Ref.: AACWBIECEM00_0_11812L.19

25 November 2019

China State Construction Engineering (Hong Kong) Ltd.
29/F, China Oversea Building,
139 Hennessy Road,
Wanchai, Hong Kong

By Post and Email

Attention: Mr. Chris Leung, Project Director

Dear Sir,

Re: Contract No. HY/2009/15
Central – Wan Chai Bypass Tunnel (Causeway Bay Shelter Section)
FEP-04/356/2009
Silt Screen Deployment Plan (Revision 4)

Reference is made to the captioned submission dated 20 November 2019 received by email on 25 November 2019, please be informed that we have no adverse comment on the captioned submission in accordance with Condition 2.9 of FEP-04/356/2009.

Thank you for your attention and please do not hesitate to contact the undersigned should you have any queries.

Yours sincerely,

David Yeung
Independent Environmental Checker

c.c.	HyD	Attn: Mr. Tony Cheung	by fax: 2714 5289
	CEDD	Attn: Mr. Jimmy Ling	by fax: 2301 1277
	AECOM CWB	Attn: Mr. Eric Wong	by fax: 3912 3010
	AECOM WDII	Attn: Ms. Gloria Tang	by fax: 2587 1877
	Lam	Attn: Mr. Raymond Dai	by fax: 2882 3331

Q:\Projects\AACWBIECEM00\Corr\AACWBIECEM00_0_11812L.19.docx

Ramboll Hong Kong Limited 英環香港有限公司
21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899
www.ramboll.com

Lam Geotechnics Limited
Ground Investigation & Instrumentation Professionals

華益土力有限公司

Ref : G1525/CS/L1188/FEP-04/356/2009
Date : 25 November 2019

China State Construction Engineering (Hong Kong) Ltd.
29/F, China Oversea Building,
129 Hennessy Road,
Hong Kong

Attn: Project Director, Mr. Chris Leung

Dear Sir,

Contract No. HY/2009/15
Central – WanChai Bypass Tunnel (Causeway Bay Shelter Section)
Silt Screen Deployment Plan (Revision 4)

Referring to the captioned submission received through email on 25 November 2019, we have reviewed your submitted details and hereby certify the submission in accordance with Condition 2.9 of FEP-04/356/2009.

Should you have any enquiry, please feel free to contact the undersigned at 2839 5666.

Yours faithfully,
For and On Behalf of Lam Geotechnics Limited

Raymond Dai
Environmental Team Leader

c.c.

HyD	- Mr. Tony Cheung	(By Fax: 2714-5289)
CEDD	- Mr. Jimmy Ling	(By Fax: 2301-1277)
AECOM CWB	- Mr. Eric Wong	(By Fax: 3912-3010)
AECOM WDII	- Ms. Gloria Tang	(By Fax: 2587-1877)
Ramboll	- Mr. David Yeung	(By Fax: 3465-2899)

11/F, Centre Point, 181-185 Gloucester Road, Wanchai, Hong Kong
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Website: www.lamgeo.com Email: info@lamgeo.com

CONTRACT HY/2009/15

CENTRAL – WAN CHAI BYPASS
TUNNEL (CAUSEWAY BAY TYPHOON SHELTER SECTION)

Silt Screen Deployment Plan

Submission Status: For Approval

Revision	Description	Date
0	1st Submission	19 October 2010
1	2nd Submission	5 January 2011
2	3rd Submission	17 February 2011
3	4th Submission	13 June 2011
4	5th Submission	20 November 2019

Prepared by: Environmental Officer	Gabriel Wong	Date: 20 November 2019

LIST OF CONTENT

EPD's observation / comment via email dated 31 Oct 2011 (ref:. Raymond LY LA/EPD/HKSARH/E[MA]31	**Responses**
Wan Chai Development Phase II – Central-Wan Chai Bypass Tunnel (Causeway Bay Typhoon Shelter Section) Silt Screen Deployment Plan (Rev.3)	
a. Section 3: Please clarify whether the "top" of the frame will also be covered by silt screen	Clarified, the top will also be covered by silt screen

1.0 Introduction

The purpose of this plan is to illustrate the design, installation and subsequent maintenance procedures of the silt screens to be deployed during the construction of the Central – Wan Chai Bypass Tunnel in accordance with the contract requirement and the condition stipulated in the Environmental Permit No. EP-356/2009 and Further Environmental Permit No. FEP-04/356/2009. Under the EP and FEP condition 2.9, silt screens shall be provided as protection for the existing cooling seawater intakes, including Intake No.8 for the Excelsior Hotel & World Trade Centre/No.27-63 Paterson Street, and Intake No.9 for the Winsor House during the concurrent dredging activities take place at reclamation shoreline zones namely HKCEC and TCBR (Scenario 2C). During concurrent dredging activities at Sewage Pipelines Zone and reclamation shoreline zone TCBR (Scenario 2B), the above two intakes shall be protected similarly, with additional silt screen to be provided as protection for Intake No. C31 for the Queensway Government Offices.

The silt screens for Intakes No. 8 and 9, which were also referred as C6 & C7 in EM&A Manual, was designed and constructed by CHEC-CRBC JV, the Main Contractor for the Contract No. HY/2009/11. China State Construction Engineer (Hong Kong) Limited (CSHK), the Main Contractor for the Contract No. HY/2009/15, was responsible for the design, construction, operation, maintenance and removal of the silt screens for Intake No. C31.

A meeting was held on 20 May 2011 between representatives from The Excelsior, Kai Shing Management Services Ltd (Property management group for Excelsior Hotel and World Trade Centre), CHEC-CRBCJV, CSHK with Engineer's Representative and Environmental Team. Excelsior Hotel's representative advised that the seawater Intake No. 8 was no longer in use and the valves inside the pumping station had been closed. As a result to the abandonment of seawater intake, the removal of silt screen for Intake No. 8 was taken place on 21 May 2011 and intake water quality impact monitoring was terminated from 26 May 2011. Notes of the meeting have been attached in Appendix D.

On 23 May 2011, the silt screen for Intake No. 9 was handed over to CSHK for subsequent operation, maintenance and removal. Instruction of silt screen take over has been attached in Appendix E.

2.0 List of Reference Document

2.1 Particular Specification, relevant conditions in the EP and our remarks for the marine ground investigations is listed as follows for ease of references.

PS Clause No. and EP Condition	Remarks
PS Appendix 25.4 EP No. EP-356-2009 Condition 2.9 FEP-04/356/2009 Condition 2.9	The permit holder shall liaise with the owners and the operators of the seawater intakes as shown in Table 1 of this Permit on details of silt screen installation, maintenance and removal at the seawater intakes. The indicative locations of the intakes are shown in Figure 4 and Figure 5 of this Permit for reference.
PS Appendix 25.4 EP No. EP-356-2009 Condition 2.9 FEP-04/356/2009 Condition 2.9	At least two weeks prior to the commencement of the marine works, the permit holder shall deposit with the Director four hard copies and one electronic copy of a silt screen deployment plan to provide details of the design, operation and maintenance requirement.
PS Appendix 25.4 EP No. EP-356-2009 Condition 2.9 FEP-04/356/2009 Condition 2.9	The silt screen deployment plan shall be certified by the ET Leader and verified by the IEC as conforming to the relevant information and recommendation contained in the approved EIA report (Reg. No. AEIAR –125/2008) and Liaison results with the owners and the operators of the seawater intakes.
PS Appendix 25.4 and EP No. EP-356-2009 Condition 2.9	Silt screens shall be installed at seawater intakes prior to the commencement of the corresponding marine works.
PS Appendix 25.4 and EP No. EP-356-2009 Condition 2.9	To avoid refuse entrapment and to ensure representative impact monitoring results, silt screens shall be maintained and refuse around them shall be collected at regular intervals on a daily basis so that water behind the silt screens is kept free from floating debris during the impact monitoring period.

3.0 General Layout of Silt Screen

For Intakes No.8 and No.9, the geotextile will be installed at a wall-mounted steel frame. The geotextile can be removed for regular cleaning or maintenance.

For Intake No. C31, there is a pump house at the seaside accommodating the seawater intakes for QGO. As agreed with the operator (EMSD), a single layer of geotextile will be attached onto the existing frame inside the pump house to protect the water quality. The top, the surface and the bottom of the frame will be covered by the silt screen. The specification of geotextile is the same as Intakes No.8 and No.9.

The location of silt screen for Intakes No.8, No.9 and C31 are appended in Appendix A.

4.0 Maintenance Schedule

The maintenance schedule of the silt screens refers to the table below. It is prepared based on the latest Initial Works Programme and it may subject to changes to reflect the site situation / progress.

Maintenance Period (Intake No. 8)		
From (a)	To (b)	Duration (months) (b) – (a)
Nov 2010	**May 2011**	**6**

Maintenance Period (Intake No. 9)		
From (a)	To (b)	Duration (months) (b) – (a)
May 2011	**Nov 2013**	**30**

Maintenance Period (Intake No. C31)		
From (a)	To (b)	Duration (months) (b) – (a)
Jan 2011	**June 2011**	**5**

5.0 Maintenance

5.1 For Intakes No. 8 & 9, site foreman and supervisors will be assigned to check the condition of the silt screens at daily intervals during the course of the marine works. While floating refuse around the silt screens will be collected to avoid blockage of sea water flow by floating debris. Checklist for Intake No.9 has been designed to standardize the inspection and the format of the inspection checklist is enclosed in Appendix B.

5.2 Unlike Intakes No. 8 & 9, Intake No. C31 was located about 5 m below ground level, which is fully submerged at sea during tidal. As such, rubbish entrapment due to floating debris behind the silt screen therefore is not existed. As agreed with the operator, the maintenance of silt screen shall be carried out on a weekly basis. Checklist for Intake No. C31 has been designed to standardize the inspection and the format of the inspection checklist is enclosed in Appendix B.

5.3 All completed checklists shall be kept for record.

5.4 If any of the silt screens is found damaged and repairing works are identified as necessary, all marine works within the region 50m from the corresponding intake would be temporarily ceased. The silt screens would be lifted up from the sea by using chain block pulley system and with the aid of crane barge if necessary so that the damaged parts (e.g. geotextile filter, steel mesh, etc.) of the silt screens can be repaired/replaced.

5.5 The ceased marine works as mentioned will only be resumed after the damaged silt screen is satisfactorily repaired.

5.6 Spare geotextile materials and other associated components will be stored on site for readily repairing/replacement in case of damages.

6.0 Technical Details and Materials of Silt Screen

The details of silt screen design and materials are attached in Appendix C.

7.0 Appendices

7.1 Appendix A – Silt Screen Location Plan

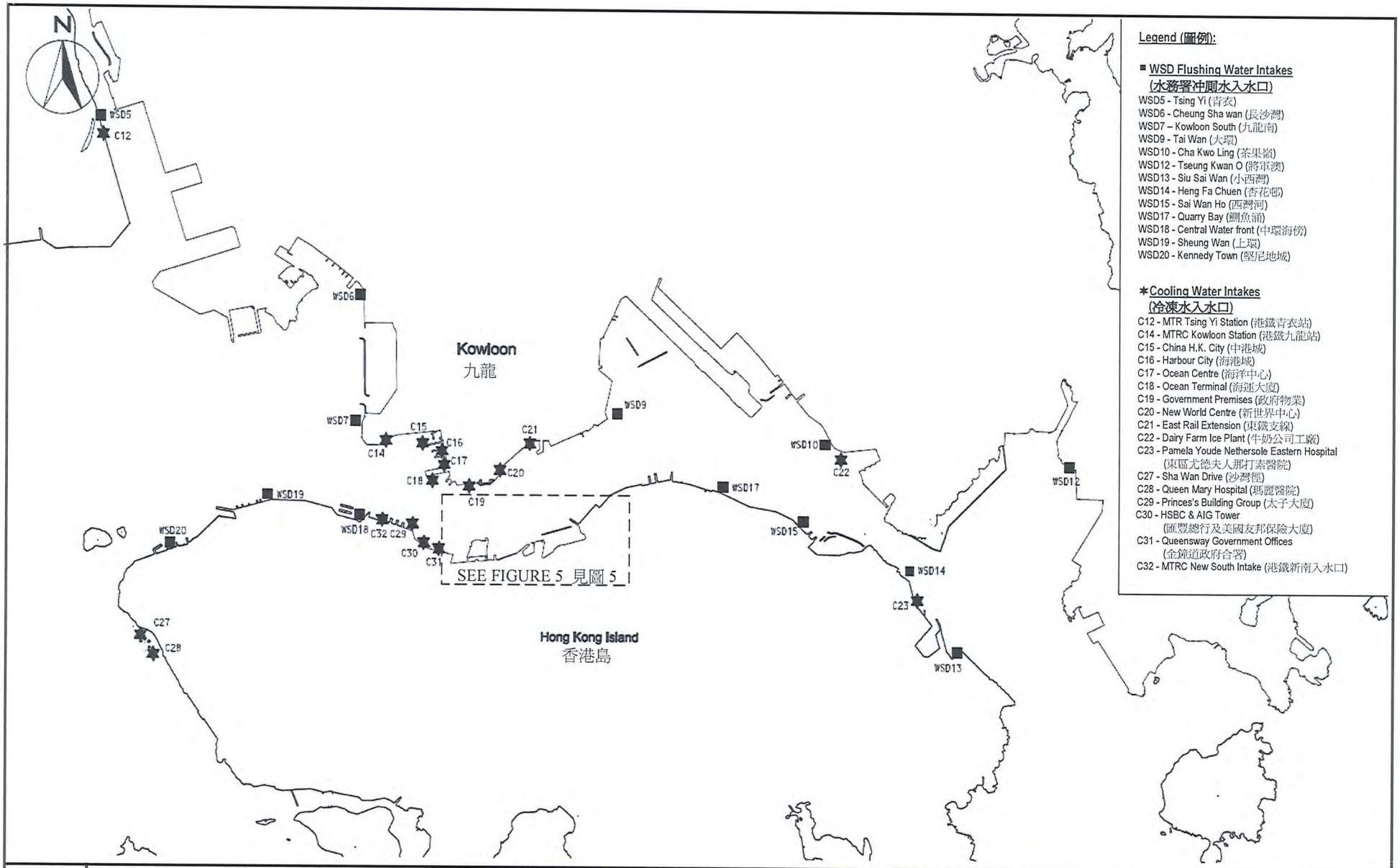
7.2 Appendix B – Daily Inspection Checklist

7.3 Appendix C – Technical Details and Materials for Silt Screen

7.4 Appendix D – Notes of Liaison Meeting for Silt Screen Removal after the Decommissioning of Seawater Intake No. 8

7.5 Appendix E – Instruction of Take Over Silt Screen at Windsor House Seawater Intake

Appendix A – Silt Screen Location Plan



Project Title: Central - Wan Chai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section) (Contract No. HY/2009/15) - Marine Works
工程項目名稱: 中環灣仔繞道- 隧道工程(銅鑼灣避風塘段)(合約編號: HY/2009/15) - 海事工程

Environmental Permit No. : FEP- 04-356/2009
環境許可證編號 : FEP-04-356/2009

Figure 4: Indicative Location of Seawater Intakes
圖 4: 海水進水口參考位置圖

(This figure was prepared based on Figure 5.1 of the EIA report (Register No.: AEIAR-125/2008))
(本圖是根據環評報告（登記冊編號 AEIAR-125/2008）圖 5.1 編製)

Legend (圖例):

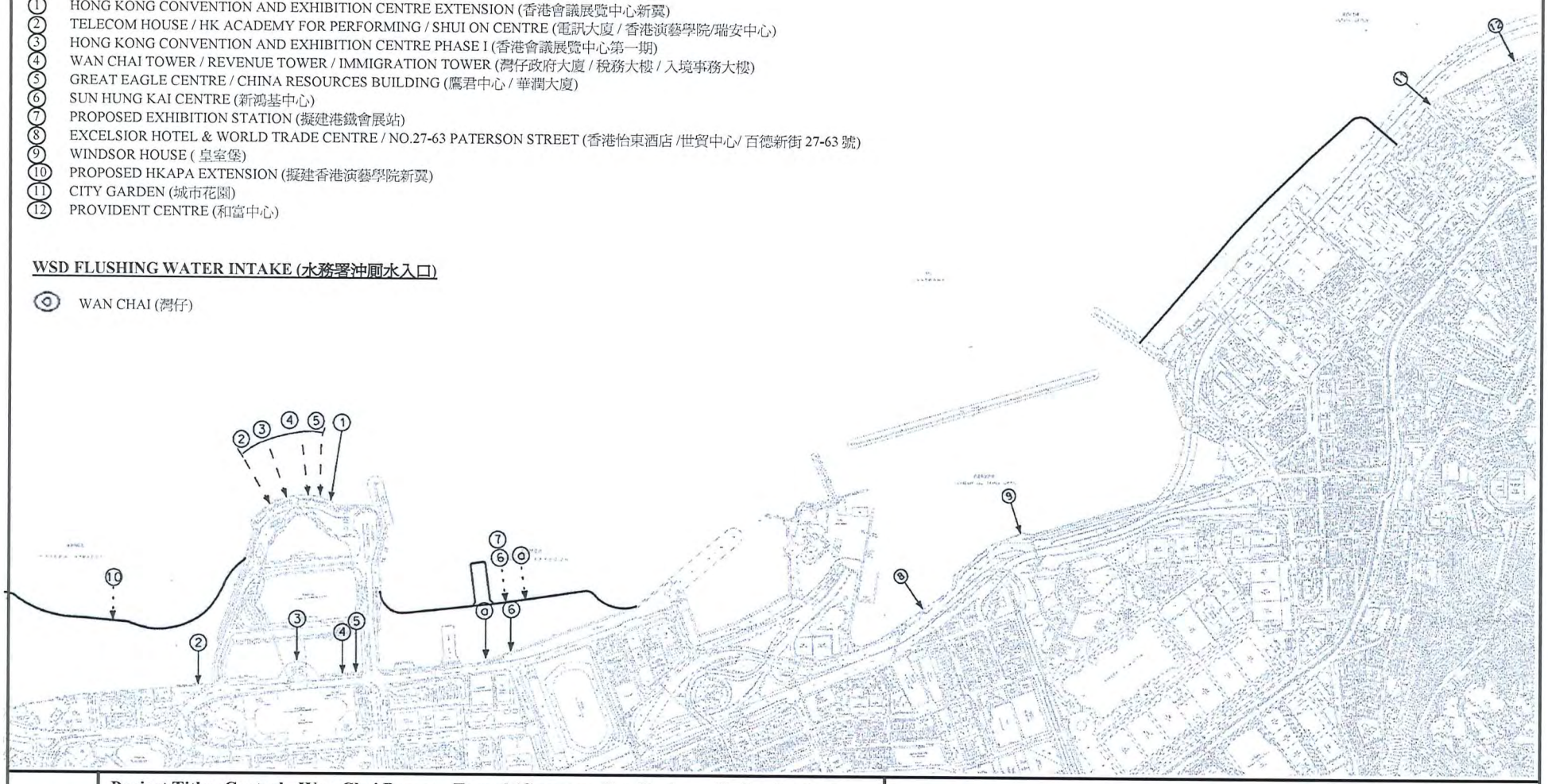
FUTURE SENSITIVE RECEIVER (AFTER PROJECT COMMISSIONED) 將來的敏感受體 (本項目工程施工後)
EXISTING SENSITIVE RECEIVER 現有的敏感受體

COOLING WATER INTAKE 冷卻水入口

1. HONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION (香港會議展覽中心新翼)
2. TELECOM HOUSE / HK ACADEMY FOR PERFORMING / SHUI ON CENTRE (電訊大廈 / 香港演藝學院/瑞安中心)
3. HONG KONG CONVENTION AND EXHIBITION CENTRE PHASE I (香港會議展覽中心第一期)
4. WAN CHAI TOWER / REVENUE TOWER / IMMIGRATION TOWER (灣仔政府大廈 / 稅務大樓 / 入境事務大樓)
5. GREAT EAGLE CENTRE / CHINA RESOURCES BUILDING (鷹君中心 / 華潤大廈)
6. SUN HUNG KAI CENTRE (新鴻基中心)
7. PROPOSED EXHIBITION STATION (擬建港鐵會展站)
8. EXCELSIOR HOTEL & WORLD TRADE CENTRE / NO.27-63 PATERSON STREET (香港怡東酒店 /世貿中心/ 百德新街 27-63 號)
9. WINDSOR HOUSE (皇室堡)
10. PROPOSED HKAPA EXTENSION (擬建香港演藝學院新翼)
11. CITY GARDEN (城市花園)
12. PROVIDENT CENTRE (和富中心)

WSD FLUSHING WATER INTAKE (水務署沖厠水入口)

WAN CHAI (灣仔)



Project Title: Central - Wan Chai Bypass - Tunnel (Causeway Bay Typhoon Shelter Section) (Contract No. HY/2009/15) - Marine Works
工程項目名稱: 中環灣仔繞道- 隧道工程(銅鑼灣避風塘段)(合約編號: HY/2009/15) - 海事工程

Environmental Permit No. : FEP- 04-356/2009
環境許可證編號 : FEP-04-356/2009

Figure 5: Indicative Locations of Seawater Intakes
圖 5: 海水進水口參考位置圖

(This figure was prepared based on Figure 5.2 of the EIA report (Register No.: AEIAR-125/2008))
(本圖是根據環評報告（登記冊編號 AEIAR-125/2008）圖 5.2 編製)

Appendix B – Daily Inspection Checklist

Silt Screen每日檢查表

位置 : For Intakes No. 8 and No. 9 ONLY　　編号　　: _____

日期 : _____　　檢查員　　: _____

	星期一	星期二	星期三	星期四	星期五	星期六
1. 整潔						
1.1 沒有垃圾在浮架內						
1.2 已清理架內垃圾						
1.3 其它 (請註明):						
2. 鐵架狀況						
2.1 鐵架沒有損壞						
2.2 鐵架接口沒有損壞						
2.3 螺絲沒有鬆脫						
2.4 其它 (請註明):						
3. 隔泥布狀況						
3.1 隔泥布沒有損壞						
3.2 隔泥布沒有鬆脫						
3.3 其它 (請註明):						
簽署 :						

說明: ✓ = 滿意　　x = 不滿意須改善　　- = 不適用

每週檢查表

位置 : For Intake C31, Queensway Gov. Offices ONLY　　編号　　: _____

日期 : _____　　檢查員　　: _____

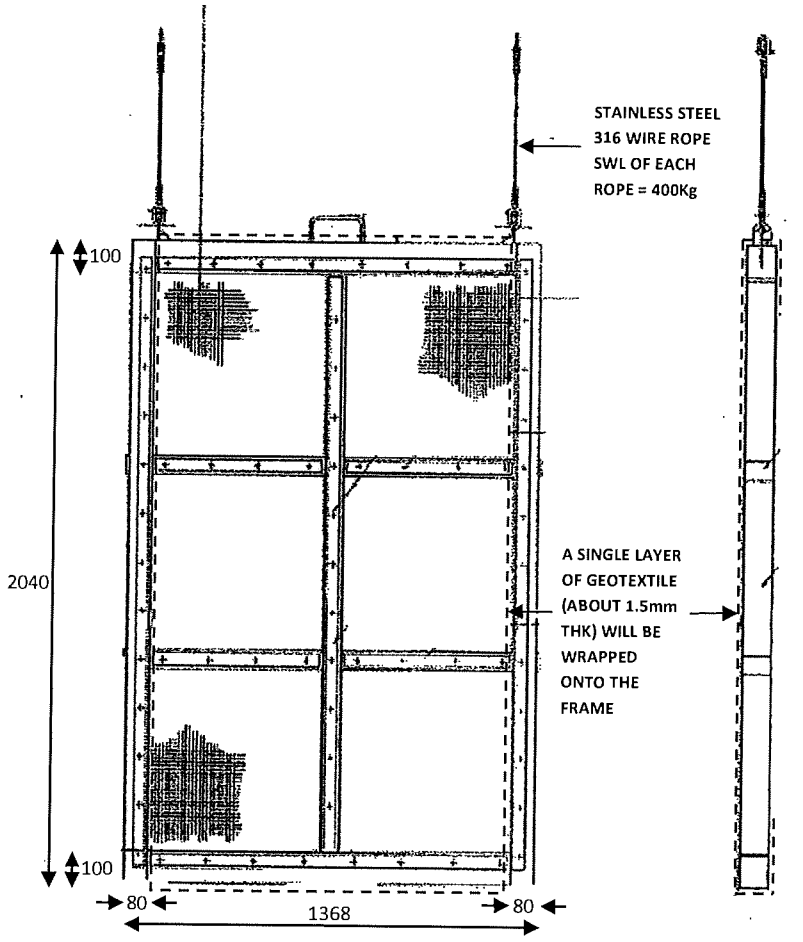
	月份 :			
	第 1 週	第 2 週	第 3 週	第 4 週
1. 整潔				
1.1 沒有垃圾在浮架內	N/A	N/A	N/A	N/A
1.2 已清理架內垃圾	N/A	N/A	N/A	N/A
1.3 其它 (請註明):				
2. 鐵架狀況				
2.1 鐵架沒有損壞	N/A	N/A	N/A	N/A
2.2 鐵架接口沒有損壞	N/A	N/A	N/A	N/A
2.3 螺絲沒有鬆脫	N/A	N/A	N/A	N/A
2.4 其它 (請註明):				
3. 隔泥布狀況				
3.1 隔泥布沒有損壞				
3.2 隔泥布沒有鬆脫				
3.3 其它 (請註明):				
簽署 :				

說明:　✓ = 滿意　　x = 不滿意須改善　　- = 不適用

Appendix C

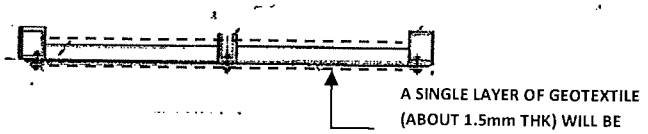
Technical Details and Materials for Silt Screen

Silt Screen for Intake C31, Queensway Government Offices



FRONT VIEW

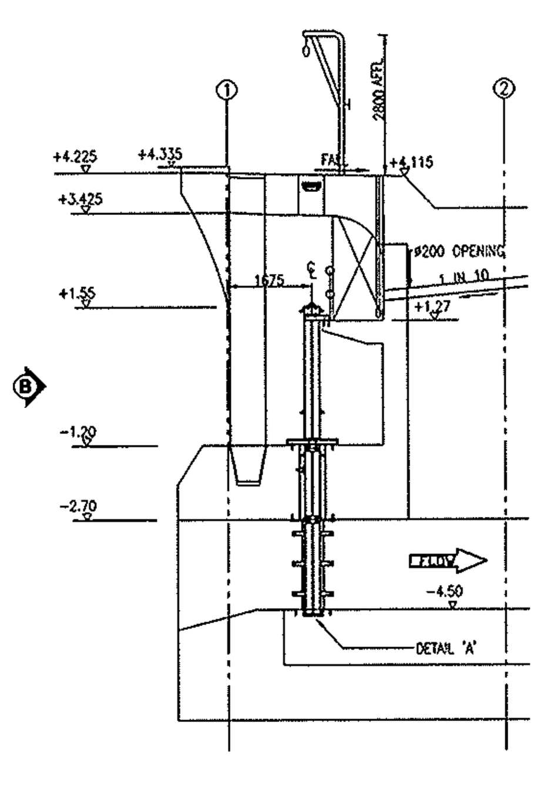
SIDE VIEW



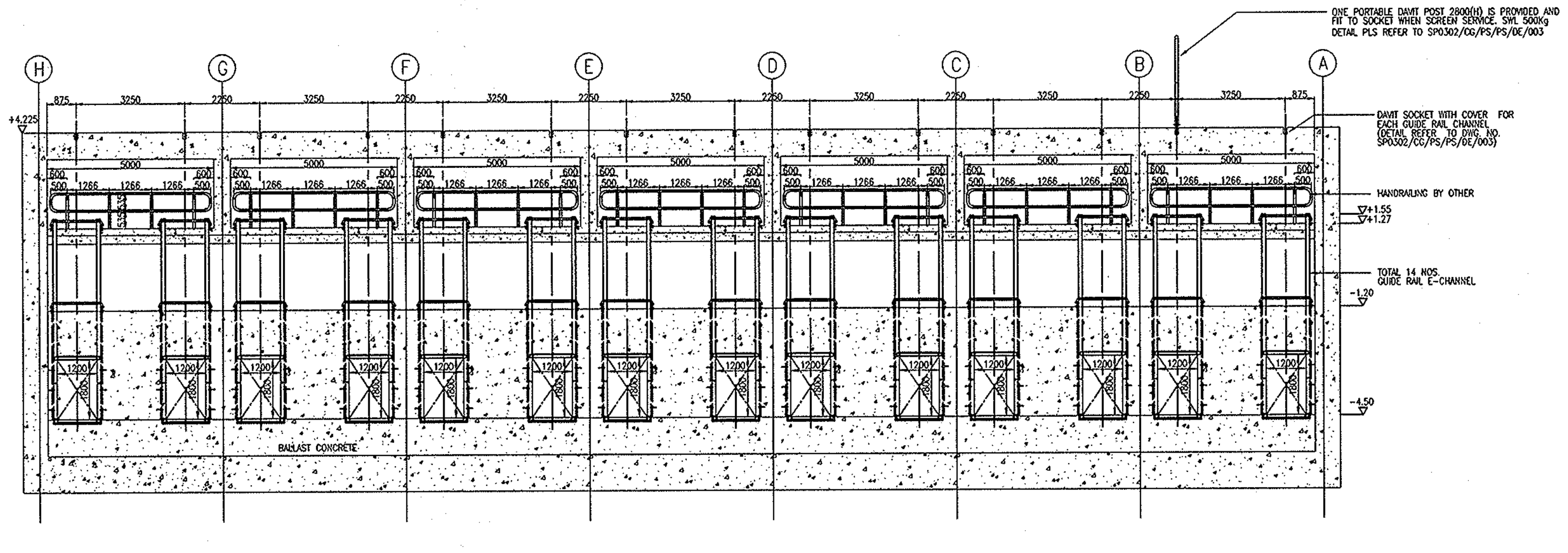
END VIEW

DRAWING REF: HANDRAILING DETAIL
H2189/S/17/C01/6530 REV.0

REMARKS:
1). ALL MATERIAL FOR GUIDE RAIL E-CHANNEL TO BE STAINLESS STEEL-316 & 6mm THICK
2). ALL BOLTS AND NUTS, WASHERS TO BE STAINLESS STEEL-316 (A4-70)
3). METHOD STATEMENT FOR INSTALLATION TO BE SEPERATE SUBMITTED
4). APPLICATION OF ANCHOR BOLTS AS FOLLOWS:
i) FOR DAVIT AND GROUND LEVEL : "HILTI" MODEL HKD-SR
ii) RAIL GUIDE RAIL : "HILTI" CHEMICAL ADHESIVE ANCHOR MODEL HVA
iii) WHEN UNDER WATER : "HILTI" CHEMICAL ADHESIVE UNDER WATER MODEL HVA-UW.
5). ALL WELDING WORK SHOULD BE AS SPECIFICATION CLAUSE 13.4.4.6. AND SUBJECT TO FINAL SUBMISSION AND APPROVAL.
6). ALL ANCHOR BOLT TO BE FIXED ON SITE.
7). 150mm SPACING TO BE RESERVED FOR ON SITE DRILLING OF EACH ANCHOR BOLTS.
8). EDGE DISTANCE OF CHEMICAL ANCHOR F1 & F2 IS 110mm (WITH NO REDUCTION FACTOR)

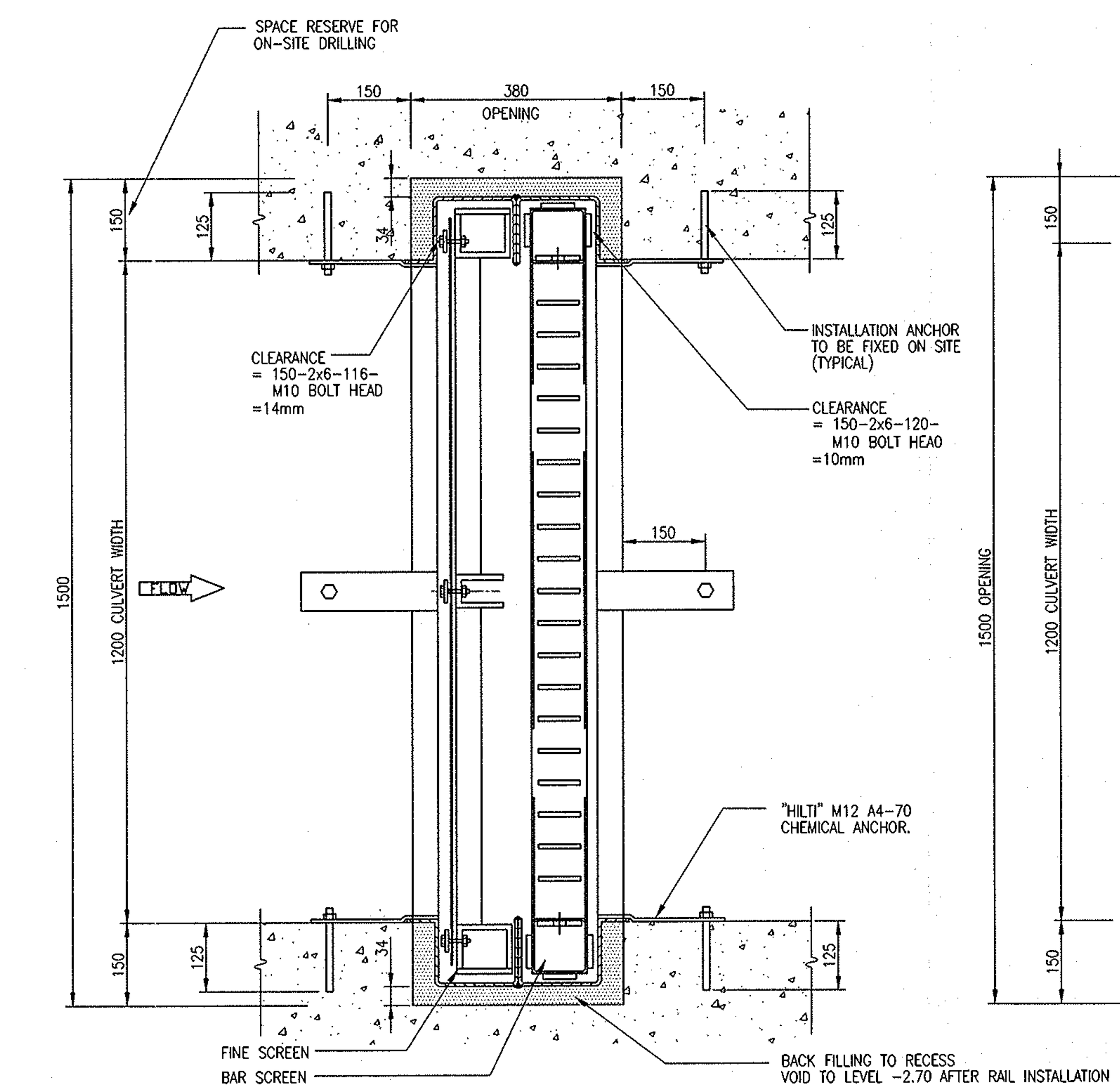


SECTION VIEW

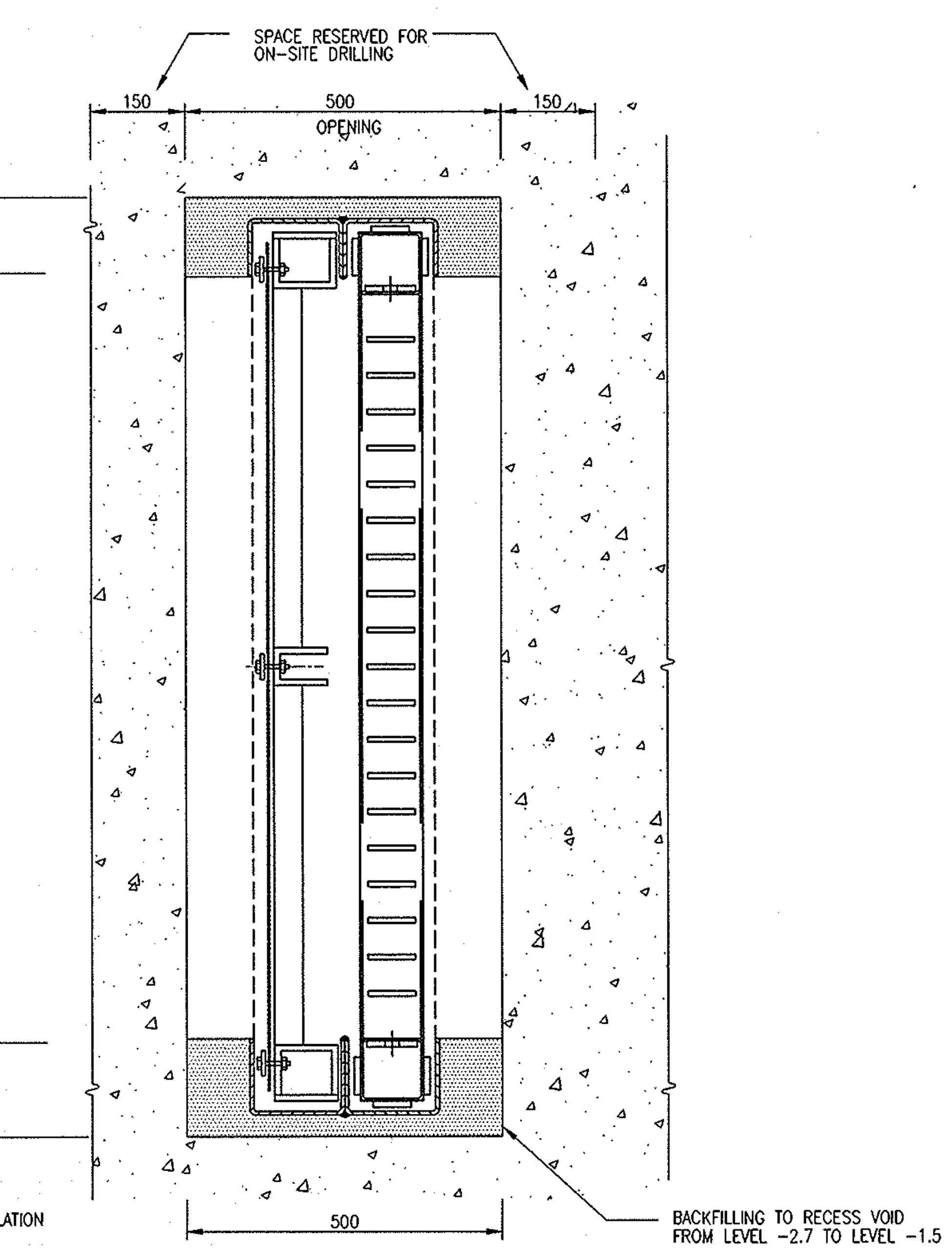


FRONT VIEW AT SEA-WALL

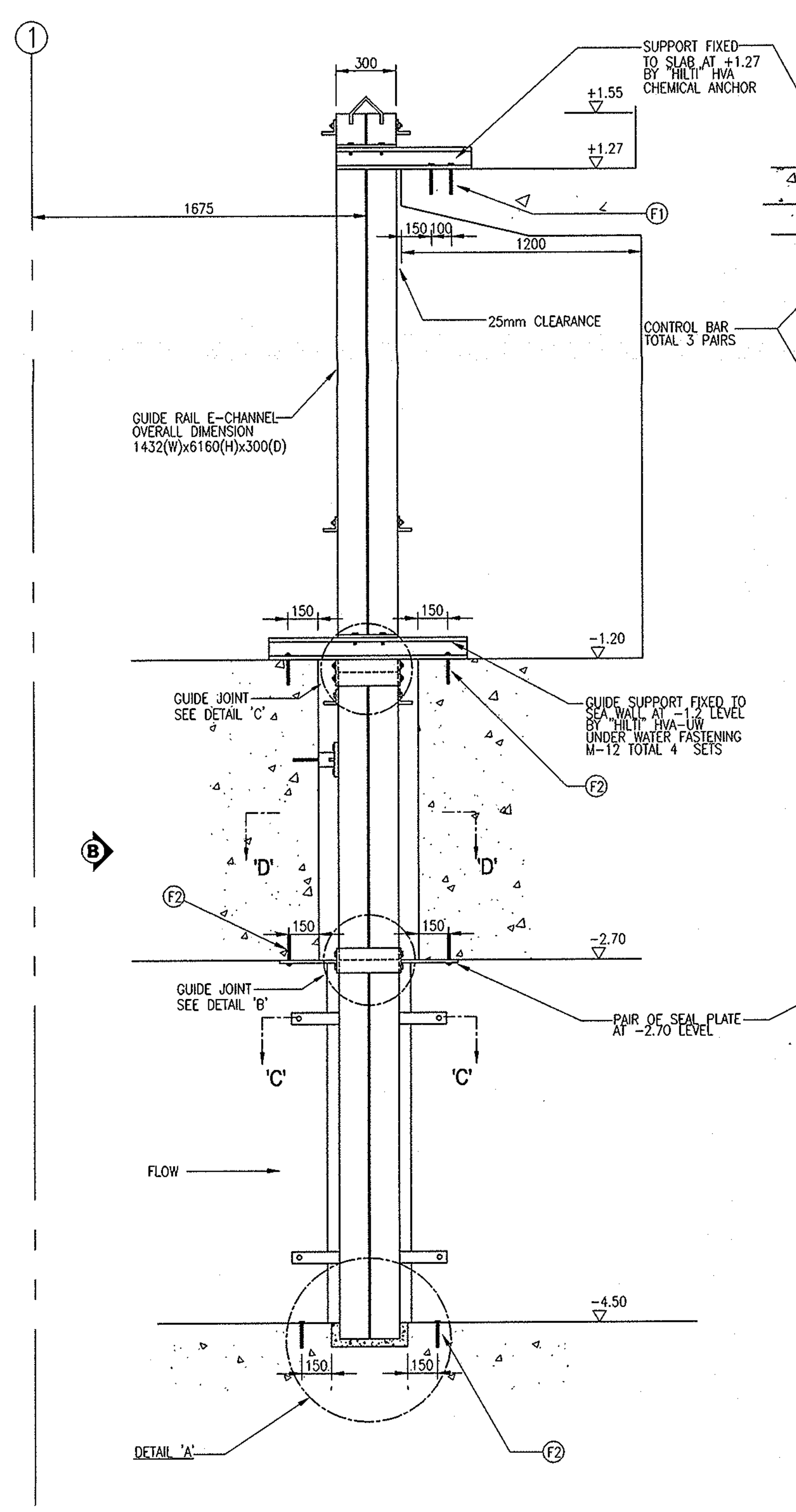
INLET SCREENS - GENERAL ARRANGEMENT FOR PUMP STATIONS
(SCALE 1:150)



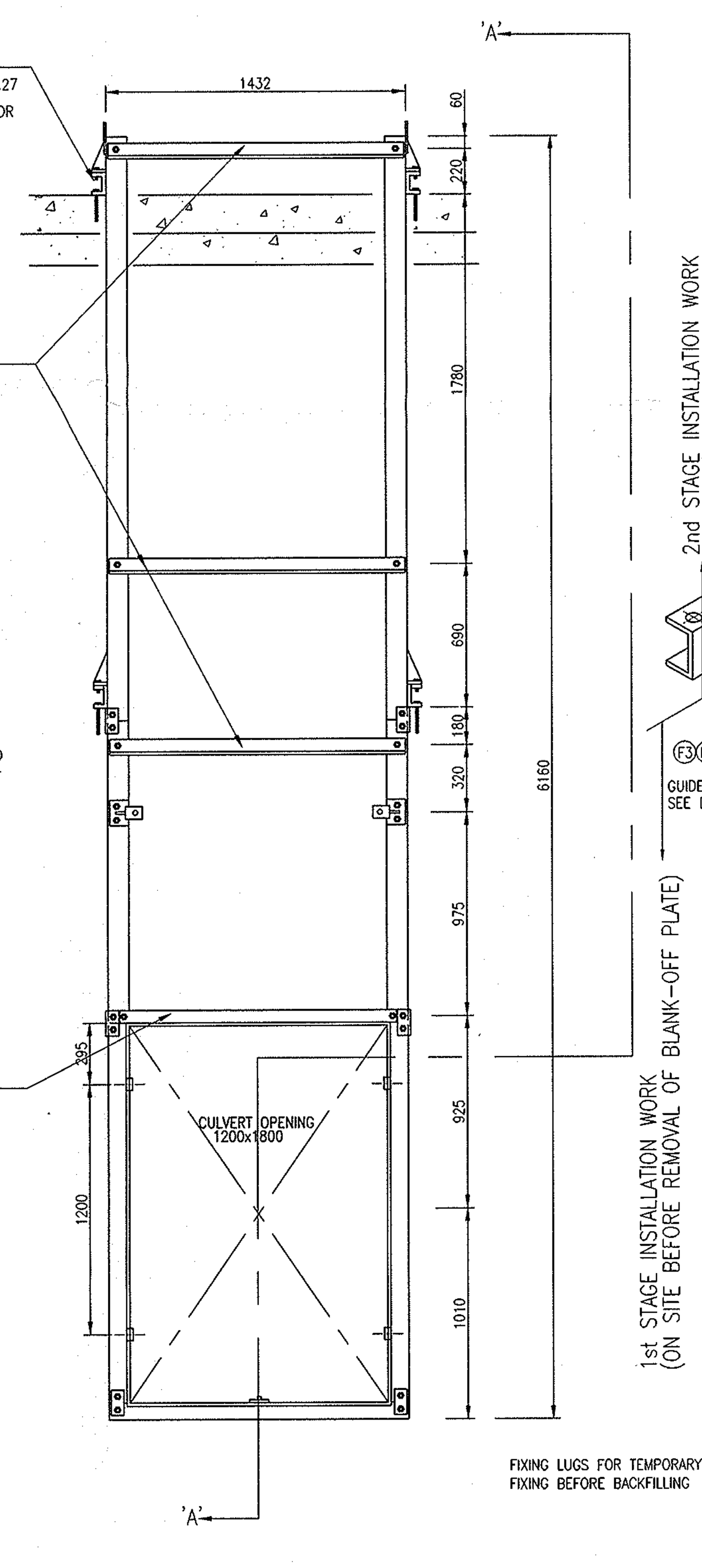
PART-SECTION 'C-C' AT -3.0 LEVEL
(SCALE 1:10)



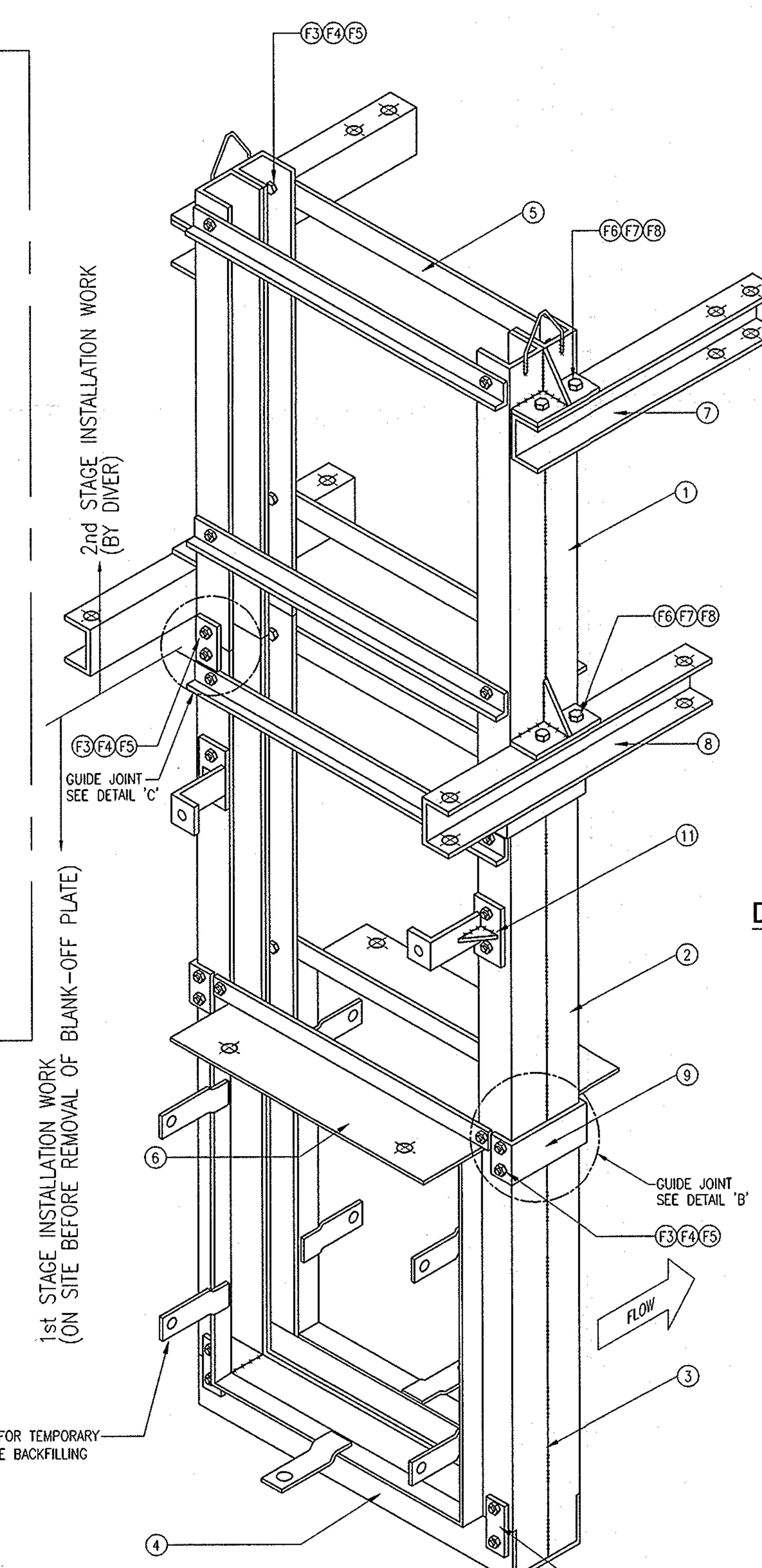
PART-SECTION 'D-D' AT -1.70 LEVEL
(SCALE 1:10)



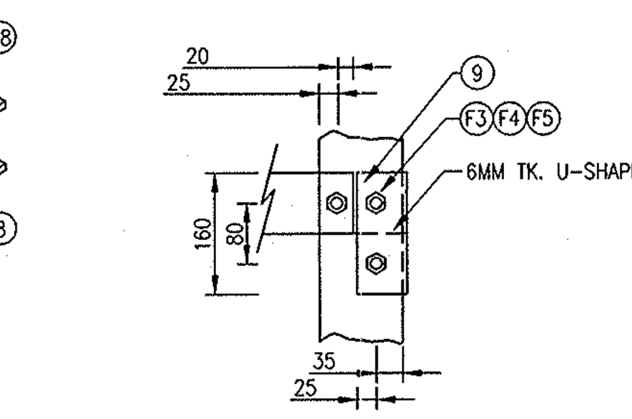
TYPICAL SECTION A-A
(SCALE 1:25)



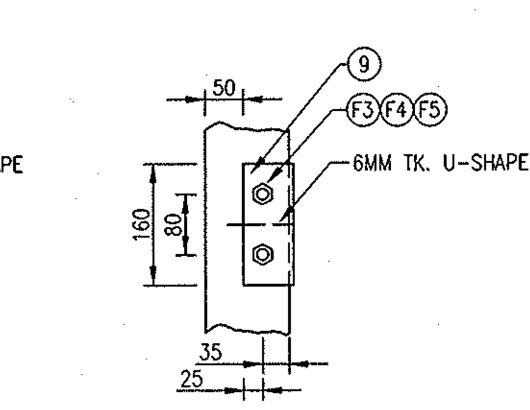
VIEW OF FACE AT INLET B-B
(SCALE 1:25)



ISOMETRIC VIEW OF GUIDE RAIL CHANNEL
(N.T.S.)



DETAIL 'B' GUIDE JOINT DETAIL
(SCALE 1:10)

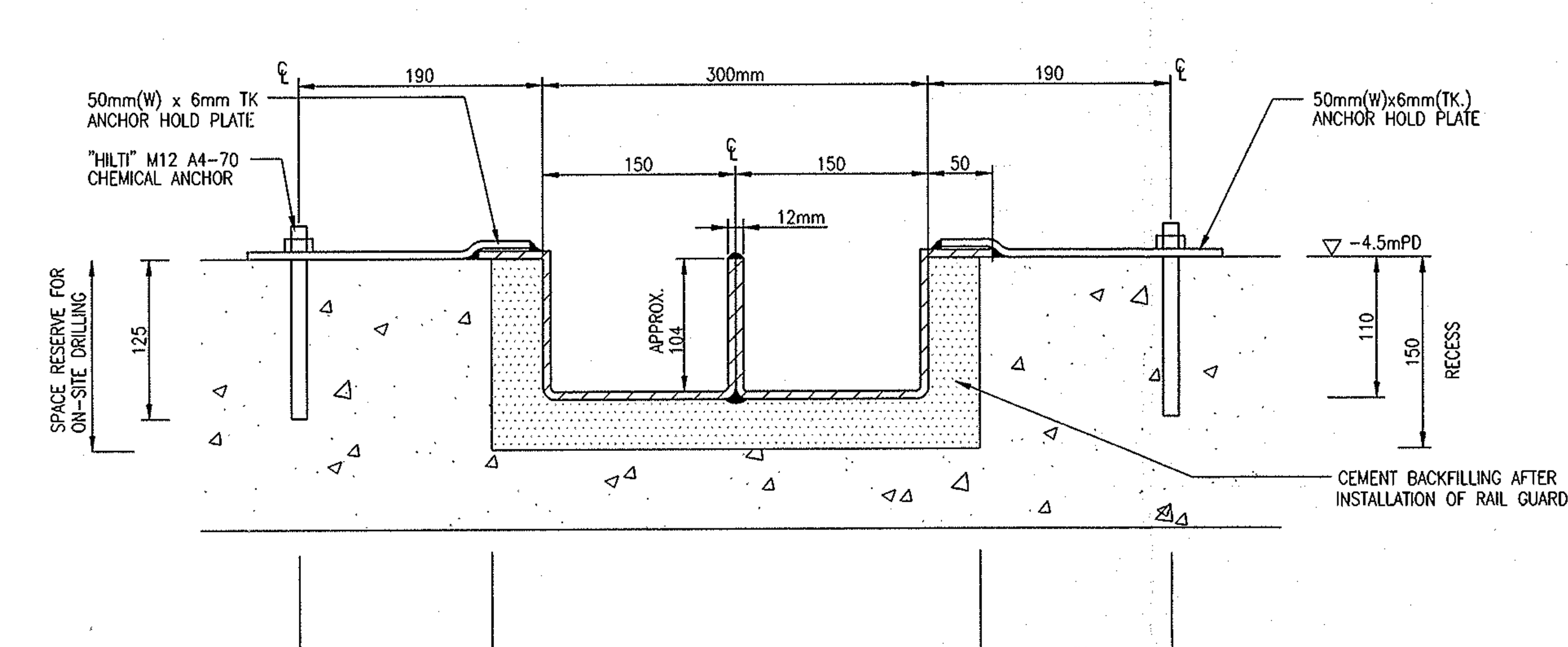


DETAIL 'C' GUIDE JOINT DETAIL
(SCALE 1:10)

RAIL GUIDE CHANNEL PARTS TABLE

PT. No.	DESCRIPTION
1	UPPER GUIDE CHANNEL SECTION
2	INTERMEDIATE GUIDE CHANNEL SECTION
3	LOWER GUIDE CHANNEL SECTION
4	BASE GUIDE CHANNEL
5	CONTROL BARS
6	SEAL PLATE
7	UPPER GUIDE SUPPORT BRACKET
8	INTERMEDIATE GUIDE SUPPORT BAR
9	GUIDE JOINT PLATE
10	GUIDE JOINT PLATE
11	INTERMEDIATE GUIDE SUPPORT BRACKET

PT. No:	DESCRIPTION
F1	M12 CHEMICAL ANCHOR MODEL - HVA
F2	M12 CHEMICAL ANCHOR MODEL - HVA-UW
F3	M10 x 25L HEXAGON BOLT
F4	M10 PLAIN WASHER
F5	M10 HEX. FULL NUT
F6	M12 x 30L HEXAGON BOLT
F7	M12 PLAIN WASHER
F8	M12 HEX. FULL NUT



DETAIL 'A' E-CHANNEL DETAIL AT -4.50 LEVEL
(SCALE 1:5)

No.	DATE	DESCRIPTION	INITIAL
B	05/01/05	AS PER ATKINS COMMENT & GENERAL REVISION	K.L.
A	16/09/04	GENERAL REVISION	K.L.
0	30/01/04	FIRST SUBMISSION	K.L.

Civil Engineering and Development Department
Hong Kong
土木工程拓展署

ATKINS 安建顧問有限公司 ATKINS CHINA LTD

MAIN CONTRACTOR
禮信中國建築寶安聯營公司
Leighton - China State - Van Oord Joint Venture

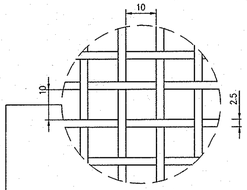
SUB CONTRACTOR
CHEVALIER 其士機電聯營公司 CHEVALIER M&E CONSORTIUM

CONTRACT
CONTRACT No. HK 12/02
CENTRAL RECLAMATION PHASE III
ENGINEERING WORKS

DRAWING TITLE
CENTRALISED GOVERNMENT COOLING WATER PUMPING STATION - DETAIL OF INLET SCREENS (SHEET 1 OF 4)

JOB No.	SP0302		
DRAWN BY	CAD		
CHECKED BY	K.L.	SIGNATURE	
A3 SIZE SCALE / A1 SIZE SCALE	AS SHOWN	DATE	30/01/2004
DRAWING No.	SP0302/CG/PS/PS/DE/001	REVISION	B

J:\DWG\CRP001\Centralised Government\PD\DETAILS\SP0302CGPSPSDE001_B.dwg, Layout1



FREE AREA CALCULATION

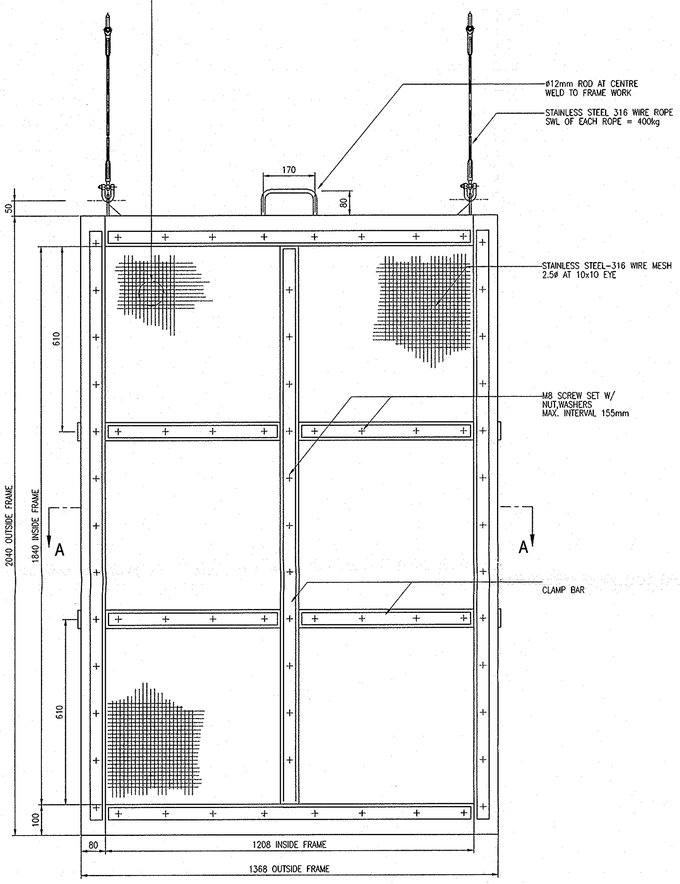
FINE SCREEN FREE AREA %

$= \frac{10 \times 10}{12.5 \times 12.5} \times 100$

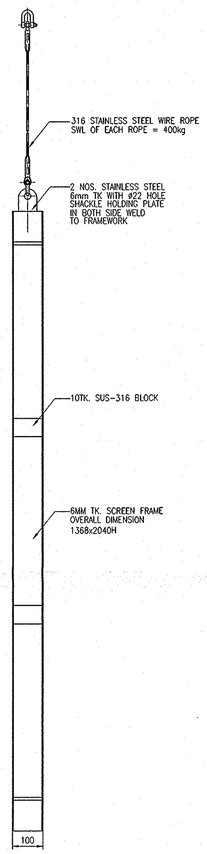
$= 64\%$

NOTES.

1. ALL METALLIC PARTS FOR FINE SCREEN, BAR SCREEN, LIFTING WIRE ROPE TO BE STAINLESS STEEL-316
2. ALL BOLTS AND NUTS, WASHERS ARE STAINLESS STEEL-316 (A4.70)
3. FOR BAR SCREEN STRUCTURE MANUFACTURED FROM ISOPTHALLIC POLYESTER RESIN PULTRUSIONS, WITH MITRED CORNERS, INTERNALLY REINFORCED. ALL SURFACES TO HAVE A SMOOTH EXTERNAL FINISH & TO BE PROTECTED WITH A SURFACE VEIL (NEXUS), TO PREVENT MARINE GROWTH.
4. GUIDE BLOCKS ARE IN HIGH DENSITY, HIGH MOLECULAR WEIGHT POLYETHYLENE.
5. ALL JOINTS ARE TO BE FULLY SEALED TO PREVENT THE INGRESS OF SEAWATER WITH 10m. HEAD.
6. DESIGN DIFFERENTIAL OF THE BAR SCREEN = 1.0m. HEAD.
7. LIFTING WIRES ROPE (STAINLESS STEEL-316) TO BE SUPPLIED
8. FRAME TO BE FITTED WITH INTERNAL BALLAST AS REQUIRED TO AVOID BUOYANCY WHEN LOWERED TO A DEPTH OF 9m.(BOTTOM OF SCREEN) IN SEAWATER WITH A SPECIFIC GRAVITY OF 1.026.
9. HOLLOW STRUCTURE TO BE FILLED WITH POLYETHYLENE FOAM TO PROVIDE WATER SEAL.
10. 2 NOS. OF LIFTING HANDLES ARE PROVIDED FOR FRP BAR SCREEN, 1 NO. OF LIFTING HANDLE IS PROVIDED FOR STAINLESS STEEL FINE SCREEN.
11. THE WEIGHT OF EACH FINE SCREEN IS 180kg AND THE WEIGHT OF EACH BAR SCREEN IS 96kg

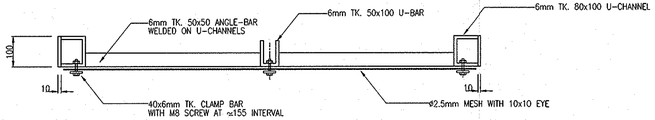


VIEW ON INLET(MESH) SIDE

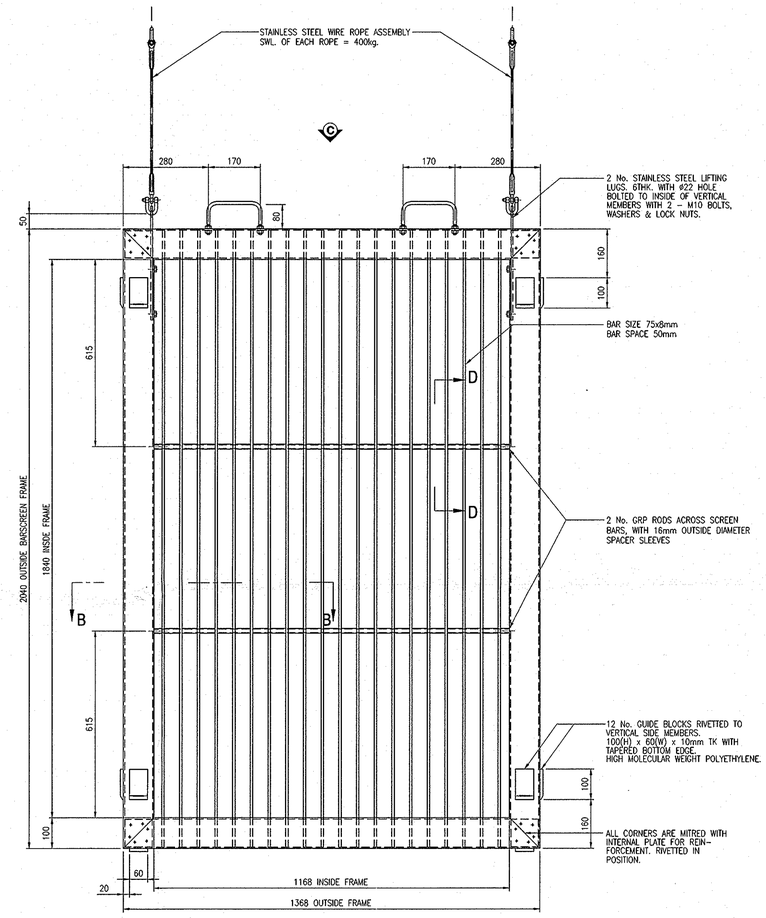


SIDE VIEW

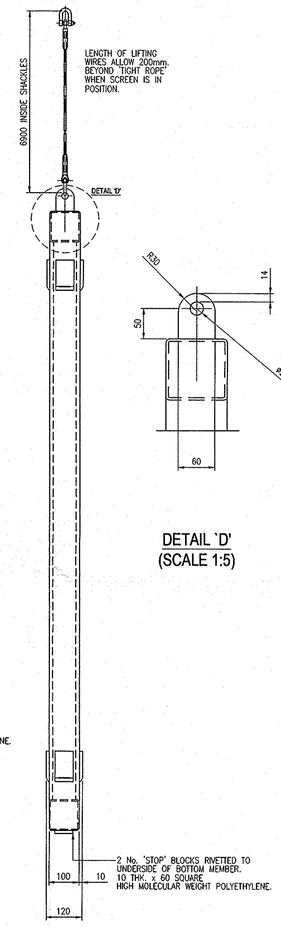
FINE SCREEN DETAIL
(SCALE 1:10)



FINE SCREEN SECTION A-A
(SCALE 1:10)



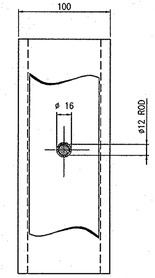
FRONT VIEW



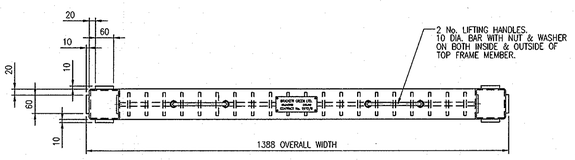
SIDE VIEW

BAR SCREEN DETAIL
(SCALE 1:10)

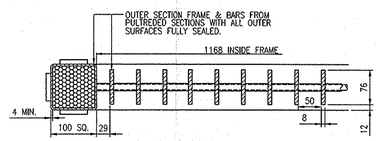
DETAIL `D'
(SCALE 1:5)



SECTION `D-D'
(SCALE 1:10)



BAR SCREEN PLAN ON VIEW 'C'
(SCALE 1:10)



BAR SCREEN SECTION 'B-B'
(N.T.S.)

No.	DATE	DESCRIPTION	INITIAL
B	05/01/05	AS PER ATKINS COMMENT & GENERAL REVISION	K.L.
A	16/09/04	GENERAL REVISION	K.L.
0	30/01/04	FIRST SUBMISSION	K.L.

Civil Engineering and Development Department
Hong Kong
土木工程拓展署

ATKINS 安建顧問有限公司 ATKINS CHINA LTD

MAIN CONTRACTOR
Leighton - China State - Van Oord Joint Venture

SUB CONTRACTOR
CHEVALIER M&E CONSORTIUM

CONTRACT
CONTRACT No. HK 12/02
CENTRAL RECLAMATION PHASE III
ENGINEERING WORKS

DRAWING TITLE
CENTRALISED GOVERNMENT COOLING WATER PUMPING STATION – DETAIL OF INLET SCREENS (SHEET 2 OF 4)

JOB No.	SP0302		
DRAWN BY	CAD		
CHECKED BY	K.L.	SIGNATURE	
A3 SIZE SCALE A1 SIZE SCALE	AS SHOWN	DATE	30/01/2004
DRAWING No.	SP0302/CC/PS/PS/DE/002	REVISION	B

J:\DWG\CRP.001\Centralised Government\PDD\DETAIL\SP0302CGPSPSDE002_B.dwg, Layout1

CHEC-CRBC JV

Date : 8th October 2010
Our Ref. : CHEC-CRBC JV/C-257/01.22/001669

AECOM
8/F., Grand Central Plaza
Tower2, 138 Shatin Rural Committee Road
Shatin, Hong Kong

Attn.: Mr. David Kwan

Dear Sir,

Contract No. HY/2009/11
Central-Wan Chai Bypass – North Point Reclamation
Construction of silt screen at seawater intake for the Windsor House

Further to the joint meeting with the representatives of Highways Department, AECOM/RSS, the Windsor House and our colleagues on 5th October 2010, we will carry out the construction works of silt screen at seawater intake for the Windsor House and please find the following documents provided herewith for your information and onward processing:

1) Sketches of silt screen at seawater intake for the Windsor House;
2) A copy of details of anchor bolt and
3) A copy of details of material for silt screen.

Thank you for your kind attention.

Yours faithfully,
For and on behalf of
China Harbour Engineering Company Limited –
China Road and Bridge Corporation Joint Venture

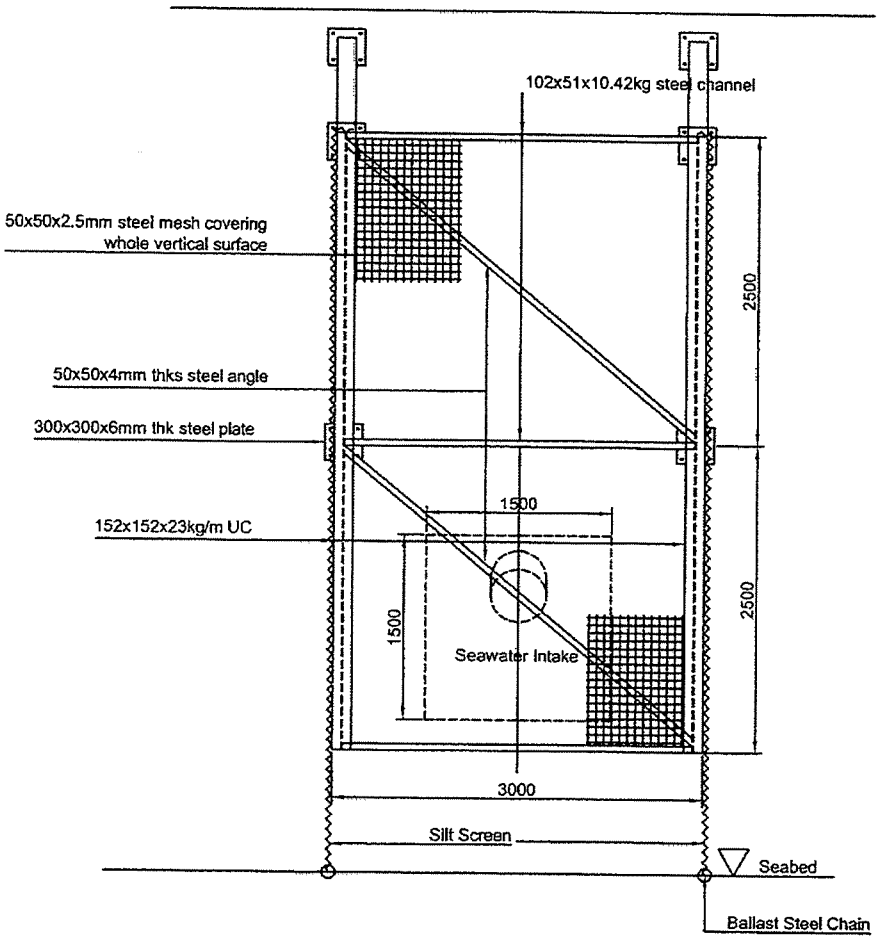
Daniel Cheung
Site Agent

Encl.

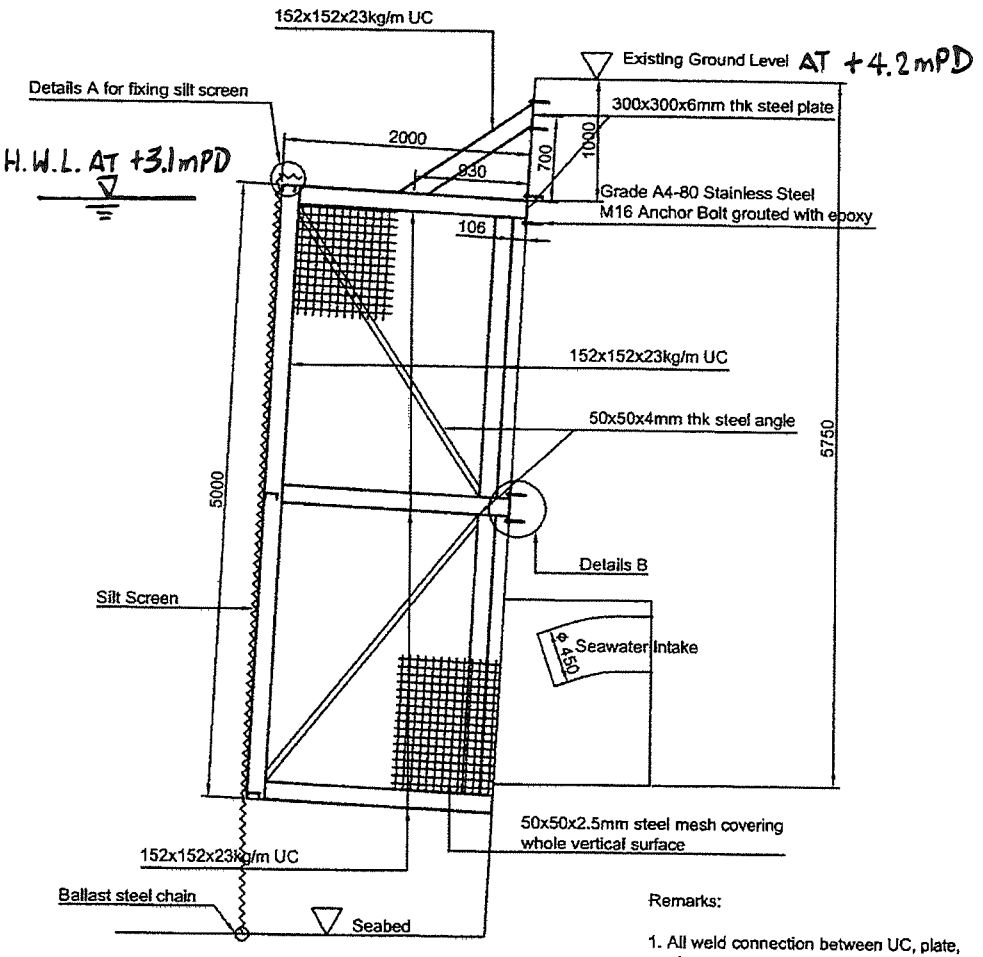
DC/JC/WCM/sy

c.c. AECOM – Mr. Kelvin Cheng

19th Floor, China Harbour Building, 370-374 King's Road, North Point, Hong Kong
Telephone: (852) 2887 8118 Facsimile: (852) 2512 0427



Elevation View of Screen at Seawater Intake



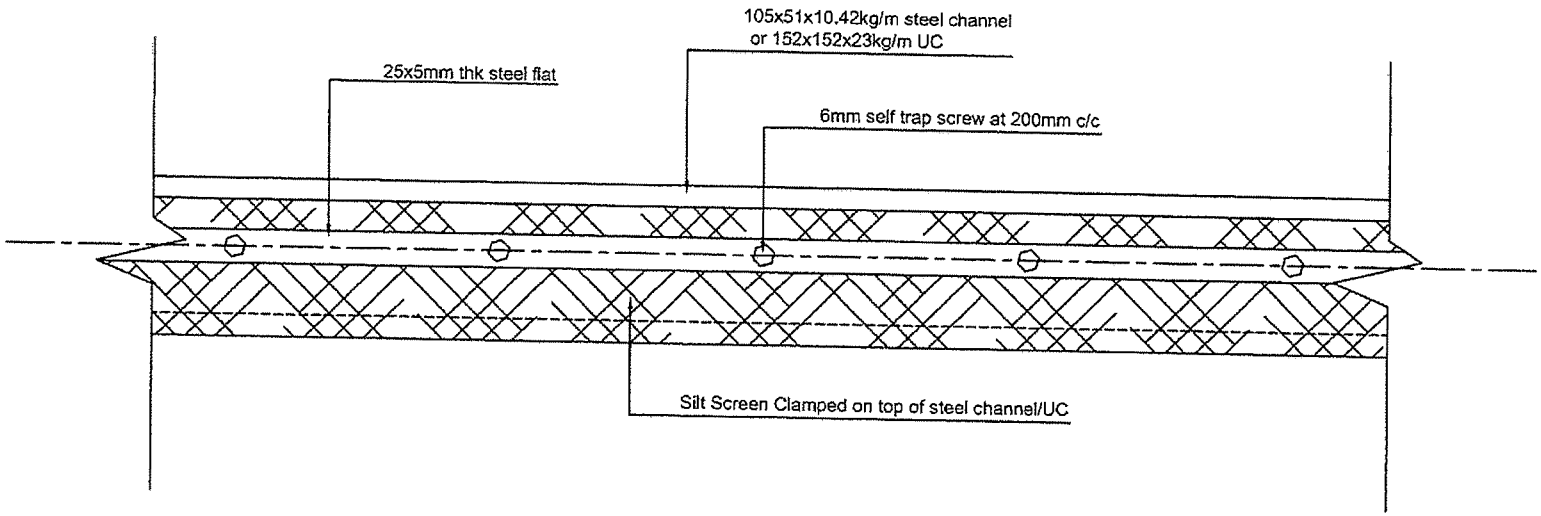
Side View of Screen at Seawater Intake

Remarks:

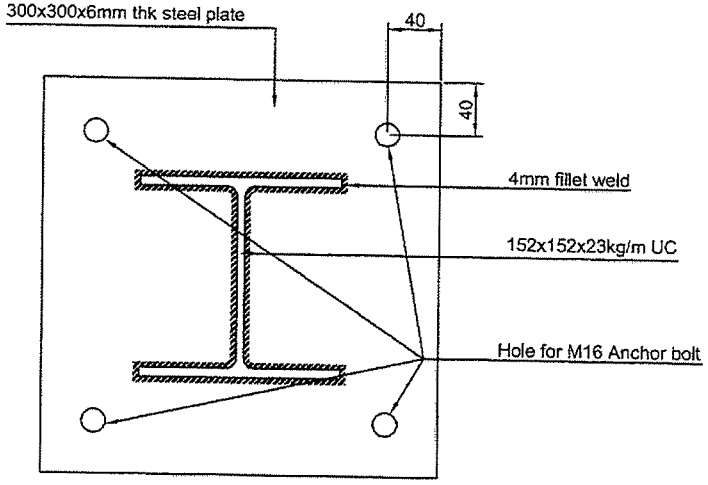
1. All weld connection between UC, plate, angle and channel should be 4mm fillet all around.
2. All units are in milimeter.
3. All steel should be Grade 43A
4. Silt Screen should cover from top of steel frame down to existing seabed

Silt Screen at Seawater Intake for Windsor House (Sheet 1 of 2)

Sketch No. SK3A



Details A



Details B

Silt Screen at Seawater Intake for Windsor House(Sheet 2 of 2)

Sketch No. SK4

CHEC-CRBC JV

Date : 8th October 2010
Our Ref. : CHEC-CRBC JV/C-257/01.22/001668

AECOM
8/F., Grand Central Plaza
Tower2, 138 Shatin Rural Committee Road
Shatin, Hong Kong

Attn.: Mr. David Kwan

Dear Sir,

Contract No. HY/2009/11
Central-Wan Chai Bypass – North Point Reclamation
Construction of silt screen at seawater intake for the Excelsior

Further to the joint meeting with the representatives of Highways Department, AECOM/RSS, the Excelsior and our colleagues on 5th October 2010, we will carry out the construction works of silt screen at seawater intake for the Excelsior and please find the following documents provided herewith for your information and onward processing:

1) Sketches of silt screen at seawater intake for the Excelsior;
2) A copy of details of anchor bolt and
3) A copy of details of material for silt screen.

Thank you for your kind attention.

Yours faithfully,
For and on behalf of
China Harbour Engineering Company Limited –
China Road and Bridge Corporation Joint Venture

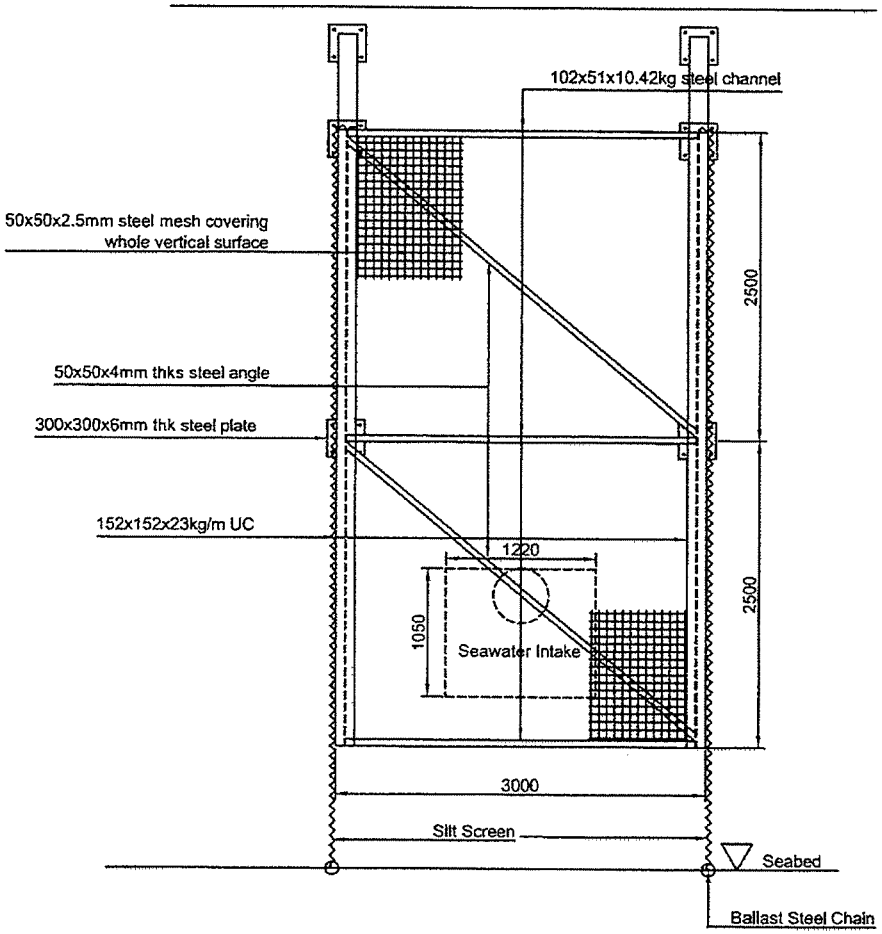
Daniel Cheung
Site Agent

Encl.

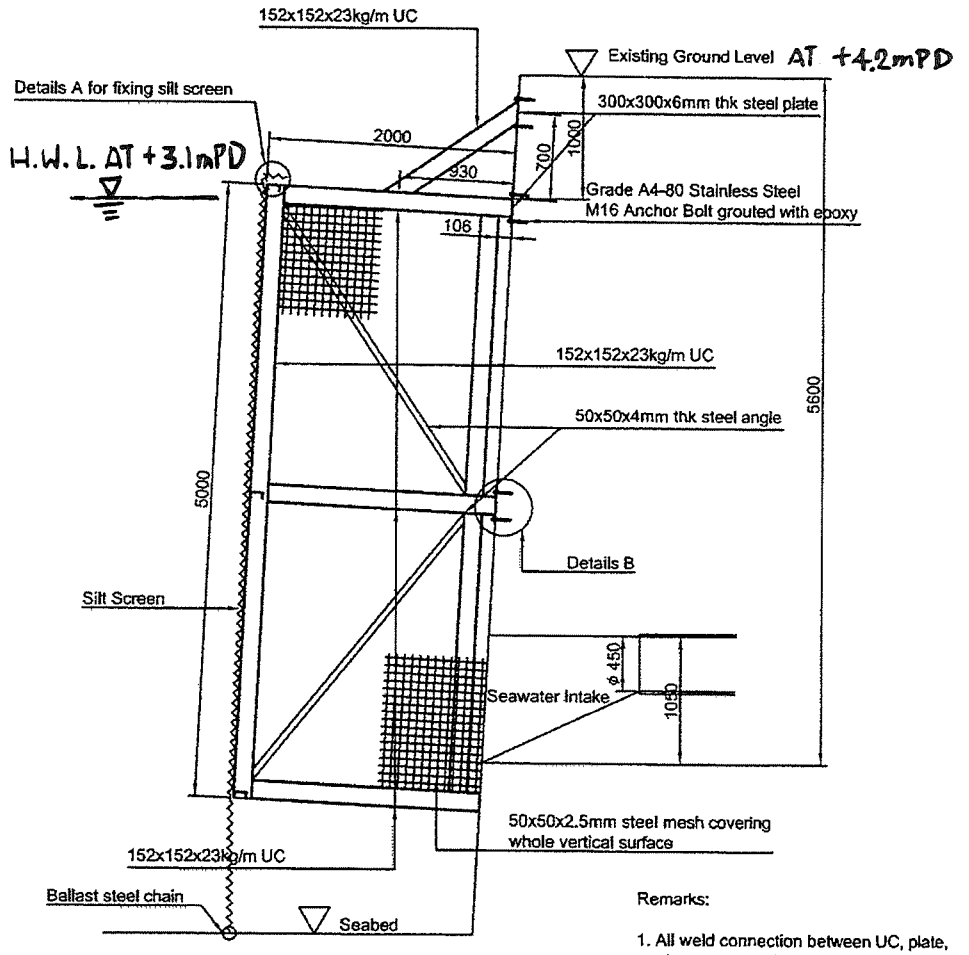
DC/JC/WCM/sy

c.c. AECOM – Mr. Kelvin Cheng

19th Floor, China Harbour Building, 370-374 King's Road, North Point, Hong Kong
Telephone: (852) 2887 8118 Facsimile: (852) 2512 0427



Elevation View of Screen at Seawater Intake



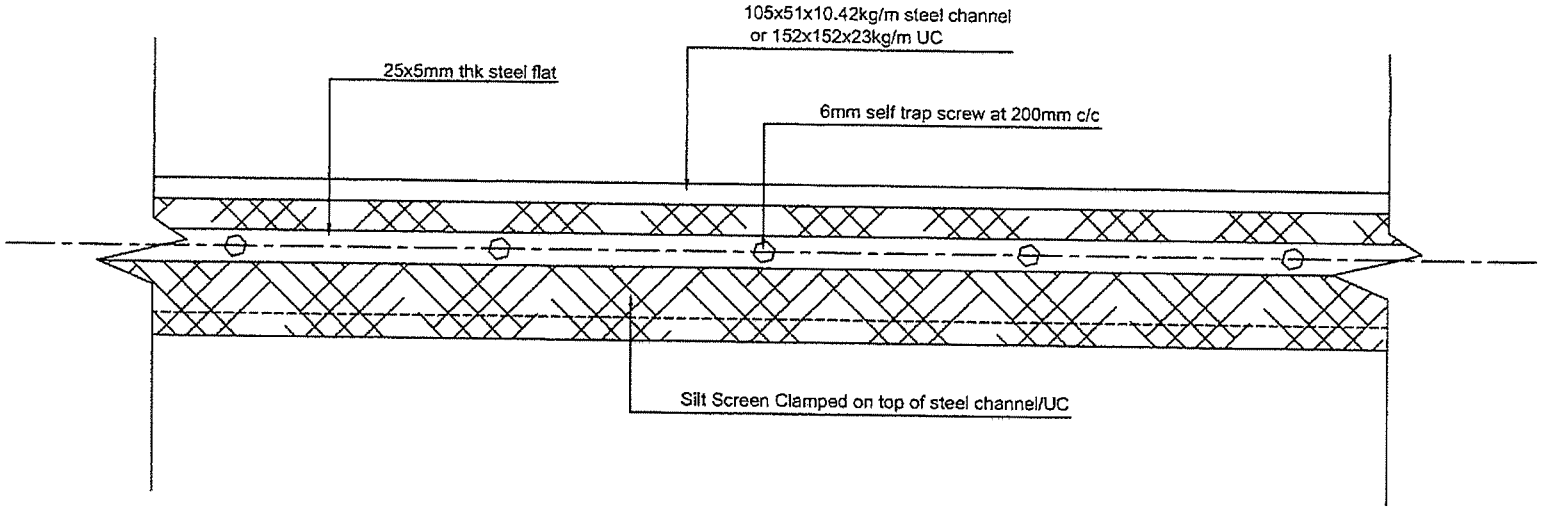
Side View of Screen at Seawater Intake

Remarks:

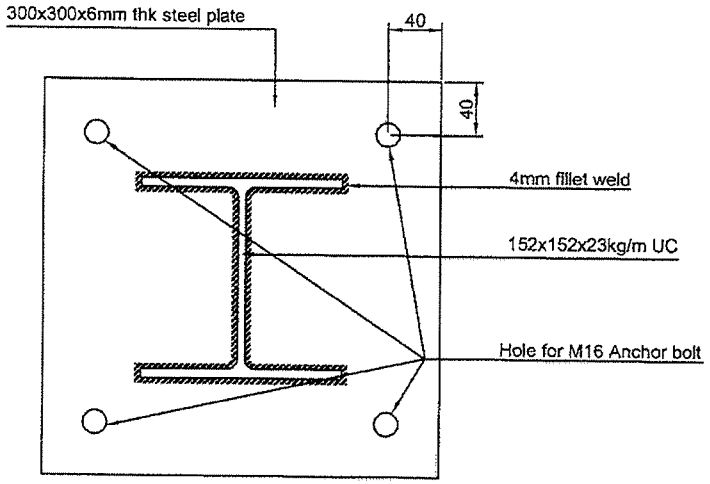
1. All weld connection between UC, plate, angle and channel should be 4mm fillet all around.
2. All units are in millmeter.
3. All steel should be Grade 43A
4. Silt Screen should cover from top of steel frame down to existing seabed

Silt Screen at Seawater Intake for The Excelsior(Sheet 1 of 2)

Sketch No. SK1A



Details A



Details B

Silt Screen at Seawater Intake for The Excelsior(Sheet 2 of 2)

Sketch No. SK2

HIT-RE 500 injection adhesive

Base material
- Concrete
- Hard natural stone
- Solid blockwork

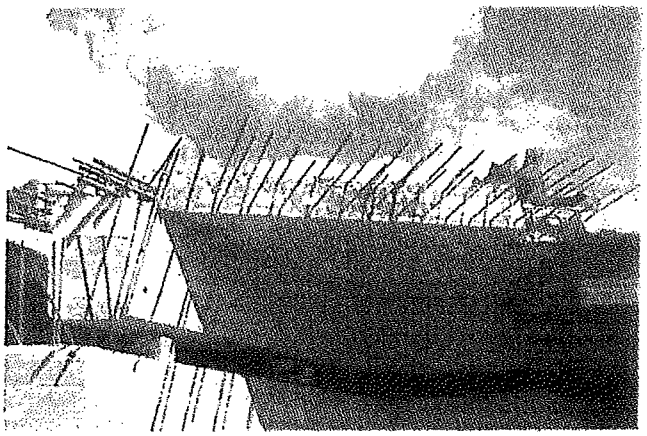
Use
- Suitable to achieve high loads in concrete and stone
- For fixing the base of tower crane
- For fixing the fender in terminals
- For fixing post-installed rebar up to Y40 and anchor rod up M39
- **For underwater application**

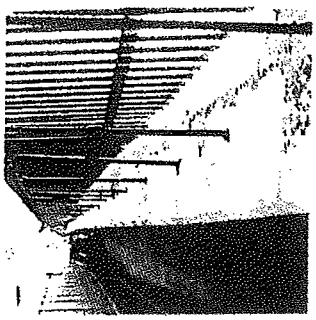
Material
- 2-component ready mix epoxy resin (styrene-free)

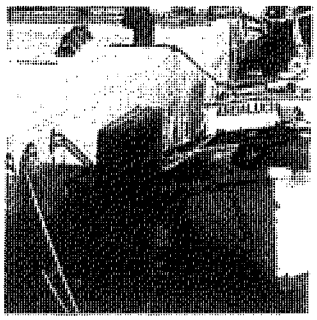
Curing Time

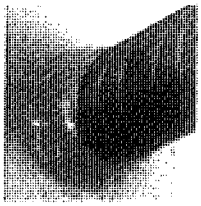
Temperature of the base material	Working time	Curing time
40°C	12 min.	4 hours
30°C	20 min.	8 hours
20°C	30 min.	12 hour
10°C	2 hours	24 hours
0°C	3 hours	50 hours
-5°C	4 hours	72 hours
less than -5°C	Contact Hilti advisory service	

Approvals: (Rebar)



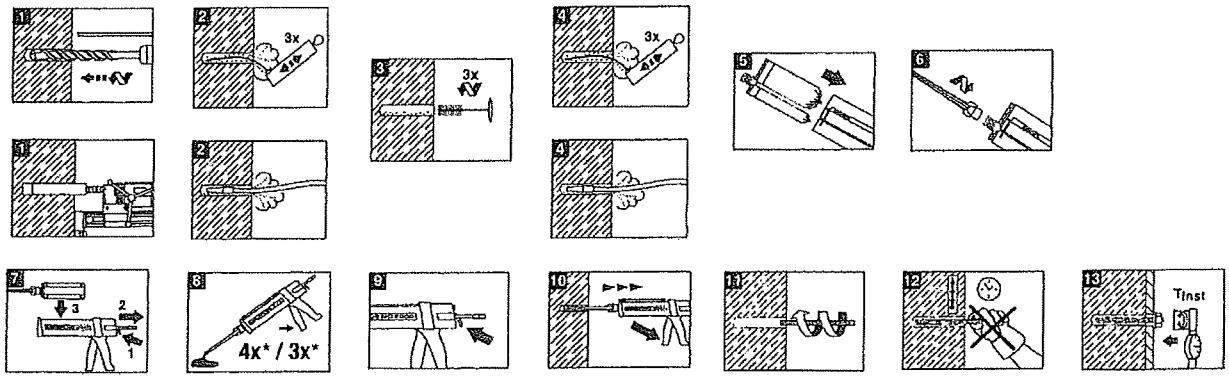






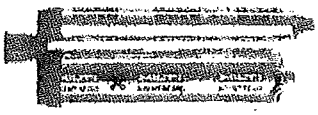
Benefits
- Extremely high performance without expansion pressure
- User-friendly, odourless (styrene free)
- Lower sensitivity to oversized, dusty, wet holes and diamond coring holes
- Red colour adhesive for easy on site inspection
- Foil pack design reduces disposal cost
- With NSF and WRAS approvals for use in contact with drinking water
- Short dispensing time

Installation procedures



* Throw away first three trigger pulls for 330 ml cartridge, four trigger pulls for 500 ml cartridge.

HIT-RE 500 programme

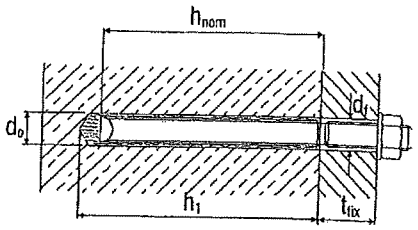


Description	Including	Content (ml)	Package (pcs)	Ordering designation	Item no.
HIT-RE 500	1 mixer	500	20	FOIL PACK RE 500 /500/1	369109
HIT-RE 500	1 mixer	330	25	FOIL PACK RE 500 /330/1	337109
HIT-RE-M mixer			100	HIT-RE-M	337111

HIT-RE 500 with HAS-E anchor rod

Material

- Steel strength grade 5.8 and 8.8 for M8 to M24 and M27 to M39 respectively, galvanized at least 5µm
- Steel strength grade 5.8 and 8.8 for M8 to M24 and M27 to M39 respectively, hot dip galv. to 45µm
- A4-70 and A4-50 stainless steel for M8 to M24 and M27 to M39 respectively.
- High corrosion resistance (HCR) (M8-M24)
- A5-80 stainless steel (on request)



Technical data

Recommended load, F_{30} (kN), non-cracked concrete at 30N/mm², safety factor(γ)=3

Model	Size	M8	M10	M12	M16	M20	M24	M27	M30	M33	M36	M39
HIT-RE 500 + HAS-E / -EF	Tensile Load, N_{rec}	5.7	9.1	13.3	25.3	39.4	56.7	69.9	91.7	107.7	128.1	146.8
	Shear Load, V_{rec}	3.6	5.8	8.4	15.8	24.8	35.7	75.2	91.3	113.9	133.6	160.7
HIT-RE 500 + HAS-ER / HCR	Tensile Load, N_{rec}	8.1	12.5	17.9	26.0	47.1	67.9	66.8	81.1	101.1	118.7	142.7
	Shear Load, V_{rec}	5.0	8.1	11.7	22.2	34.7	49.9	47.0	57.1	71.2	83.5	100.5

Remarks:
1) All the data applies to no edge distance, spacing and other influences
2) For detail design method please refer to Fastening Technology Manual
3) HAS-HCR anchor rod are only up to M24 only

Approvals: (Thread Rod)

E TA | ES | LEED | Low VOC | WRAS | NSF | Tested as per BS5080

HAS-E Programme

Thread dia. (mm)	Drill bit nom. dia., d_o (mm)	Min. hole depth, h_1 (mm)	Anchorage depth, h_{nom} (mm)	Tighten. torque T_{inst} (Nm)	Max. fasten. thk. t_{fix} (mm)	Clearance hole, d_f (mm)	Width across flats, S_w	Filling Volume (ml)	Package (pcs)	Order designation	Item no
HAS-E galvanized version (min. 5µm)											
M8	10	85	80	15	14	9	13	4	20	HAS-E M8x80/14	332219
M8	10	85	80	15	54	9	13	4	10	HAS-E M8x80/54	333099 ★
M10	12	95	90	30	21	12	17	6	20	HAS-E M10x90/21	332220
M10	12	95	90	30	61	12	17	6	10	HAS-E M10x90/61	333100 ★
M10	12	95	90	30	81	12	17	6	10	HAS-E M10x90/81	333101 ★
M12	14	115	110	50	28	14	19	10	20	HAS-E M12x110/28	332221
M12	14	115	110	50	88	14	19	10	10	HAS-E M12x110/88	333102 ★
M12	14	115	110	50	128	14	19	10	10	HAS-E M12x110/128	333103 ★
M12	14	115	110	50	168	14	19	10	10	HAS-E M12x110/168	333104 ★
M16	18	130	125	100	20	18	24	15	10	HAS-E M16x125/20	333105 ★
M16	18	130	125	100	38	18	24	15	20	HAS-E M16x125/38	332222
M16	18	130	125	100	108	18	24	15	10	HAS-E M16x125/108	333106 ★
M16	18	130	125	100	148	18	24	15	10	HAS-E M16x125/148	333107 ★
M16	18	130	125	100	198	18	24	15	10	HAS-E M16x125/198	333108 ★
M16	18	130	125	100	348	18	24	15	10	HAS-E M16x125/348	333109 ★
M20	24	175	170	160	48	22	30	43	10	HAS-E M20x170/48	332223
M20	24	175	170	160	68	22	30	43	10	HAS-E M20x170/68	333110 ★
M20	24	175	170	160	108	22	30	43	10	HAS-E M20x170/108	333111 ★
M20	24	175	170	160	158	22	30	43	10	HAS-E M20x170/158	333112 ★
M20	24	175	170	160	208	22	30	43	10	HAS-E M20x170/208	333113 ★
M24	28	215	210	240	54	26	36	65	10	HAS-E M24x210/54	332224
M27	30	250	240	270	60	30	41	71	4	HAS-E M27x240/60	333114 ★
M30	35	280	270	300	70	33	46	124	4	HAS-E M30x270/70	333115 ★
M33	37	310	300	1200	80	36	50	140	4	HAS-E M33x300/80	333116 ★
M36	40	340	330	1500	90	39	55	160	2	HAS-E M36x330/90	333117 ★
M39	42	370	360	1800	100	42	59	160	2	HAS-E M39x360/100	333118 ★

★ Special Request

Thread dia. (mm)	Drill bit nom. dia., d_0 (mm)	Min. hole depth, h_1 (mm)	Anchorage depth, h_{nom} (mm)	Tighten. torque T_{inst} (Nm)	Max. fasten. thk. t_{fix} (mm)	Clearance hole, d_f (mm)	Width across flats, S_w	Filling Volume (ml)	Package (pcs)	Order designation	Item no
HAS-EF hot dip galvanized version (min. 45µm)											
M8	10	85	80	15	14	9	13	4	20	HAS-EF M8x80/14	333143★
M8	10	85	80	15	54	9	13	4	10	HAS-EF M8x80/54	333144★
M10	12	95	90	30	21	12	17	6	20	HAS-EF M10x90/21	333145★
M10	12	95	90	30	61	12	17	6	10	HAS-EF M10x90/61	333146★
M10	12	95	90	30	81	12	17	6	10	HAS-EF M10x90/81	333147★
M12	14	115	110	50	28	14	19	10	10	HAS-EF M12x110/28	333148★
M12	14	115	110	50	88	14	19	10	20	HAS-EF M12x110/88	333149★
M12	14	115	110	50	128	14	19	10	10	HAS-EF M12x110/128	333150★
M12	14	115	110	50	168	14	19	10	10	HAS-EF M12x110/168	333151★
M16	18	130	125	100	20	18	24	15	10	HAS-EF M16x125/20	333152★
M16	18	130	125	100	38	18	24	15	10	HAS-EF M16x125/38	333153★
M16	18	130	125	100	108	18	24	15	10	HAS-EF M16x125/108	333154★
M16	18	130	125	100	148	18	24	15	10	HAS-EF M16x125/148	333155★
M16	18	130	125	100	198	18	24	15	10	HAS-EF M16x125/198	333156★
M16	18	130	125	100	348	18	24	15	10	HAS-EF M16x125/348	333157★
HAS-EF hot dip galvanized version (min. 45µm)											
M20	24	175	170	160	48	22	30	43	10	HAS-EF M20x170/48	333158★
M20	24	175	170	160	68	22	30	43	10	HAS-EF M20x170/68	333159★
M20	24	175	170	160	108	22	30	43	10	HAS-EF M20x170/108	333160★
M20	24	175	170	160	158	22	30	43	10	HAS-EF M20x170/158	333161★
M20	24	175	170	160	208	22	30	43	10	HAS-EF M20x170/208	333162★
M24	28	215	210	240	54	26	36	65	10	HAS-EF M24x210/54	333163★
M27	30	250	240	270	60	30	41	71	4	HAS-EF M27x240/60	333164★
M30	35	280	270	300	70	33	46	124	4	HAS-EF M30x270/70	333165★
M33	37	310	300	1200	80	36	50	140	4	HAS-EF M33x300/80	333166★
M36	40	340	330	1500	90	39	55	160	2	HAS-EF M36x330/90	333167★
M39	42	370	360	1800	100	42	59	160	2	HAS-EF M39x360/100	333168★
HAS-ER A4 stainless steel version											
M8	10	85	80	15	14	9	13	4	20	HAS-ER M8x80/14	333119
M8	10	85	80	15	54	9	13	4	10	HAS-ER M8x80/54	333120 ★
M8	10	85	80	15	114	9	13	4	10	HAS-ER M8x80/114	333121 ★
M10	12	95	90	30	21	12	17	6	20	HAS-ER M10x90/21	333122
M10	12	95	90	30	61	12	17	6	10	HAS-ER M10x90/61	333123 ★
M10	12	95	90	30	81	12	17	6	10	HAS-ER M10x90/81	333124 ★
M10	12	95	90	30	111	12	17	6	10	HAS-ER M10x90/111	333125 ★
M12	14	115	110	50	28	14	19	10	20	HAS-ER M12x110/28	333126
M12	14	115	110	50	88	14	19	10	10	HAS-ER M12x110/88	333127 ★
M12	14	115	110	50	128	14	19	10	10	HAS-ER M12x110/128	333128 ★
M12	14	115	110	50	168	14	19	10	10	HAS-ER M12x110/168	333129 ★
~~M16~~	~~18~~	~~130~~	~~125~~	~~100~~	~~20~~	~~18~~	~~24~~	~~15~~	~~10~~	~~HAS-ER M16x125/20~~	~~333130 ★~~
M16	18	130	125	100	38	18	24	15	20	HAS-ER M16x125/38	333131
~~M16~~	~~18~~	~~130~~	~~125~~	~~100~~	~~108~~	~~18~~	~~24~~	~~15~~	~~10~~	~~HAS-ER M16x125/108~~	~~333132 ★~~
M16	18	130	125	100	148	18	24	15	10	HAS-ER M16x125/148	333133 ★
M16	18	130	125	100	198	18	24	15	10	HAS-ER M16x125/198	333134 ★
M20	24	175	170	160	48	22	30	43	10	HAS-ER M20x170/48	333135
M20	24	175	170	160	108	22	30	43	10	HAS-ER M20x170/108	333136 ★
M24	28	215	210	240	54	26	36	65	10	HAS-ER M24x210/54	333137
M27	30	250	240	270	60	30	41	71	4	HAS-ER M27x240/60	333138 ★
M30	35	280	270	300	70	33	46	124	4	HAS-ER M30x270/70	333139 ★
M33	37	310	300	1200	80	36	50	140	4	HAS-ER M33x300/80	333140 ★
M36	40	340	330	1500	90	39	55	160	2	HAS-ER M36x330/90	333141 ★
M39	42	370	360	1800	100	42	59	160	2	HAS-ER M39x360/100	333142 ★
HAS-HCR high corrosion resistance material											
M8	10	85	80	15	14	9	13	4	20	HAS-HCR M8x80/14	229504 ★
M10	12	95	90	30	21	12	17	6	10	HAS-HCR M10x90/21	229505 ★
M12	14	115	110	50	28	14	19	10	10	HAS-HCR M12x110/28	229506 ★
M16	18	130	125	100	38	18	24	15	5	HAS-HCR M16x125/38	229507 ★
M20	24	175	170	160	48	22	30	43	5	HAS-HCR M20x170/48	229508 ★
M24	28	215	210	240	54	26	36	65	5	HAS-HCR M24x210/54	229509 ★

anchor bolt

★ Special Request

Silt Curtain

Bontec SG100/100

April 2007

G&E ENGINEERING

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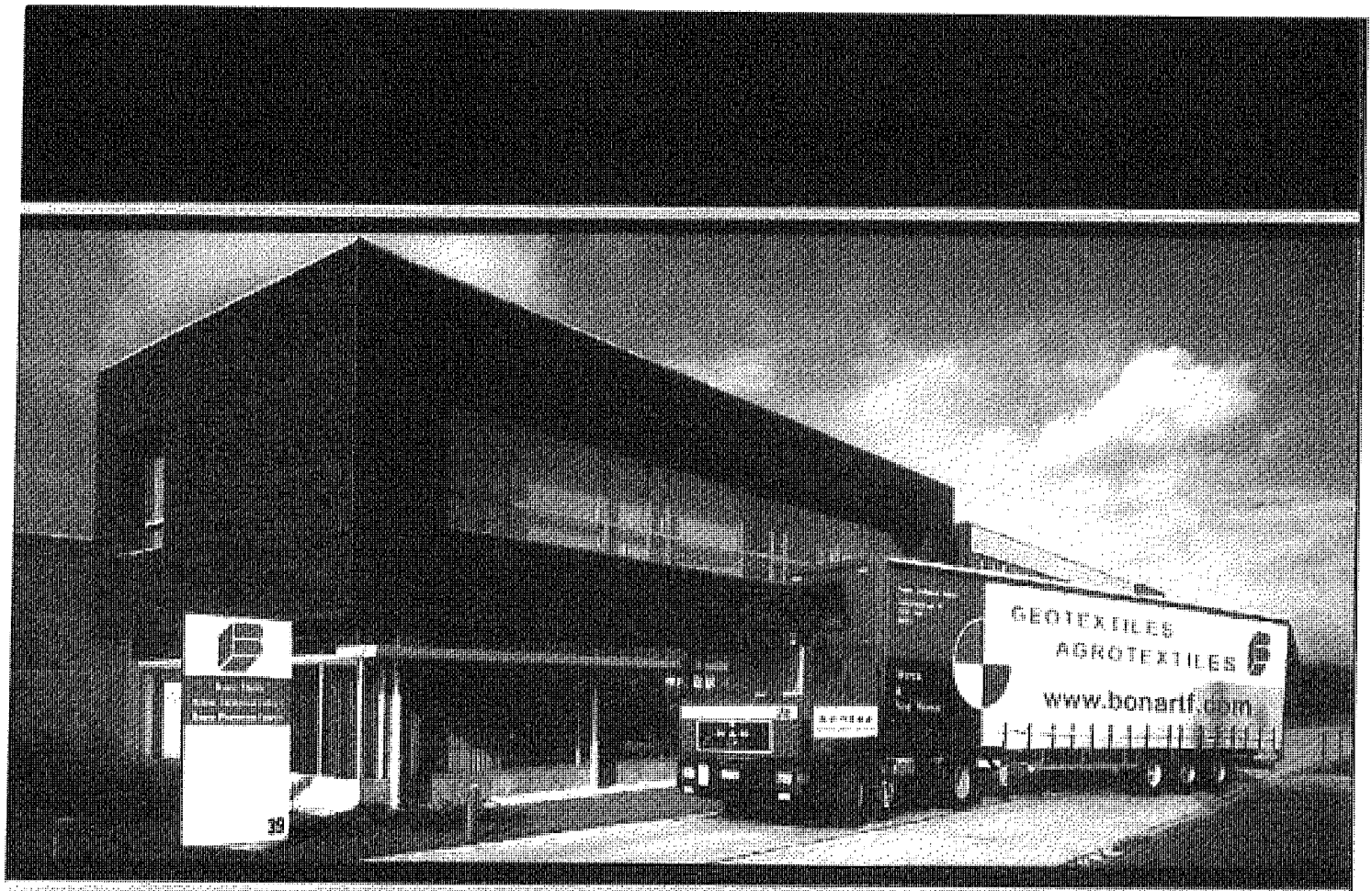
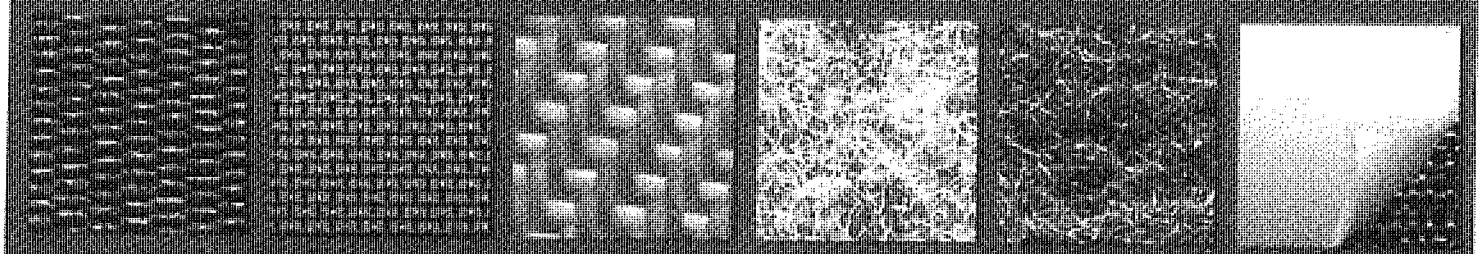
Manufacturer Company Profile





WE UNDER COVER THE WORLD

bontec

woven and nonwoven geotextiles

A TOTAL RANGE OF GEOTEXTILES

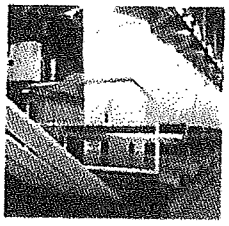
WHY CHOOSE BONTEC® GEOTEXTILES ?

BONAR TECHNICAL FABRICS
invisibly good

bontec
woven and nonwoven geotextiles

Bonar Technical Fabrics is Europe's premier manufacturer of woven and nonwoven geotextile products. Through our continuous commitment to **quality, product development and production improvement**, we have earned our position as a major player in our markets. Today, with over 30 years experience in the geosynthetics industry, and the full backing of our parent company, we are confident that we will continue to grow our business and remain at the forefront of our markets for many years ahead.

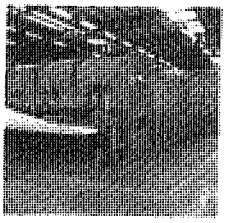
Manufactured under the brand name **Bontec®**, using state of the art **geotextile production technology**, our woven and nonwoven geotextile ranges offer product solutions for the functions of Separation, Filtration, Drainage, Erosion Control, Reinforcement and Protection.



Fibre Extrusion

In-house Fibre Production

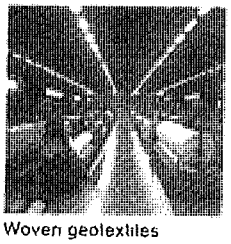
Fibre production involves the extrusion of continuous filaments that are then cut into short staple fibres. Through the careful identification of fibre formulation, filament density and staple fibre length, we can ensure that the mechanical and hydraulic properties are maximised for each of our nonwoven product ranges.



Non woven geotextiles

Nonwoven Geotextile Production

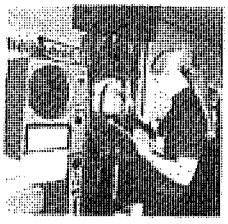
Using ultra modern needle punching looms and a unique thermal bonding process, our nonwoven geotextile production involves the processing of a uniform web of staple fibres that are orientated and bonded to form a finished sheet product.



Woven geotextiles

Woven Geotextile Production

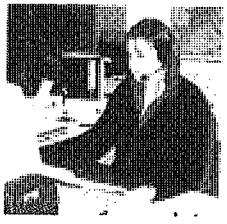
Polypropylene tapes are manufactured in our slit film extrusion department prior to being woven on Sulzer looms. The warp tapes (machine direction) are beamed into the loom and the weft tapes (cross-machine direction) are threaded over and under alternate elements. The woven product that emerges offers very high mechanical strengths per unit weight.



State of the art laboratory

Quality and the Environment

All plants operate in accordance with an ISO 9001:2000 Quality Assurance System and ISO 14001 Environmental Management System. Products are tested internally in our fully equipped geosynthetics laboratory in accordance with the latest European and International standards.



First class
customer service

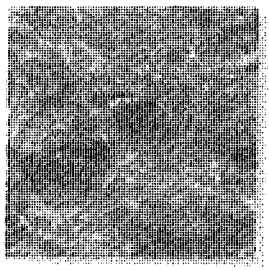
First Class Customer Service

At Bonar we believe the customer should be able to purchase the most appropriate product for his task. As such our staff are readily available to offer a full service package from the initial product selection phase, through to final delivery and the provision of after sales support.

CE Q&E igs

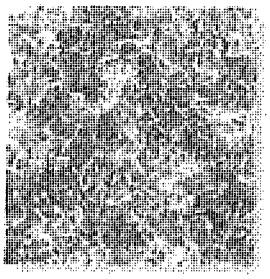
BONTEC®: A TOTAL RANGE OF GEOTEXTILES

NON-WOVEN GEOTEXTILES



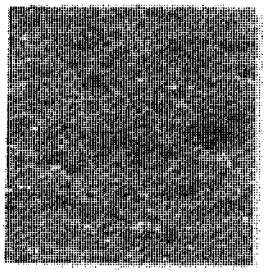
NW: Thermally Bonded Non Woven Geotextiles

Produced using mechanical and thermal bonding processes, the NW range is primarily used for lightweight separation and filtration. Their excellent hydraulic properties result in their preferred use in filtration applications. Typical uses include as a filter to encapsulate a trench drain or a granular drainage blanket.



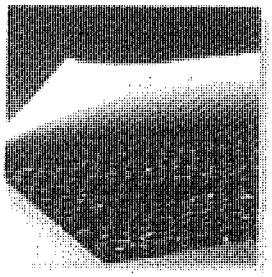
SNW: Superior Needlepunched Nonwoven Geotextiles

Made from white high tenacity fibres the SNW range offers maximum performance per unit weight and is ideal for use in applications where both strength and elongation are key parameters of the geotextiles' performance.



VNW: Coloured Needlepunched Nonwoven Geotextiles

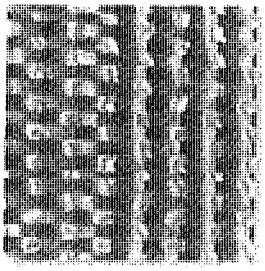
Produced using multi-coloured staple virgin fibres, products range from 200 to 1800g/m2. VNW grades offer a felt like appearance and are used in the functions of protection, drainage and erosion control. Areas of application include membrane protection in landfill and reservoirs, or for erosion control on riverbanks and coastlines.



LG: Geocomposites

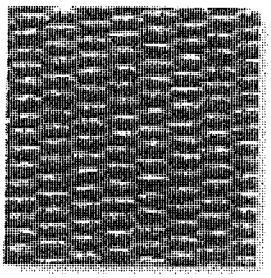
Produced via a combination of woven and nonwoven technology, the LG range offers the best of both product types in a single layer. The resulting products are ideally suited to uses where a high demand is placed on the geotextiles' strength, protection efficiency and physical robustness.

WOVEN GEOTEXTILES



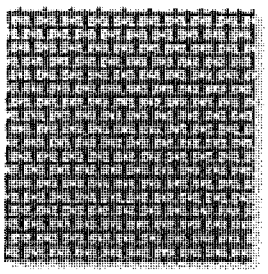
SG: Standard Grade Light weight Woven Geotextiles

Increasing from 70 to 200g/m2 SG lightweights are used primarily for separation to prevent good quality granular fill intermixing with the poorer soil below. Typical uses include in new highways, car parks, airport runways, under stone foundation layers for new buildings etc.



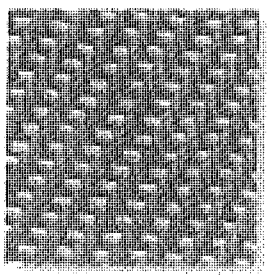
SG: Standard Grade Heavy weight Woven Geotextiles

With possible tensile strengths in excess of 200kN/m, SG heavyweight geotextiles are used in applications where the loadings are severe. Uses include short term basal reinforcement, coastal erosion schemes or areas requiring general soil stabilisation.



HF: High Flow Woven Geotextiles

Used where there exists a requirement for the quick escape of excess water, HF fabrics are used primarily in erosion control applications e.g. under concrete revetment blocks or between dissimilar layers of quick draining granular fill e.g. a coarse sand and rounded gravel.



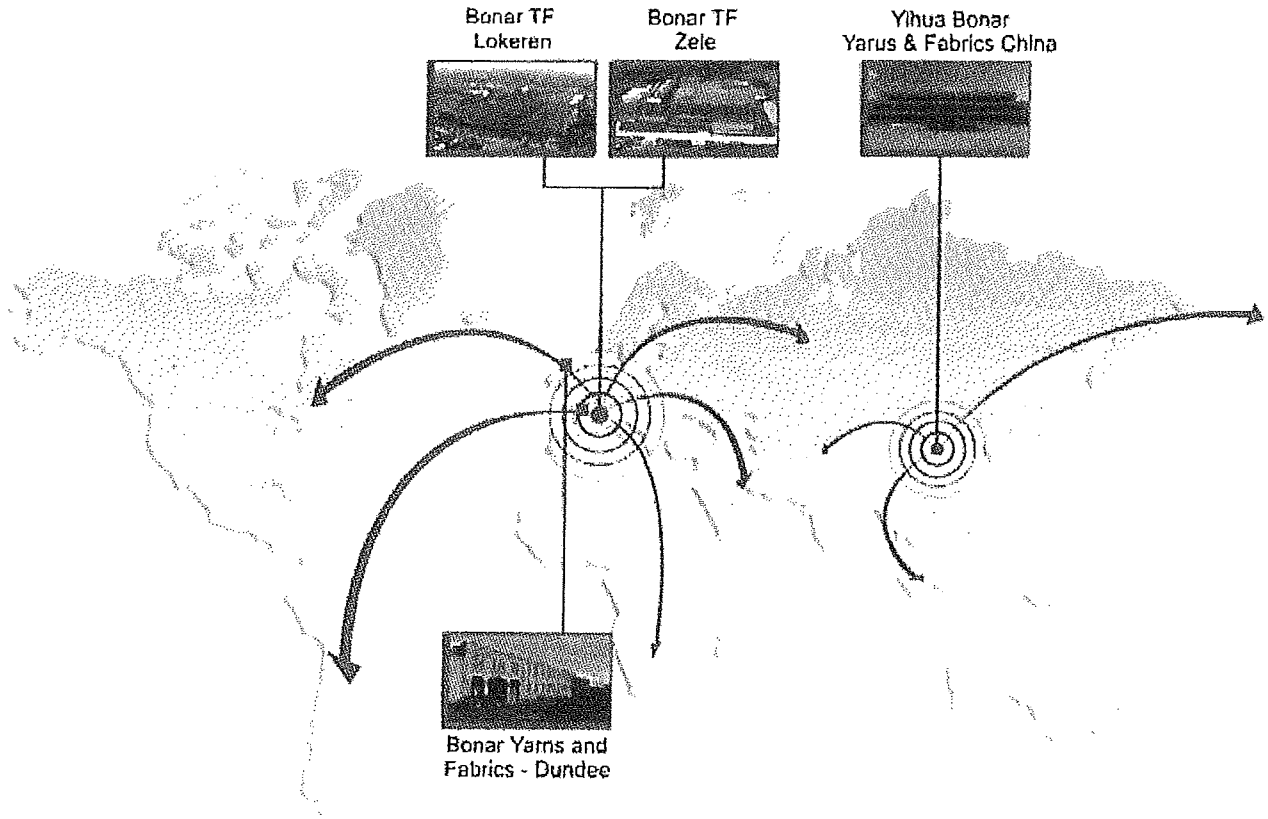
HS: High Strength Woven Geotextiles

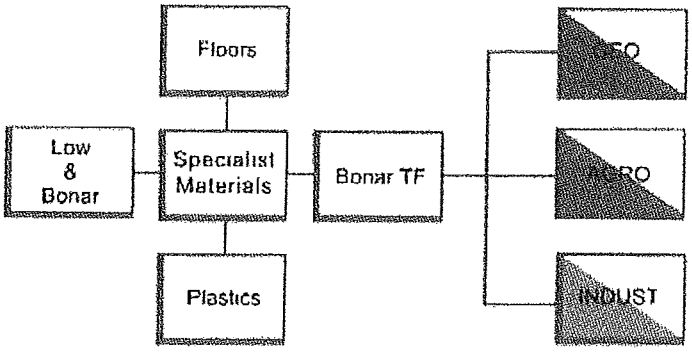
Produced from high tenacity polyester yarns, the HS products offer tensile strengths up to 600kN/m combined with low extension and excellent creep characteristics. Applications include the reinforcement of vertical walls, steep slopes and embankments over soft soil with long term design lives.

bontec

woven and nonwoven geotextiles

GROUP STRUCTURE





Bonar Technical Fabrics is a division of **LOW & BONAR** plc, an international group that manufactures and supplies a wide range of products in the Specialist Materials, Flooring and Plastics markets.

As part of the Specialist Materials division, **Bonar TF** focuses on the production of three distinct product ranges including geotextiles, agrotextiles, and technical textiles for the industrial and building sectors. Its headquarters are situated in the Belgian town of Zele, a short distance from the main ports of Antwerp, Zeebrugge and Rotterdam. This proximity assures clients quick and economic deliveries throughout the world.

BONAR TECHNICAL FABRICS

Invisibly good

BONAR TECHNICAL FABRICS NV/SA
P/A. Industrielaan 39
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F. + 32 (0) 52 457 495
e-mail: geotextiles@bonartf.com

Bonar Yarns & Fabrics Ltd
St Salvador Street
Dundee • Scotland
DD3 7EU
T. +44 (0)1382 346102
F. +44 (0)1382 229238
E-mail: geotextiles@bonaryarns.com

website: www.bonartf.com

Product Specification

bontec

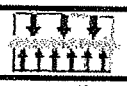
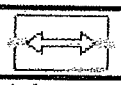
a bonar technical fabrics product

SG 100/100

Technical data sheet according to internal specifications Bonar TF: version 03 dd. 17/02/03
Accompanying documents CE marking: version 01 dd. 01/10/02

CE

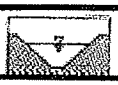
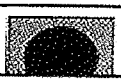
1137
1137-CPD-601
03

				
separation	**filtration**	**reinforcement**	**protection**	**drainage**

	test method	value	tolerance
Mechanical properties			
Tensile strength MD	EN ISO 10319	110 kN/m	- 9,9 kN/m
Tensile strength CD	EN ISO 10319	110 kN/m	- 9,9 kN/m
Elongation MD	EN ISO 10319	20 %	+/- 4,6 %
Elongation CD	EN ISO 10319	11 %	+/- 2,53 %
Static puncture resistance – CBR	EN ISO 12236	12,5 kN	- 2,5 kN
Dynamic perforation resistance – cone drop	EN 918	10 mm	+ 2 mm
Hydraulic properties			
Water permeability normal to the plane	EN ISO 11058	23 x 10^{-3} m/s	- 6,9 x 10^{-3} m/s
Water flow normal to the plane (*)	EN ISO 11058	23 l/m².s	- 6,9 l/m².s
Characteristic opening size	EN ISO 12956	190 µm	+/- 57 µm
Physical properties			
Thickness under 2 kPa (*)	EN 964/1	1,53 mm	+/- 0,31 mm
Weight (*)	EN 965	475 g/m²	+/- 47,5 g/m²
Composition	100 % polypropylene woven geotextile		

Durability	• geotextile has to be covered within 2 weeks after installation • predicted to be durable for a minimum of 25 years in natural soil with 4 < pH < 9 and soil temperatures < 25 °C.

				
roads	**railways**	**foundations & retaining walls**	**drainage systems**	**erosion control systems**
EN 13249:2000	EN 13250:2000	EN 13251:2000	EN 13252:2000	EN 13253:2000

				
reservoirs & dams	**canals**	**tunnels & under-ground structures**	**solid waste**	**liquid waste**
EN 13254:2000	EN 13255:2000	EN 13256:2000	EN 13257:2000	EN 13265:2000

1. This geotextile is intended for use in both functions & applications highlighted with a bold border.
2. Roll dimensions are 5,25 m x 100/200 m. Other dimensions on demand.
3. Bonar Technical Fabrics reserves the right to alter product specifications without prior notice. It is the responsibility of all users to satisfy themselves that the above data is current.
4. Although not guaranteed, these results do to the best of our knowledge offer a true and accurate record of the product's performance.
5. Bonar Technical Fabrics cannot accept responsibility for the performance of these products as the conditions of use are beyond our control.

(*) Not mandated characteristics for CE marking.

BONAR TECHNICAL FABRICS
invisibly good

BONAR Technical Fabrics nv/sa
Industrieweg 3[illegible] • B-9240 Zele • Belgium
Tel. +32 (0)52 45[illegible] • Fax +32 (0)52 45[illegible]
[illegible]

BONAR Yarns & Fabrics Ltd
St. Salvador Street • Dundee DD1 3TU • United Kingdom
Tel. +44 (0)1382 [illegible] • Fax +44 (0)1382 [illegible]
[illegible]

Specification Comparison

Particular Specification vs Bonar SG 100/100

Updated: 25/08/2006

Properties	Particular Specification		Bonar SG 100/100	
	Test Method	Technical Data	Test Method	Technical Data
Tensile strength MD	(mean value)	55 kN/m	EN ISO 10319	110 kN/m
Tensile strength CMD	(mean value)	55 kN/m	EN ISO 10319	110 kN/m
Elongation MD	-	-	EN ISO 10319	20%
Elongation CMD	-	-	EN ISO 10319	11%
Mass per unit area	(mean value)	330 g/m^2	EN 965	475 g/m^2
Thickness at 2kN/m^2	-	-	EN 964-1	1.53 mm
Dynamic perforation resistance	-	-	EN 918	10 mm
Resistance to static puncture	-	-	EN ISO 12236	12.5 kN
Opening size O90	(maximum value)	190 um	EN ISO 12956	190 um
Water permeability	-	-	EN ISO 11058	23 mm/s
Material	-	PP woven	-	PP woven
Roll width	-	-	-	5.25 m
Roll length	-	-	-	100 m

Ref:\\...\comp.xls

Certification

CERTIFICAAT KWALITEITSMANAGEMENTSYSTEEM

ISO 9001 : 2000

Hiermee verklaart BQA, nv dat het kwaliteitsmanagementsysteem van de firma
Bonar Technical Fabrics NV – Site in Zele en Lokeren

BONAR TF

waarvan de zetel gevestigd is Industriestraat 39 - 9240 Zele - België, op 02-05-2005 beoordeeld werd en conform is met de norm ISO 9001, uitgave 2000, voor het volgende toepassingsgebied:

Development, manufacture and sales of a standard range of fibres and textiles such as agrotextiles, building textiles and geosynthetics, as well as similar products especially designed to customer specifications.

Dit certificaat is door BQA, nv verstrekt conform zijn kwaliteitshandboek betreffende kwaliteits-systeemcertificatie en na het afsluiten van het certificatiecontract N° AC/AJ/CER/02-05-2005/301, waarbij de firma zich onderwerpt aan de regelmatige controle van haar kwaliteitsmanagementsysteem.

Certificaat N° C/02-05-2005/301
Geldig tot 02-05-2008

BELCERT

BQA N° QS 006

A. COCHAUX
Directeur

BQA

AC/AJ/C/02-05-2005

CERTIFICAAT MILIEUBEHEERSYSTEEM

ISO 14001 : 2004

Hiermee verklaart BQA, nv dat het kwaliteitssysteem van de firma
Bonar Technical Fabrics NV – Site in Zele en Lokeren

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Certificaat N° C/02-05-2005
Geldig tot 02-05-2008

BELCERT

BQA N° 018 EMS

A. COCHAUX
Directeur

BQA

AC/AJ/C/02-05-2005

BONAR TF

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Purchase. +32 (0) 52 45 74 13
Fax General +32 (0) 52 45 74 54
Fax Geo/Carpet. +32 (0) 52 45 74 95
Fax Agro +32 (0) 52 44 56 04
Fax purchase. +32 (0) 52 45 74 19
www.bonartf.com

Zele, 14.07.06

CERTIFICATION OF CONFORMANCE

The undersigned supplier BONAR TECHNICAL FABRICS, hereby states under his responsibility that the following product complies with the indicated technical properties :

L/C n°ICBC04M606896

Type SG 100/100 :	13125,0 m²
Type VNW 200-PP-K	9773,2 m²

Manufacturer : Bonar Technical Fabrics N.V

BONAR TECHNICAL FABRICS N.V.

BONAR TECHNICAL FABRICS N.V
p/a Industriestraat 39
B-9240 Zele

bontec

A Bonar technical fabrics product

Fax

Date: 11-Aug-04	
To: G and E – Hong Kong Mr. Gary NG	From: Isabelle Ruyffelaere – 0032 52 457 487 Philippe Grimmelprez – 0032 52 457 486
Fax:	Pages: 1 +
Your reference: Bonar TF acquisition of Uco Technical Fabrics	
	Our reference: G&E11082004.fax

To Whom it may concern

We hereby confirm that Bonar acquired the company UCO Technical Fabrics in October 1996 and all activities of the manufacturing and sales of Woven and Non woven geotextiles.

The Company changed name to **BONAR TECHNICAL FABRICS.**

Its headquaters are moved to Industriestraat 39, 9240 Zele, Belgium. At the same location is a new manufacturing plant of non woven geotextiles based.

The plant where woven geotextiles are produced is based on the old UCO location: weverslaan 15, Lokeren, Belgium.

Should you require any further information, please do not hesitate to contact us.

Best regards

Philippe Grimmelprez
Sales & Marketing Manager geotextiles.

BONAR TECHNICAL FABRICS *invisibly good*

BONAR Technical Fabrics nv/sa
Industriestraat 39 • B-9240 Zele • Belgium
Tel +32 (0)52 457 411 • Fax +32 (0)52 457 495
E-mail geotextiles@bonartf.com

BONAR Yarns & Fabrics Ltd.
St. Salvador Street • Dundee DD3 7BJ • United Kingdom
Tel +44 (0)1382 346102 • Fax +44 (0)1382 202278
E-mail rguild@bonaryarns.com

bontec

a bonar technical fabrics product

fax

Date: 14-Jun-05	
To: G and E – Hong Kong Mr. Gary NG / Mr Stanley	**From:** Isabelle Ruyffelaere – 0032 52 457 487 Philippe Grimmelprez – 0032 52 457 486
Fax:	**Pages:** 1 +
Your reference: SG 100/100	
	Our reference: G&E06142005.fax

Dear Gary,

- With reference to your inquiry of we hereby would like to confirm that:

Bontec SG 100/100 geotextile is woven in our vertical integrated plant in Belgium according the strict Iso 9001 : 2000 quality and ISO 14001 environmental system.

a/ The material is resistant to all naturally accurring soil acids and alkalis.
b/ The material is resistant to biological attack
c/ when used correctly (cfr installation guidelines), resistant to detoriation vaused by the effects of exposure to weather and burial. The polymers contain special stabilizers to resist to normal UV and oxidation.
d/ this is stable over temeperatures of 0 – 60 °C.
e/ The material is resistant to normal forces imposed during installation. Special forces that might occur during construction / installation must be given to Bonar so that special studies can be done.

Should you require any further information, please do not hesitate to contact us.

Best regards

Philippe Grimmelprez
Sales & Marketing Manager

BONAR TECHNICAL FABRICS
invisibly good

BONAR Technical Fabrics nv/sa
Industriestraat 39 • B-9240 Zele • Belgium
Tel +32 (0)52 457 411 • Fax +32 (0)52 457 495
E-mail geotextiles@bonartf.com

BONAR Yarns & Fabrics Ltd
St. Salvador Street • Dundee DD3 7EU • United Kingdom
Tel +44 (0)1382 346102 • Fax +44 (0)1382 202378
E-mail rguild@bonaryarns.com

Installation Guideline

BONTEC: Woven and Non Woven Geotextiles manufactured by Bonar Technical Fabrics – Belgium.

BONAR TF

RECOMMENDATION FOR THE INSTALLATION OF GEOTEXTILES

- The **BONTEC** geotextiles shall be kept in its original packaging in order to protect it from damaging UV-rays and high temperatures.

- The **BONTEC** geotextiles shall be stored protected from wind, rain, excess moisture or sunlight.

- The **BONTEC** geotextiles shall only be unpacked just before use. The material shall be covered within 1 week

- The **BONTEC** geotextiles shall be labelled and show the following data :

  - roll number
  - quality
  - name of the manufacturer
  - roll length & width
  - roll weight

- The **BONTEC** geotextiles shall be laid with the longitudenal ascis down slopes

- A minimum overlap of 500 mm between the different sheets shall be respected. Sewing of the different fabrics shall be done with a double prayer stitching technique with non deteriorating thread.

- Wherever visibility or installation of the BONTEC geotextile is poor an extra safety overlap of +/- 1 m shall be respected

- The surfaces to be covered with **BONTEC** geotextiles shall be smooth and free of sticks, roots, sharp objects, and all debris that may damage the fabric. The surface to be covered shall be firm and unyielding, with no sudden changes or brakes in grade.
- The compacted sub-base shall be maintained in a smooth, uniform and compacted condition during installation of the fabric.
- In area' s where wind is prevalent, fabric installation shall be started at the upwind side of the project and proceed downwind. The leading edgeof the fabric shall be secured at all times with sandbags or other means sufficient to hold it down during high winds. Sandbags or rubber tires may be used as required to hold the fabric in position during installation. Tires shall not have exposedsteel cords or other sharp edges which may snag or cut the fabric. Materials, equipment or other items shall not be dragged across the fabric or be allowed to slide down slopes on the fabric.

- Should the fabric be damaged during any step of the installation, the damaged section shall be repaired by covering it with a piece of fabric which extends at least 0,6 meter in all directions beyond the damaged area. The fabric shall be secured as directed by the engineer.

- Smoking shall not be permitted by personnel working on the fabric.

List of Project Reference

Bonar

Date	Project	Client	Consultant	Style
Feb-05	CV/2003/06 Stanley Waterfront Improvement Project - Construction Pier and Boardwalk	* Sun Fook Kong (Civil) Ltd	Civil Engineering and Development Department	SG100/100 NW10
Feb-05	99/9028 Lamma Power Station	Wai Kee (Zens) Construction & Transportation Co Ltd	Maunsell Geotechnical Services Ltd	SG100/100
Feb-05	CV/2004/02 Reconst. of Wong Shek & Ko Lau Wan Public Piers	* Kin Shing Construction Co Ltd	Civil Engineering and Development Department	SG100/100
Apr-05	CV/2002/04 Penny's Bay Reclamation Stage 2	Gammon Skanska Ltd Shun Tat Construction Engineering Ltd	Scott Wilson Ltd	SG100/100 SG100/100
Apr-05	HK/12/02 CED, Central Reclamation Phase III, Engineering Works	Best Leader Engineering Ltd Leighton - China State - Van Oord Joint Venture	Atkins China Ltd	SG100/100 SG100/100
May-05	03/8013 Lamma Island to Cyberport	Leader Marine Contractors Ltd Honwin Engineering Ltd	Maunsell Geotechnical Services Ltd	SG100/100 SG100/100
Jul-05	Shenzhen to Tai Po Twin Submarine Gas Pipeline Project	Honwin Engineering Limited		SG100/100
Sep-05	TP37/03 Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A	Leader - Wai Kee (C&T) Joint Venture	Hyder Consulting Ltd	SG100/100
Nov-05	HY/2002/26 Stone Cutter's Bridge	r Hong Kong River Engineering Co Ltd	Ove Arup	SG100/100
Feb-06	CV/2005/12 Fill Reception Facilities at Tseung Kwan O Area 137 Quarry Bay and Mui Wo	Penta-Ocean Construction Co Ltd	Civil Engineering Department	SG100/100
Mar-06	Maintenance Dredging at Castle Peak Power Station (CPPS) Jetty	New Concepts Engineering Development Ltd	Civil Engineering Department	SG100/100
Mar-06	CV/2004/04	China Harbour Engineering	Civil Engineering	SG100/100

		Co (Group)	Department	
Mar-06	HY/2005/06 Castle Peak Road Improvement West of Tsing Lung Tau	Shun Tat Construction Engineering Limited	Mouchel Halcrow JV	SG100/100
May-06	212 Main Works for the Proposed Third Golf Course Development at Kau Sai Chau, Sai Kung	China Harbour Engineering Co (Group)	Ove Arup and Partner	SG100/100 NW15
Jun-06	Hong Kong Convention and Exhibition Centre	Wai Kee (Zens) Construction & Transportation Co Ltd Kaden - Wai Kee (C&T) Joint Venture		SG100/100 SG100/100
Aug-06	EP/SP/52/06 Development of EcoPark in Tuen Mun Area 38	Kaden Construction Limited	Scott Wilson Ltd	SG100/100
Oct-06	Lamma Island Cable Landing	United Marine Co Ltd	Hong Kong Electric Co Ltd	SG100/100
Nov-06	CV/2004/01 Maintenance and Repairs to Seawalls, Piers and Other Port Works	Kin Shing Construction Co Ltd	Civil Engineering and Development Department	SG100/100
Dec-06		Friendly Benefit Engineering Ltd		SG100/100
Feb-07	Prebored Socketted H-Piles at Hong Kong Convention & Exhibition Centre	Yee Hop Engineering Co Ltd		SG100/100

March 12, 2007

Approval Letters

土木工程拓展署
CEDD Civil Engineering and Development Department

Web site 網址 : http://www.cedd.gov.hk
E-mail 電子郵件 :
Telephone 電話 : (852) 2760 5737
Facsimile 傳真 : (852) 2714 2054
Our reference 本署檔號 : ( ) in PW WC/CV0402/R20/340 Pt.1
Your reference 來函檔號 : KS330/2005

土木工程處
Civil Engineering Office

香港九龍公主道101號
土木工程拓展署大樓四樓
4/F, Civil Engineering and Development Building,
101 Princess Margaret Road,
Kowloon, Hong Kong

RECEIVED 28 JAN 2005

24 January 2005

BY MAIL & FAX No. 2780 2085

Kin Shing Construction Company Limited
1/F,
27 Yin Chong Street,
Mong Kok
Kowloon
(Attn.: Mr. Patrick P K Chau – Site Agent)

Dear Sirs,

Contract No. CV/2004/02
Reconstruction of Wong Shek and Ko Lau Wan Public Piers

Material Submission – Geotextile for Silt Curtain

I refer to your letter of 14.1.2005 enclosing the particulars of the geotextile for fabrication of silt curtain.

In accordance with PS Clause 26.08(2), the proposed "SG 100/100" woven geotextile manufactured by Bonar Technical Fabrics is approved to be used under the captioned Contract.

Pursuant to PS Clause 26.08(1), you are required to submit details of the silt curtains 3 weeks before their deployment.

Contract No. CV/2004/02			
Post	Initial	Copy	Action
CM			
PM			
SA			
Sub-A			
Eng(1)			
Eng(2)			
O/F			
Foreman			
Q.S			
Safety			
Material Survey			

Yours faithfully,

(W H LEE)
Engineer's Representative
Port Works Division
Civil Engineering and Development Department

c.c.
SIOW/P2B – Site Copy

cls

土木工程拓展署
CEDD Civil Engineering and Development Department

Web site 網址 : http://www.cedd.gov.hk
E-mail 電子郵件 :
Telephone 電話 : (852) 2762 5035
Facsimile 傳真 : (852) 2714 2054
Our reference 本署檔號 : (15) in PW WC/CV0306/R20/340 Pt.01
Your reference 來函檔號 : CIV/002091/1.2/HW/SY/CC/ms(S0057),
CIV/002091/1.2/HW/SY/CC/ms(S0114)

土木工程處
Civil Engineering Office

香港九龍公主道101號
土木工程拓展署大樓4樓
4/F, Civil Engineering and Development Building,
101 Princess Margaret Road,
Kowloon, Hong Kong

112

18 February 2005

Sun Fook Kong (Civil) Limited
Rms. 3207-10,
Great Eagle Centre,
23 Harbour Road,
Wan Chai,
Hong Kong
(Attn: Mr. Howard KONG - Fax No.2827 6275)

Dear Sirs,

Contract No. CV/2003/06
Stanley Waterfront Improvement Project –
Construction of Pier and Boardwalk

Fabric for Silt Curtain

I refer to your above letters dated 21.1.2005 and 15.2.2005 proposing the SG100/100 fabric supplied by "Bonar Technical Fabrics" for silt curtain.

I have no objection to your proposed material for silt curtain.

Yours faithfully,

(Paul YK MA)
Engineer's Representative
Port Works Division
Civil Engineering and Development Department

c.c.
Site Office (Attn: SIOW/P1A)
CEG/P1A

File PW WC/CV0306/M10/300

YKM/wlm

Post-it® Fax Note 7671	Date 24/2/05 pages 1
To MR. STANLEY WAN	From CHAN SZE-HO
Co./Dept. G&E	Co. SFK
Phone # 25080026	Phone # 68147703
Fax # 25700089	Fax #

Mott MacDonald Hong Kong Limited

Consulting Engineers

Chief Resident Engineer's Office
North Lantau Development - Tung Chung
for Territories Development Department

Our Ref : S287/NL1/25.7/283/JY 30 June 1992

China Harbour Engineering Company
19/F, China Harbour Building
370-374 King's Road
North Point
Hong Kong.

Attn : Mr. S. Y. Yu

T.D.D. CONTRACT NO. NL 1/91 C. E. Dept.		
DATE	ACTION	INFORM
SA		
DSA		
QS		
ENG		
SUR		
FOREMAN		
FILE		

Dear Sirs,

North Lantau Development
Contract No. NL1/91
Tung Chung Development Phase I - Site Formation
Materials for Subsoil Drains

I refer to your letter ref. NL1/C/0097/008/MM/145 of 10/6/92 submitting materials for subsoil drains for our approval.

I have the following comments :

1) The proposed subsoil drain material - i.e. 300mm diameter ADS corrugated polyethylene subsoil drain pipes from Benpak Waterwise company is acceptable.

2) The proposed Geotextile SG17/15 from UCO (2 layers) as protection for subsoil drainage is acceptable in principal. Please submit further technical specification such as lapping and site storage requirements recommended by the manufacturer.

3) The proposed Greenfix Eromat Special type 5 from CCL is still under review. You will be notified of the outcome if a decision is made.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED

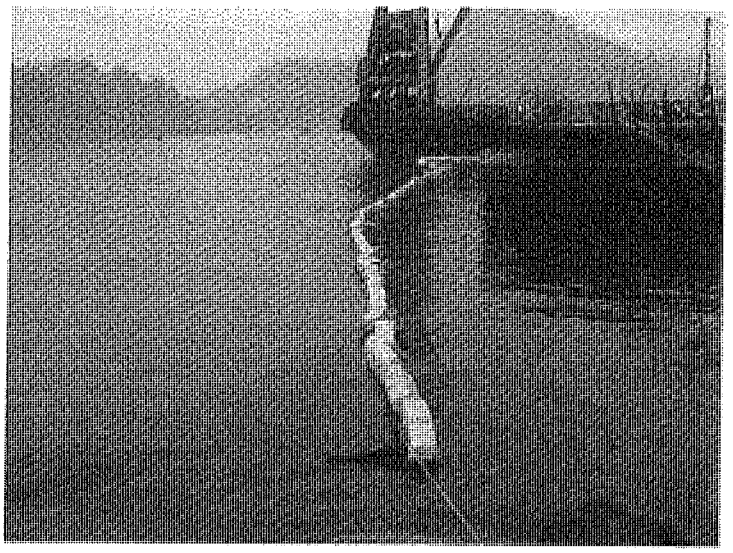
Luke Chi
Engineer's Representative

LC/JY/ak

Photos References

G AND E COMPANY LIMITED

Rm. B, 13/F Cheung Lee Ind. Bldg.
9 Cheung Lee Street
Chai Wan, Hong Kong
Tel: 2508 0028 / 2570 0103 Fax: 2570 0089



Appendix D

Notes of Liaison Meeting for

Silt Screen Removal after the Decommissioning of

Seawater Intake No. 8

AECOM
8/F, Grand Central Plaza, Tower 2,
138 Shatin Rural Committee Road,
Shatin, Hong Kong
香港新界沙田鄉事會路 138 號
新城市中央廣場第 2 座 8 樓
www.aecom.com

Engineer's Representative's Office
25 Hung Hing Road,
Causeway Bay, Hong Kong
香港銅鑼灣鴻興道 25 號
+852 3912 3000 tel
+852 3912 3010 fax

Your Ref. :
Our Ref. : CWB/(HY/2009/15)/M30/910/15B001371

15B001371

21 May 2011

24 MAY 2011
M30/910

See Distribution List

Dear Sir/ Madam,

Contract No. HY/2009/15
Central-Wan Chai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

Water Quality Monitoring Station C6 - Seawater Intakes for the Excelsior (and World Trade Centre)

I refer to the liaison meeting amongst Excelsior / Kai Shing / AECOM / ET / CSHK / CHEC CRBC JV held in 33/F Conference Room of the Excelsior on 17 May 2011.

The notes of the meeting is hereby attached for your reference.

Yours faithfully,
For and on behalf of
AECOM Asia Co. Ltd.

Peter Poon
Principal Resident Engineer

Encl.

c.c AECOM - Attn. : Mr. Conrad Ng
M45/150

PP/EW/QMY/gw

Distribution List

	Company / Address	Contact Person
1.	The Excelsior Hotel 281 Gloucester Road Causeway Bay Hong Kong	Attn: Mr. Raymond Ho
2.	Kai Shing Management Services Ltd Room 1404, 14/F., World Trade Centre 280 Gloucester Road Causeway Bay Hong Kong	Attn: Ms. Margaret Lau/ Mr. Kelvin Tsang/ Mr. Cheng
3.	Lam Environmental Services Ltd. 11/F, Centre Point 181-185 Gloucester Road Wan Chai, Hong Kong	Attn: Mr. Raymond Dai
4.	CHEC-CRBC Joint Venture 19th Floor, China Harbour Building 370-374 King's Road North Point, Hong Kong	Attn: Mr. Daniel CHEUNG/ Mr. C M Wong
5.	China State Construction Engineering (Hong Kong) Ltd. 29/F, China Overseas Building 139 Hennessy Road Wan Chai, H.K.	Attn: Mr. Simon Tang

Notes of Meeting

Meeting Date/Time: 17 May 2011, 11:00 a.m.

Venue: Conference Room, 33/F, The Excelsior

Project: (Contract no. HY/2009/15)
Central–Wan Chai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

Subject: Liaison meeting for silt screen removal after the Decommissioning of the Seawater Intakes for the Excelsior

Distribution: Excelsior, Kai Shing, ETL, CSHK, CHEC CRBC JV & AECOM

PRESENT:	Mr. Raymond Ho	}	The Excelsior, Hong Kong (Excelsior)
	Ms. Margaret Lau Mr. Kelvin Tsang Mr. Cheung	} } }	Kai Shing Management Services Ltd (Kai Shing)
	Mr. Eric Wong Mr. Y K Poon Mr. Ernest Wong	} } }	AECOM Asia Co. Ltd (AECOM)
	Ms. Cherry Mak	}	Lam Environmental Services Ltd, Environmental Team (ET)
	Mr. Samuel Tsui	}	China State Construction Engineering Ltd, The Contractor of HyD Contract No. HY/2009/15 (CSHK)
	Mr. Daniel Cheung Mr. C M Wong	} }	China Harbour Engineering Co. Ltd. China Road and Bridge Corporation Joint Venture The Contractor of HyD Contract No. HY/2009/11 (CHEC CRBC JV)

NO.	ITEM	ACTION
1.	Mr. Eric Wong (AECOM) briefly described the background of silt screen installation for seawater intakes (C6) for The Excelsior, which is a part of the environmental permit's requirements. CHEC CRBC JV was the party responsible for installation and maintenance of the silt screen at the seawater intakes for The Excelsior.	Noted
2.	Mr. Raymond Ho (Excelsior) advised that the seawater intake was no longer in use since 11 January 2011 as they had connected permanent water supply from WSD pipelines, and that the seawater intake had been abandoned with the valves inside the pumping station closed.	Noted
3.	Mr. Daniel Cheung (CHEC CRBC JV) suggested that the silt screen provision for C6 would be removed from 20 May 2011 (Friday) and expected that the removal works would need a few days to complete.	CHEC CRBC JV
4.	Ms. Margaret Lau (Kai Shing) suggested and CHEC CRBC JV agreed that the removal works would not be scheduled for Saturday or Sunday.	Note
5.	Mr. Eric Wong stated that a submission would be prepared by CSHK notifying EPD of the removal works.	CSHK
6.	Ms. Cherry Mak (ET) said that they would entirely disconnect and remove all power sockets inside the pump house accordingly. Advance notice would be sent to Ms. Margaret Lau.	ET
7.	Ms. Cherry Mak advised that the routine impact water quality monitoring for intake would be terminated subjected to the formal notification to EPD. The enhanced dissolved oxygen monitoring would be maintained.	Noted
8.	Ms. Margaret Lau stated that advance notice, as well as the working schedule and details of supervisor for silt screen removal, would be required from CHEC CRBC JV for information. CHEC CRBC JV agreed.	CHEC CRBC JV
9.	Mr. Daniel Cheung said that after removal of the silt screen, CHEC would take photos and share to all parties for record.	CHEC CRBC JV

EW/QMY/gw

Appendix E

Instruction of Take Over Silt Screen at Windsor House Seawater Intake

AECOM
8/F, Grand Central Plaza, Tower 2,
138 Shatin Rural Committee Road,
Shatin, Hong Kong
香港新界沙田鄉事會路 138 號
新城市中央廣場第 2 座 8 樓
www.aecom.com

Engineer's Representative's Office
25 Hung Hing Road,
Causeway Bay, Hong Kong
香港銅鑼灣鴻興道 25 號
+852 3912 3000 tel
+852 3912 3010 fax

Your Ref. :
Our Ref. : CWB/(HY/2009/15)/C20/800/15B001478

2 June 2011

China State Construction Engineering (Hong Kong) Limited
29/F China Overseas Building,
139 Hennessy Road,
Hong Kong

Attn.: Mr. Simon Tang

Dear Sir,

Contract No. HY/2009/15
Central-Wan Chai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

Silt Screen at Windsor House Seawater Intake

Pursuant to P.S. Clause 25.05 (2) (i), you are instructed to take over the captioned silt screen effective on 23 May 2011, and carry out regular inspection and maintenance of the silt screen until such time that an instruction is made to you to cease the operation.

Yours faithfully,
For and on behalf of
AECOM Asia Co. Ltd.

Peter Poon
Engineer's Representative

c.c. AECOM - Attn.: Mr. Conrad Ng

PP/EW/EH/gw