No. as issued by PEGNL D0178
which is valid for the year 2020.
CBCL LIMITED

E	ISSUED FOR INFORMATION	JAN 22/21	LMC
D	ISSUED FOR INFORMATION	DEC 18/20	LMC
C	ISSUED FOR REVIEW	NOV 27/20	LMC
B	GENERAL REVISIONS	NOV 13/20	LMC
A	ISSUED FOR INFORMATION	NOV 4/20	LMC
No.	Description	Date	By

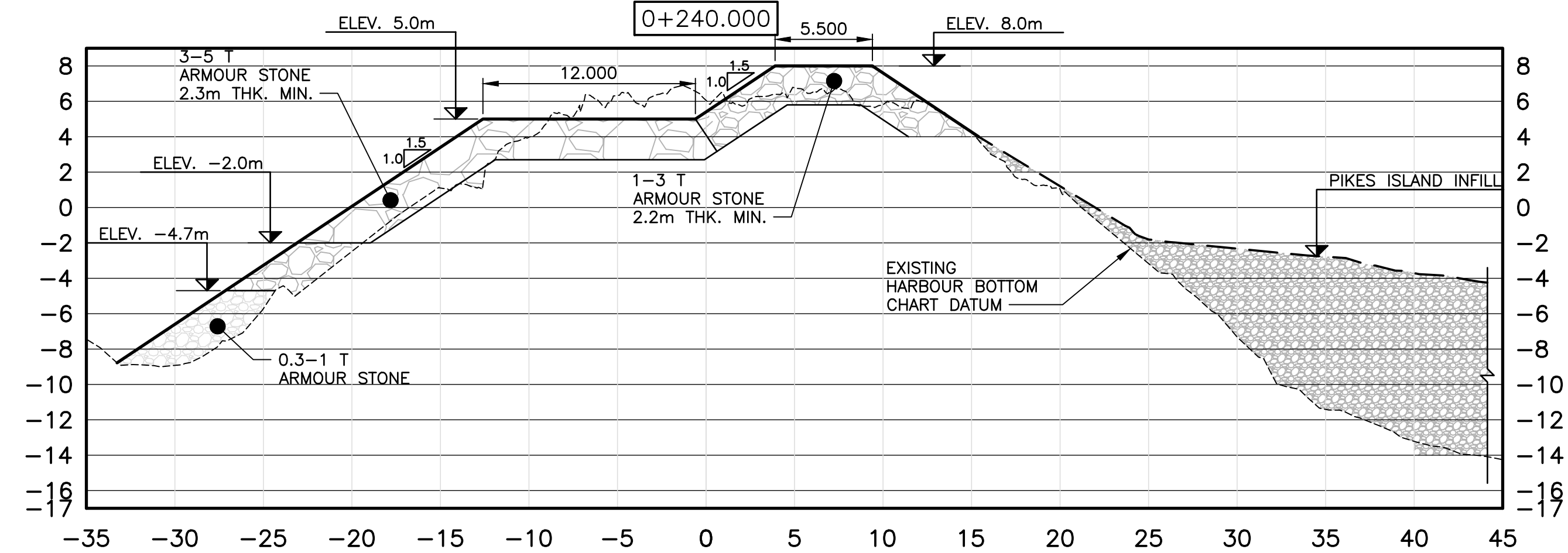
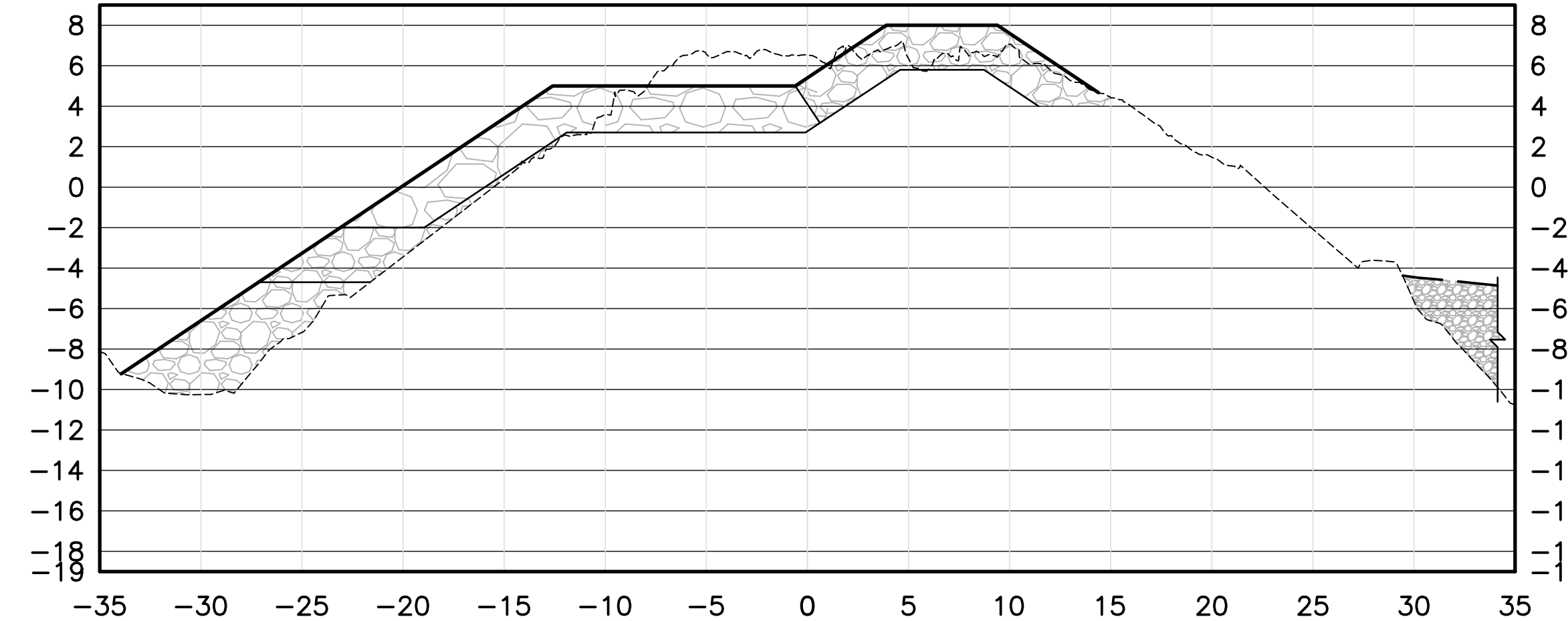
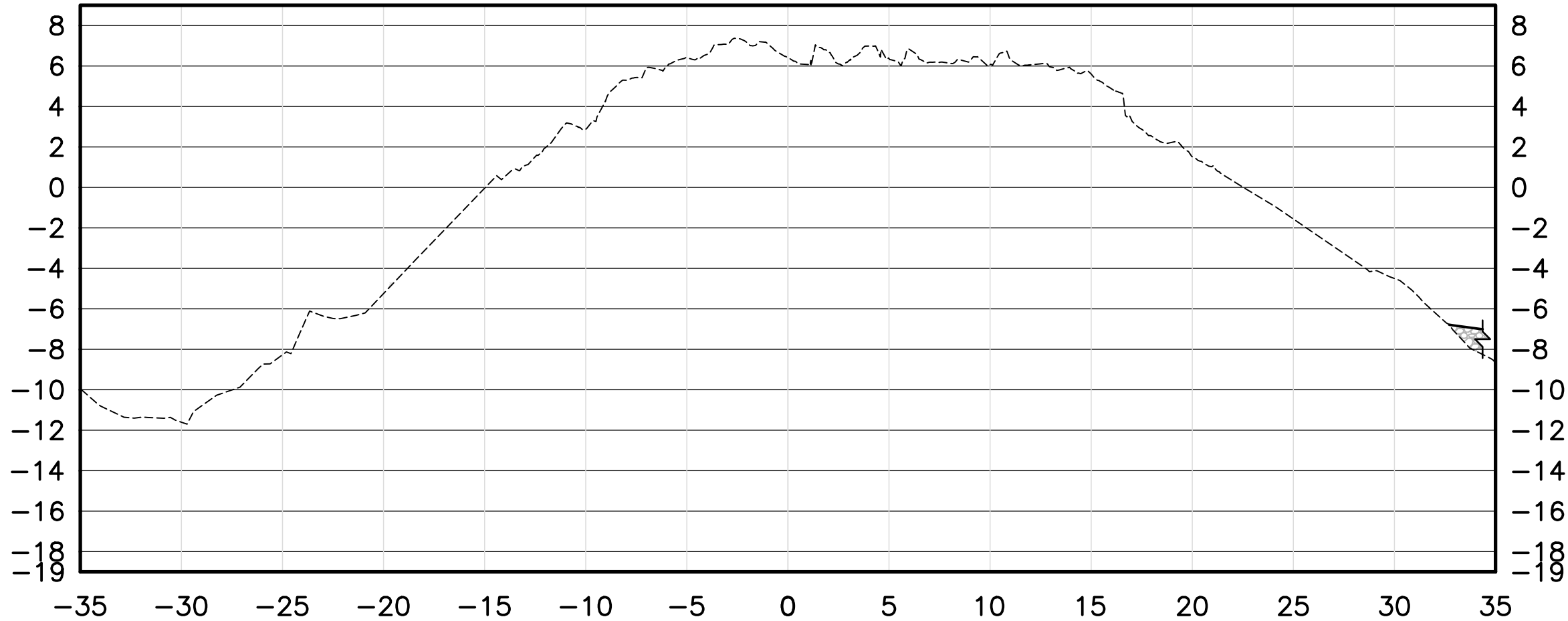
Revision or Issue

Project
**PAB NAVIGATION
IMPROVEMENT PROJECT
PORT aux BASQUES, NL**

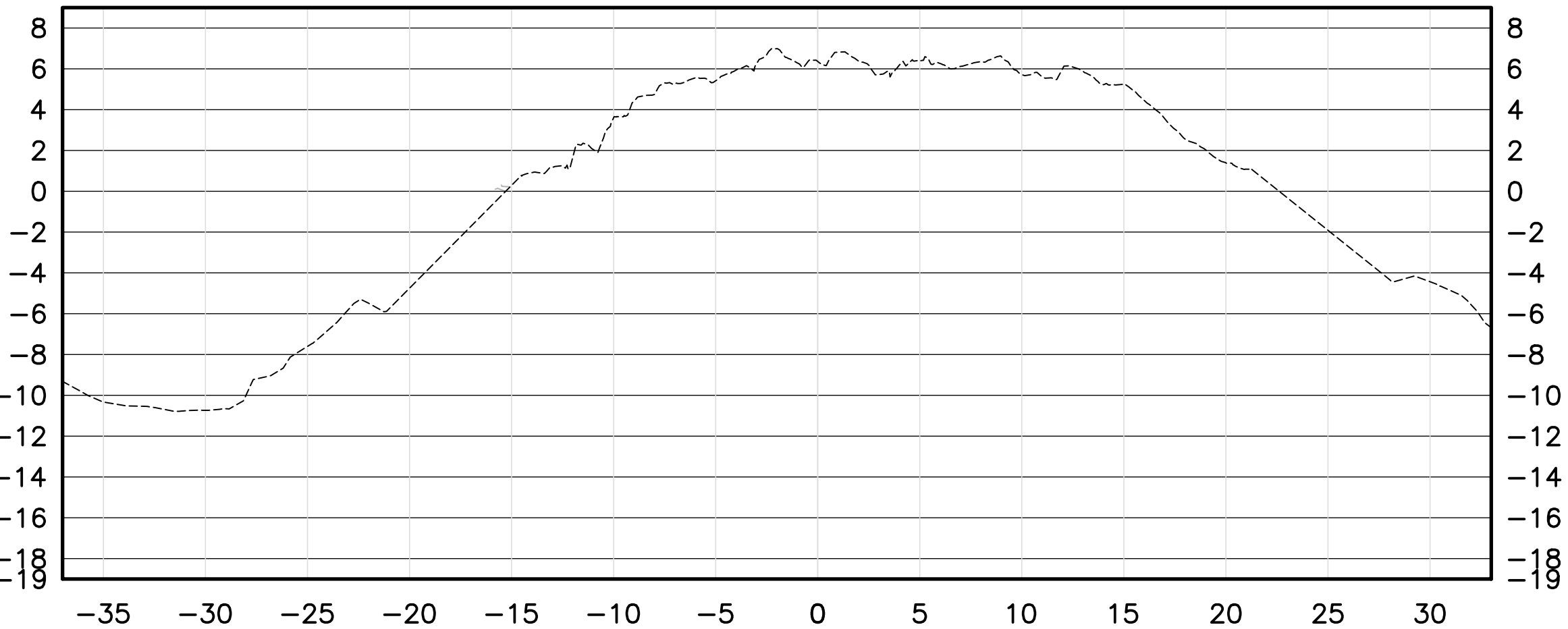
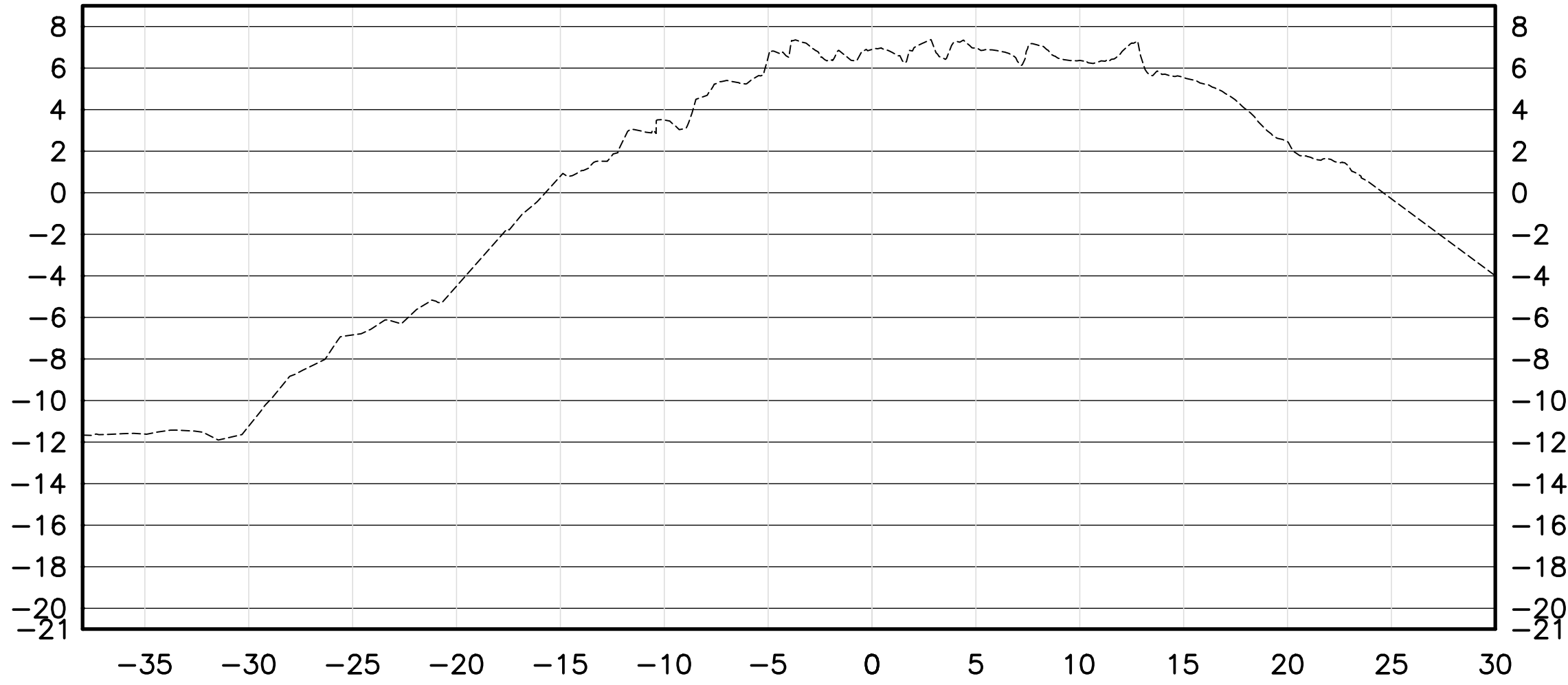
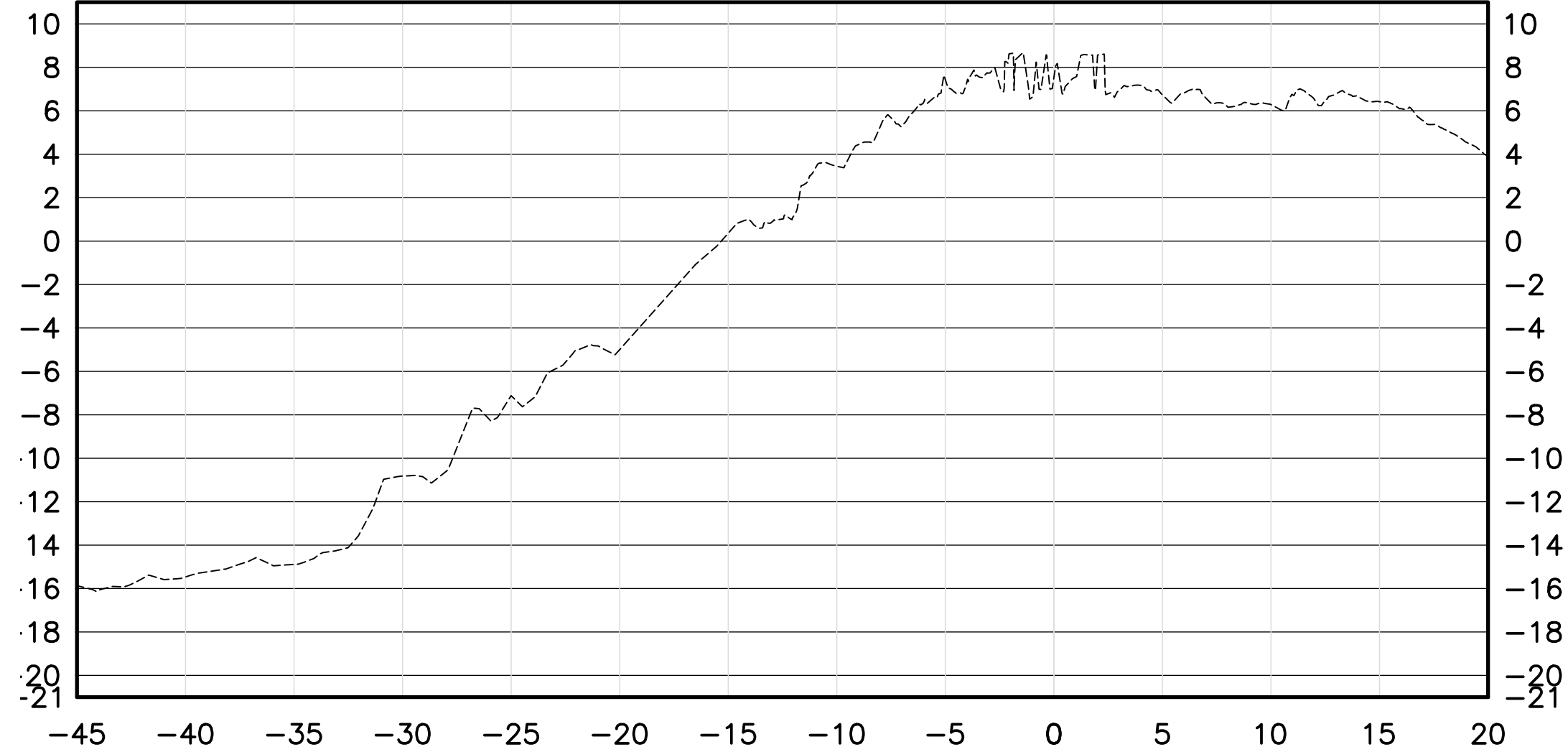
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**CIVIL
PIKES ISLAND REPAIRS
SECTIONS**

PROPOSED NAVIGATION CHANNEL

CBCL No. 192479.45	MAI ENG No. ## ## ##	Date JUNE 19/20	Scale AS NOTED
	Designed	Drawn PJC	
	Checked AMA	Approved	
	Sheet No 11 of 15		
	Drawing No C11		



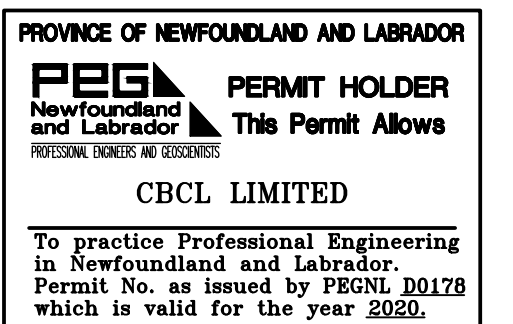
SECTIONS
1:250 [H] 1:250 [V]



Sub-Consultant

NOTES:

PRELIMINARY
NOT FOR CONSTRUCTION



E	ISSUED FOR INFORMATION	JAN 22/21	LMC
D	ISSUED FOR INFORMATION	DEC 18/20	LMC
C	ISSUED FOR REVIEW	NOV 27/20	LMC
B	GENERAL REVISIONS	NOV 13/20	LMC
A	ISSUED FOR INFORMATION	NOV 4/20	LMC
No.	Description	Date	By

Revision or Issue

Project	PAB NAVIGATION IMPROVEMENT PROJECT PORT aux BASQUES, NL
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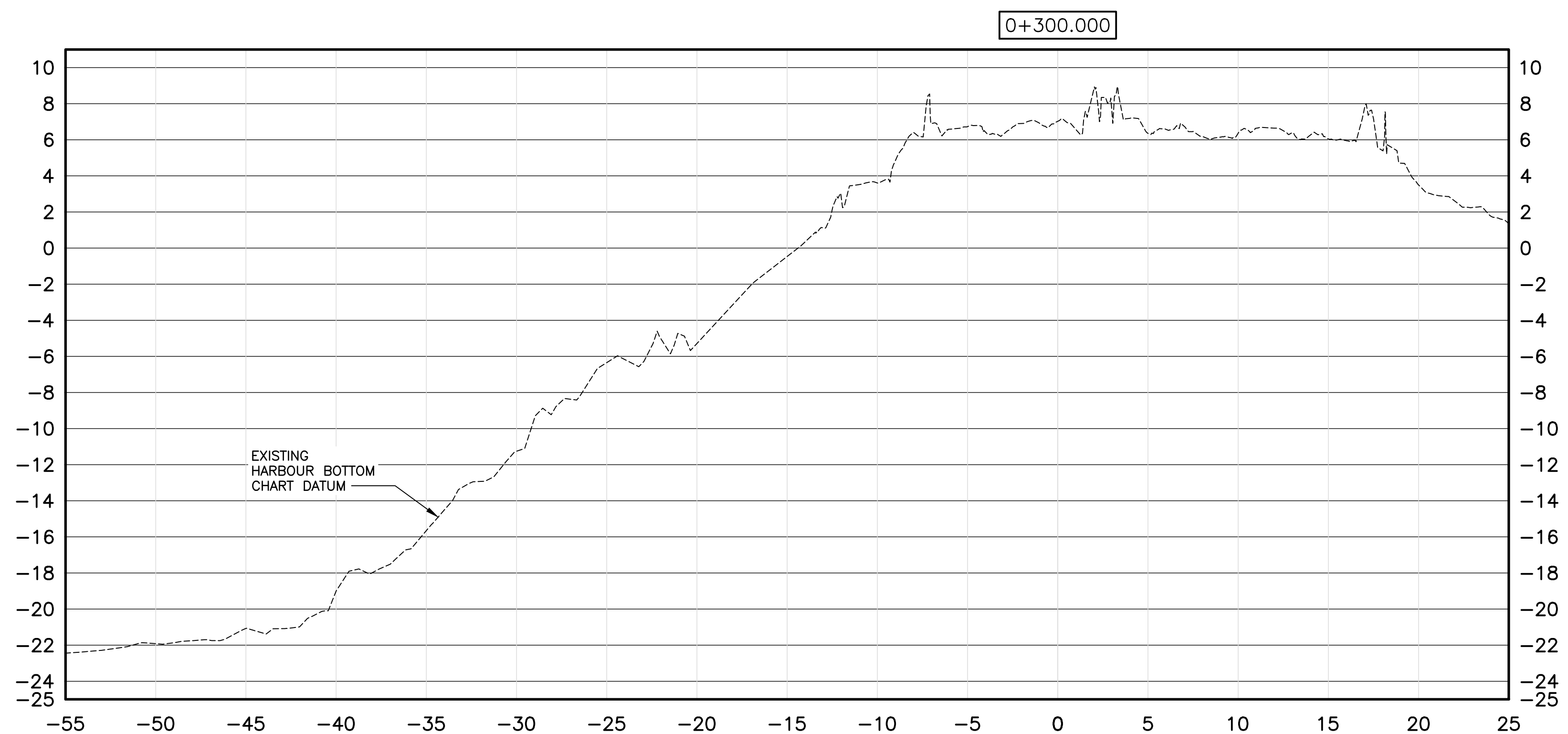
Drawing Title

CIVIL

PIKES ISLAND REPAIRS
SECTIONS

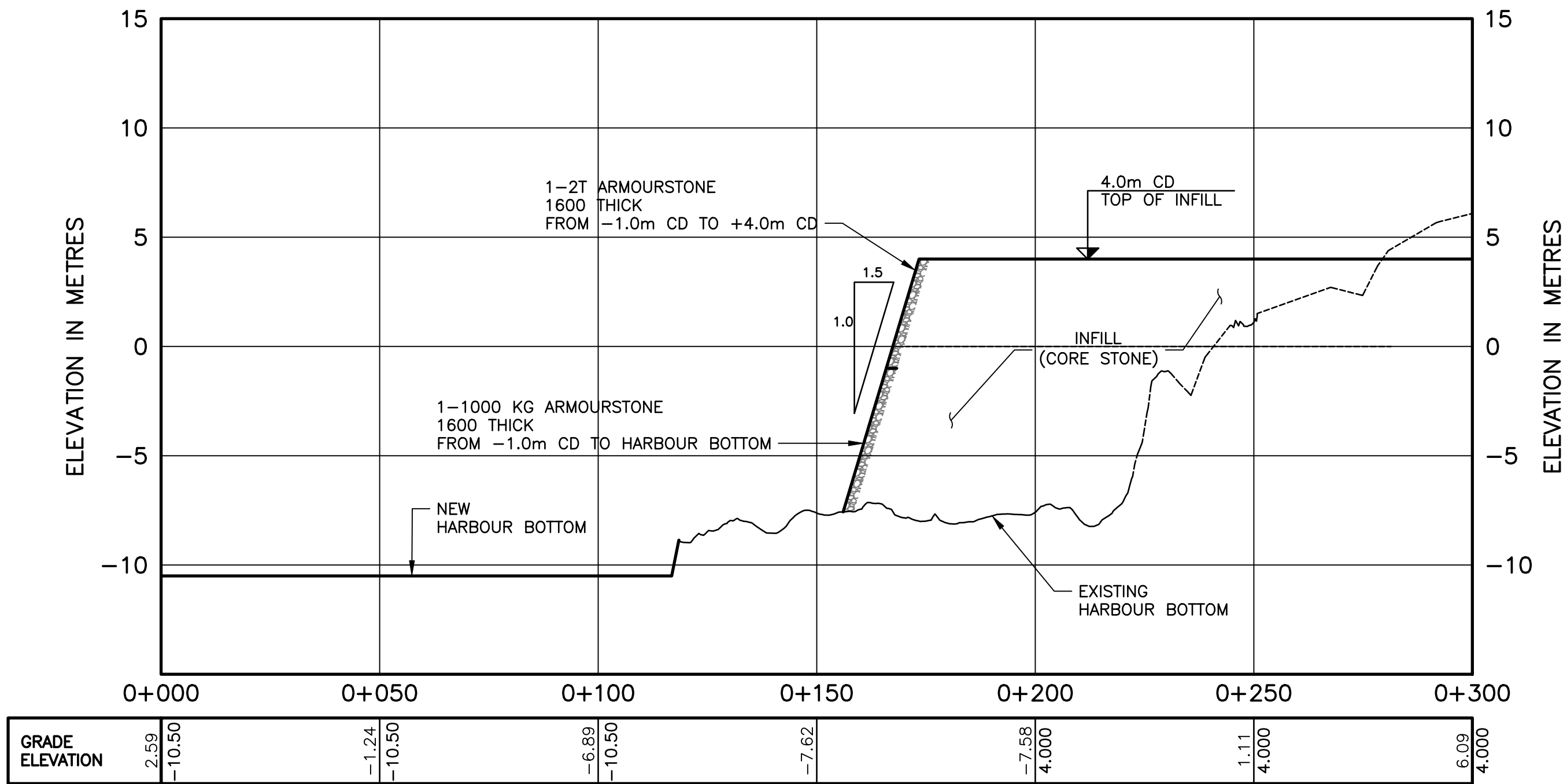
PROPOSED NAVIGATION CHANNEL

CBL No 192479.45	MAI ENG No ## ## ##	Date JUNE 19/20	Scale AS NOTED
		Designed PJC	Drawn PJC
		Checked AMA	Approved
		Sheet No 12 of 15	
		Drawing No C12	



C13

DRAWING NAME: Y:\STONEY\DATA\2011\12479.00 MAI PROJ MAI\192479.45 - 2019-06-13.2 PAB VARDY'S ISLAND - INITIAL PLANNING AND PM - PRELIMINARY DESIGN AND REGULATORY PROCESS\04\01 CIVIL\192479.45 - 007-008-C09-C10.DWG LAYOUT NAME: C14 ELOT DATE: January 22, 2021 8:53:59 AM CAD OPERATOR: PAULC



A SECTION
1:1000 [H] 1:200 [V]



PLAN
1:2000

Client
Marine Atlantic
Marine Atlantique
PORT aux BASQUES, NL

Prime-Consultant
CBCL LIMITED
Consulting Engineers

Sub-Consultant

NOTES:
HORIZONTAL DATUM: NAD 83 CSRS
PROJECTION: UTM ZONE 21
VERTICAL DATUM: CHART DATUM
SURVEY CONDUCTED JANUARY 2020
BY CSR GEOSURVEYS LTD.

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PROVINCE OF NEWFOUNDLAND AND LABRADOR
PERMIT HOLDER
CBCL LIMITED
To practice Professional Engineering
in Newfoundland and Labrador
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No.	Description	Date	By
D	ISSUED FOR INFORMATION	JAN 22/21	LMC
C	ISSUED FOR INFORMATION	DEC 18/20	LMC
B	ISSUED FOR REVIEW	NOV 27/20	LMC
A	ISSUED FOR INFORMATION	NOV 4/20	LMC

Revision or Issue

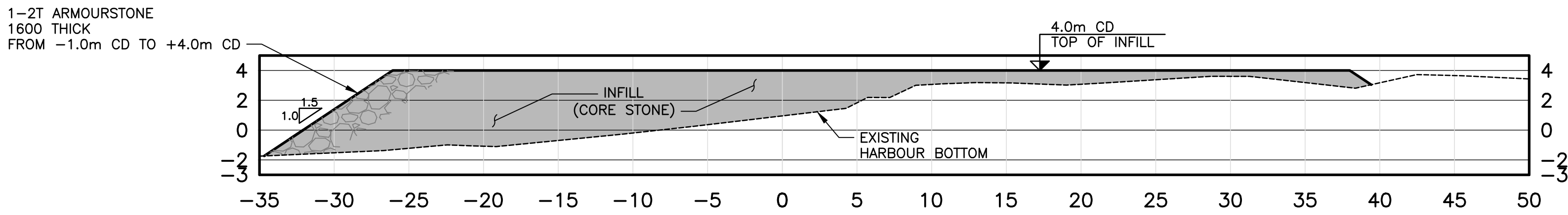
Project
**PAB NAVIGATION
IMPROVEMENT PROJECT
PORT aux BASQUES, NL**

Drawing Title
**CIVIL
PIKES ISLAND INFILL
PLAN & SECTION**
PROPOSED NAVIGATION CHANNEL

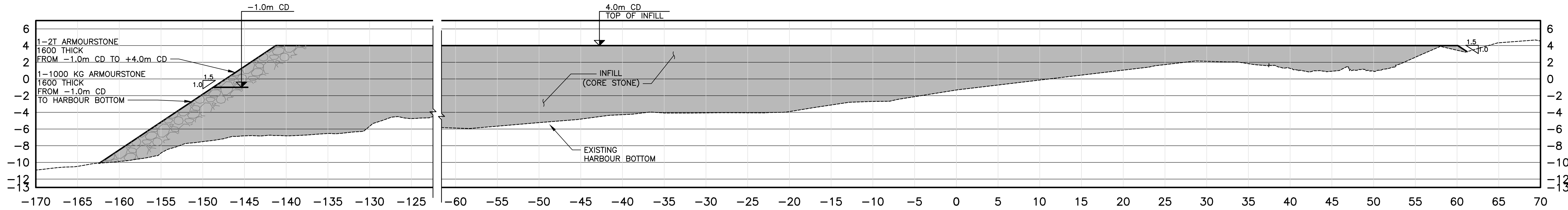
CBCL No.	MAI ENG No.	Date	Scale
192479.45	## ## ##	MAY 06/20	AS NOTED
Designed	Drawn		
Checked	Approved		
AMA	PJC		
Sheet No			
14	of 15		
Drawing No			

C14

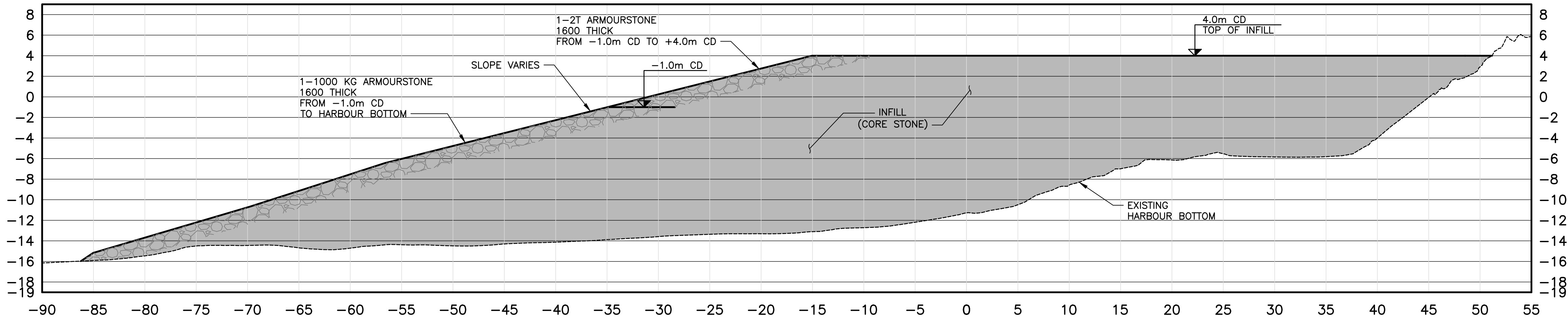
DRAWING NAME: Y:\STOREY\DATA\2011\12479.00 MAI PROJ MAIN\192479.45 - 2019-06-13.2 PAB VARIO'S ISLAND - INITIAL PLANNING AND PM - PRELIMINARY DESIGN AND REGULATORY PROCESS\CAD\01 CIVIL\192479.45 - 001-C09-C09-C10.DWG LAYOUT NAME: C15 PLOT DATE: January 22, 2021 10:02:02 AM CAD OPERATOR: PAULC



B SECTION —
C12 1:250 [H] 1:250[V]



C SECTION —
C12 1:250 [H] 1:250[V]



D SECTION —
C12 1:250 [H] 1:250[V]

SECTIONS
1:250 [H] 1:250 [V]

Client
Marine Atlantic
Marine Atlantique
PORT aux BASQUES, NL

Prime-Consultant

CBCL **CBCL LIMITED**
Consulting Engineers

Sub-Consultant

NOTES:

HORIZONTAL DATUM: NAD 83 CSRS
PROJECTION: UTM_ZONE 21
VERTICAL DATUM: CHART DATUM

SOUNDING SURVEY CONDUCTED JANUARY 2020
BY CSR GEOSURVEYS LTD.

PRELIMINARY
NOT FOR CONSTRUCTION

PROVINCE OF NEWFOUNDLAND AND LABRADOR
PEG **PERMIT HOLDER**
Newfoundland and Labrador **This Permit Allows**
REGULATORY DESIGN AND REVIEW
CBCL LIMITED
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No.	Description	Date	By
D	ISSUED FOR INFORMATION	JAN 22/21	LMC
C	ISSUED FOR INFORMATION	DEC 18/20	LMC
B	ISSUED FOR REVIEW	NOV 27/20	LMC
A	ISSUED FOR INFORMATION	NOV 4/20	LMC

Revision or Issue

Project
**PAB NAVIGATION
IMPROVEMENT PROJECT
PORT aux BASQUES, NL**

Drawing Title
**CIVIL
PIKES ISLAND INFILL
SECTIONS**

PROPOSED NAVIGATION CHANNEL

CBCL No	MAI ENG No.	Date	Scale
192479.45	## ## ##	JUL 31/20	AS NOTED
	Designed	Drawn	
	Checked AMA	Approved	
	Sheet No 15 of 15		
	Drawing No C15		