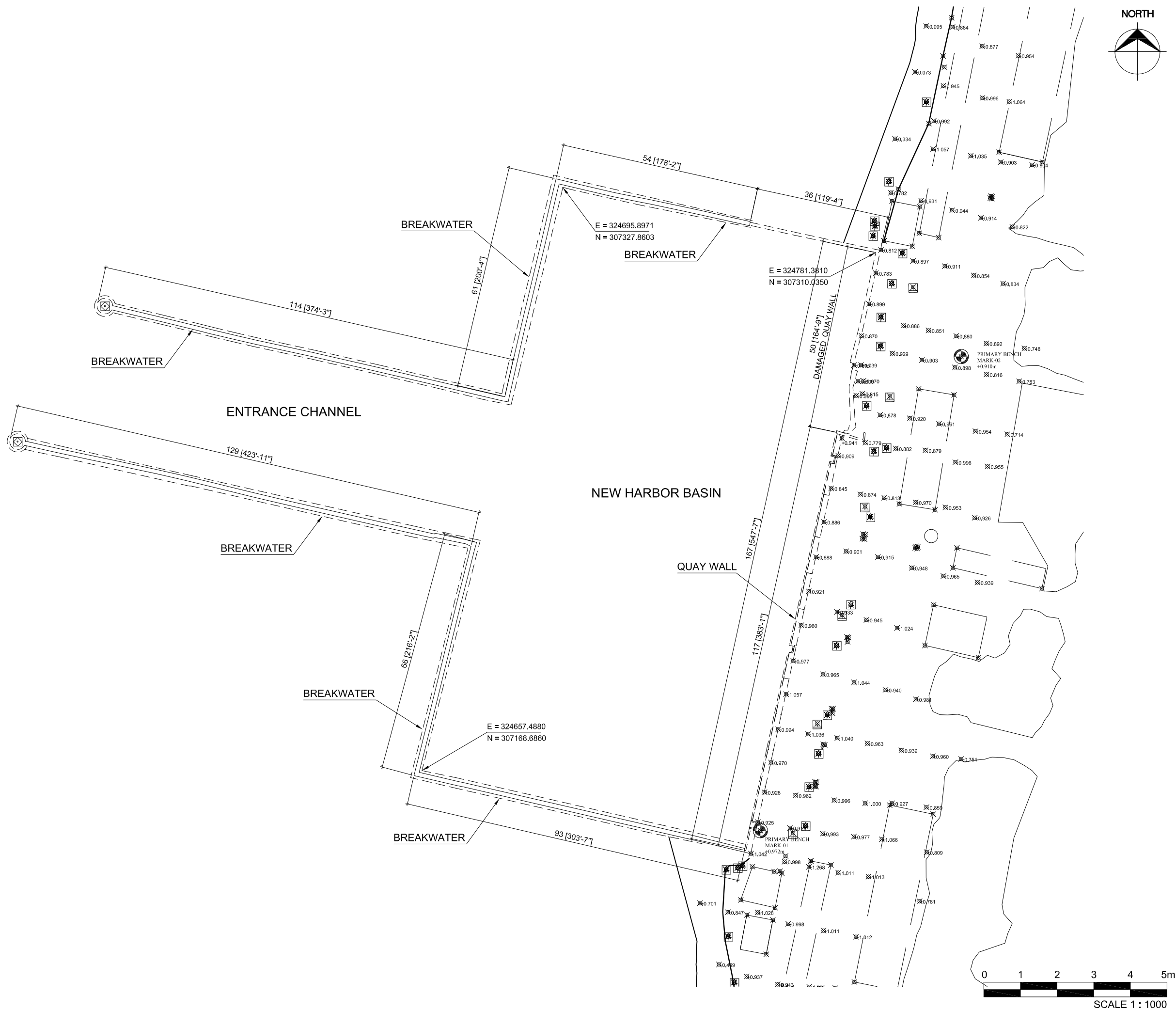


M.KOLHUFUSHI HARBOUR LIST OF DRAWINGS		
DWG. NOS	DRAWING TITLES	REV. NO
KF-CI-00	LIST OF DRAWINGS	0
KF-CI-01	EXISTING LAYOUT	0
KF-CI-02	NEW DESIGN LAYOUT	0
KF-CI-03	NEW DESIGN W/ EXISTING FOOT PRINT	0
KF-CI-04	DREDGING PLAN	0
KF-CI-05	ENTRANCE CHANEL LAYOUT	0
KF-CI-06	QUAY WALL DETAILS (SHEET 1 OF 4)	0
KF-CI-06	QUAY WALL DETAILS (SHEET 2 OF 4)	0
KF-CI-06	QUAY WALL DETAILS (SHEET 3 OF 4)	0
KF-CI-06	QUAY WALL DETAILS (SHEET 4 OF 4)	0
KF-CI-07	BREAKWATER DETAILS (SHEET 1 OF 3)	0
KF-CI-07	BREAKWATER DETAILS (SHEET 2 OF 3)	0
KF-CI-07	BREAKWATER DETAILS (SHEET 3 OF 3)	0
KF-CI-08	TYPICAL DETAILS	0



NOTES:

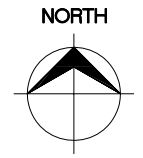
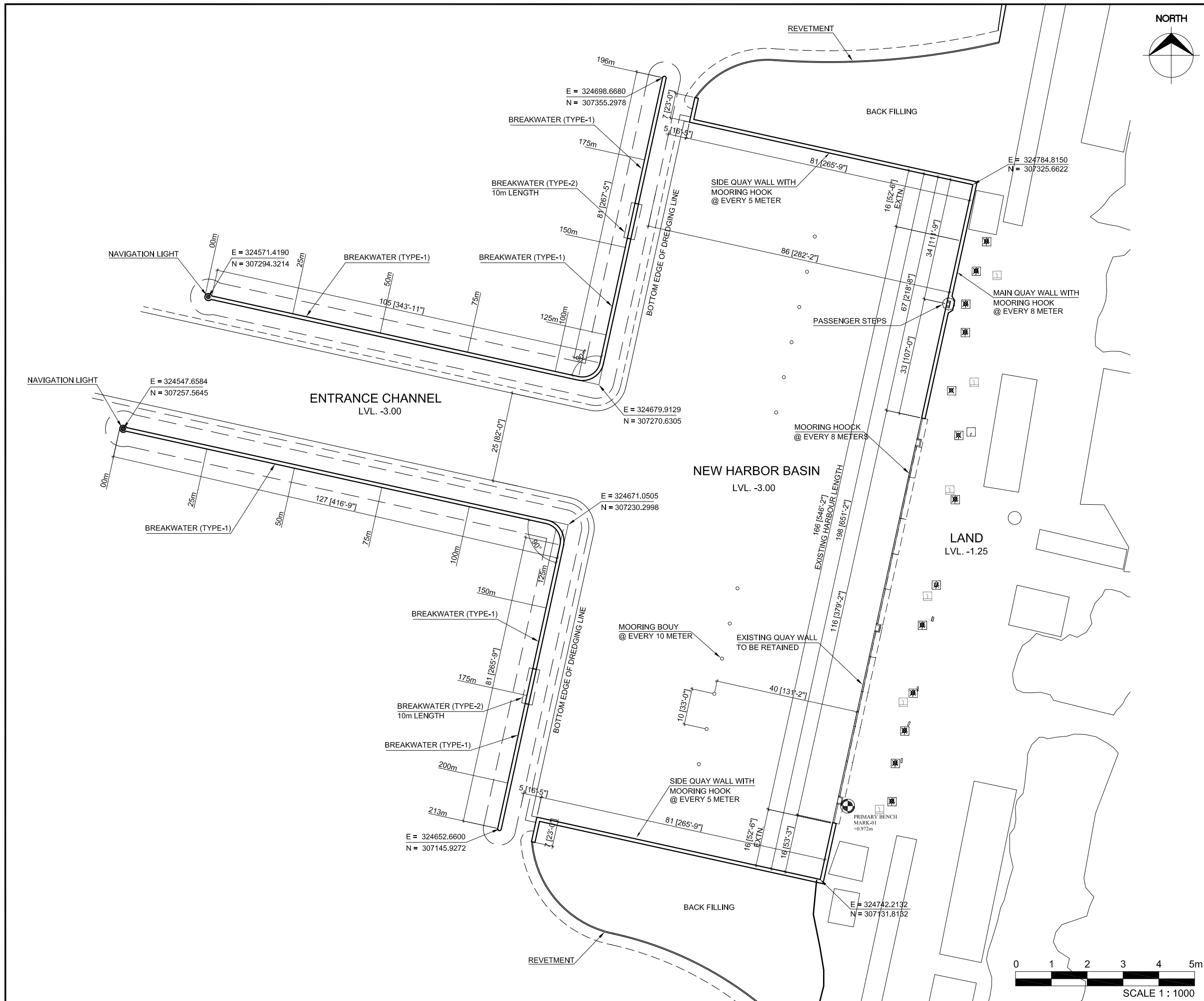
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REVISION					
CLIENT					
<div><div></div><div>MINISTRY OF HOUSING & INFRASTRUCTURE REPUBLIC OF MALDIVES</div></div>					
CONSULTANT:					
<div><div></div><div>Al-Habshi Consultants Office Tel: 2430103 / 2433131 - Fax : 2431136 P.O.Box 27154 Safat 13132 - Kuwait</div></div>					
PROJECT:					
RECONSTRUCTION OF HARBORS PHASE-2					
DRAWING TITLE:					
M.KOLHUFUSHI HARBOUR LIST OF DRAWINGS					
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	N.T.S	15-07-14
PROJECT No.	SHEET No.	DRAWING No.			
K-601	1 OF 1	KF-CI-00			
REV. No.	0				





NOTES:
1- ALL DIMENSIONS AND LEVELS ARE IN METER, UNLESS OTHERWISE SHOWN.

- LEGENDS:-**
- Benchmark
PBM-1 = +1.498m(337587.992E,213816.868N)
PBM-2 = +1.280m(337648.163E,213804.335N)
 - BEACH LINE (TOE OF BEACH)
 - EDGE OF VEGETATION
 - EXISTING QUAY WALL
 - EXISTING BREAKWATER

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPRD.
REVISION					
CLIENT					
 MINISTRY OF HOUSING & INFRASTRUCTURE REPUBLIC OF MALDIVES					
CONSULTANT:					
 Al-Habshi Consultants Office Tel: 2430103 / 2433131 - Fax: 2431136 P.O.Box 27154 Safat 13132 - Kuwait					
PROJECT:					
RECONSTRUCTION OF HARBORS PHASE-2					
DRAWING TITLE:					
KOLHUFUSHI HARBOUR EXISTING LAYOUT					
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:1000	15-07-14
PROJECT No.	SHEET No.	DRAWING No.			
K-601	1 OF 1	KF-CI-01			
REV. No.	0				



NOTES:
1- ALL DIMENSIONS AND LEVELS ARE IN METER, UNLESS OTHERWISE SHOWN.

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPRD.
REVISION					
CLIENT					
					
MINISTRY OF HOUSING & INFRASTRUCTURE					
REPUBLIC OF MALDIVES					
CONSULTANT:					
 Al-Habshi Consultants Office					
Tel: 2430103 / 2433131 - Fax: 2431136 P.O.Box 27154 Safat 13132 - Kuwait					
PROJECT:					
RECONSTRUCTION OF HARBORS					
PHASE-2					
DRAWING TITLE:					
KOLHUFUSHI HARBOUR					
NEW DESIGN LAYOUT					
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:1000	15-07-14
PROJECT No.	SHEET No.	DRAWING No.			
K-601	1 OF 1	KF-CI-02			
REV. No.	0				



The diagram illustrates five different cross-sectional views of coastal structures, each with a corresponding label to its right:

- EXISTING BREAKWATER**: A cross-section of a breakwater with a stepped, armor layer on the seaward side and a core of rubble or similar material.
- EXISTING QUAY WALL**: A cross-section of a quay wall, showing a vertical or slightly battered structure with a flat top.
- NEW QUAY WALL**: A cross-section of a new quay wall, showing a vertical or slightly battered structure with a flat top.
- NEW BREAKWATER**: A cross-section of a new breakwater, showing a stepped, armor layer on the seaward side and a core of rubble or similar material.
- NEW REVETMENT**: A cross-section of a new revetment, showing a curved, armor layer on the seaward side and a core of rubble or similar material.

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPRD.
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REVISION

CLIENT

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REPUBLIC OF MALDIVES

CONSULTANT:

Al-Hafshi Consultants Office

Tel.: 2430103 / 2433131 - Fax : 2431136
P.O.Box 27154 Safat 13132 - Kuwait

PROJECT:

RECONSTRUCTION OF HARBORS

 PHASE-2

DRAWING TITLE:

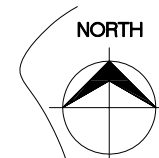
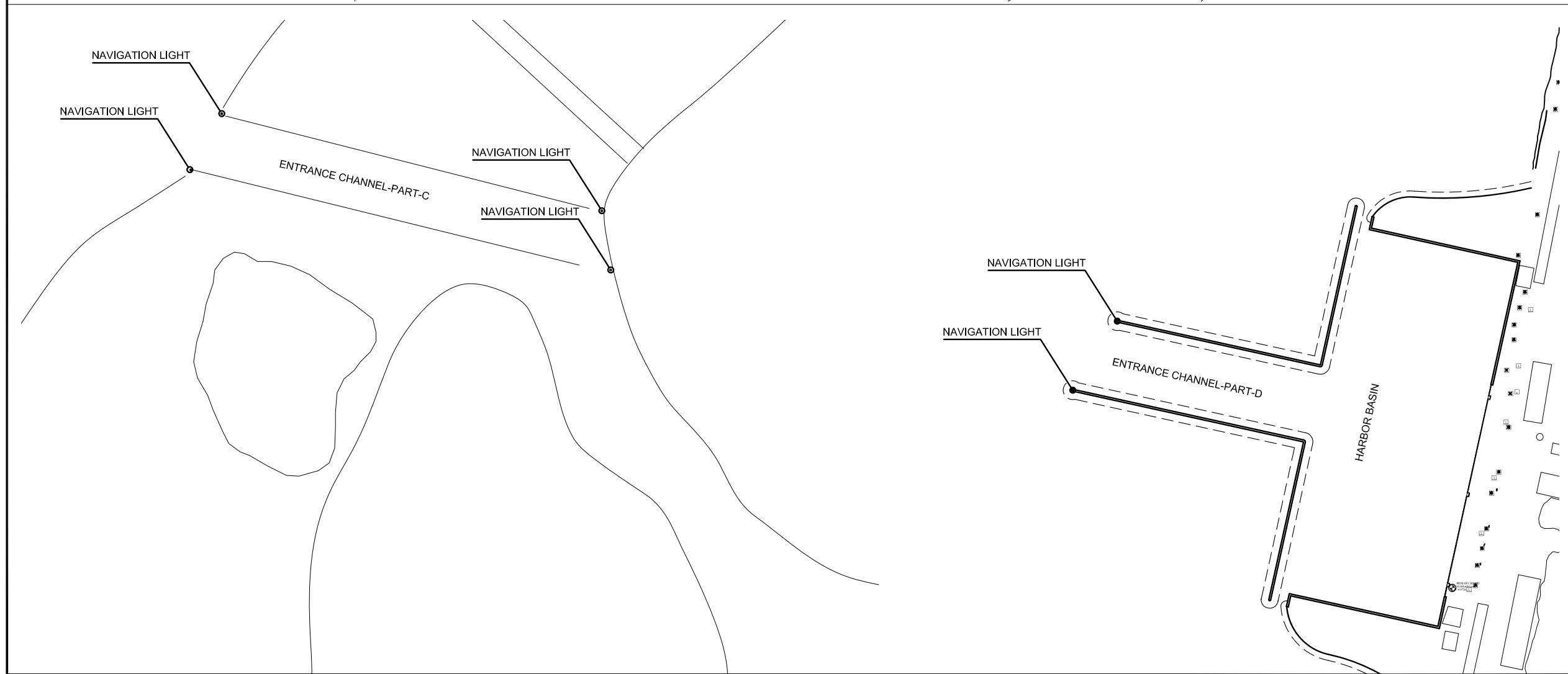
KOLHUFUSHI HARBOUR

 NEW DESIGN W/ EXISTING FOOTPRINT

DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:1000	15-07-'14

PROJECT No. SHEET No. DRAWING No. KF-CI-03

K-601	1 OF 1
REV. No.	0



DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:2500	15-07-14
PROJECT No.	SHEET No.	DRAWING No.			
K-601	1 OF 1	KF-CI-05			
REV. No.	0				



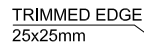
SCALE 1 : 50



SCALE 1 : 50



DETAIL-1



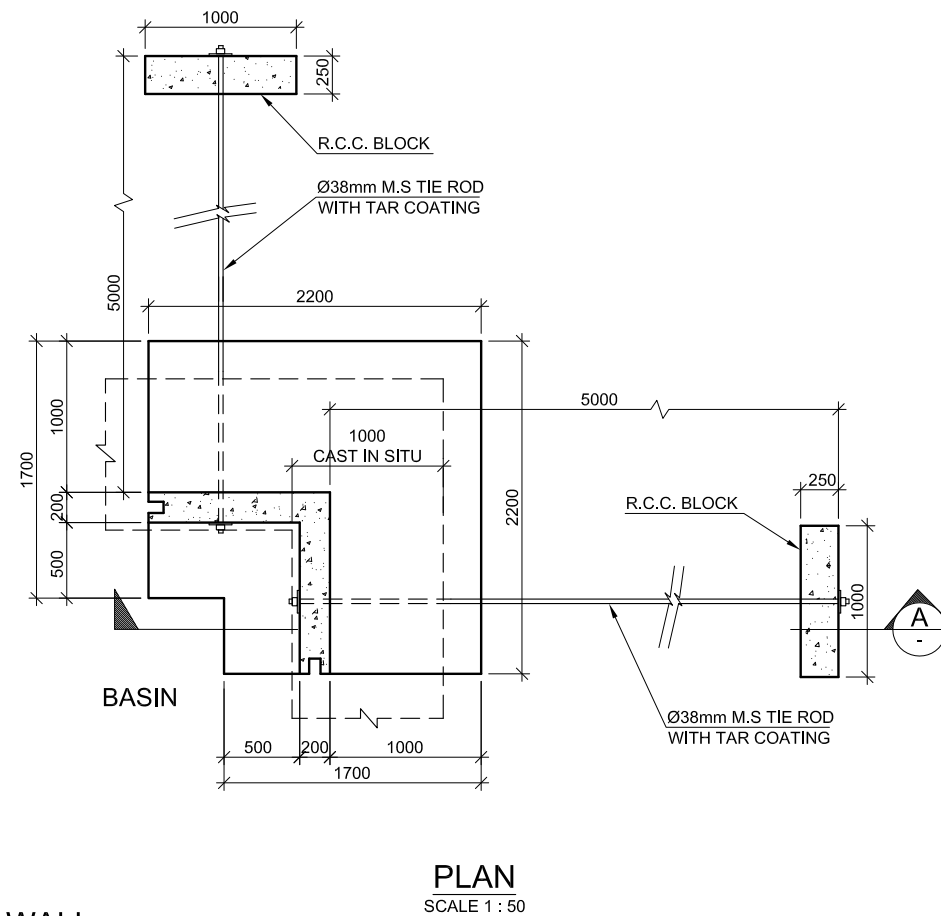
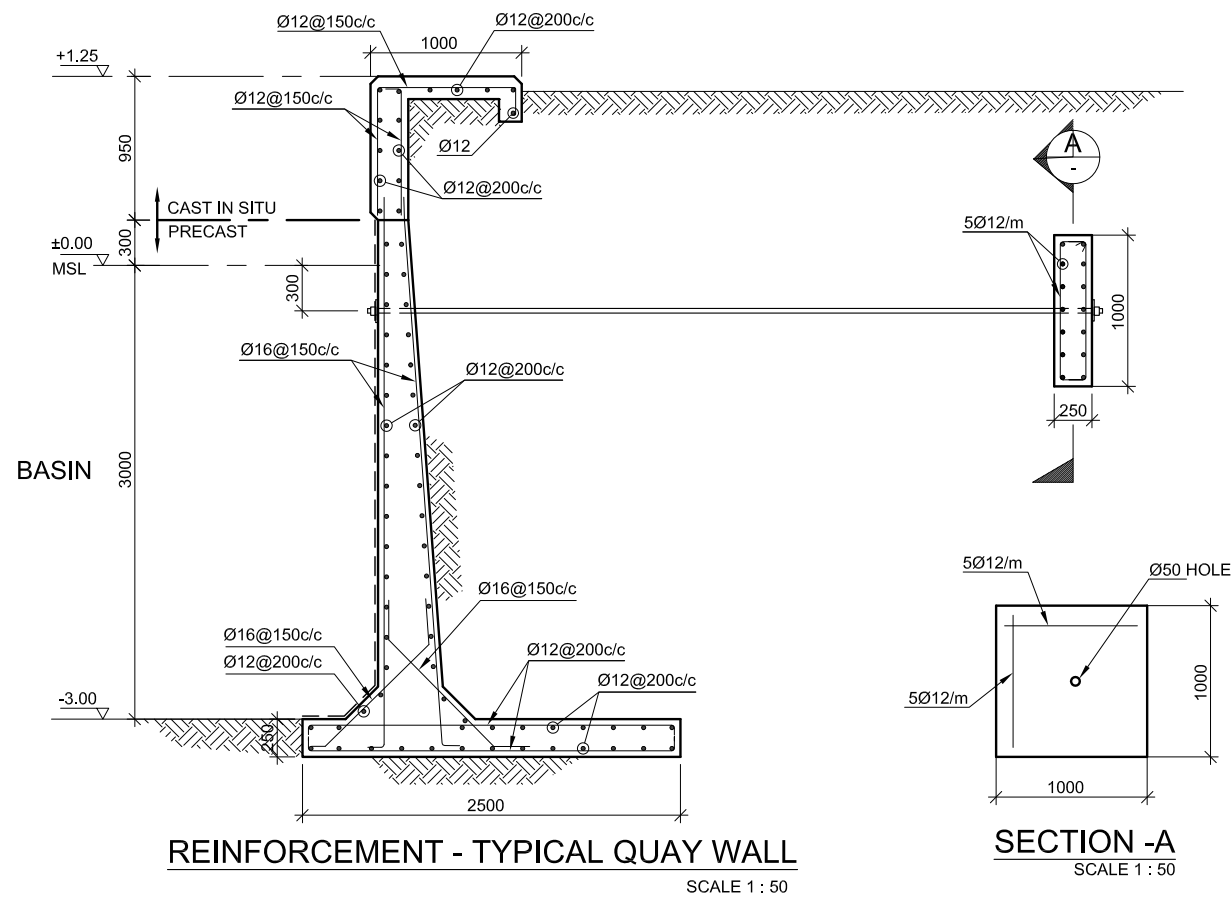
DETAIL-2



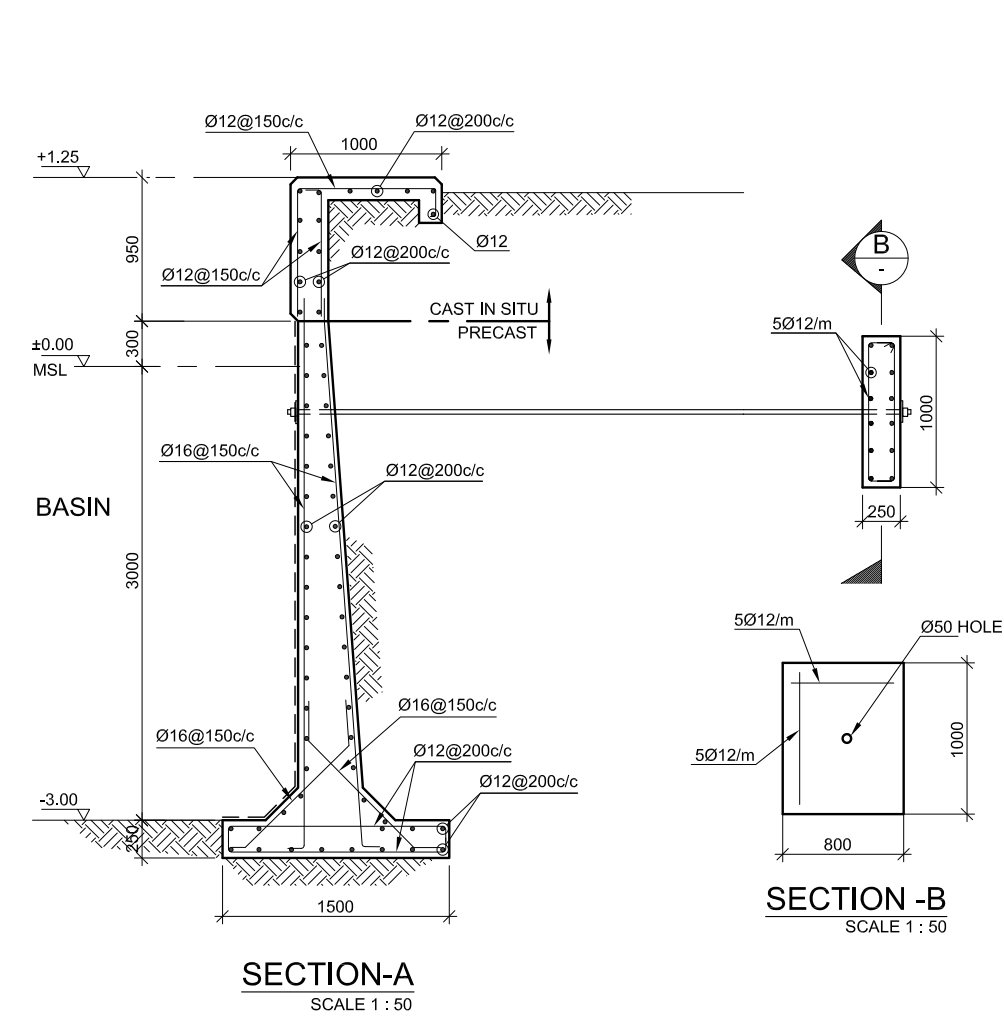
DETAIL-3

- 1- ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METER UNLESS OTHERWISE SHOWN
- 2- PLAIN CEMENT CONCRETE (PCC) SHALL BE OF GRADE C10 (OR 10 N/ MM² WHEN COMPRESSIVE STRENGTH AT 28 DAYS)
- 3- REINFORCED CEMENT CONCRETE (RCC) FOR WATER RETAINING STRUCTURE SHALL BE C40 FOR ALL PRECAST AND C35 FOR ALL CAST IN SITU ELEMENTS (COMPRESSIVE STRENGTH AT 28 DAYS)
- 4- YIELD STRENGTH OF STEEL REINFORCEMENT SHALL BE 460 N/ M
- 5- ALL STRUCTURE CONCRETE SHALL BE FROM SULPHATE RESISTANT CEMENT

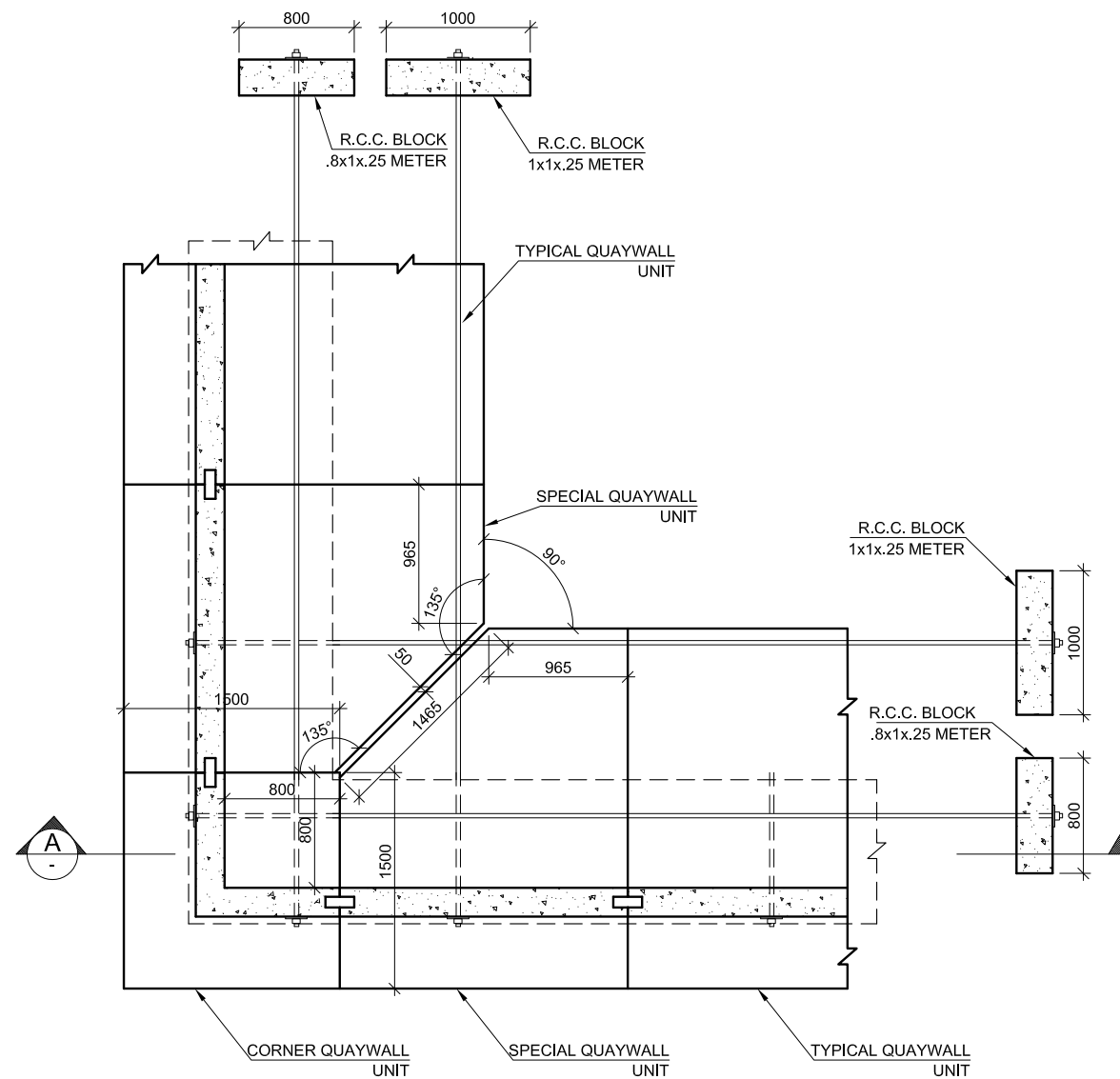
REV.	DATE	DESCRIPTION		DRAWN	CHKD.	APPRD.
REVISION						
CLIENT						
 MINISTRY OF HOUSING & INFRASTRUCTURE REPUBLIC OF MALDIVES						
CONSULTANT:						
 Al-Habshi Consultants Office Tel.: 2430103 / 2433131 - Fax : 2431136 P.O.Box 27154 Safat 13132 - Kuwait						
PROJECT:						
RECONSTRUCTION OF HARBORS PHASE-2						
DRAWING TITTLE:						
KOLHUFUSHI HARBOUR QUAY WALL DETAILS						
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE	
SS	JP	MS	MA	1:50	15-07-14	
PROJECT No.	SHEET No.	DRAWING No.				
K-601	1 OF 4	KF-CI-06				
Rev.	0					



DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:50	15-07-'14
PROJECT No.	SHEET No.	DRAWING No. KF-CI-06			
K-601	2 OF 4				
REV. No.	0				



SECTION -B
SCALE 1 : 50





PLAN
SCALE 1 : 50

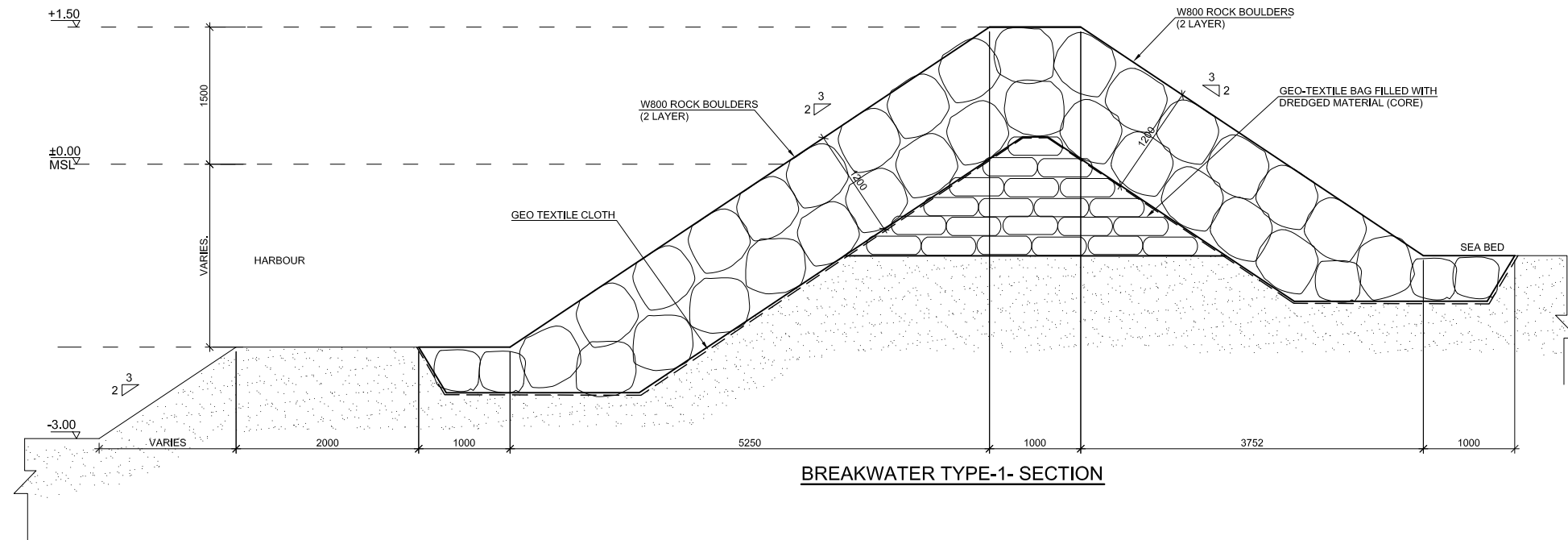
270° CORNER QUAY WALL

NOTES:

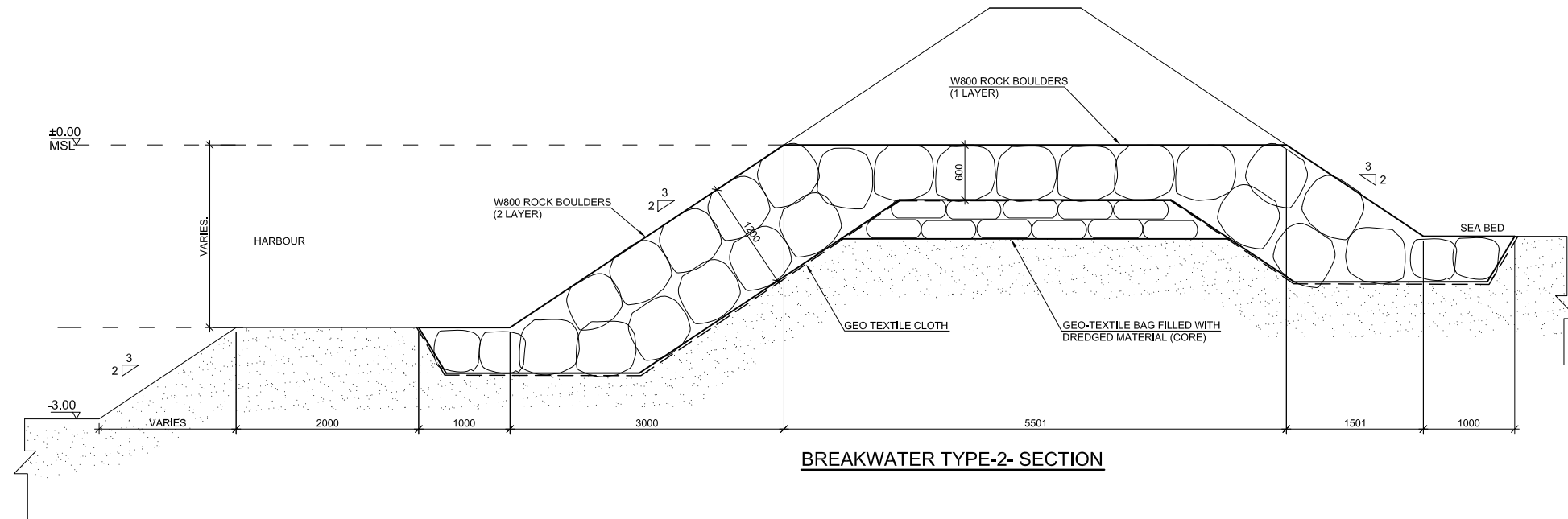
- 1 - ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METER UNLESS OTHERWISE SHOWN
- 2 - PLAIN CEMENT CONCRETE (PCC) SHALL BE OF GRADE C10 (OR 10 N / MM² WHEN COMPRESSIVE STRENGTH AT 28 DAYS)
- 3 - REINFORCED CEMENT CONCRETE (RCC) FOR WATER RETAINING STRUCTURE SHALL BE C40 FOR ALL PRECAST AND C35 FOR ALL CAST IN SITU ELEMENTS (COMPRESSIVE STRENGTH AT 28 DAYS)
- 4 - YIELD STRENGTH OF STEEL REINFORCEMENT SHALL BE 460 N / MM²
- 5 - ALL STRUCTURE CONCRETE SHALL BE FROM SULPHATE RESISTANT CEMENT

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPRD.
REVISION					
CLIENT					
MINISTRY OF HOUSING & INFRASTRUCTURE REPUBLIC OF MALDIVES					
CONSULTANT:					
Al-Habshi Consultants Office Tel.: 2430103 / 2433131 - Fax : 2431136 P.O.Box 27154 Safat 13132 - Kuwait					
PROJECT:					
RECONSTRUCTION OF HARBORS PHASE-2					
DRAWING TITLE:					
KOLHUFUSHI HARBOUR QUAY WALL DETAILS					
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:50	15-07-14
PROJECT No.	SHEET No.	DRAWING No.			
K-601	3 OF 4	KF-CI-06			
REV. No.	0				

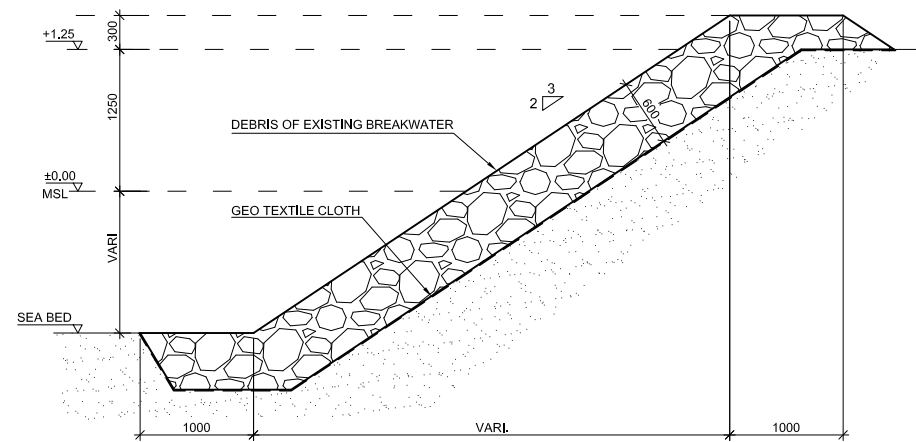
REV.	DATE		DESCRIPTION		DRAWN	CHKD.	APPRD.		
REVISION									
CLIENT  MINISTRY OF HOUSING & INFRASTRUCTURE REPUBLIC OF MALDIVES									
CONSULTANT:  Al-Habshi Consultants Office Tel.: 2430103 / 2433131 - Fax : 2431136 P.O.Box 27154 Safat 13132 - Kuwait									
PROJECT: RECONSTRUCTION OF HARBORS PHASE-2									
DRAWING TITLE: KOLHUFUSHI HARBOUR QUAY WALL DETAILS									
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE				
SS	JP	MS	MA	1:50	15-07-14				
PROJECT No.		SHEET No.		DRAWING No.					
K-601		4 OF 4		KF-CI-06					
REV. No.		0							



BREAKWATER TYPE-1- SECTION





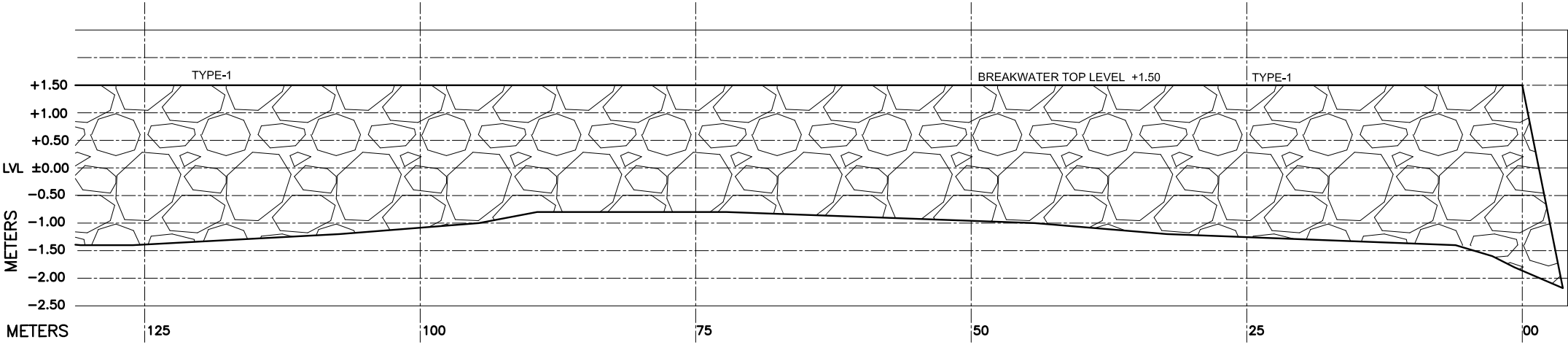
BREAKWATER TYPE-2- SECTION



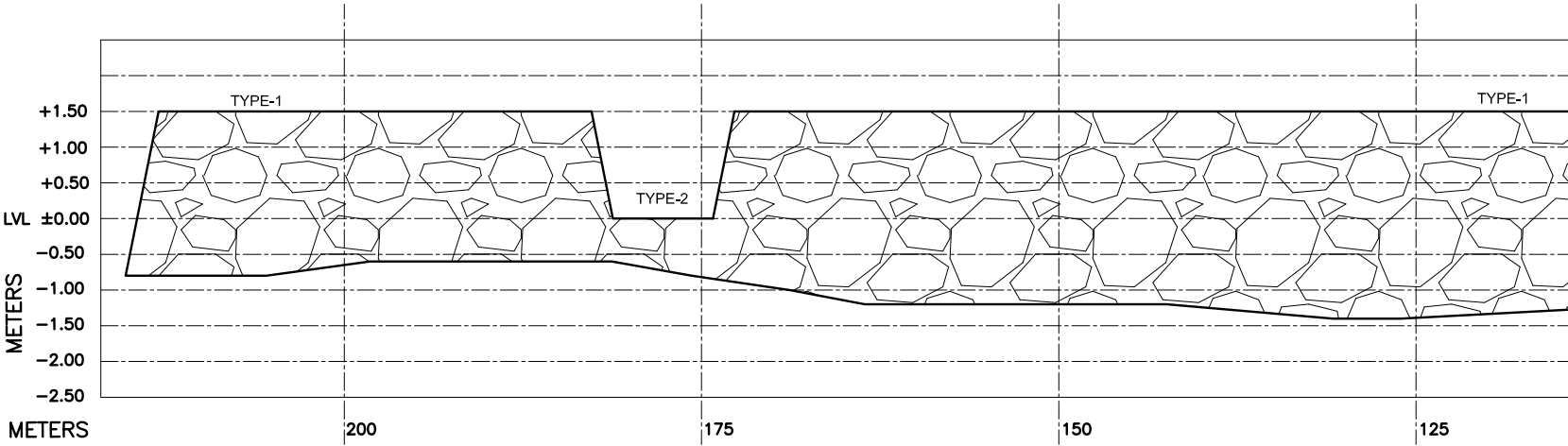
TYPICAL REVETMENT SECTION

NOTES:

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPRD.	
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 MINISTRY OF HOUSING & INFRASTRUCTURE REPUBLIC OF MALDIVES						
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PROJECT:						
RECONSTRUCTION OF HARBORS PHASE-2						
DRAWING TITLE:						
KOLHUFUSHI HARBOUR BREAKWATER DETAILS						
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE	
SS	JP	MS	MA	1:50	15-07-14	
PROJECT No.	SHEET No.	DRAWING No.				
K-601	1 OF 3	KF-CI-07				
REV. No.	0					





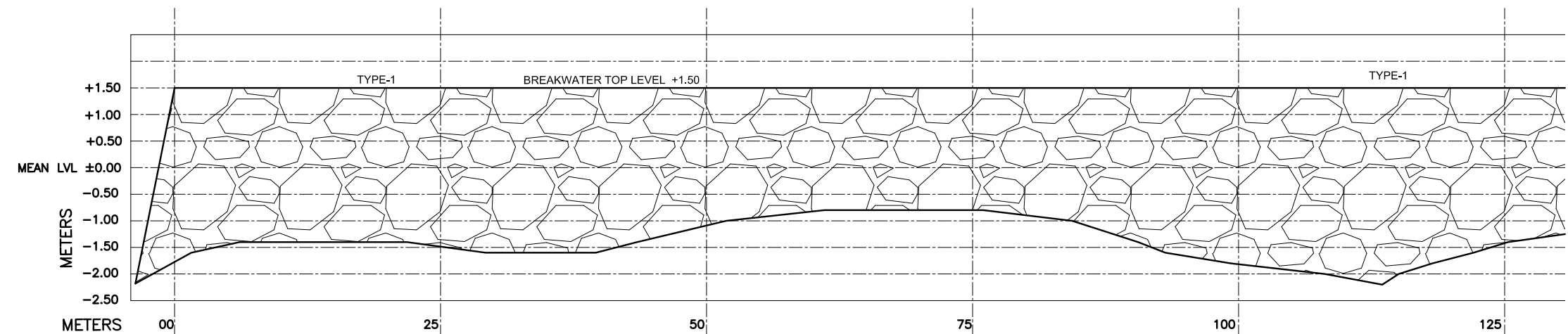
SOUTH BREAKWATER PROFILE



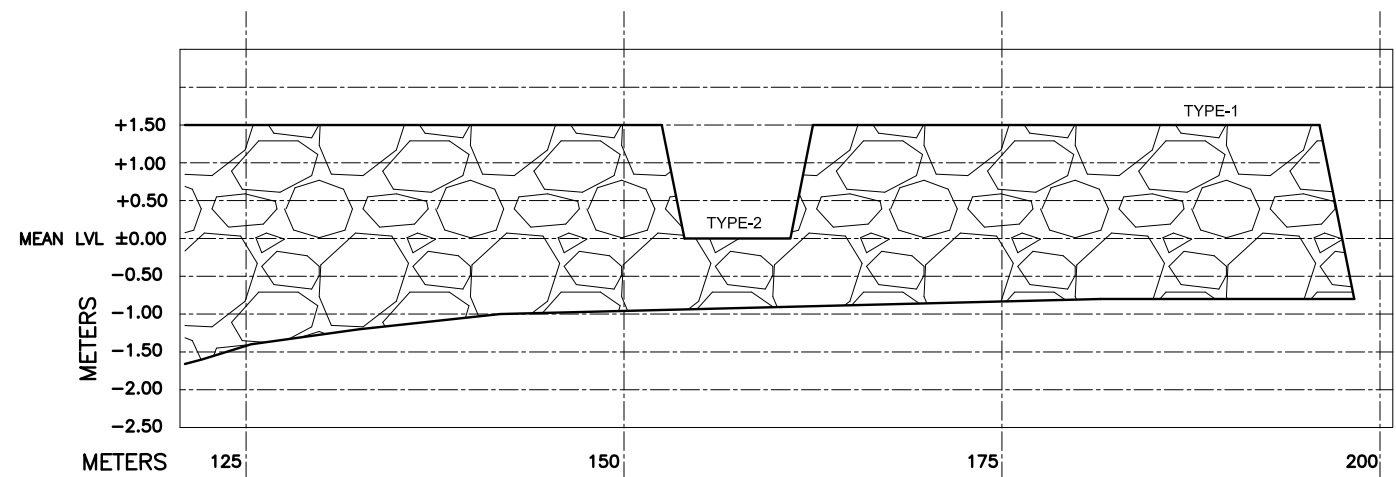
SOUTH BREAKWATER PROFILE

NOTES:

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPROD.
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CLIENT					
<div></div> <div>MINISTRY OF HOUSING & INFRASTRUCTURE</div> <div>REPUBLIC OF MALDIVES</div>					
CONSULTANT:					
<div></div> <div>Al-Habshi Consultants Office</div> <div>Tel: 2430103 / 2433131 - Fax: 2431136 P.O.Box 27154 Safat 13132 - Kuwait</div>					
PROJECT:					
RECONSTRUCTION OF HARBORS					
PHASE-2					
DRAWING TITLE:					
KOLHUFUSHI HARBOUR					
BREAKWATER DETAILS					
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:50	15-07-14
PROJECT No.	SHEET No.	DRAWING No.			
K-601	2 OF 3	KF-CI-07			
REV. No.	0				




NORTH BREAKWATER PROFILE



NORTH BREAKWATER PROFILE

NOTES:

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPRD.
REVISION					
CLIENT					
<div><div></div><div>MINISTRY OF HOUSING & INFRASTRUCTURE REPUBLIC OF MALDIVES</div></div>					
CONSULTANT:					
<div><div></div><div>Al-Habshi Consultants Office Tel.: 2430103 / 2433131 - Fax : 2431136 P.O.Box 27154 Safat 13132 - Kuwait</div></div>					
PROJECT:					
RECONSTRUCTION OF HARBORS PHASE-2					
DRAWING TITLE:					
KOLHUFUSHI HARBOUR BREAKWATER DETAILS					
DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:50	15-07-14
PROJECT No.	SHEET No.	DRAWING No.			
K-601	3 OF 3	KF-CI-07			
REV. No.	0				



- 1- ALL DIMENSIONS ARE IN MILLIMETER AND LEVELS ARE IN METER UNLESS OTHERWISE SHOWN
- 2- PLAIN CEMENT CONCRETE (PCC) SHALL BE OF GRADE C10 (OR 10 N/MM² WHEN COMPRESSIVE STRENGTH AT 28 DAYS)
- 3- ALL STRUCTURE CONCRETE SHALL BE FROM SULPHATE RESISTANT CEMENT

REV.	DATE	DESCRIPTION	DRAWN	CHKD.	APPR.
REVISION					

CLIENT

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REPUBLIC OF MALDIVES

CONSULTANT:

Al-Habshi
Consultant

Al-Habshi Consultants Office

Tel.: 2430103 / 2433131 - Fax : 2431136
P.O.Box 27154 Safet 13132 - Kunwat

PROJECT:

RECONSTRUCTION OF HARBORS

PHASE-2

DRAWING TITLE:

KOLHUFUSHI HARBOUR

TYPICAL DETAILS

DESIGNED	DRAWN	CHECKED	APPROVED	SCALE	DATE
SS	JP	MS	MA	1:50	15-07-'14

PROJECT No.	SHEET No.
K-601	1 OF 1
Rev. No.	0

DRAWING No.

KF-CI-08