

**Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link –
Southern Connection Viaduct Section**

Seventeenth Monthly EM&A Report

16 April 2015

Environmental Resources Management
16/F, Berkshire House
25 Westlands Road
Quarry Bay, Hong Kong
Telephone 2271 3000
Facsimile 2723 5660

www.erm.com





Contract No. HY/2012/07 Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section

**Environmental Resources
Management**

16/F, Berkshire House
25 Westlands Road
Quarry Bay, Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660
E-mail: post.hk@erm.com
http://www.erm.com

Seventeenth Monthly EM&A Report

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Client: Gammon		Project No: 0215660			
Summary: This document presents the Seventeenth Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section.		Date: 16 April 2015			
		Approved by: 			
		Mr Craig Reid Partner			
		Certified by: 			
		Mr Jovy Tam ET Leader			
	Seventeenth Monthly EM&A Report	VAR	JT	CAR	16/04/15
Revision	Description	By	Checked	Approved	Date
<p>This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.</p> <p>We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.</p>		<p>Distribution</p> <p><input type="checkbox"/> Internal</p> <p><input checked="" type="checkbox"/> Public</p> <p><input type="checkbox"/> Confidential</p>			
		 			

Ref.: HYDHZMBEEM00_0_2892L.15

17 April 2015

AECOM
Supervising Officer's Representative's Office
780 Cheung Tung Road, Lantau, N.T.

By Fax (3691 2899) and By Post

Attention: Mr. Daniel Ip

Dear Mr. Ip,

**Re: Agreement No. CE 48/2011 (EP)
Environmental Project Office for the
HZMB Hong Kong Link Road, HZMB Hong Kong Boundary Crossing Facilities,
and Tuen Mun-Chek Lap Kok Link – Investigation**

**Contract No. HY/2012/07 TM-CLKL Southern Connection Viaduct Section
Monthly EM&A report for March 2015 (EP-354/2009/D)**

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report (March 2015) certified by the ET Leader (ET's ref.: "0215660_17th Monthly EM&A 20150416.doc" dated 16 April 2015) and provided to us via e-mail on 17 April 2015.

We are pleased to inform you that we have no adverse comments on the captioned monthly EN&A report. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/D.

Thank you for your kind attention. Please do not hesitate to contact the undersigned or the ENPO Leader Mr. Y. H. Hui should you have any queries.

Yours sincerely,



F. C. Tsang
Independent Environmental Checker
Tuen Mun – Chek Lap Kok Link

c.c. HyD – Mr. Stephen Chan (By Fax: 3188 6614)
HyD – Mr. Matthew Fung (By Fax: 3188 6614)
AECOM – Mr. Conrad Ng (By Fax: 3922 9797)
ERM – Mr. Jovy Tam (By Fax: 2723 5660)
Gammon – Mr. Roy Leung (By Fax: 3520 0486)

Internal: DY, YH, SLUI, ENPO Site

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TABLE OF CONTENTS

	<i>EXECUTIVE SUMMARY</i>	<i>I</i>
<i>1</i>	<i>INTRODUCTION</i>	<i>1</i>
<i>1.1</i>	<i>BACKGROUND</i>	<i>1</i>
<i>1.2</i>	<i>SCOPE OF REPORT</i>	<i>2</i>
<i>1.3</i>	<i>ORGANIZATION STRUCTURE</i>	<i>2</i>
<i>1.4</i>	<i>SUMMARY OF CONSTRUCTION WORKS</i>	<i>2</i>
<i>2</i>	<i>EM&A RESULTS</i>	<i>5</i>
<i>2.1</i>	<i>AIR QUALITY</i>	<i>5</i>
<i>2.2</i>	<i>NOISE MONITORING</i>	<i>7</i>
<i>2.3</i>	<i>WATER QUALITY MONITORING</i>	<i>8</i>
<i>2.4</i>	<i>DOLPHIN MONITORING</i>	<i>10</i>
<i>2.5</i>	<i>EM&A SITE INSPECTION</i>	<i>14</i>
<i>2.6</i>	<i>WASTE MANAGEMENT STATUS</i>	<i>15</i>
<i>2.7</i>	<i>ENVIRONMENTAL LICENSES AND PERMITS</i>	<i>16</i>
<i>2.8</i>	<i>IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES</i>	<i>19</i>
<i>2.9</i>	<i>SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT</i>	<i>19</i>
<i>2.10</i>	<i>SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS</i>	<i>19</i>
<i>3</i>	<i>FUTURE KEY ISSUES</i>	<i>20</i>
<i>3.1</i>	<i>CONSTRUCTION PROGRAMME FOR THE COMING MONTHS</i>	<i>20</i>
<i>3.2</i>	<i>KEY ISSUES FOR THE COMING MONTH</i>	<i>20</i>
<i>3.3</i>	<i>MONITORING SCHEDULE FOR THE COMING MONTH</i>	<i>20</i>
<i>4</i>	<i>CONCLUSIONS AND RECOMMENDATIONS</i>	<i>21</i>
<i>4.1</i>	<i>CONCLUSIONS</i>	<i>21</i>

List of Appendices

- Appendix A Project Organization for Environmental Works
- Appendix B Three Month Rolling Construction Programmes
- Appendix C Implementation Schedule of Environmental Mitigation Measures (EMIS)
- Appendix D Summary of Action and Limit Levels
- Appendix E Calibration Certificates of Monitoring Equipment
- Appendix F EM&A Monitoring Schedules
- Appendix G Impact Air Quality Monitoring Results and Graphical Presentation
- Appendix H Meteorological Data for the Reporting Month
- Appendix I Impact Noise Monitoring Results and Graphical Presentation
- Appendix J Impact Water Quality Monitoring Results and Graphical Presentation
- Appendix K Impact Dolphin Monitoring Survey Results
- Appendix L Event Action Plan
- Appendix M Monthly Summary of Waste Flow Table
- Appendix N Cumulative Statistics on Exceedances, Complaints, Notifications of Summons and Successful Prosecutions

EXECUTIVE SUMMARY

Under *Contract No. HY/2012/07*, Gammon Construction Limited (GCL) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Southern Connection Viaduct Section of the Tuen Mun – Chek Lap Kok Link Project (TM-CLK Link Project) while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET). ENVIRON Hong Kong Ltd. was employed by the HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO) in accordance with *Environmental Permit No. EP-354/2009/A*. Further applications for variation of environmental permit (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

The construction phase of the Contract commenced on 31 October 2013 and will tentatively be completed by 2018. The impact monitoring of the EM&A programme, including air quality, noise, water quality and marine ecological monitoring as well as environmental site inspections, commenced on 31 October 2013.

This is the Seventeenth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 March 2015 for the Southern Connection Viaduct Section in accordance with the Updated EM&A Manual of the TM-CLK Link Project. As informed by the Contractor, major activities in the reporting period included:

Marine Works

- Construction of Pile caps at Viaducts B, C, D & E;
- Marine piling platform installation & uninstallation;
- Marine Piling at Viaducts C & E; and
- Additional marine ground investigation (GI) and laboratory testing.

Land-based Works

- Construction of pile cap superstructure of Viaduct B;
- Channel re-construction at Area 1;
- Land Piling at Viaducts B, C & D;
- Pre-drilling works at Viaduct A;
- Construction of pile cap at Viaducts B, C, D & E;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

A summary of monitoring and audit activities conducted in the reporting period is listed below:

24-hour TSP monitoring	6 sessions
1-hour TSP monitoring	6 sessions
Noise monitoring	6 sessions
Impact Water Quality Monitoring	13 sessions
Impact Dolphin Monitoring	2 sessions
Joint Environmental site inspection	4 sessions

Breaches of Action and Limit Levels for Air Quality

No exceedance of Action and Limit Levels was recorded for construction air monitoring in the reporting month.

Breaches of Action and Limit Levels for Noise

No exceedance of Action and Limit Levels was recorded for construction noise monitoring in the reporting month.

Breaches of Action and Limit Levels for Water Quality

No exceedance of Action and Limit Levels was recorded for impact water quality monitoring in the reporting month.

Impact Dolphin Monitoring

During this month of dolphin monitoring, no unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Chinese White Dolphins was noticeable from general observations. Due to monthly variation in dolphin occurrence within the study area, it would be more appropriate to draw conclusion on whether any impacts on dolphins have been detected related to the construction activities of the TM-CLKL Southern Connection Viaduct Section in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

Daily marine mammal exclusion zone monitoring was undertaken during the period of marine works under this Contract. No Passive Acoustic Monitoring (PAM) was implemented as the marine works were not carried out outside the daylight hours in this reporting month. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in March 2015 during the exclusion zone monitoring.

Environmental Complaints, Non-compliance & Summons

No environmental complaint, notification of summons and successful prosecution was received in the reporting month.

Reporting Change

The weekly monitoring for landscape and visual impact mitigation measures will be reported in a separated checklist instead of reported in the weekly checklist with other mitigation measures, and the status of landscape and visual impact mitigation measures will be summarized in the EMIS of the EM&A Monthly Report. The aforementioned procedure will be undertaken in April 2015.

Upcoming Works for the Next Reporting Period

Works to be undertaken in the next monitoring period of April 2015 include the following:

Marine Works

- Construction of Pile caps at Viaducts B, C, D & E;
- Marine piling platform installation & uninstallation;
- Marine Piling at Viaducts A, C & E; and
- Additional marine ground investigation (GI) and laboratory testing.

Land-based Works

- Construction of pile cap superstructure of Viaduct B;
- Channel re-construction at Area 1;
- Land Piling at Viaducts B, C & D;
- Pre-drilling works at Viaduct A;
- Construction of pile cap at Viaducts B, C, D & E;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of April 2015 are mainly associated with dust, noise, marine water quality, marine ecology and waste management issues.

1.1

BACKGROUND

According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated increase in cross boundary traffic, developments in the Northwest New Territories (NWNT), and possible developments in North Lantau, including the Airport developments, the Lantau Logistics Park (LLP) and the Hong Kong – Zhuhai – Macao Bridge (HZMB). In order to cope with the anticipated traffic demand, two new road sections between NWNT and North Lantau – Tuen Mun – Chek Lap Kok Link (TM-CLKL) and Tuen Mun Western Bypass (TMWB) are proposed.

An Environmental Impact Assessment (EIA) of TM-CLKL (the Project) was prepared in accordance with the EIA Study Brief (No. ESB-175/2007) and the *Technical Memorandum of the Environmental Impact Assessment Process (EIAO-TM)*. The EIA Report was submitted under the Environmental Impact Assessment Ordinance (EIAO) in August 2009. Subsequent to the approval of the EIA Report (EIAO Register Number AEIAR-146/2009), an Environmental Permit (EP-354/2009) for TM-CLKL was granted by the Director of Environmental Protection (DEP) on 4 November 2009, and EP variation (EP-354/2009/A) was issued on 8 December 2010.

Under *Contract No. HY/2012/07*, Gammon Construction Limited (GCL) is commissioned by the Highways Department (HyD) to undertake the design and construction of the Southern Connection Viaduct Section of TM-CLKL (“the Contract”) while AECOM Asia Company Limited was appointed by HyD as the Supervising Officer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET). ENVIRON Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO) in accordance with *Environmental Permit No. EP-354/2009/A*. Further applications for variation of environmental permit (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

The construction phase of the Contract commenced on 31 October 2013 and will be tentatively completed by 2018. The impact monitoring phase of the EM&A programme, including air quality, noise, water quality and marine ecological monitoring as well environmental site inspections, commenced on 31 October 2013.

The general layout plan of the Contract components is presented in *Figures 1.1 & 1.2a to l*.

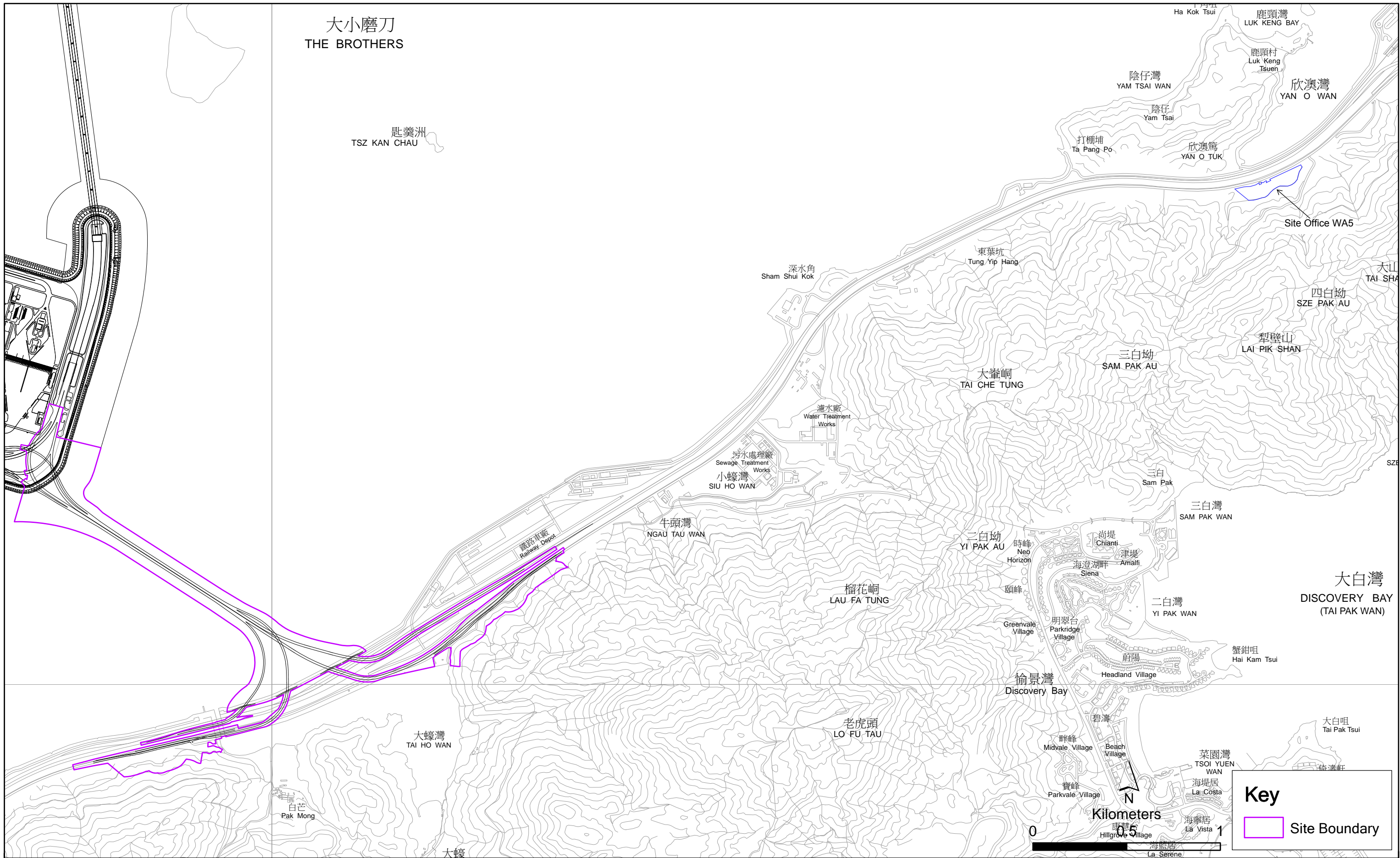
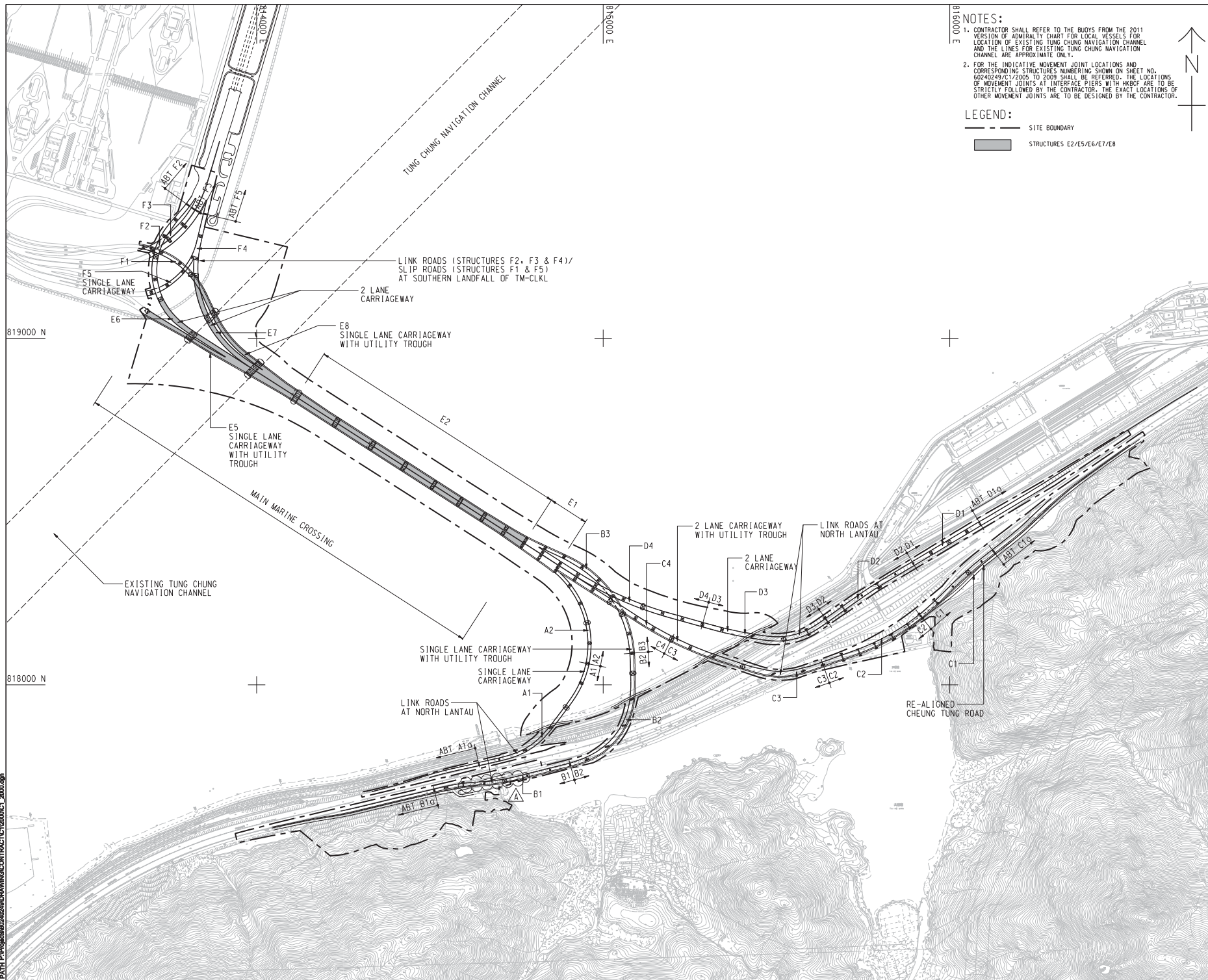


Figure 1.1

General Layout Plan of the Project



NOTES:

- CONTRACTOR SHALL REFER TO THE BUOYS FROM THE 2011 VERSION OF ADMIRALTY CHART FOR LOCAL VESSELS FOR LOCATION OF EXISTING TUNG CHUNG NAVIGATION CHANNEL AND THE LINES FOR EXISTING TUNG CHUNG NAVIGATION CHANNEL ARE APPROXIMATE ONLY.
- FOR THE INDICATIVE MOVEMENT JOINT LOCATIONS AND CORRESPONDING STRUCTURES NUMBERING SHOWN ON SHEET NO. 60240249/C1/2005 TO 2009 SHALL BE REFERRED. THE LOCATIONS OF MOVEMENT JOINTS AT INTERFACE PIERS WITH HKBCF ARE TO BE STRICTLY FOLLOWED BY THE CONTRACTOR. THE EXACT LOCATIONS OF OTHER MOVEMENT JOINTS ARE TO BE DESIGNED BY THE CONTRACTOR.

LEGEND:

- SITE BOUNDARY
- STRUCTURES E2/E5/E6/E7/E8

AECOM

PROJECT
 TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
 TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
 路政署
HIGHWAYS DEPARTMENT
 港務局
 港務局工程處
 Hong Kong - Zhuhai - Hainan Bridge
 Hong Kong Project Management Office

CONSULTANT
 AECOM Asia Company Ltd.
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SUB-CONSULTANTS

Figure 1.2a

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.

STATUS

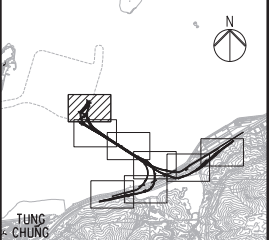
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KEY PLAN

PROJECT NO. 60240249	CONTRACT NO. HY/2012/07
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SHEET NUMBER 60240249/C1/2000A	

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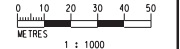


KEY PLAN

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- LEGEND**
- SITE BOUNDARY
 - GF1 FAULT
 - EXISTING G.I.-STATIONS :
 - ⊕ BOREHOLE BY GIU DATA EXCLUDING VC
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2012/04
 - ⊕ BOREHOLE BY GCL CONTRACT NL8/97
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2009/23
 - ⊕ TRIAL PIT BY GCL CONTRACT HY/2012/04
 - SLOPE STRIPPING BY GCL CONTRACT HY/2012/04
 - PROPOSED G.I.-STATIONS :
 - ⊕ PBH01 PROPOSED BOREHOLE
 - ⊕ TP01 PROPOSED TRIAL PIT
 - ⊕ CH01 PROPOSED COREHOLE
 - SS01 SS02 PROPOSED SLOPE STRIPPING

MATCH LINE
 FOR CONTINUATION
 SEE DRG J3518/P/OAP/04/01101



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 香港特別行政區運輸及房屋局
 Transport and Housing Planning Department
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

Supervising Officer: **AECOM**
 Contractor: **Gammon**

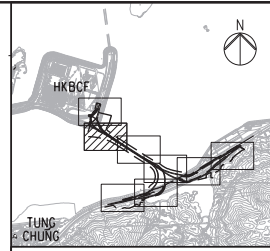
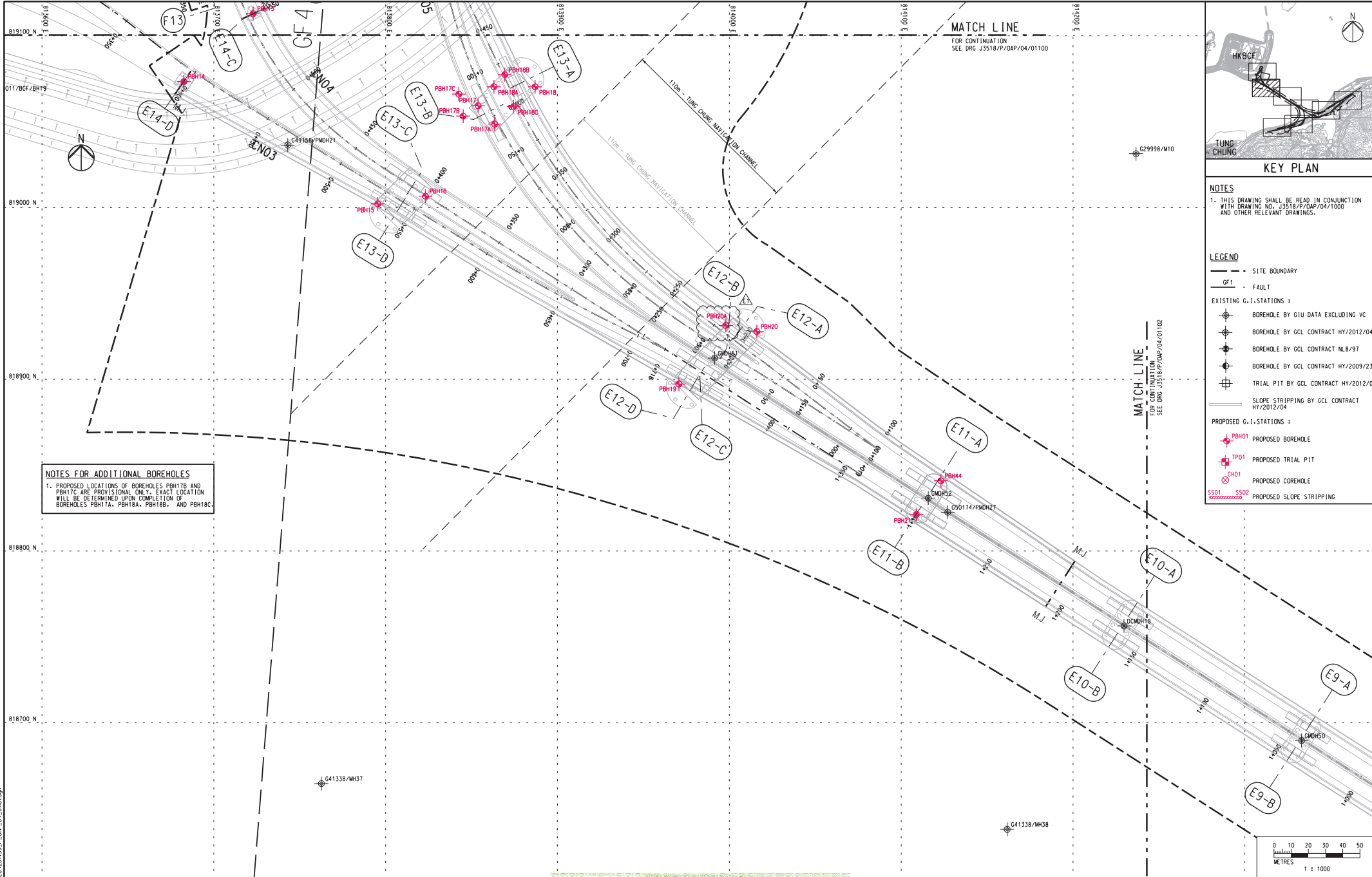
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Contract No. HY/2012/07
Tuen Mun - Chek Lap Kok Link
Southern Connection Viaduct Section

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 - ▬ SLOPE STRIPPING BY GCL CONTRACT HY/2012/04
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 - ⊕ PBH01 PROPOSED BOREHOLE
 - ⊕ TP01 PROPOSED TRIAL PIT
 - ⊕ CH01 PROPOSED COREHOLE
 - ▬ SS01 ▬ SS02 PROPOSED SLOPE STRIPPING

NOTES FOR ADDITIONAL BOREHOLES
 1. PROPOSED LOCATIONS OF BOREHOLES PBH17B AND PBH17C ARE PROVISIONAL ONLY. EXACT LOCATION WILL BE DETERMINED UPON COMPLETION OF BOREHOLES PBH17A, PBH18A, PBH18B, AND PBH18C.

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RL	07/13	HIGHWAYS DEPARTMENT

Checked	Date	Supervising Officer	Contractor
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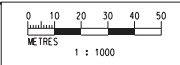
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Client: **HIGHWAYS DEPARTMENT**
 香港運輸及房屋局
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 Hong Kong Project Management Office

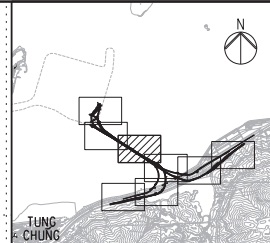
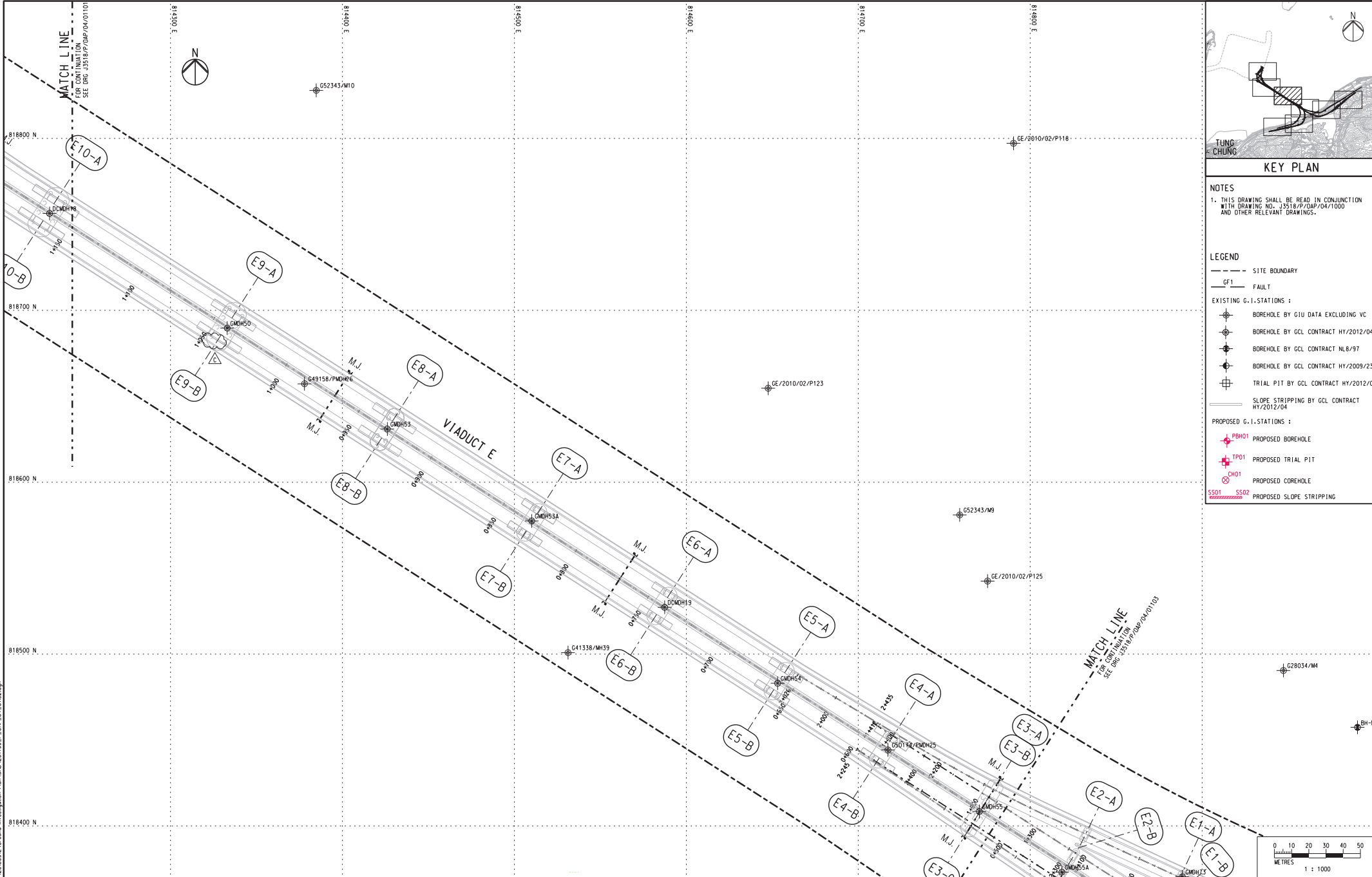
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 Southern Connection Viaduct Section

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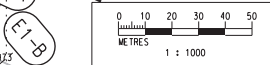
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C	SUBMISSION	RC	09/13					DS	DOP		
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 港珠澳大桥香港工程管理有限公司
 Hong Kong Project Management Office

Supervising Officer: **AECOM**

Project Title: Contract No. HY/2012/07
 Tuen Mun - Chek Lap Kok Link
 Southern Connection Viaduct Section

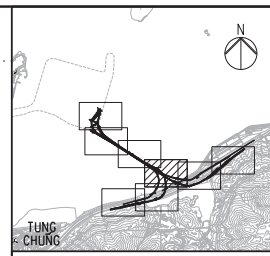
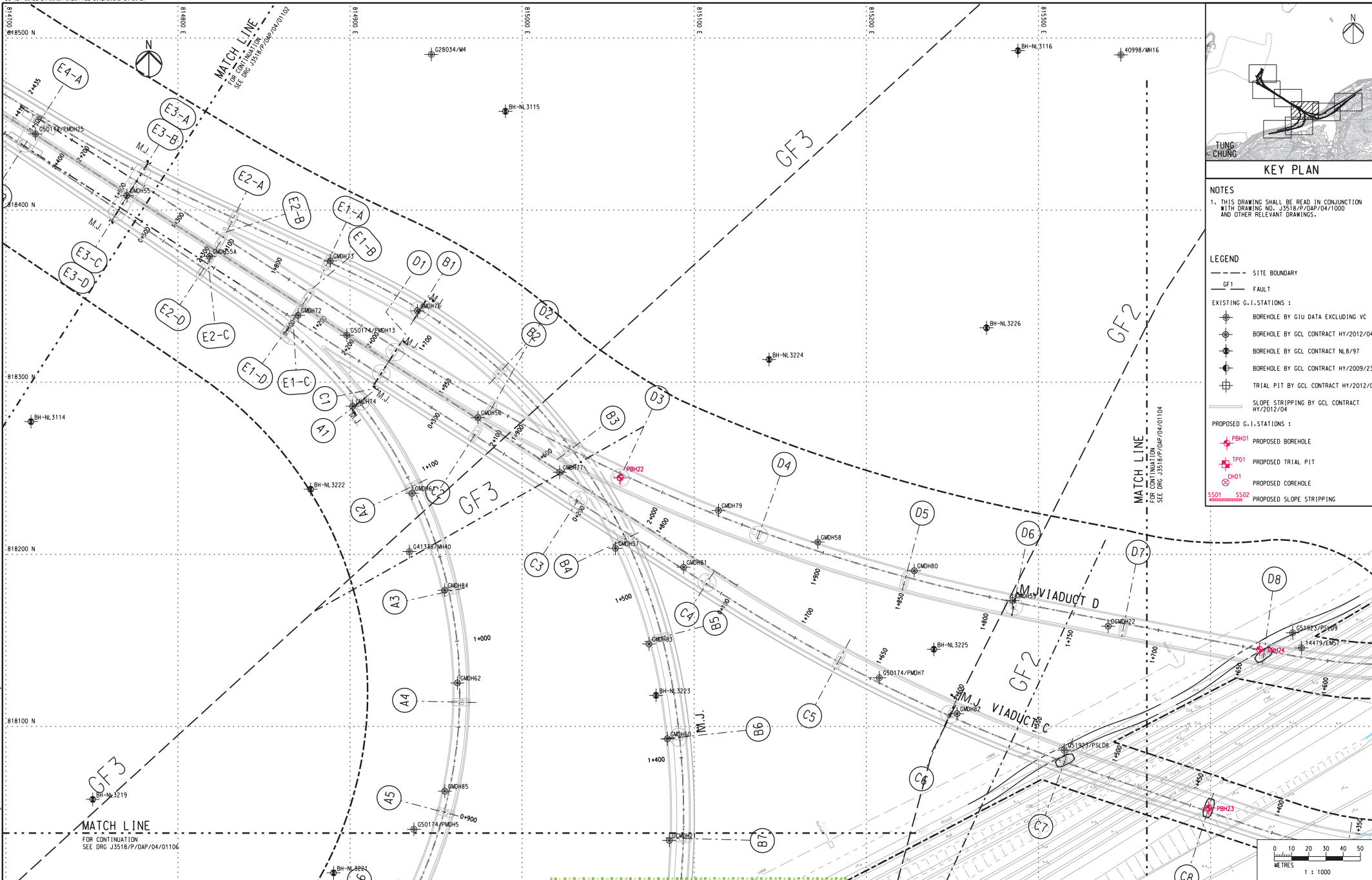
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Originator: **ARUP**

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 - SS01 SS02 PROPOSED SLOPE STRIPPING



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Client
 路政署
 HIGHWAYS DEPARTMENT
 港珠澳大桥香港工程管理局
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

Supervising Officer
AECOM

Project Title
 Contract No. HY/2012/07
 Tuen Mun - Chek Lap Kok Link
 Southern Connection Viaduct Section

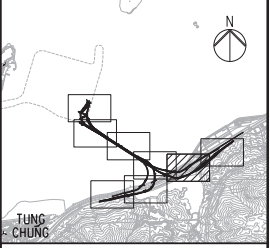
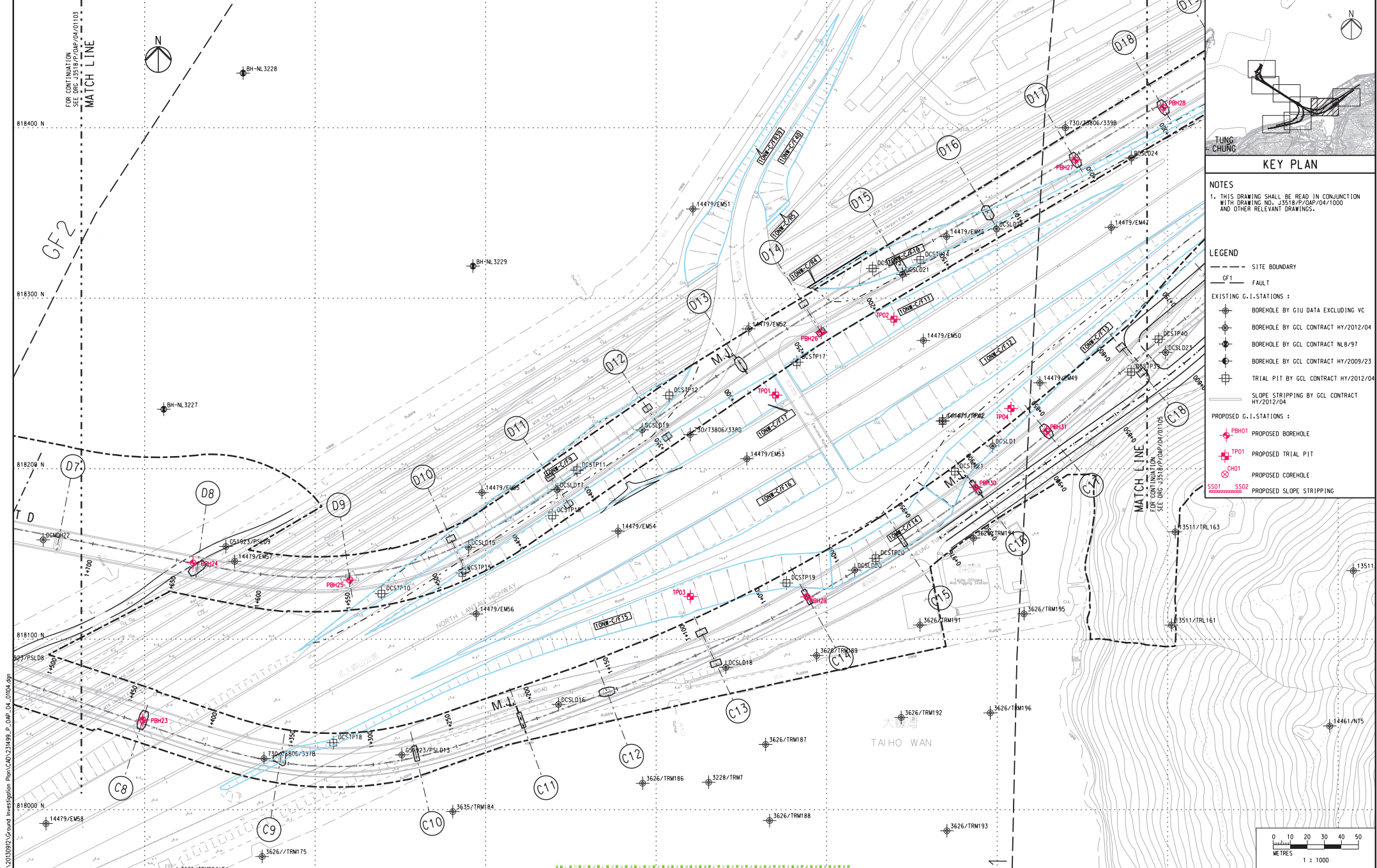
Contractor
Gammon

Originator
ARUP

Drawing title
Figure 1.2e

Drawing no. J3518/P/OAP/04/01103 Rev. c

DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



NOTES
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NO. J3518/P/OAP/04/1000 AND OTHER RELEVANT DRAWINGS.

LEGEND

--- SITE BOUNDARY
 -GF1- FAULT
 --- EXISTING G.I. STATIONS :
 ● BOREHOLE BY GIU DATA EXCLUDING VC
 ● BOREHOLE BY GCL CONTRACT HY/2012/04
 ● BOREHOLE BY GCL CONTRACT NL6/97
 ● BOREHOLE BY GCL CONTRACT HY/2009/23
 ● TRIAL PIT BY GCL CONTRACT HY/2012/04
 --- SLOPE STRIPPING BY GCL CONTRACT HY/2012/04

PROPOSED G.I. STATIONS :
 ● PBH01 PROPOSED BOREHOLE
 ● TP01 PROPOSED TRIAL PIT
 ● CH01 PROPOSED COREHOLE
 ● SS01 SS02 PROPOSED SLOPE STRIPPING



Rev	Description	By	Date	Rev	Description	By	Date	Drawn	Date
A	SUBMISSION	RC	07/13					RL	07/13
B	SUBMISSION	RC	07/13					Checked	Approved
C	SUBMISSION	RC	09/13					DS	DOP
								Scale	1:1000 @ A1 / 1:2000 @ A3

Client
 路政署
 HIGWAYS DEPARTMENT
 香港港大橋香港工程總處
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

Supervising Officer
 AECOM

Project Title
 Contract No. HY/2012/07
 Tuen Mun - Chek Lap Kok Link
 Southern Connection Viaduct Section

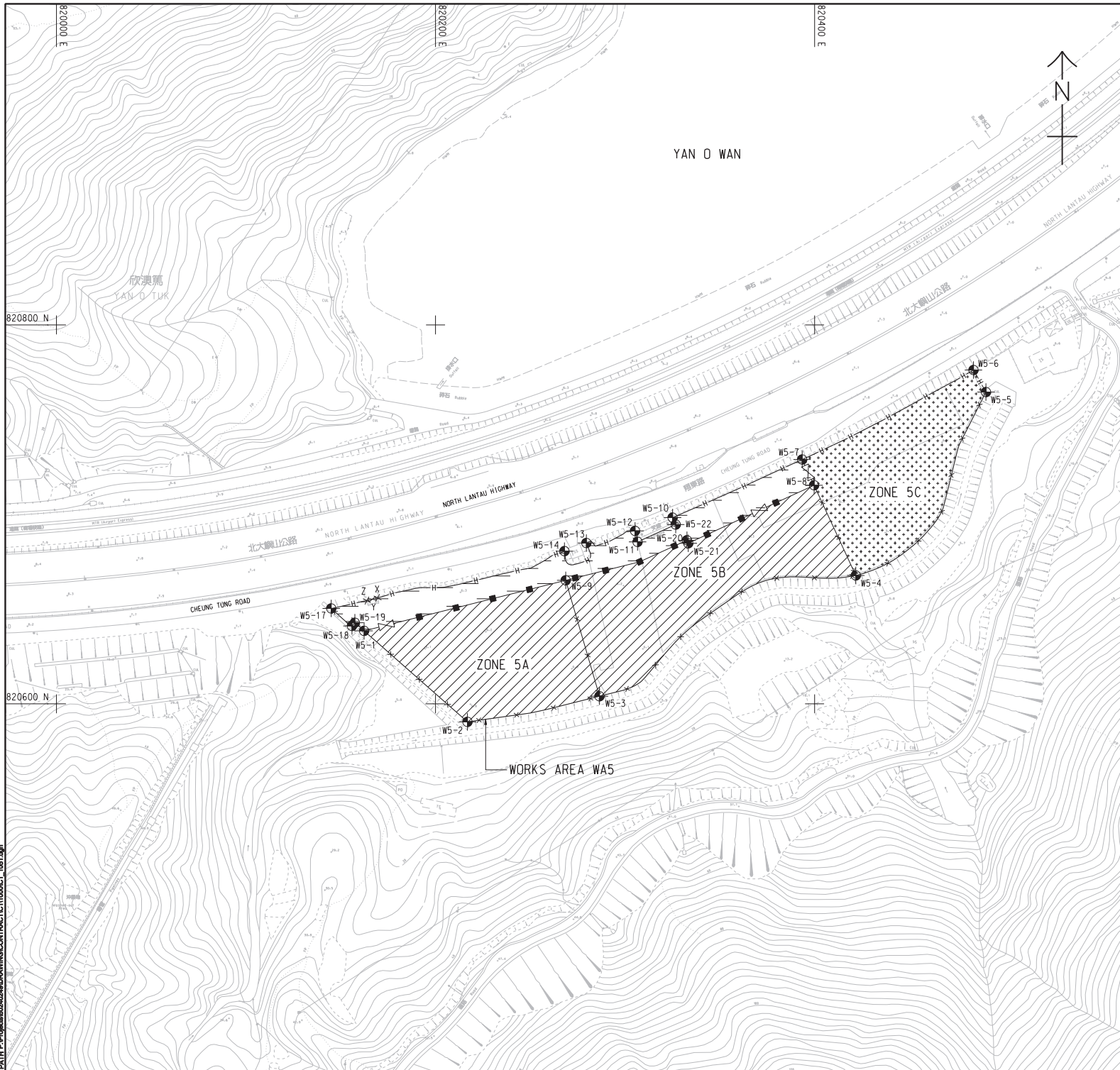
Contractor
 Gammon

Originator
 ARUP


Drawing title
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Drawing no. J3518/P/OAP/04/01104 Rev. C







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NOTES:

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/C1/1000.
- THE SETTING OUT INFORMATION AND WORKS AREA CONDITIONS SHOWN IN THIS DRAWING ARE FOR REFERENCE ONLY. THE WORKS AREA BOUNDARY SHALL BE IN ACCORDANCE WITH THE ENGINEERING CONDITIONS FOR TEMPORARY GOVERNMENT LAND ALLOCATION NO. T15 619. IN CASE OF DISCREPANCY BETWEEN THE BOUNDARY SHOWN ON THIS DRAWING AND THE BOUNDARY INDICATED ON THE ENGINEERING CONDITIONS, THE LATTER SHALL PREVAIL.
- DEMARCATION OF THE WORKS AREA SHALL BE DETERMINED ON SITE.
- REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NOS. H6110 AND H6111 FOR DETAILS OF HOARDING.
- REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NOS. H6121 AND H6122 FOR DETAILS OF CHAIN LINK FENCE.
- REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NO. H6121 FOR DETAILS OF GATE.
- CHAIN LINK FENCE SHALL BE ERECTED ALONG THE WORKS AREA BOUNDARY. THE ALIGNMENT AND EXTENT OF CHAIN LINK FENCE SHOWN ARE INDICATIVE ONLY AND SHALL BE CONFIRMED BY THE SUPERVISING OFFICER.
- THE LOCATION AND WIDTH OF GATE SHOWN ARE INDICATIVE ONLY AND SHALL BE CONFIRMED BY THE SUPERVISING OFFICER.
- NO STRUCTURES SHALL BE ERECTED OTHER THAN SUCH STRUCTURES NOT EXCEEDING TWO STOREYS IN HEIGHT, WHICH ARE APPROVED BY THE DISTRICT LANDS OFFICER AS BEING APPROPRIATE FOR THE USE OF THE SITE AS A WORKS AREA.
- THE TENTATIVE OCCUPATION PERIOD SHALL BE REFERRED TO EMPLOYER'S REQUIREMENTS PART 2 AND PART 14 SECTION 1 CLAUSE 1.45A.
- THE WORKS AREAS SHOWN ON THIS DRAWING ARE TO BE SHARE-USED AMONG THE CONTRACTS OF TM-CLK RELATED CONTRACTS. THE AREAS HATCHED WITH  ARE TENTATIVELY ALLOCATED FOR THE USE OF THIS CONTRACT.
- THE COMMON AREA SHALL BE CONCRETE PAVED BY THE CONTRACTOR.

LEGEND:

-  WORKS AREA UNDER THIS CONTRACT
-  COMMON AREA (MAINTAINED UNDER THIS CONTRACT) TO BE SHARE-USED WITH OTHER CONTRACTS
-  WORKS AREA FOR THIS CONTRACT TO BE EARLY HANDED OVER BY THE CONTRACTOR.
-  HOARDING AND GATE (TO BE ERECTED AND MAINTAINED UNDER THIS CONTRACT)
-  CHAIN LINK FENCE AND GATE (TO BE ERECTED AND MAINTAINED BY OTHERS)
-  CHAIN LINK FENCE AND GATE (TO BE ERECTED AND MAINTAINED UNDER THIS CONTRACT)

SETTING OUT COORDINATES OF WORKS AREA W5

POINT	COORDINATES	
	EASTING	NORTHING
W5-1	820162.308	820638.492
W5-2	820216.839	820590.455
W5-3	820286.496	820603.985
W5-4	820421.757	820667.742
W5-5	820490.425	820764.554
W5-6	820483.839	820776.180
W5-7	820393.451	820728.958
W5-8	820399.746	820715.343
W5-9	820268.674	820665.173
W5-10	820325.075	820698.276
W5-11	820306.587	820685.458
W5-12	820305.269	820691.287
W5-13	820279.580	820684.863
W5-14	820268.027	820680.572
X	820169.407	820655.859
Y	820166.601	820655.172
Z	820163.794	820654.484
W5-17	820144.957	820650.334
W5-18	820155.899	820641.093
W5-19	820157.432	820642.788
W5-20	820332.642	820686.314
W5-21	820333.350	820684.738
W5-22	820326.723	820694.608

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.
1	OCT. 12	TENDER DRAWING	CWN

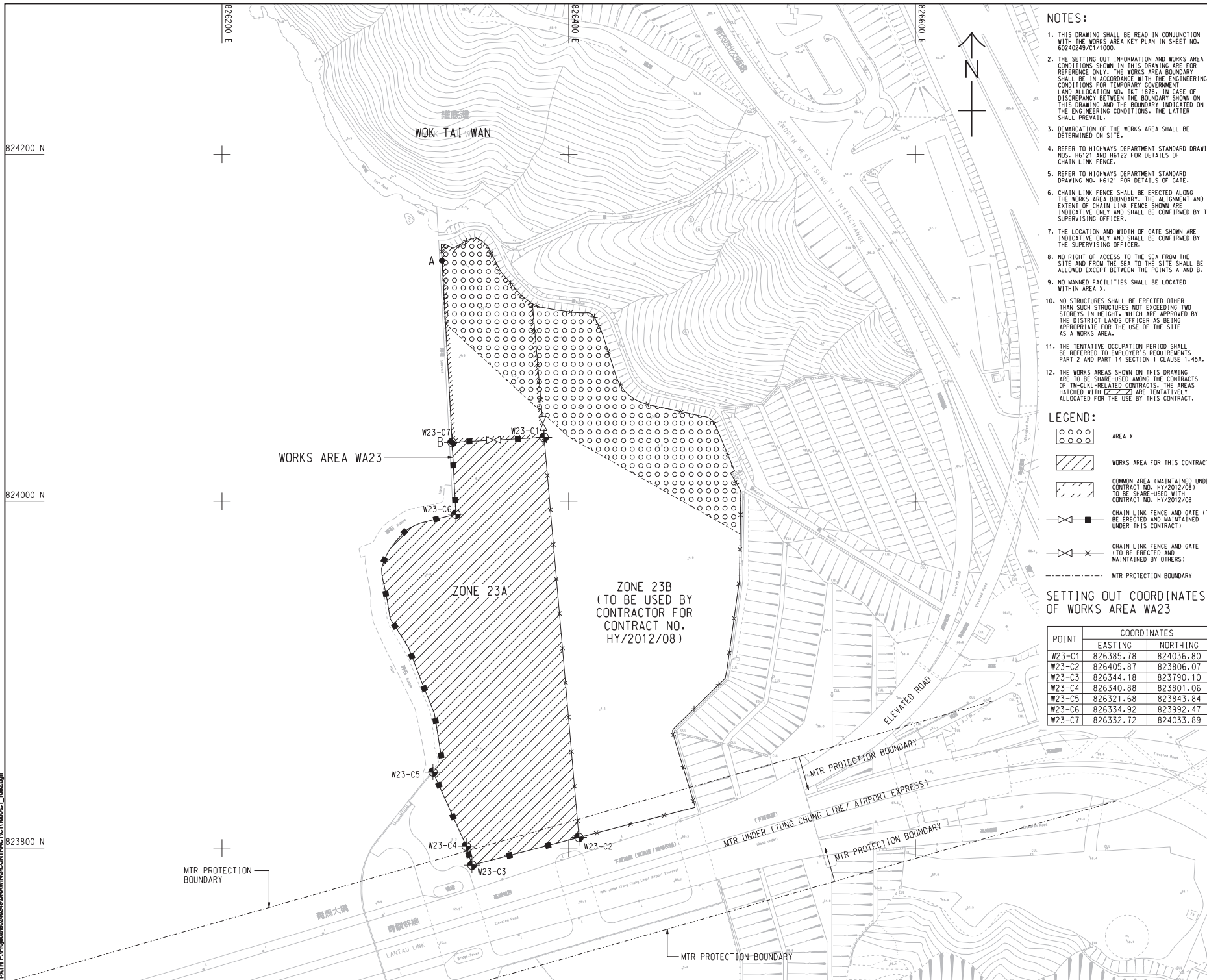
STATUS

SCALE	DIMENSION UNIT
A1:1:1000	METRES

KEY PLAN

Figure 1.2h

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3. DEMARCATION OF THE WORKS AREA SHALL BE DETERMINED ON SITE.
4. REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NOS. H6121 AND H6122 FOR DETAILS OF CHAIN LINK FENCE.
5. REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NO. H6121 FOR DETAILS OF GATE.
6. CHAIN LINK FENCE SHALL BE ERECTED ALONG THE WORKS AREA BOUNDARY. THE ALIGNMENT AND EXTENT OF CHAIN LINK FENCE SHOWN ARE INDICATIVE ONLY AND SHALL BE CONFIRMED BY THE SUPERVISING OFFICER.
7. THE LOCATION AND WIDTH OF GATE SHOWN ARE INDICATIVE ONLY AND SHALL BE CONFIRMED BY THE SUPERVISING OFFICER.
8. NO RIGHT OF ACCESS TO THE SEA FROM THE SITE AND FROM THE SEA TO THE SITE SHALL BE ALLOWED EXCEPT BETWEEN THE POINTS A AND B.
9. NO MANNED FACILITIES SHALL BE LOCATED WITHIN AREA X.
10. NO STRUCTURES SHALL BE ERECTED OTHER THAN SUCH STRUCTURES NOT EXCEEDING TWO STOREYS IN HEIGHT, WHICH ARE APPROVED BY THE DISTRICT LANDS OFFICER AS BEING APPROPRIATE FOR THE USE OF THE SITE AS A WORKS AREA.
11. THE TENTATIVE OCCUPATION PERIOD SHALL BE REFERRED TO EMPLOYER'S REQUIREMENTS PART 2 AND PART 14 SECTION 1 CLAUSE 1.45A.
12. THE WORKS AREAS SHOWN ON THIS DRAWING ARE TO BE SHARED AMONG THE CONTRACTS OF TM-CLKL-RELATED CONTRACTS. THE AREAS HATCHED WITH [diagonal lines] ARE TENTATIVELY ALLOCATED FOR THE USE BY THIS CONTRACT.

LEGEND:

- [Circle with dot symbol] AREA X
- [Diagonal hatched symbol] WORKS AREA FOR THIS CONTRACT
- [Cross-hatched symbol] COMMON AREA (MAINTAINED UNDER CONTRACT NO. HY/2012/08) TO BE SHARED WITH CONTRACT NO. HY/2012/08
- [Chain link symbol] CHAIN LINK FENCE AND GATE (TO BE ERECTED AND MAINTAINED UNDER THIS CONTRACT)
- [Chain link with gate symbol] CHAIN LINK FENCE AND GATE (TO BE SHARED AND MAINTAINED BY OTHERS)
- [Dashed line symbol] MTR PROTECTION BOUNDARY

SETTING OUT COORDINATES OF WORKS AREA WA23

POINT	COORDINATES	
	EASTING	NORTHING
W23-C1	826385.78	824036.80
W23-C2	826405.87	823806.07
W23-C3	826344.18	823790.10
W23-C4	826340.88	823801.06
W23-C5	826321.68	823843.84
W23-C6	826354.92	823992.47
W23-C7	826332.72	824033.89

AECOM

PROJECT NO.
60240249

CONTRACT NO.
HY/2012/07

TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
路政署 HIGHWAYS DEPARTMENT
港務局 港務工程管理有限公司
Hong Kong - Zhuhai - Hainan Bridge
Hong Kong Project Management Office

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS
[Symbol]

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.
1	OCT. 12	TENDER DRAWING	CWN

STATUS

SCALE
A1 1:1000

DIMENSION UNIT
METRES

KEY PLAN

Figure 1.2i

PROJECT NO.
60240249

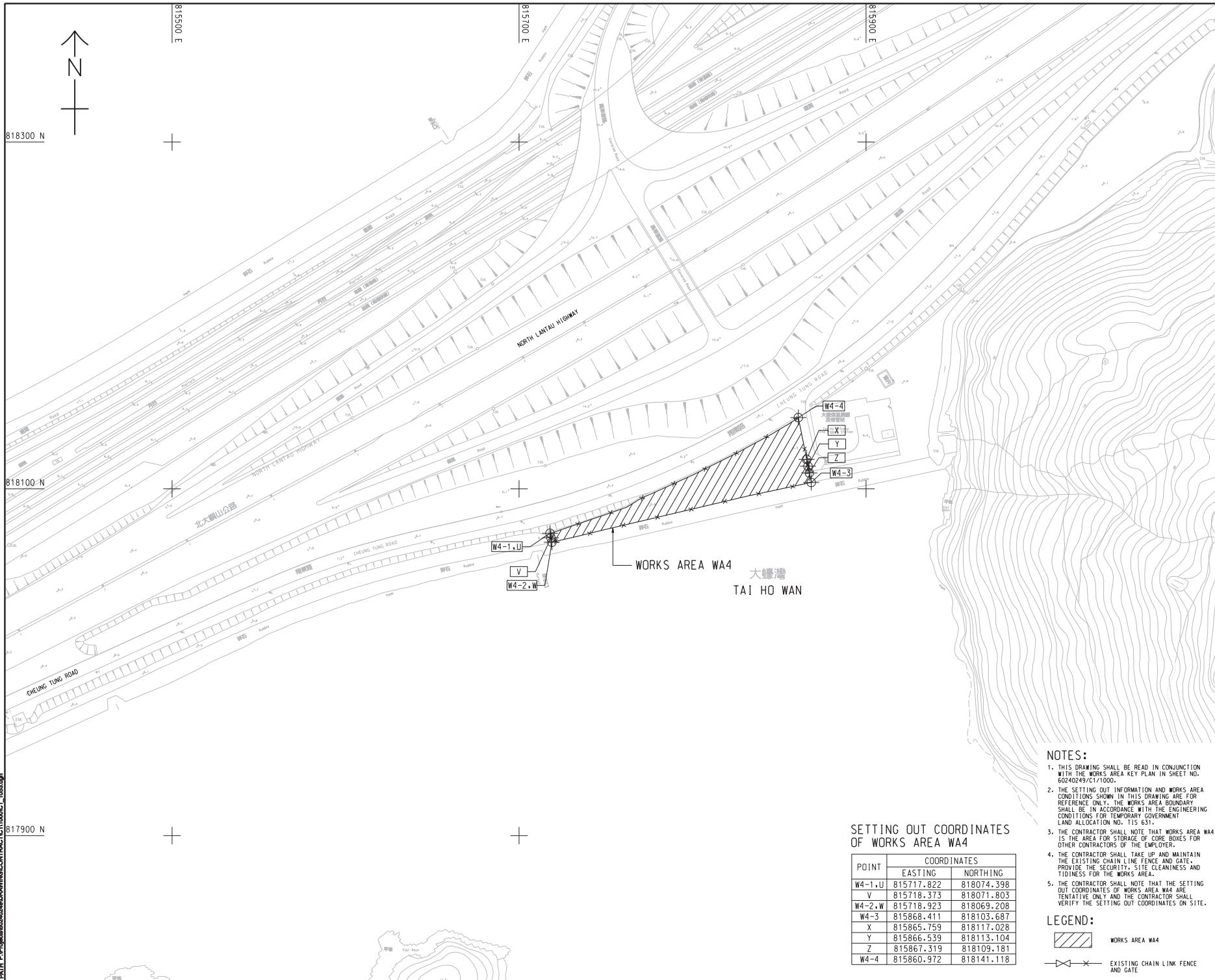
CONTRACT NO.
HY/2012/07

SHEET TITLE
WORKS AREA AND HOARDING PLAN

SHEET NUMBER
60240249/CT1/052

SHEET 2 OF 2

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SETTING OUT COORDINATES OF WORKS AREA WA4

POINT	COORDINATES	
	EASTING	NORTHING
W4-1,U	815717.822	818074.398
V	815718.373	818071.803
W4-2,W	815718.923	818069.208
W4-3	815868.411	818103.687
X	815865.759	818117.028
Y	815866.539	818113.104
Z	815867.319	818109.181
W4-4	815860.972	818141.118

- NOTES:**
- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/C1/100.
 - THE SETTING OUT INFORMATION AND WORKS AREA CONDITIONS SHOWN IN THIS DRAWING ARE FOR REFERENCE ONLY. THE WORKS AREA BOUNDARY SHALL BE IN ACCORDANCE WITH THE ENGINEERING CONDITIONS FOR TEMPORARY GOVERNMENT LAND ALLOCATION NO. T15 631.
 - THE CONTRACTOR SHALL NOTE THAT WORKS AREA WA4 IS THE AREA FOR STORAGE OF CORE BOXES FOR OTHER CONTRACTORS OF THE EMPLOYER.
 - THE CONTRACTOR SHALL TAKE UP AND MAINTAIN THE EXISTING CHAIN LINK FENCE AND GATE. PROVIDE THE SECURITY, SITE CLEANLINESS AND TIDINESS FOR THE WORKS AREA.
 - THE CONTRACTOR SHALL NOTE THAT THE SETTING OUT COORDINATES OF WORKS AREA WA4 ARE TENTATIVE ONLY AND THE CONTRACTOR SHALL VERIFY THE SETTING OUT COORDINATES ON SITE.

LEGEND:

WORKS AREA WA4

EXISTING CHAIN LINK FENCE AND GATE

AECOM

PROJECT
 TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
 TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

CLIENT
 路政署 DEPARTMENT OF HIGHWAYS
 港務局 港務工程管理局
 Hong Kong + Zhuhai + Hainan Bridge
 Hong Kong Project Management Office

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS
 2/11/2012/16

Figure 1.2j

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.
1	NOV. 12	TENDER ADDENDUM NO. 1	C/W

SCALE
 A1 : 1:1000

DIMENSION UNIT
 大呎

METRES

KEY PLAN

PROJECT NO.
 60240249

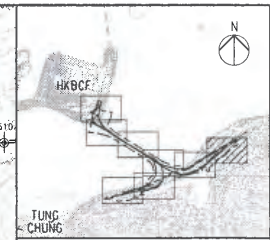
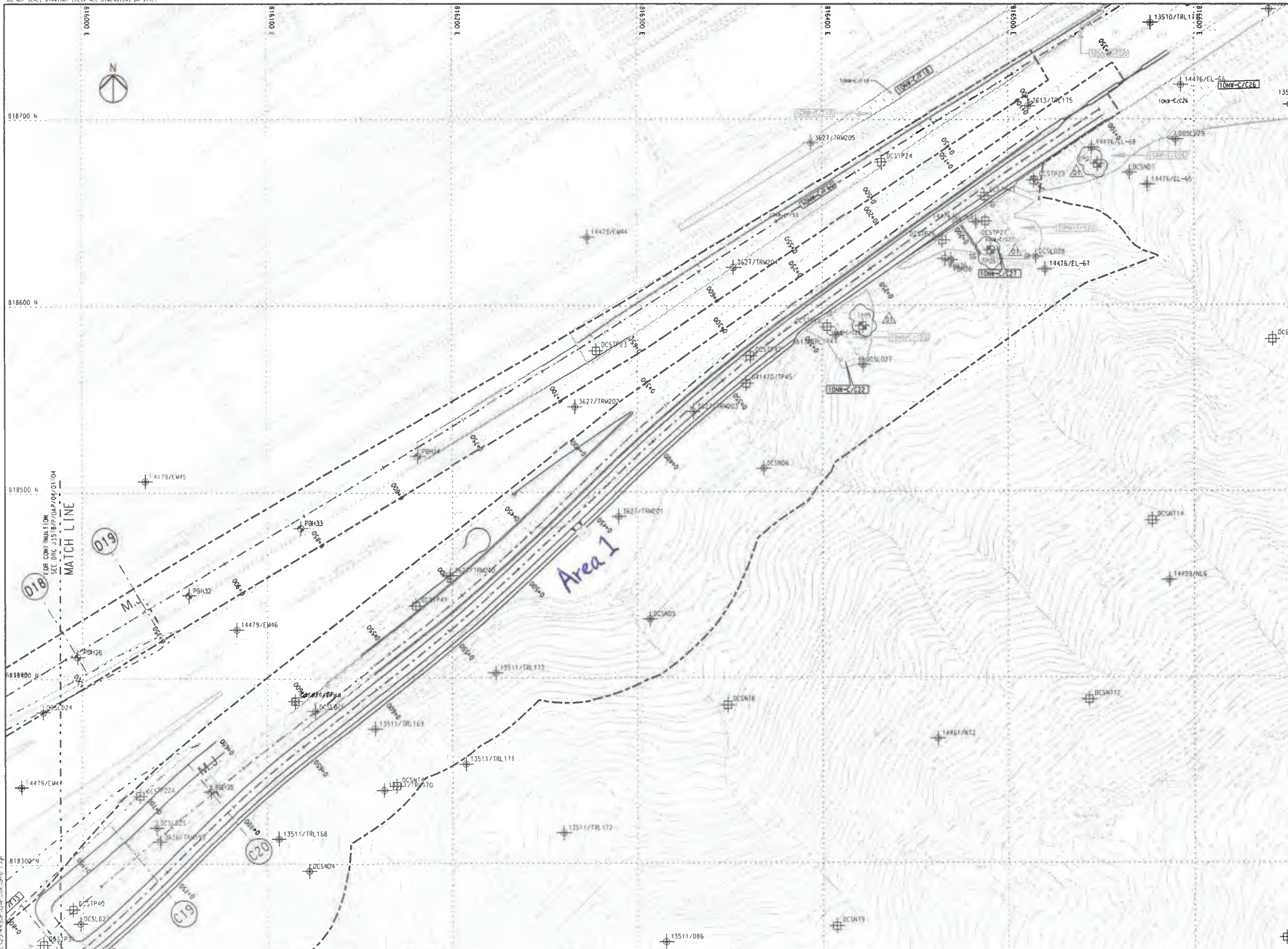
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 HY/2012/07

SHEET TITLE
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SHEET NUMBER
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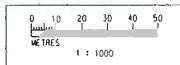
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- LEGEND**
- SITE BOUNDARY
 - GF1 FAULT
- EXISTING G.I. STATIONS :
- ⊕ BOREHOLE BY GIU DATA EXCLUDING VC
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2012/04
 - ⊕ BOREHOLE BY GCL CONTRACT N6.8/97
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2009/23
 - ⊕ TRIAL PIT BY GCL CONTRACT HY/2012/04
 - ⊕ SLOPE STRIPPING BY GCL CONTRACT HY/2012/04
- PROPOSED G.I. STATIONS :
- ⊕ P6-0 PROPOSED BOREHOLE
 - ⊕ P6-1 PROPOSED TRIAL PIT
 - ⊕ P6-2 PROPOSED COREHOLE
 - ⊕ S502 PROPOSED SLOPE STRIPPING



Rev	Description	By	Date	Rev	Description	By	Date
01	FOR CONSTRUCTION	RL	31/7/13				
02	FOR CONSTRUCTION	RL	27/7/13				
03	FOR CONSTRUCTION	RL	29/7/13				
04	FOR INTERNAL REVIEW	RL	19/7/12				

Drawn	Date	Client
RL	07/13	路政署 HIGHWAYS DEPARTMENT
Checked <td>Approved</td> <td>港珠澳大桥香港工程指挥部 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office</td>	Approved	港珠澳大桥香港工程指挥部 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office
DS	DOP	Supervising Officer

Client: 路政署 HIGHWAYS DEPARTMENT
 港珠澳大桥香港工程指挥部
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

Project Title: Tuen Mun - Chek Lap Kok Link Southern Connection Viaduct Section

Contract No. HY/2012/07

Scale: 1:1000 @ A1 / 1:2000 @ A3

Supervising Officer: **AZCOM**

Contractor: **Gammon**

Originator: **ARUP**

Drawing title: **Figure 1.2k**

Drawing no. J3518/P/OAP/04/01105 Rev. D1

1.2 SCOPE OF REPORT

This is the Seventeenth Monthly EM&A Report under the *Contract No. HY/2012/07 Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section*. This report presents a summary of the environmental monitoring and audit works in March 2015.

1.3 ORGANIZATION STRUCTURE

The organization structure of the Contract is shown in *Appendix A*. The key personnel contact names and contact details are summarized in *Table 1.1* below.

Table 1.1 *Contact Information of Key Personnel*

Party	Position	Name	Telephone	Fax
HyD (Highways Department)	Project Coordinator	Stanley Chan	2762 3406	3188 6614
	Senior Engineer	Steven Shum	2762 4133	3188 6614
SOR (AECOM Asia Company Limited)	Chief Resident Engineer	Daniel Ip	3553 3800	2492 2057
	Resident Engineer	Kingman Chan	3691 3950	3691 2899
ENPO / IEC (ENVIRON Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2888	3465 2899
	IEC	Dr. F.C. Tsang	3465 2828	3465 2899
Contractor (Gammon Construction Limited)	Environmental Manager	Brian Kam	3520 0387	3520 0486
	Environmental Officer	Roy Leung	3520 0387	3520 0486
	24-hour Complaint Hotline		9738 4332	
ET (ERM-HK)	ET Leader	Jovy Tam	2271 3113	2723 5660

1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of the Contract commenced on 31 October 2013. The three-month rolling construction programme is shown in *Appendix B*.

As informed by the Contractor, details of the major works carried out in this reporting month are listed below:

Marine Works

- Construction of Pile caps at Viaducts B, C, D & E;
- Marine piling platform installation & uninstallation;
- Marine Piling at Viaducts C & E; and

- Additional marine ground investigation (GI) and laboratory testing.

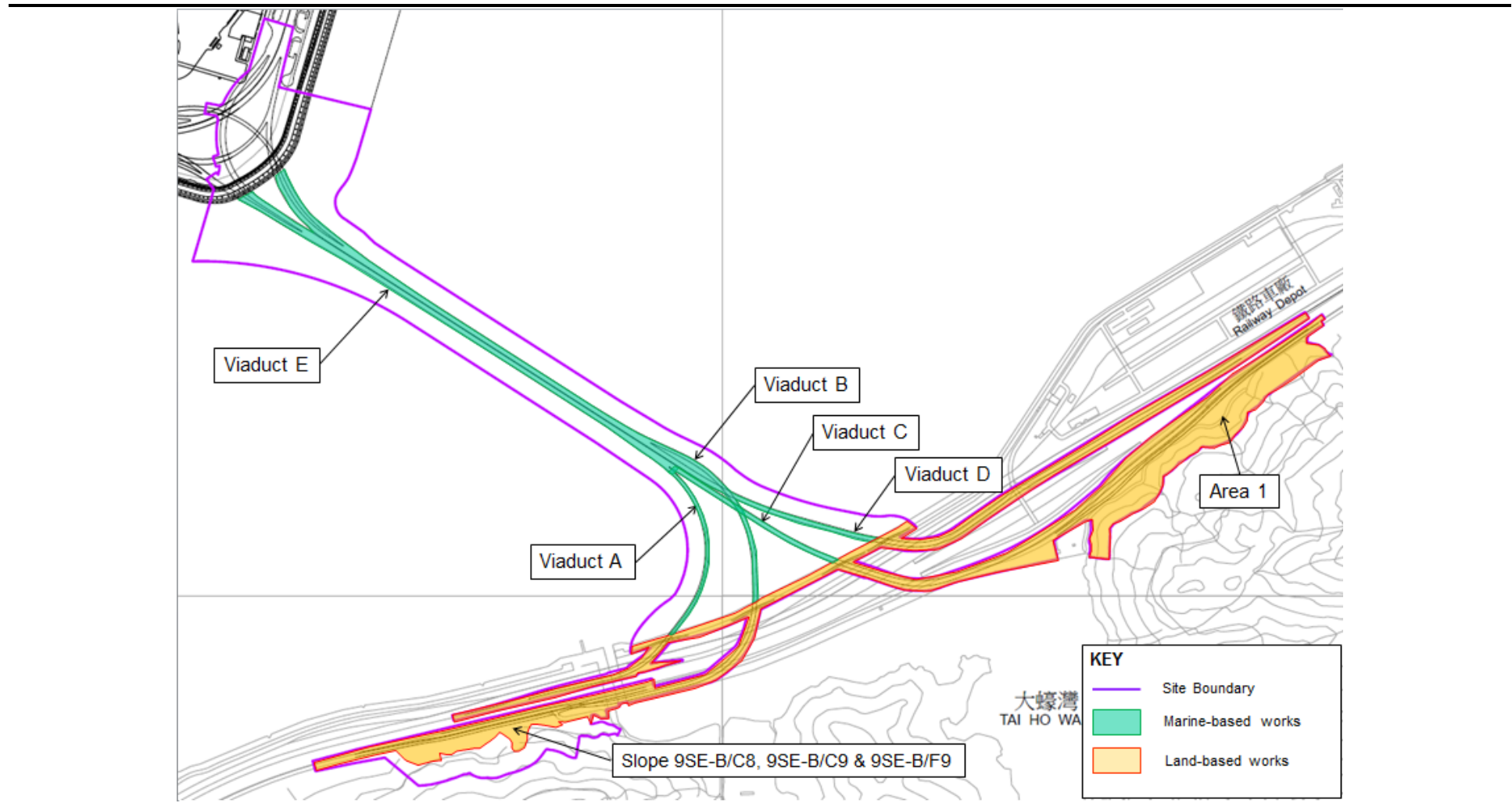
Land-based Works

- Construction of pile cap superstructure of Viaduct B;
- Channel re-construction at Area 1;
- Land Piling at Viaducts B, C & D;
- Pre-drilling works at Viaduct A;
- Construction of pile cap at Viaducts B, C, D & E;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

The locations of the construction activities are shown in *Figure 1.3*. The Environmental Sensitive Receivers in the vicinity of the Project are shown in *Figure 1.4*.

The environmental mitigation measures implementation schedule is presented in *Appendix C*.

Figure 1.3 Locations of Construction Activities in the Reporting Month



Key

Air Sensitive Receiver

- Air Sensitive Receiver
- Noise Sensitive Receiver
- Water Sensitive Receiver
- ▲ Site of Special Scientific Interest (SSSI)
- Known Coral Communities
- Site Boundary

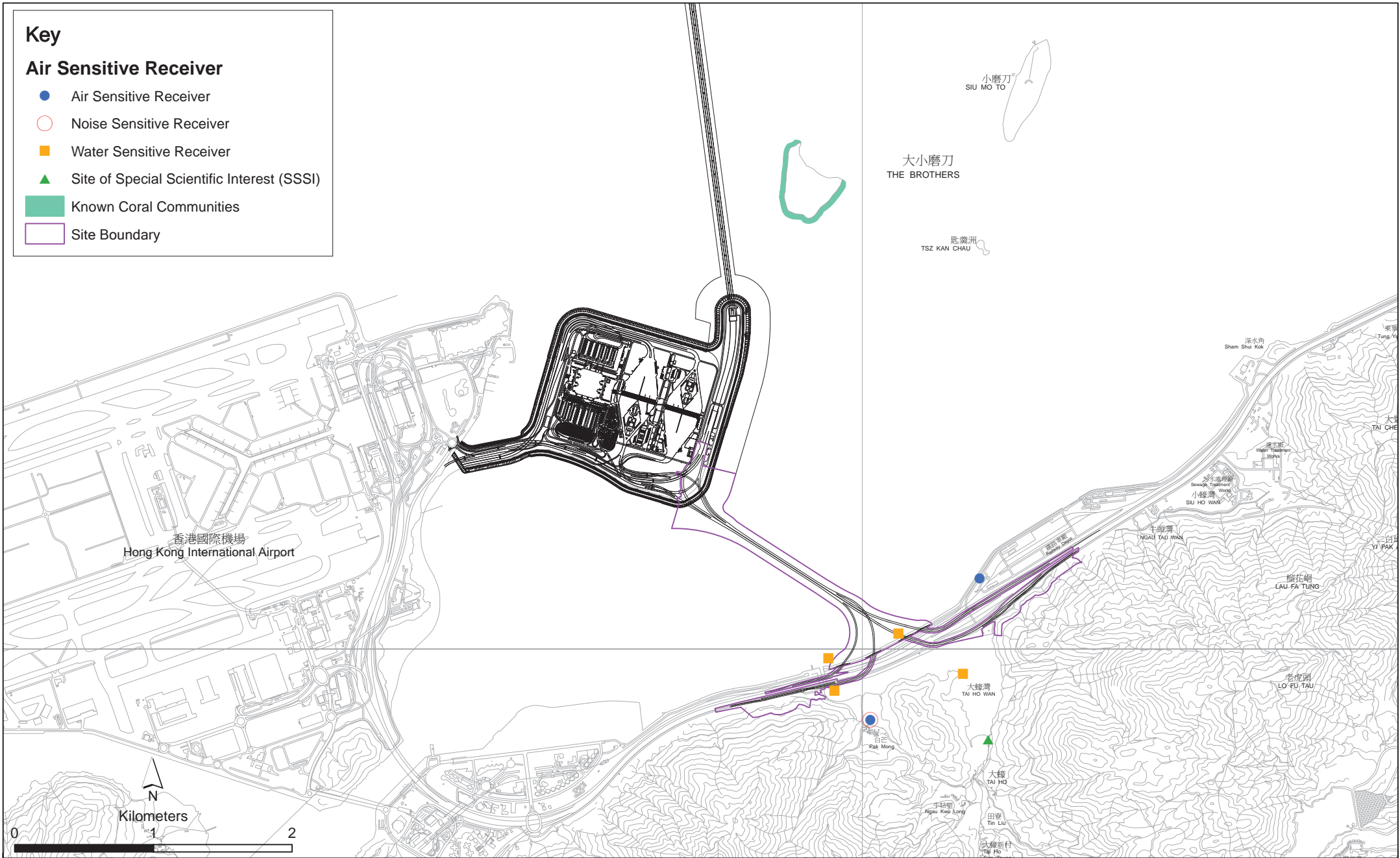


Figure 1.4

Environmental Sensitive Receivers in the Vicinity of Contract No. HY/2012/07
Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section

The EM&A programme required environmental monitoring for air quality, noise, water quality and marine ecology as well as environmental site inspections for air quality, noise, water quality, waste management, marine ecology and landscape and visual impacts. The EM&A requirements and related findings for each component are summarized in the following sections.

2.1 AIR QUALITY

2.1.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual, impact 1-hour TSP monitoring was conducted three (3) times every six (6) days and impact 24-hour TSP monitoring was carried out once every six (6) days when the highest dust impact was expected. The Action and Limit Levels of the air quality monitoring is provided in *Appendix D*.

Table 2.1 *Locations of Impact Air Quality Monitoring Stations*

Monitoring Station	Location	Description	Monitoring Dates
ASR 9	MTR Depot	On the ground nearby MTR Depot Entrance	4, 10, 16, 19, 25 and 31 March 2015
ASR 8A	Area 4	On ground at the works area, Area 4	4, 10, 16, 19, 25 and 31 March 2015

High Volume Samplers (HVSs) were used for carried out 1-hour and 24-hour TSP monitoring on 4, 10, 16, 19, 25 and 31 March 2015 at ASR8A and ASR9 in accordance with the requirements of the Updated EM&A Manual. The TSP monitoring stations are illustrated in *Figure 2.1* and detailed in *Table 2.1*. Wind anemometer was deployed at Area 4 for logging wind speed and wind direction. Copies of the calibration certificates for the equipment are presented in *Appendix E*. Details of the deployed equipment are given in *Table 2.2*.

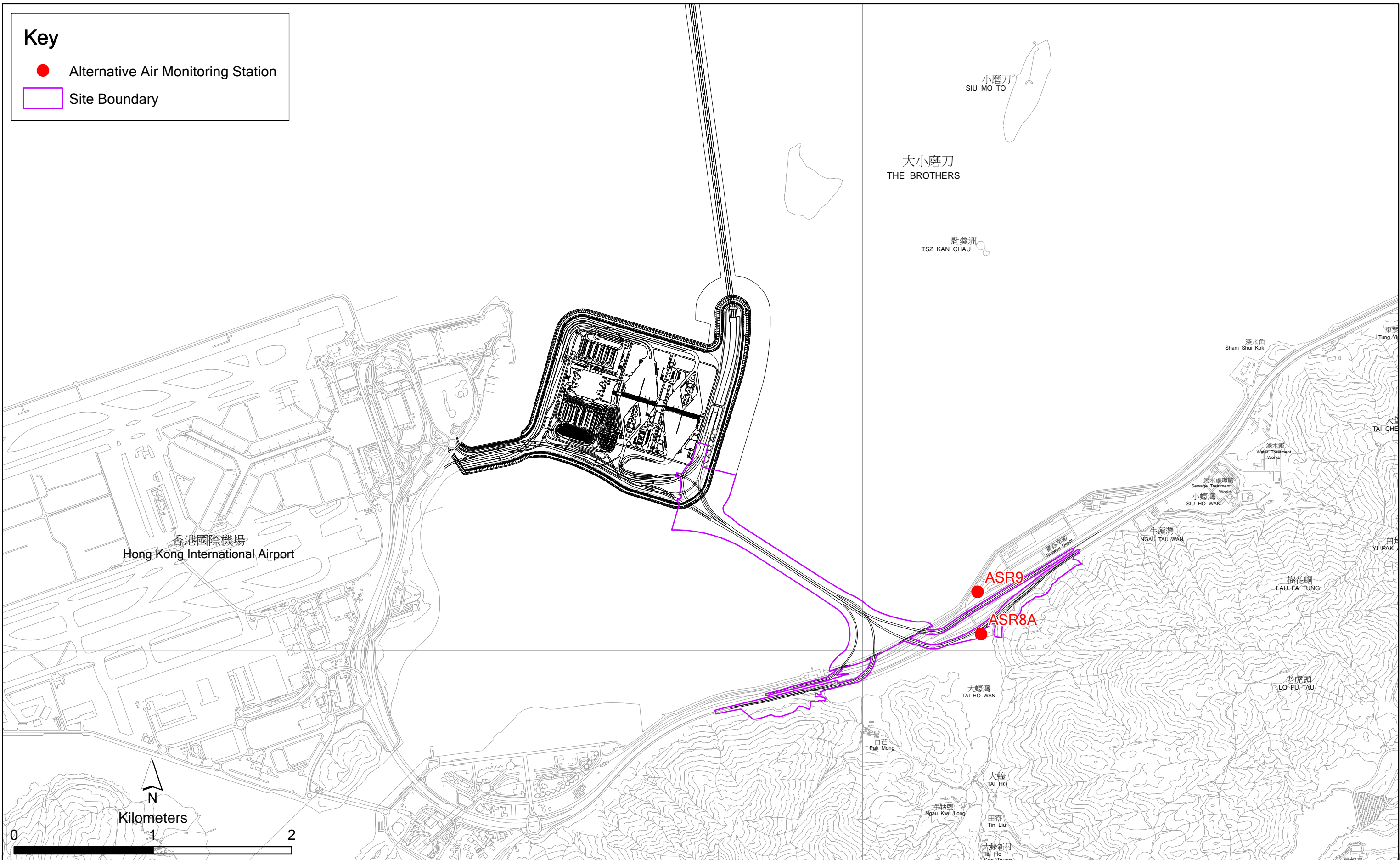


Figure 2.1

Locations of Air Quality Monitoring Stations

Table 2.2 Air Quality Monitoring Equipment

Equipment	Brand and Model
High Volume Sampler (1-hour TSP and 24-hour TSP)	Tisch Environmental Mass Flow Controlled Total Suspended Particulate (TSP) High Volume Sampler (Model No. TE-5170)
Wind Sensor	Global Water (Wind Speed Sensor: WE550; Wind Direction Sensor: WE570)
Wind Anemometer for calibration	Lutron (Model No. AM-4201)

2.1.2 Monitoring Schedule for the Reporting Month

The schedule for air quality monitoring in March 2015 is provided in *Appendix F*.

2.1.3 Results and Observations

The monitoring results for 1-hour TSP and 24-hour TSP are summarized in *Tables 2.3 and 2.4* respectively. Detailed impact air quality monitoring results are presented in *Appendix G*.

Table 2.3 Summary of 1-hour TSP Monitoring Results in the Reporting Period

Monitoring Station	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
ASR 8A	88	58 - 156	394	500
ASR 9	109	60 - 235	393	500

Table 2.4 Summary of 24-hour TSP Monitoring Results in the Reporting Period

Monitoring Station	Average ($\mu\text{g}/\text{m}^3$)	Range ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
ASR 8A	57	43 - 76	178	260
ASR 9	77	54 - 101	178	260

The major dust sources in the reporting period included construction activities under the Contract as well as nearby traffic emissions.

All 1-hour and 24-hour TSP results were below the Action and Limit levels at all monitoring locations in the reporting period. No action is thus required to be undertaken in accordance with the Event Action Plan presented in *Appendix L*.

Meteorological information collected at ASR8A including wind speed and wind direction is provided in *Appendix H*.

2.2 NOISE MONITORING

2.2.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual, impact noise monitoring was conducted once per week during the construction phase of the Contract. The Action and Limit level of the noise monitoring is provided in *Appendix D*.

Noise monitoring was performed on 4, 10, 16, 19, 25 and 31 March 2015 by using sound level meter at the designated monitoring station NSR1A (*Figure 2.2; Table 2.5*) in accordance with the requirements stipulated in the Updated EM&A Manual. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Details of the deployed equipment are provided in *Table 2.6*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

Table 2.5 *Location of Impact Noise Monitoring Station*

Monitoring Station	Location	Description	Parameter	Frequency and Duration	Monitoring Dates
NSR 1A	Pak Mong Village Pavilion	On the ground at the village entrance	30-minute measurement at each monitoring station between 0700 and 1900 on normal weekdays (Monday to Saturday). L_{eq} , L_{10} and L_{90} would be recorded.	At least once per week	4, 10, 16, 19, 25 and 31 March 2015

Table 2.6 *Noise Monitoring Equipment*

Equipment	Brand and Model
Integrated Sound Level Meter	Rion NL-31
Acoustic Calibrator	Rion NC-73

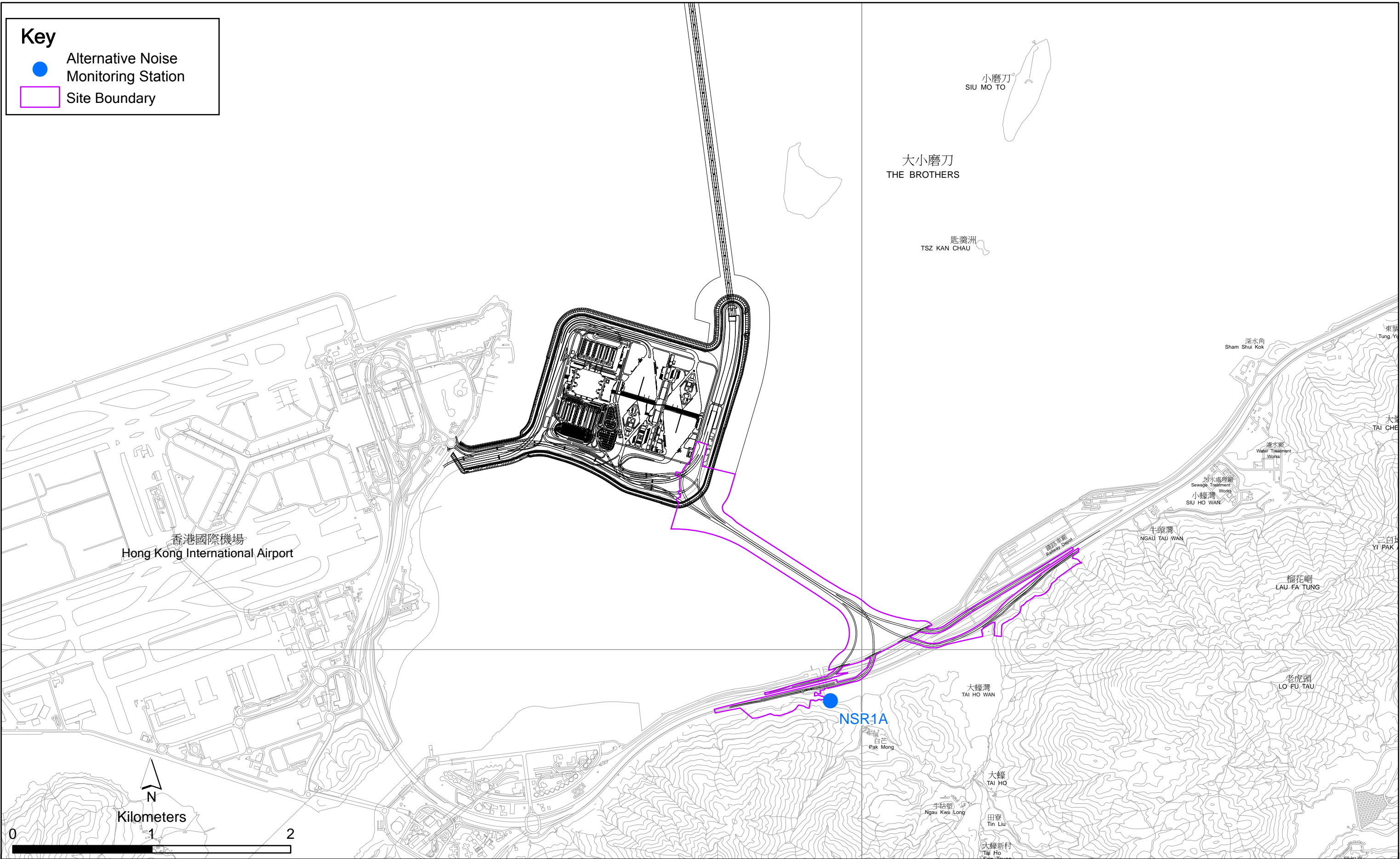


Figure 2.2

Location of Noise Monitoring Station

2.2.2 *Monitoring Schedule for the Reporting Month*

The schedule for construction noise monitoring in the reporting period is provided in *Appendix F*.

2.2.3 *Results and Observations*

Results for noise monitoring are summarized in *Table 2.7* and the monitoring data is provided in *Appendix I*.

Table 2.7 *Summary of Construction Noise Monitoring Results in the Reporting Period*

	Average , dB(A), Leq (30mins)	Range, dB(A), Leq (30mins)	Limit Level, dB(A), Leq (30mins)
NSR 1A	60	57 – 61	75

No noise Action Level and Limit level exceedance was recorded in the reporting month. No action is thus required to be undertaken in accordance with the Event Action Plan presented in *Appendix L*.

Major noise sources during the noise monitoring included noise from crane operation and excavation works, nearby traffic noise and aircraft noise.

2.3 *WATER QUALITY MONITORING*

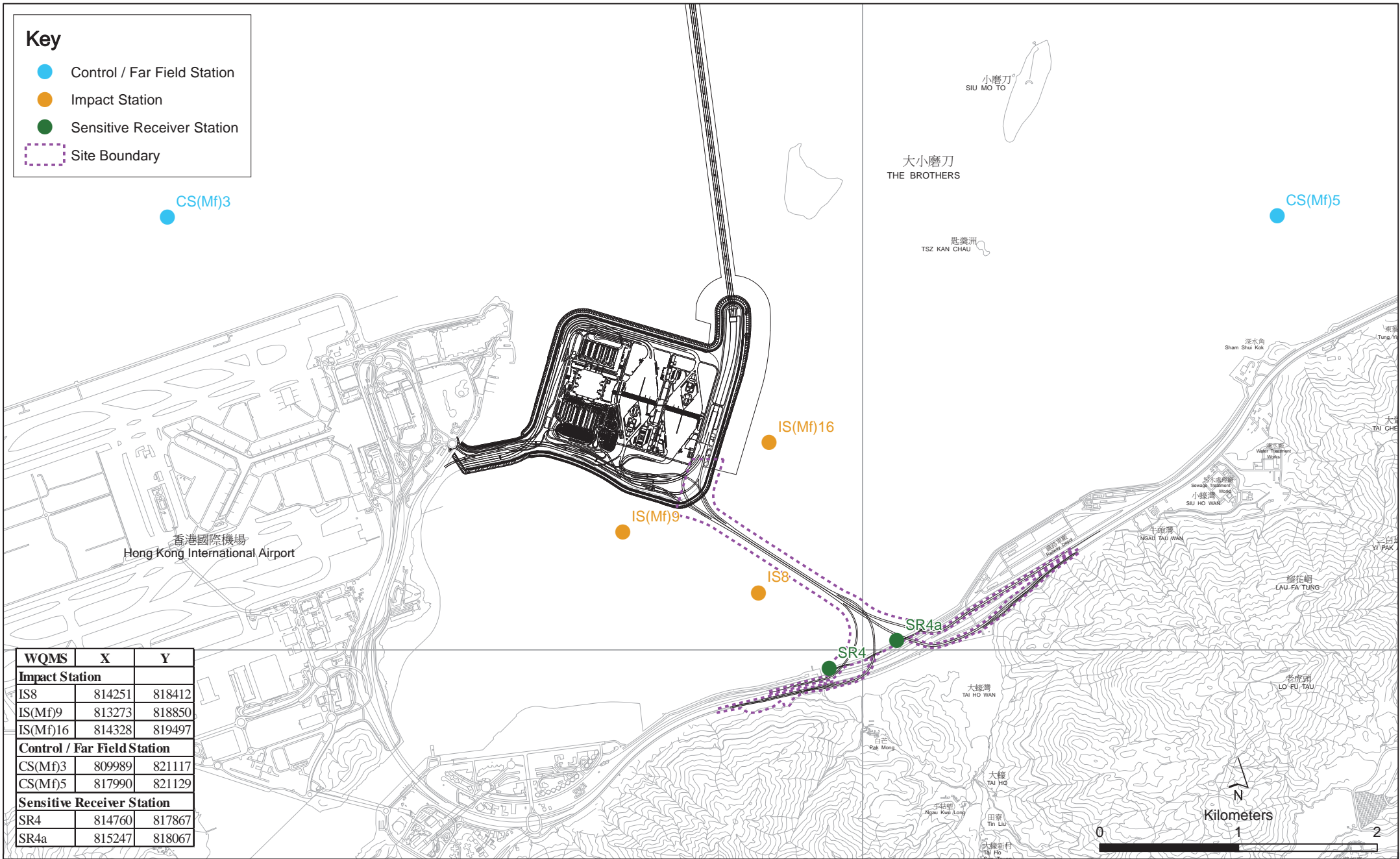
2.3.1 *Monitoring Requirements and Equipment*

Impact water quality monitoring was carried out to ensure that any deterioration of water quality was detected, and that timely action was taken to rectify the situation. Impact water quality monitoring was undertaken three days per week during the construction period in accordance with the Updated EM&A Manual. The Action and Limit Levels of the water quality monitoring are provided in *Appendix D*.

The locations of the monitoring stations under the Contract are shown in *Figure 2.3* and *Table 2.8*.

Key

- Control / Far Field Station
- Impact Station
- Sensitive Receiver Station
- Site Boundary



WQMS	X	Y
Impact Station		
IS8	814251	818412
IS(Mf)9	813273	818850
IS(Mf)16	814328	819497
Control / Far Field Station		
CS(Mf)3	809989	821117
CS(Mf)5	817990	821129
Sensitive Receiver Station		
SR4	814760	817867
SR4a	815247	818067

Figure 2.3

Locations of Water Quality Monitoring Stations

Table 2.8 *Locations of Impact Water Quality Monitoring Stations and its Corresponding Monitoring Requirements*

Station ID	Type	Coordinates		*Parameters, unit	Frequency	Depth
		Easting	Northing			
IS(Mf)9	Impact Station (Close to HKBCF construction site)	813273	818850	<ul style="list-style-type: none"> • Temperature(°C) • pH (pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • DO (mg/L and % of saturation) • SS (mg/L) 	Impact monitoring: 3 days per week, at mid-flood and mid-ebb tides during the construction period of the Contract	3 water depths: 1m below sea surface, mid-depth and 1m above sea bed. If the water depth is less than 3m, mid-depth sampling only. If water depth less than 6m, mid-depth may be omitted
IS(Mf)16	Impact Station (Close to HKBCF construction site)	814328	819497			
IS8	Impact Station (Close to HKBCF construction site)	814251	818412			
SR4	Sensitive receiver (Tai Ho Inlet)	814760	817867			
SR4a	Sensitive receiver	815247	818067			
CS(Mf)3	Control Station	809989	821117			
CS(Mf)5	Control Station	817990	821129			

*Notes:

In addition to the parameters presented monitoring location/position, time, water depth, sampling depth, tidal stages, weather conditions and any special phenomena or works underway nearby were also recorded.

Table 2.9 summarises the equipment used in the impact water quality monitoring programme. Copies of the calibration certificates are attached in Appendix E.

Table 2.9 *Water Quality Monitoring Equipment*

Equipment	Brand and Model
DO and Salinity	YSI Pro2030
Turbidity meter	HACH Model 2100Q
pH meter	HANNA HI8314
Positioning Equipment	Koden913MK2 with KBG-3 DGPS antenna
Water Depth Detector	Speedtech Instrument SM-5
Water Sampler	Kemmerer 1520 (1520-C25) 2.2L with messenger

2.3.2 *Monitoring Schedule for the Reporting Month*

The schedule for water quality monitoring in March 2015 is provided in *Appendix F*.

2.3.3 *Results and Observations*

In total of 13 monitoring events for impact water quality monitoring were conducted at all designated monitoring stations in the reporting month. Impact water quality monitoring results and graphical presentations are provided in *Appendix J*.

Although some results of depth-averaged SS were recorded higher than the values of Action Level or Limit Level in the monitoring period, the results were not higher than 120% of the upstream control at the same tide of the same day. Thus the results were considered as natural variation. No Action and Limit levels exceedances was recorded at all monitoring stations for impact water quality monitoring in the reporting month. No action is thus required to be undertaken in accordance with the Event Action Plan presented in *Appendix L*.

2.4 *DOLPHIN MONITORING*

2.4.1 *Monitoring Requirements*

Impact dolphin monitoring is required to be conducted by a qualified dolphin specialist team to evaluate whether there have been any effects on the dolphins. In order to fulfil the EM&A requirements and make good use of available resources, the on-going impact line transect dolphin monitoring data collected by HyD's *Contract No. HY/2011/03 Hong Kong-Zhuhai-Macao Bridge, Hong Kong Link Road - Section between Scenic Hill and Hong Kong Boundary Crossing Facilities* on the monthly basis is adopted to avoid duplicates of survey effort.

2.4.2 *Monitoring equipment*

Table 2.10 summarises the equipment used for the impact dolphin monitoring.

Table 2.10 *Dolphin Monitoring Equipment*

Equipment	Model
Global Positioning System (GPS)	Garmin 18X-PC Geo One Phottix
Camera	Nikon D90 300m 2.8D fixed focus Nikon D90 20-300m zoom lens
Laser Binoculars	Infinitor LRF 1000
Marine Binocular	Bushell 7 x 50 marine binocular with compass and reticules
Vessel for Monitoring	65 foot single engine motor vessel with viewing platform 4.5m above water level

2.4.3 *Monitoring Parameter, Frequencies and Duration*

Dolphin monitoring should cover all transect lines in Northeast Lantau (NEL) and the Northwest Lantau (NWL) survey areas twice per month throughout the entire construction period. The monitoring data should be compatible with, and should be made available for, long-term studies of small cetacean ecology in Hong Kong. In order to provide a suitable long-term dataset for comparison, identical methodology and line transects employed in baseline dolphin monitoring was followed in the impact dolphin monitoring.

2.4.4 *Monitoring Location*

The impact dolphin monitoring was carried out in the NEL and NWL along the line transect as depicted in *Figure 2.4*. The co-ordinates of all transect lines are shown in *Table 2.11* below.

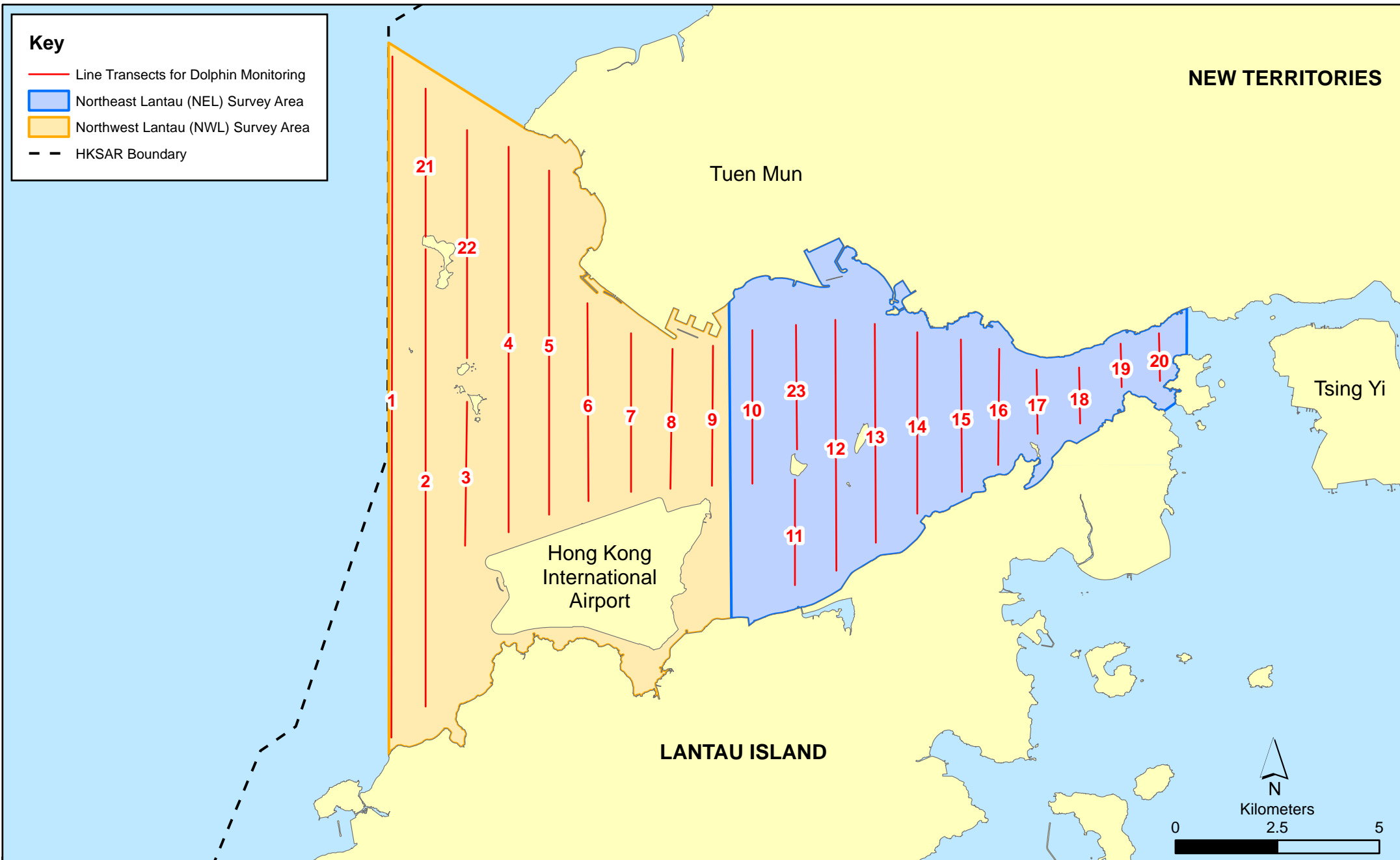


Figure 2.4

Layout of Transect Lines of Dolphin Monitoring in Northwest and Northeast Lantau Areas

Table 2.11 Impact Dolphin Monitoring Line Transect Co-ordinates

Line No.		Easting	Northing	Line No.		Easting	Northing
1	Start Point	804671	814577	13	Start Point	816506	819480
1	End Point	804671	831404	13	End Point	816506	824859
2	Start Point	805475	815457	14	Start Point	817537	820220
2	End Point	805477	826654	14	End Point	817537	824613
3	Start Point	806464	819435	15	Start Point	818568	820735
3	End Point	806464	822911	15	End Point	818568	824433
4	Start Point	807518	819771	16	Start Point	819532	821420
4	End Point	807518	829230	16	End Point	819532	824209
5	Start Point	808504	820220	17	Start Point	820451	822125
5	End Point	808504	828602	17	End Point	820451	823671
6	Start Point	809490	820466	18	Start Point	821504	822371
6	End Point	809490	825352	18	End Point	821504	823761
7	Start Point	810499	820690	19	Start Point	822513	823268
7	End Point	810499	824613	19	End Point	822513	824321
8	Start Point	811508	820847	20	Start Point	823477	823402
8	End Point	811508	824254	20	End Point	823477	824613
9	Start Point	812516	820892	21	Start Point	805476	827081
9	End Point	812516	824254	21	End Point	805476	830562
10	Start Point	813525	820872	22	Start Point	806464	824033
10	End Point	813525	824657	22	End Point	806464	829598
11	Start Point	814556	818449	23	Start Point	814559	821739
11	End Point	814556	820992	23	End Point	814559	824768
12	Start Point	815542	818807				
12	End Point	815542	824882				

2.4.5 Action & Limit Levels

The Action and Limit levels of dolphin impact monitoring are shown in *Appendix D*. The Event and Action plan is presented in *Appendix L*.

2.4.6 *Monitoring Schedule for the Reporting Month*

Dolphin monitoring was carried out on 4, 11, 17 and 26 of March 2015 (*Appendix F*).

2.4.7 *Results and Observations*

A total of 297.41 km of survey effort was collected, with 98.9% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) during the surveys of March. Among the two areas, 115.25 km and 182.16 km of survey effort were collected from NEL and NWL survey areas respectively. The total survey effort conducted on primary and secondary lines were 217.65 km and 79.76 km respectively. The survey efforts are summarized in *Appendix K*.

Four (4) groups of twelve (12) Chinese White Dolphins were sighted during the two sets of monitoring surveys in March 2015. All sightings were made in NWL, with no dolphin being sighted at all in NEL. During surveys of March, only one (1) of the four (4) sightings was made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel. No sighting was made in the proximity of the Project's alignment. The distribution of dolphin sighting during the reporting month is shown in *Figure 2.5*.

Encounter rates of Chinese White Dolphins are deduced from the survey effort and on-effort sighting data made under favourable conditions (Beaufort 3 or below) in March 2015 are shown in *Tables 2.12* and *2.13*.

Table 2.12 *Individual Survey Event Encounter Rates*

		Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)	Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)
		Primary Lines Only	Primary Lines Only
NEL	Set 1: Mar 4 th / 11 th	0.0	0.0
	Set 2: Mar 17 th / 26 th	0.0	0.0
NWL	Set 1: Mar 4 th / 11 th	0.0	0.0
	Set 2: Mar 17 th / 26 th	1.4	10.0

Note: Dolphin Encounter Rates are deduced from the two sets of surveys (two surveys in each set) in March 2015 in Northeast (NEL) and Northwest Lantau (NWL)

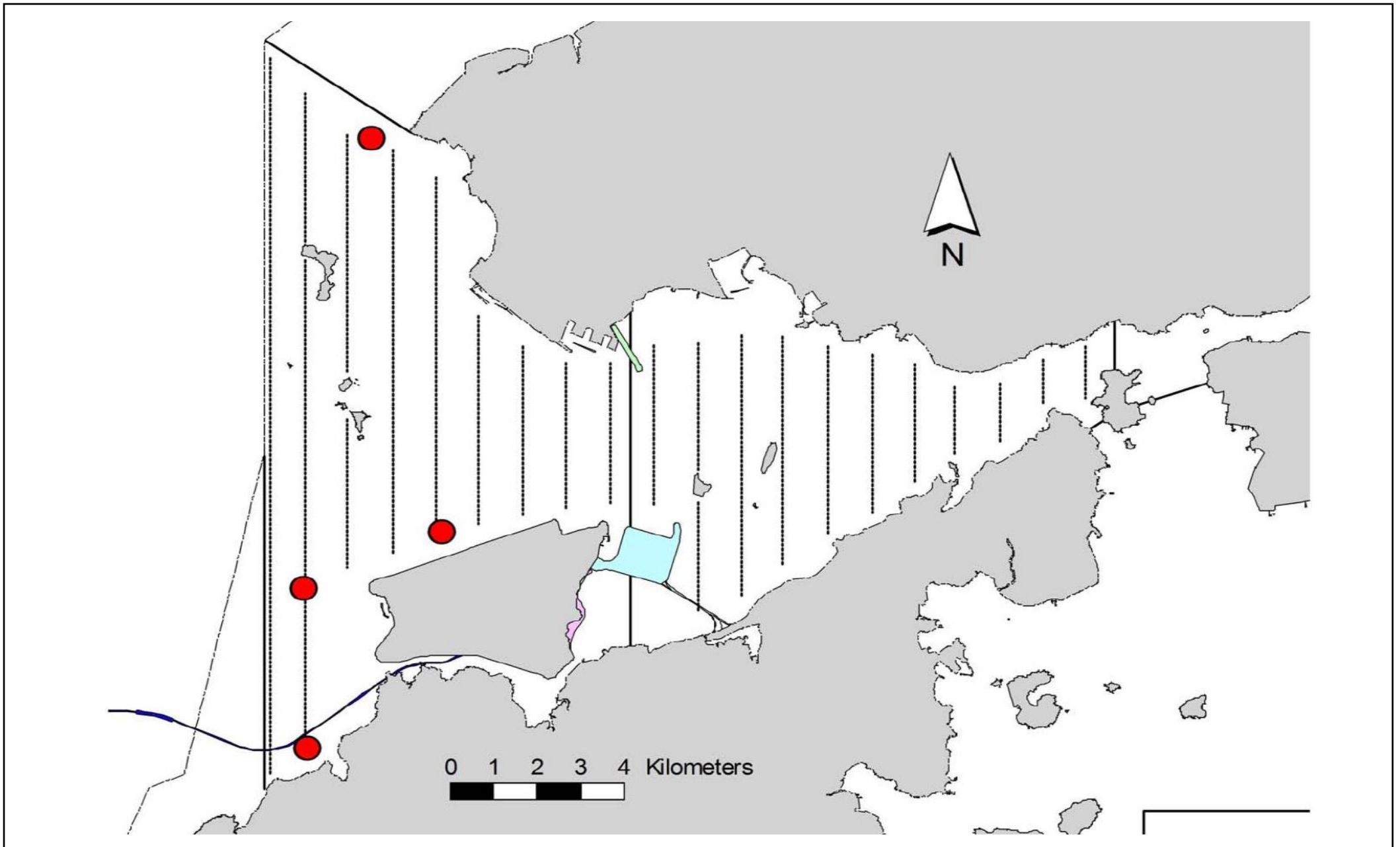


Figure 2.5

Date 2/4/2015

HY/2012/07 TM-CLKL Southern Connection Viaduct Section
 The distribution of dolphin sightings during the reporting period
 (Source: Adopted from HKLR03 Monitoring Survey in March 2015)

Environmental
 Resources
 Management



Table 2.13 Monthly Average Encounter Rates

	Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)		Encounter rate (ANI) (no. of dolphins from all on-effort sightings per 100 km of survey effort)	
	Primary Lines Only	Both Primary and Secondary Lines	Primary Lines Only	Both Primary and Secondary Lines
Northeast Lantau	0.0	0.0	0.0	0.0
Northwest Lantau	0.7	1.1	5.0	5.6

Note: Overall dolphin encounter rates (sightings per 100km of survey effort) from all four surveys are conducted in March 2015 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau

No unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Chinese White Dolphins was noticeable from general observations during the dolphin monitoring in this reporting month.

Due to monthly variation in dolphin occurrence within the study area, it would be more appropriate to draw conclusion on whether any impacts on dolphins have been detected related to the construction activities of the TM-CLKL Southern Connection Viaduct Section in the quarterly EM&A reports, where comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

2.4.8 Marine Mammal Exclusion Zone Monitoring

Daily 250 m marine mammal exclusion zone monitoring was undertaken during the period of marine works activities being undertaken. No Passive Acoustic Monitoring (PAM) was implemented as the marine works were not carried out outside the daylight hours in this reporting month. No sighting of Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) were recorded in March 2015 during the exclusion zone monitoring.

2.5 EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting month, four (4) site inspections were carried out on 4, 11, 19 and 26 March 2015.

Key observations during the site inspections are summarized in *Table 2.14*.

Table 2.14 Specific Observations Identified during the Weekly Site Inspections in this Reporting Month

Inspection Date	Environmental Observations	Recommendations/ Remarks
4 March 2015	<p>Pier E12</p> <ul style="list-style-type: none"> The updated dumping permit was not displayed. The checklist for wet sep was not displayed. The label of sediment at barge Kin Yip was not well displayed. <p>Pier B1</p> <ul style="list-style-type: none"> An air compressor was not placed on decoupling pad. 	<p>Pier E12</p> <ul style="list-style-type: none"> Dumping permit, checklist for wet sep and sediment label should be well displayed. <p>Pier B1</p> <ul style="list-style-type: none"> The air compressor should be placed on decoupling pad.
11 March 2015	<p>Area 1</p> <ul style="list-style-type: none"> A slope close to drainage was partially unpaved. <p>Pier C14B</p> <ul style="list-style-type: none"> Refuse was found placed next to drainage. <p>Site Access 9B</p> <ul style="list-style-type: none"> An old EP was displayed. 	<p>Area 1</p> <ul style="list-style-type: none"> The unpaved slope should be covered by tarpaulin sheet <p>Pier C14B</p> <ul style="list-style-type: none"> Refuse or waste container should be placed away from drainage. <p>Site Access 9B</p> <ul style="list-style-type: none"> Only the most updated permit should be displayed.
19 March 2015	<p>Seafront</p> <ul style="list-style-type: none"> Refuse was found disposed improperly. Chemical containers were placed without drip tray. <p>Pier ACD1</p> <ul style="list-style-type: none"> Some chemical containers were not placed in drip tray. 	<p>Seafront</p> <ul style="list-style-type: none"> Refuse should be cleaned up regularly. Chemical containers should be placed in drip tray. <p>Pier ACD1</p> <ul style="list-style-type: none"> Chemical containers should be placed in drip tray.
26 March 2015	<p>Pak Mong</p> <ul style="list-style-type: none"> Soil stockpile was not covered. <p>Barge Gammon 38 (next to Pier E7)</p> <ul style="list-style-type: none"> An air compressor was not placed on acoustic decoupling pad. 	<p>Pak Mong</p> <ul style="list-style-type: none"> Soil stockpile should be covered by tarpaulin sheet or watered. <p>Barge Gammon 38 (next to Pier E7)</p> <ul style="list-style-type: none"> Air compressor on marine platform should be placed on acoustic decoupling pad.

The Contractor has rectified all of the observations identified during environmental site inspections in the reporting month.

2.6 WASTE MANAGEMENT STATUS

The Contractor has submitted application form for registration as chemical waste producer under the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.

Wastes generated during this reporting period include mainly construction wastes (inert and non-inert), imported fill, recyclable materials and marine sediment (Categories L & M). Reference has been made to the waste flow table prepared by the Contractor (*Appendix M*). The quantities of different types of wastes are summarized in *Table 2.15*.

Table 2.15 Quantities of Different Waste Generated in the Reporting Period

Month/Year	Inert C&D	Imported	Inert	Non-inert	Recyclable	Chemical	Marine Sediment (m ³)
ENVIRONMENTAL RESOURCES MANAGEMENT 0215660_17TH MONTHLY EM&A 20150416.DOC							GCL 16 APRIL 2015

	Materials ^(a) (m ³)	Fill (m ³)	Construction Waste Re- used (m ³)	Construction Waste ^(b) (kg)	Materials ^(c) (kg)	Wastes (kg)	Category L	Category M (M _p & M _f)
March 2015	9,600	77	473	120,940	203	0	618	222

Notes:

- (a) Inert construction wastes include hard rock and large broken concrete, and materials disposed as public fill.
- (b) Non-inert construction wastes include general refuse disposed at landfill.
- (c) Recyclable materials include metals, paper, cardboard, plastics, timber, felled trees and others.

The Contractor was advised to properly maintain on site C&D materials and waste collection, sorting and recording system, dispose of C&D materials and wastes at designated ground and maximize reuse/ recycle of C&D materials and wastes. The Contractor was also reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

For chemical waste containers, the Contractor was reminded to treat properly and store temporarily in designated chemical waste storage area on site in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes.

2.7 ENVIRONMENTAL LICENSES AND PERMITS

The status of environmental licensing and permit is summarized in *Table 2.16* below.

Table 2.16 Summary of Environmental Licensing and Permit Status

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Environmental Permit	EP-354/2009/D	13 March 2015	N/A	HyD	Tuen Mun- Chek Lap Kok Link
Construction Dust Notification	361571	5 Jul 2013	N/A	GCL	
Construction Dust Notification	362093	17 Jul 2013	N/A	GCL	For Area 23
Chemical Waste Registration	5213-961-G2380-13	10 Oct 2013	N/A	GCL	Chemical waste produced in Contract HY/2012/07 (Area 1 adjacent to Cheng Tung Road, Siu Ho Wan)
Chemical Waste Registration	5213-961-G2380-14	10 Oct 2013	N/A	GCL	Chemical waste produced in Contract HY/2012/07 (Area 2 adjacent to Cheung Tung Road, Pak Mong Village)
Chemical Waste Registration	5213-974-G2588-03	4 Nov 2013	N/A	GCL	Chemical waste produced in Contract HY/2012/07 (WA5 adjacent to Cheung Tung Road, Yam O)
Chemical Waste Registration	5213-951-G2380-17	12 Jun 2014	N/A	GCL	Viaducts A, B, C, D & E
Construction Waste Disposal Account	7017735	10 Jul 2013	N/A	GCL	-
Construction Waste Disposal Account	7019470	3 Mar 2014	N/A	GCL	Vessel CHIT Account
Waste Water Discharge License	WT00019017-2014	13 May 2014	31 May 2019	GCL	Discharge for marine portion
Waste Water Discharge License	WT00019018-2014	13 May 2014	31 May 2019	GCL	Discharge for land portion
Construction Noise Permit	Nil	N/A	N/A	GCL	For Piling Works
Construction Noise Permit for night works and works in general holidays	GW-RS1032-14	27 Mar 2015	27 Sep 2015	GCL	For Load unload at NLH near Viaduct D
Construction Noise Permit for night works and works in general holidays	GW-RS0078-15	28 Jan 2015	29 Jul 2015	GCL	For Plant mobilization using tractor
Construction Noise Permit for night works and works in general holidays	GW-RS1225-14	31 Oct 2014	2 May 2015	GCL	For Broad Permit
Construction Noise Permit for night works and works in general holidays	GW-RS0212-15	2 Mar 2015	4 Jun 2015	GCL	Pier A8A9 Safety Fence Erection
Construction Noise Permit for night works and works in general holidays	GW-RS1406-15	30 Mar 2015	31 May 2015	GCL	B9-B16 Pier Head Segments Erection
Construction Noise Permit for night works and works in general holidays	GW-RS0225-15	13 Mar 2015	12 May 2015	GCL	TTA Case 009 Ch.2.1E-4.2E

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Construction Noise Permit for night works and works in general holidays	GW-RS0266-15	20 Mar 2015	30 Apr 2015	GCL	B8 Pier Head Segment Erection and Formwork Installation
Marine Dumping Permit	EP/MD/15-248	27 Mar 2015	26 Apr 2015	GCL	For dumping Type I (Dedicated Site) and Type II sediment
Marine Dumping Permit	EP/MD/15-203	28 Jan 2015	27 Jul 2015	GCL	For dumping Type I sediment

2.8 *IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES*

In response to the site audit findings, the Contractors carried out corrective actions.

A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in *Appendix C*. The necessary mitigation measures were implemented properly for this Contract.

2.9 *SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT*

Results for 1-hour TSP, 24-hour TSP, construction noise and impact water quality monitoring complied with the Action/ Limit levels in the reporting period.

Cumulative statistics on exceedances is provided in *Appendix N*.

2.10 *SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS*

The Environmental Complaint Handling Procedure is provided in *Figure 2.6*.

No complaint, notification of summons and prosecution was received in the reporting period.

Statistics on complaints, notifications of summons, successful prosecutions are summarized in *Appendix N*.

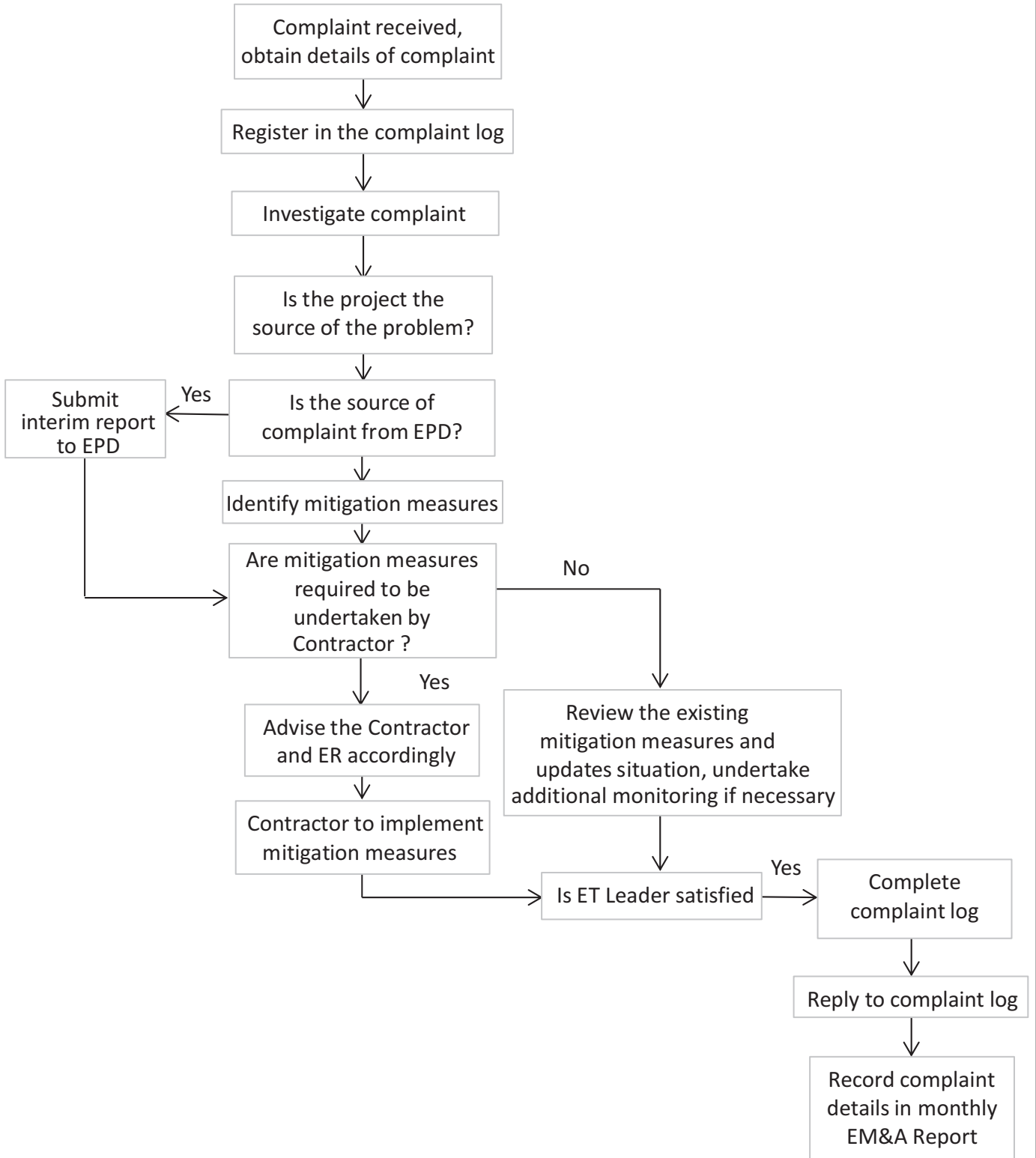


Figure 2.6

Environmental Complaint Handling Procedure

3 *FUTURE KEY ISSUES*

3.1 *CONSTRUCTION PROGRAMME FOR THE COMING MONTHS*

As informed by the Contractor, the major works for this Contract in April 2015 will be:

Marine Works

- Construction of Pile caps at Viaducts B, C, D & E;
- Marine piling platform installation & uninstallation;
- Marine Piling at Viaducts A, C & E; and
- Additional marine ground investigation (GI) and laboratory testing.

Land-based Works

- Construction of pile cap superstructure of Viaduct B;
- Channel re-construction at Area 1;
- Land Piling at Viaducts B, C & D;
- Pre-drilling works at Viaduct A;
- Construction of pile cap at Viaducts B, C, D & E;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

3.2 *KEY ISSUES FOR THE COMING MONTH*

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of April 2015 are mainly associated with dust, noise, marine water quality, marine ecology and waste management issues.

3.3 *MONITORING SCHEDULE FOR THE COMING MONTH*

The tentative schedules for environmental monitoring in April 2015 are provided in *Appendix F*.

4.1 CONCLUSIONS

This Seventeenth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 31 March 2015, in accordance with the Updated EM&A Manual and the requirements of the *Environmental Permit (EP-354/2009/D)*.

Air quality (including 1-hour TSP and 24-hour TSP), noise, water quality, and dolphin monitoring were carried out in the reporting month. Results for water quality monitoring, 1-hour TSP, 24-hour TSP and noise monitoring complied with the Action and Limit levels in the reporting period.

Four (4) groups of twelve (12) Chinese White Dolphins were sighted during the two sets of monitoring surveys in March 2015. All sightings were made in NWL, with no dolphin being sighted at all in NEL. No sighting was made in the proximity of the Project's alignment. During this month of dolphin monitoring, no unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Chinese White Dolphins was noticeable from general observations.

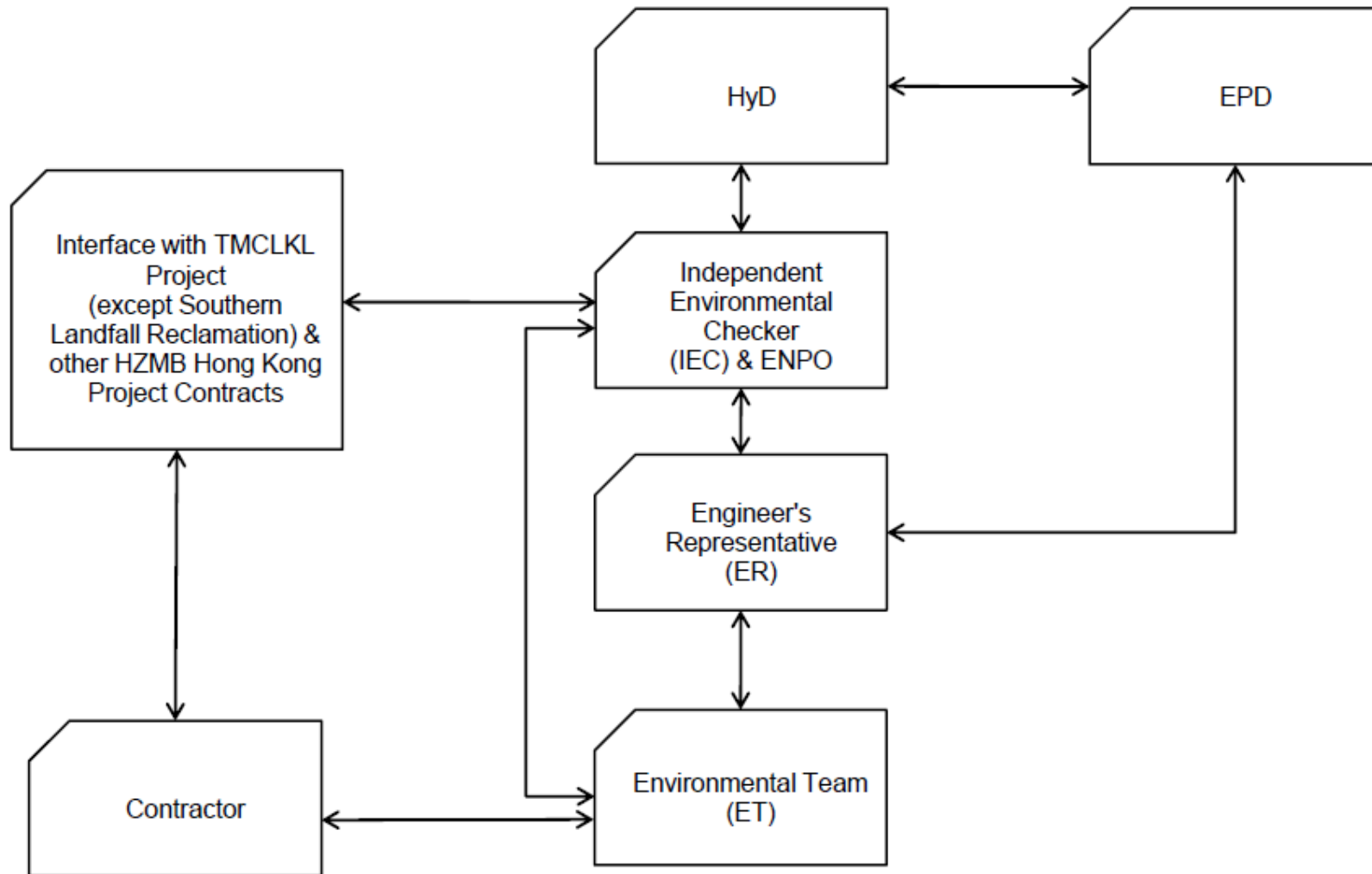
Environmental site inspection was carried out four (4) times in March 2015. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audits.

No environmental complaint, notification of summons or prosecution was received in the reporting month.

The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix A

Project Organization for Environmental Works



↔ Line of Communication

Appendix B

Three-Month Rolling Construction Programme

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015															
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04
Viaduct Design																											
ARDD0430-2	Viaduct A - IC/SO Approval of Foundation DDA - DP11.01	75	04-Oct-14 A	40%	45	24-Apr-15	16-Apr-15	17-Jun-15	38	0	40%																
ARDD0430-4	Viaduct A - IC/SO Approval of Foundation DDA - DP11.01	0		0%	0	24-Apr-15		17-Jun-15	38	0	0%																
ARDD0432	Viaduct A - Preparation of Substructure DDA - DP11.03	50	19-Sep-14 A	100%	0	18-Feb-15 A					100%																
ARDD0433	Viaduct A - Preparation of Superstructure DDA-DP11.03	70	19-Sep-14 A	100%	0	18-Feb-15 A					100%																
ARDD0433-1	Viaduct A - GCL Review of Draft DDA Rev A1 - DP11.03	5	19-Feb-15 A	40%	3	25-Feb-15	23-Dec-14	25-Dec-14	-44	0	0%																
ARDD0433-2	Viaduct A - Update to Incorporate GCL Comments	10	26-Feb-15	0%	10	11-Mar-15	26-Dec-14	08-Jan-15	-44	0	0%																
ARDD0434	Viaduct A - Submission of DDA - DP11.03	0		0%	0	11-Mar-15		08-Jan-15	-44	0	0%																
ARDD0434-1	Viaduct A - Earliest IC Certificate for DDA DP11.02, DP11.03	0		0%	0	22-Apr-15		24-Aug-15	88	8	0%																
ARDD0435	Viaduct A - IC/SO Approval of DDA DP11.03	75	27-Apr-15	0%	75	07-Aug-15	09-Jul-15	21-Oct-15	53	0	0%																
ARDD0435-2	Viaduct A - GCL/FRE Issue of Construction Method/Temporary Work Data	0		0%	0	11-Mar-15		08-Jan-15	-44	0	0%																
ARDD0435-3	Viaduct A - Coordination and Further Issue of Construction Method and Temporary Works D	60	12-Mar-15	0%	60	03-Jun-15	09-Jan-15	02-Apr-15	-44	0	0%																
ARDD0435-4	Viaduct A - Preparation of Draft DDA Working Drawing Set	60	12-Mar-15	0%	60	03-Jun-15	09-Jan-15	02-Apr-15	-44	0	0%																
Information to Contractor																											
ARDD0443	Viaduct A - Typical Pilecap Reinforcement - Stainless Steel Rebar	0	18-Feb-15 A	100%	0						100%																
ARDD0444	Viaduct A - Typical Pilecap Reinforcement - Regular Rebar	0		100%	0	18-Feb-15 A					100%																
ARDD0445	Viaduct A - Final Pilecap Reinforcement	0		0%	0	11-Mar-15		13-Feb-15	-18	0	0%																
ARDD0447	Viaduct A - Final Pier Shapes and Reinforcement	0		0%	0	11-Mar-15		27-Feb-15	-8	13	0%																
ARDD0448	Viaduct A - Typical Segment Shapes for Moulds	0		100%	0	18-Feb-15 A					100%																
ARDD0449	Viaduct A - Typical Segment Reinforcement	0		100%	0	18-Feb-15 A					100%																
ARDD0450	Viaduct A - Final Segment Types and Reinforcement	0		0%	0	11-Mar-15		22-Jan-16	227	107	0%																
ARDD0452	Viaduct A - Final Anchorage and PT Requirements	0		0%	0	11-Mar-15		22-Jan-16	227	107	0%																
ARDD0453	Viaduct A - Provisional Bearing Schedule	0		100%	0	18-Feb-15 A					100%																
ARDD0454	Viaduct A - Final Bearing Schedule	0		0%	0	31-Mar-15		23-Dec-15	191	43	0%																
ARDD0455	Viaduct A - Provisional Movement Joint (MJ) Schedule	0		100%	0	18-Feb-15 A					100%																
ARDD0456	Viaduct A - Final Movement Joint (MJ) Schedule	0		0%	0	11-Mar-15		20-Oct-15	159	46	0%																
Viaduct F1 & F3																											
Viaduct Design																											
ARDD0485	Viaduct F1 & F3 - IC/SO Approval of DDA - DP16.02, 16.03, 16.08, 16.09	75	25-Nov-14 A	20%	60	15-May-15	09-Feb-15	01-May-15	-10	10	20%																
ARDD0486-2	Viaduct F1 & F3 - Coordination and Further Issue of Construction Method and Temporary W	60	23-Feb-15	0%	60	15-May-15	26-Jan-15	17-Apr-15	-20	0	0%																
ARDD0486-3	Viaduct F1 & F3 - Preparation of Draft Working Drawing Set	60	23-Feb-15	0%	60	15-May-15	26-Jan-15	17-Apr-15	-20	0	0%																
ARDD0486-4	Viaduct F1 & F3 - GCL/FRE Final Coordinated Construction Method/Temporary Work Detail	0		0%	0	15-May-15		17-Apr-15	-20	0	0%																
ARDD0486-5	Viaduct F1 & F3 - Preparation and Coordination of DDA Working Drawing Set	10	18-May-15	0%	10	29-May-15	20-Apr-15	01-May-15	-20	0	0%																
Viaduct F2, F4 and F5																											
Viaduct Design																											
ARDD0529	Viaduct F2, F4 & F5 - IC/SO Approval of DDA - DP16.05, 06, 11, 12, 14, 15	75	25-Nov-14 A	20%	60	15-May-15	27-Apr-15	17-Jul-15	45	10	20%																
ARDD0530-3	Viaduct F2, F4 & F5 - Coordination and Further Issue of Construction Method and Temporar	60	23-Feb-15	0%	60	15-May-15	26-Jan-15	17-Apr-15	-20	0	0%																
ARDD0530-4	Viaduct F2, F4 & F5 - Preparation of Draft Working Drawing Set	60	23-Feb-15	0%	60	15-May-15	26-Jan-15	17-Apr-15	-20	0	0%																
ARDD0530-5	Viaduct F2, F4 & F5 - GCL/FRE Final Coordination Construction Method/Temporary Work D	0		0%	0	15-May-15		17-Apr-15	-20	0	0%																
ARDD0530-6	Viaduct F2, F4 & F5 - Preparation and Coordination of DDA Working Drawing Set	10	18-May-15	0%	10	29-May-15	20-Apr-15	01-May-15	-20	0	0%																
Parapet and Utility Trough																											
ARDD0562-4	IC/SO Approval of DDA - DP30.01	75	31-Jul-14 A	90.67%	7	03-Mar-15	07-Oct-15	15-Oct-15	162	0	90%																
ARDD0562-5	IC/SO Approval of DDA - DP30.01	0		0%	0	03-Mar-15		15-Oct-15	162	0	0%																
ARDD0566	IC/SO Approval of DDA - DP31.01	75	24-Oct-14 A	60%	30	03-Apr-15	04-Sep-15	15-Oct-15	139	0	60%																
ARDD0566-1	IC/SO Approval of DDA - DP31.01	0		0%	0	03-Apr-15		15-Oct-15	139	7	0%																
Slopeworks for Viaduct B: 9SE- B/C8, B/C9, B/F9, B/F85+ 10SW-A/F52, A/F53																											
ARDD0580-5	Preparation of Slope A/F52 Submission - CP12.03	20	10-Feb-15 A	30%	14	12-Mar-15	07-Apr-15	24-Apr-15	31	0	30%																
ARDD0580-6	IC/SO Approval of Slope - CP12.03	75	13-Mar-15	0%	75	25-Jun-15	27-Apr-15	07-Aug-15	31	0	0%																

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 3 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start / FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015															
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04
PR65011	Design & Approvals for Marine Navigation Aids	150	23-Oct-13 A	54.67%	68	18-May-15	21-May-15	11-Aug-15	70	58	55%																
Tower Cranes																											
PR66011	Procure & Deliver Tower Cranes	325	01-Oct-14 A	53.85%	150	25-Aug-15	19-Jan-15	25-Jul-15	-27	793	50%																
PR66013	Erect & Commission Tower Crane @ E4	12	23-Mar-15	0%	12	09-Apr-15	19-Jan-15	02-Feb-15	-51	8	0%																
PR66013-1	Dismantle Tower Crane @ E4	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66014-1	Dismantle Tower Crane @ E5	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66015-1	Dismantle Tower Crane @ E6	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66016-1	Dismantle Tower Crane @ E7	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66017-1	Dismantle Tower Crane @ E8	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66018	Erect & Commission Tower Crane @ E9	12	23-Mar-15	0%	12	09-Apr-15	22-Jan-15	05-Feb-15	-47	12	0%																
PR66018-1	Dismantle Tower Crane @ E9	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66019	Erect & Commission Tower Crane @ E10	12	23-Mar-15	0%	12	09-Apr-15	11-May-15	28-May-15	36	75	0%																
PR66019-1	Dismantle Tower Crane @ E10	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66020	Erect & Commission Tower Crane @ E11	12	20-Apr-15	0%	12	05-May-15	17-Feb-15	06-Mar-15	-45	62	0%																
PR66020-1	Dismantle Tower Crane @ E11	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66021	Erect & Commission Tower Crane @ E12A	12	05-May-15	0%	12	19-May-15	08-Sep-15	24-Sep-15	94	110	0%																
PR66021-1	Dismantle Tower Crane @ E12A	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66022	Erect & Commission Tower Crane @ E12B	12	05-May-15	0%	12	19-May-15	06-Aug-15	22-Aug-15	68	91	0%																
PR66022-1	Dismantle Tower Crane @ E12B	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66023-1	Dismantle Tower Crane @ E13-Sth	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
PR66024-1	Dismantle Tower Crane @ E13-Nth	12	23-Feb-15	0%	12	07-Mar-15	14-Apr-18	30-Apr-18	874	874	0%																
Equipment Platforms for Tower Cranes																											
PR66026	Inst.Temp.Eqpt.Platform (piles & deck) @ E4	24	23-Feb-15	0%	24	21-Mar-15	18-Dec-14	19-Jan-15	-51	0	0%																
PR66027	Inst.Temp.Eqpt.Platform (piles & deck) @ E5	24	08-May-15	0%	24	10-Jun-15	06-May-15	08-Jun-15	-2	0	0%																
PR66030	Inst.Temp.Eqpt.Platform (piles & deck) @ E8	24	04-May-15	0%	24	04-Jun-15	09-Jul-15	08-Aug-15	47	0	0%																
PR66031	Inst.Temp.Eqpt.Platform (piles & deck) @ E9	24	23-Feb-15	0%	24	21-Mar-15	22-Dec-14	22-Jan-15	-47	0	0%																
PR66032	Inst.Temp.Eqpt.Platform (piles & deck) @ E10	24	23-Feb-15	0%	24	21-Mar-15	09-Apr-15	11-May-15	36	0	0%																
PR66033	Inst.Temp.Eqpt.Platform (piles & deck) @ E11	24	17-Mar-15	0%	24	18-Apr-15	20-Jan-15	17-Feb-15	-45	0	0%																
PR66034	Re-arrange temp.platform @ E12	24	30-Mar-15	0%	24	04-May-15	07-Jul-15	06-Aug-15	68	0	0%																
Deck Segment Installation Equipment																											
Launching Gantry 1																											
PR67040	Launching Gantry Design	130	05-Feb-14 A	98.46%	2	24-Feb-15	05-Nov-14	06-Nov-14	-88	6	99%																
PR67041	Launching Gantry 1 Fabrication	130	10-Mar-14 A	98.46%	2	24-Feb-15	28-Apr-18	30-Apr-18	941	941	97%																
PR67042	Launching Gantry 1 Delivery	24	25-Aug-14 A	79.17%	5	27-Feb-15	25-Apr-18	30-Apr-18	938	938	80%																
Launching Gantry 2																											
PR67043	Launching Gantry 2 Fabrication	142	16-Jun-14 A	60.56%	56	04-May-15	29-Oct-14	05-Jan-15	-94	0	60%																
PR67044	Launching Gantry 2 Delivery	12	05-May-15	0%	12	18-May-15	06-Jan-15	19-Jan-15	-94	0	0%																
Lifting Frames																											
Lifting Frames 1 & 2																											
PR68011	Lifting Frame 1&2 Design	86	02-Jun-14 A	77.91%	19	16-Mar-15	27-Nov-14	19-Dec-14	-69	0	60%																
PR68012	Lifting Frame 1&2 Approval	24	03-Mar-15	0%	24	30-Mar-15	05-Dec-14	06-Jan-15	-69	0	0%																
PR68013	Lifting Frame 1&2 Fabrication	24	31-Mar-15	0%	24	02-May-15	06-Jan-15	03-Feb-15	-69	0	0%																
PR68014	Lifting Frame 1&2 Delivery	12	04-May-15	0%	12	16-May-15	03-Feb-15	17-Feb-15	-69	7	0%																
Lifting Frames 3 & 4																											
PR68015	Lifting Frame 3&4 Design	70	02-Jun-14 A	72.86%	19	16-Mar-15	08-Jan-15	30-Jan-15	-36	0	60%																
PR68016	Lifting Frame 3&4 Approval	24	03-Mar-15	0%	24	30-Mar-15	16-Jan-15	13-Feb-15	-36	0	0%																
PR68017	Lifting Frame 3&4 Fabrication	24	31-Mar-15	0%	24	02-May-15	13-Feb-15	17-Mar-15	-36	0	0%																
PR68018	Lifting Frame 3&4 Delivery	12	04-May-15	0%	12	16-May-15	17-Mar-15	31-Mar-15	-36	23	0%																

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 6 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015															
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04
Lifting Frames 5 & 6																											
PR68019	Lifting Frame 5&6 Design	70	22-Dec-14 A	14.29%	60	08-May-15	07-May-15	18-Jul-15	58	0	15%																
PR68020	Lifting Frame 5&6 Approval	60	30-Mar-15	0%	60	13-Jun-15	12-Jun-15	22-Aug-15	58	2	0%																
PR68021	Lifting Frame 5&6 Fabrication	85	31-Mar-15	0%	85	16-Jul-15	11-Jun-15	19-Sep-15	56	0	0%																
Unloading Frames																											
Type 1 (at B6 and D6)																											
PR69100	Unloading Frame Type 1 Design	50	05-May-14 A	40%	30	28-Mar-15	10-Jan-15	13-Feb-15	-34	2	40%																
PR69110	Unloading Frame Type 1 Fabrication	80	23-Feb-15	0%	80	02-Jun-15	05-Dec-17	14-Mar-18	827	0	0%																
Type 2 (at Bridge E1)																											
PR69170	Unloading Frame Type 2 Design	50	23-Feb-15	0%	50	25-Apr-15	10-Jan-15	12-Mar-15	-34	0	0%																
PR69180	Unloading Frame Type 2 Fabrication	80	30-Mar-15	0%	80	09-Jul-15	07-Dec-17	16-Mar-18	799	0	0%																
Type 4 (at HKBCF)																											
PR69250	Unloading Frame Type 4 Design	50	23-Feb-15	0%	50	25-Apr-15	10-Jan-15	12-Mar-15	-34	0	0%																
PR69260	Unloading Frame Type 4 (BCF) Fabrication	80	30-Mar-15	0%	80	09-Jul-15	14-Feb-15	28-May-15	-34	0	0%																
Deck Segments & Precast Pile Cap Shells																											
Preliminaries																											
MBBE0018	Precast Segment Mould Design (Viaduct E5, E6, E7 & E8)	42	05-Jul-14 A	59.52%	17	13-Mar-15	25-Mar-15	18-Apr-15	27	926	60%																
MBBE0020	Precast Segment Mould Fabrication & Assembly (Viaduct E5, E6, E7 & E8)	52	23-Feb-15	0%	52	28-Apr-15	25-Mar-15	01-Jun-15	27	67	0%																
MBBE0024	Precast Segment Mould Design (Viaduct E2)	42	28-Jun-14 A	59.52%	17	13-Mar-15	05-Jan-15	24-Jan-15	-39	926	60%																
MBBE0026	Precast Segment Mould Fabrication & Assembly (Viaduct E2)	52	23-Feb-15	0%	52	28-Apr-15	05-Jan-15	10-Mar-15	-39	3	0%																
MBBE0030	Precast Segment Mould Design (Viaduct E1)	42	30-Jul-14 A	0%	42	16-Apr-15	11-Dec-14	02-Feb-15	-57	901	0%																
MBBE0032	Precast Segment Mould Fabrication & Assembly (Viaduct E1)	52	23-Feb-15	0%	52	28-Apr-15	11-Dec-14	13-Feb-15	-57	0	0%																
MBBE0036	Precast Segment Mould Design (Viaduct D)	42	23-Feb-15	0%	42	16-Apr-15	13-Dec-14	03-Feb-15	-55	0	0%																
MBBE0038	Precast Segment Mould Fabrication & Assembly (Viaduct D)	52	06-Mar-15	0%	52	11-May-15	27-Dec-14	02-Mar-15	-55	0	0%																
MBBE0042	Precast Segment Mould Design (Viaduct C)	42	23-Feb-15	0%	42	16-Apr-15	06-Feb-15	31-Mar-15	-11	0	0%																
MBBE0044	Precast Segment Mould Fabrication & Assembly (Viaduct C)	52	06-Mar-15	0%	52	11-May-15	18-Feb-15	28-Apr-15	-11	59	0%																
MBBE0048	Precast Segment Mould Design (Viaduct A)	42	12-Mar-15	0%	42	05-May-15	17-Dec-15	06-Feb-16	229	0	0%																
MBBE0050	Precast Segment Mould Fabrication & Erection (Viaduct A)	52	24-Mar-15	0%	52	29-May-15	31-Dec-15	04-Mar-16	229	91	0%																
MBBE0054	Precast Segment Mould Design (Viaduct F1 to F5)	42	23-Feb-15	0%	42	16-Apr-15	15-Jun-15	04-Aug-15	90	0	0%																
MBBE0056	Precast Segment Mould Fabrication & Erection (Viaduct F1 to F5)	52	06-Mar-15	0%	52	11-May-15	27-Jun-15	27-Aug-15	90	60	0%																
Viaduct B																											
Precast Deck Segments																											
MBBE0130-1	B: Progressive Pier Head Segment Manufacture & Delivery remaining segments	54	02-Dec-14 A	16.67%	45	20-Apr-15	10-Jan-15	06-Mar-15	-34	0	16.7%																
MBBE130	B: Commence Match Cast Segment Delivery	0	23-Feb-15	0%	0		30-Apr-18		943	943	0%																
MBBE130-1	B: Progressive Match Cast Segment Manufacture & Delivery remaining segments (334 Nr)	96	24-Oct-14 A	10.42%	86	09-Jun-15	19-Nov-14	05-Mar-15	-76	0	10.48%																
Viaduct E																											
Precast Pile Caps																											
Viaduct E1																											
PP7330	Production of Viaduct E1 Marine Precast Pile Cap Shells	80	17-Oct-14 A	50%	40	14-Apr-15	27-Dec-14	12-Feb-15	-45	903	50%																
Viaduct E2																											
PP7260	Production of Viaduct E2 Marine Precast Pile Cap Shells	80	27-Oct-14 A	33.75%	53	29-Apr-15	15-Dec-14	18-Feb-15	-53	36	33%																
Viaduct E5, E6, E7 & E8																											
MBE0120-5	E5-6-7-8: Commence Pile Cap Shell Casting on Approval of DDA	0	09-May-15	0%	0		15-Dec-14		-114	0	0%																
PP7120	Production of Viaduct E5 & E6 Marine Precast Pile Cap Shells	60	09-May-15	0%	60	21-Jul-15	15-Dec-14	02-Mar-15	-114	0	0%																
PP7190	Production of Viaduct E7 & E8 Marine Precast Pile Cap Shells	60	09-May-15	0%	60	21-Jul-15	15-Dec-14	02-Mar-15	-114	0	0%																
Precast Deck Segments																											
MBE00014	Viaduct E2 - Pier Head Segment Casting	0	21-Mar-15	0%	0		28-Jan-15		-42	0	0%																
Viaduct E1																											

	Project ID: J3518DWP-E-M21	Tuen Mun - Chek Lap Kok Link - Southern Connection 3-Month Rolling Programme (Page 7 of 41 Pages) (Progress as of 21-Feb-15)	Date	Revision	Checked	Approved	DWG. No.: J3518/GCL/PGM/3MRP-M21
	Layout: J3518-DWP-3MRP Submission - M21		21-Jan-15		DB		
	Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.		09-Mar-15		DB		

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																			
												February			March			April			May										
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18		
MBEE0120-3	E1: Commence Segment Casting on Approval of DDA	0	18-Mar-15	0%	0		07-Jan-15		-57	0	0%																				
MBEE0130-3	E1: Commence Segment Delivery	0	27-Apr-15	0%	0		04-Mar-15		-42	15	0%																				
MBEE0130-5	E1: Progressive Segment Manufacture & Delivery remaining segments (189 Nr)	120	15-May-15	0%	120	07-Oct-15	04-Mar-15	31-Jul-15	-57	13	0%																				
Viaduct E2																															
MBEE0120-2	E2: Commence Segment Casting on Approval of DDA	0	21-Mar-15	0%	0		28-Jan-15		-42	0	0%																				
MBEE0130-2	E2: Commence Segment Delivery	0	08-May-15	0%	0		14-Mar-15		-42	0	0%																				
MBEE0130-7	E2: Progressive Segment Manufacture & Delivery remaining segments (358 Nr)	120	08-May-15	0%	120	29-Sep-15	14-Mar-15	11-Aug-15	-42	0	0%																				
Viaduct D																															
Precast Pile Caps																															
MBDC0130-8	D: Progressive Pile Cap Shell Manufacture & Delivery remaining shells	90	07-Dec-14 A	42.22%	52	28-Apr-15	06-Feb-15	15-Apr-15	-11	891	42.8%																				
Precast Deck Segments																															
MBDE0120	D: Commence Segment Casting on Approval of DDA	0	30-Mar-15	0%	0		21-Jan-15		-55	0	0%																				
MBDE0130-1	D: Commence Pier Head Segment Delivery	0	09-May-15	0%	0		03-Jul-15		44	0	0%																				
MBDE0130-5	D: Progressive Pier Head Segment Manufacture & Delivery	107	09-May-15	0%	107	14-Sep-15	03-Jul-15	07-Nov-15	44	40	0%																				
Viaduct C																															
Precast Pile Caps																															
MBCC0120	C: Commence Pile Cap Shell Casting on Approval of DDA	0	23-Feb-15	0%	0		17-Jan-15		-28	0	0%																				
MBCC0130	C: Commence Pile Cap Shell Delivery	0	24-Apr-15	0%	0		18-Mar-15		-28	0	0%																				
MBCC0130-1	C: Progressive Pile Cap Shell Manufacture & Delivery remaining shells	80	24-Apr-15	0%	80	30-Jul-15	18-Mar-15	27-Jun-15	-28	26	0%																				
PP7490	Production of initial Viaduct C Marine Precast Pile Cap Shells	38	23-Feb-15	0%	38	11-Apr-15	21-Jan-15	10-Mar-15	-25	0	0%																				
Viaduct A																															
Precast Pile Caps																															
MBAC0120	A: Commence Pile Cap Shell Casting on Approval of DDA	0	23-Feb-15	0%	0		02-Sep-15		156	0	0%																				
MBAC0130	A: Commence Pile Cap Shell Delivery	0	24-Apr-15	0%	0		11-Dec-15		191	30	0%																				
PP7570	Production of initial Viaduct A Marine Precast Pile Cap Shells	40	13-Apr-15	0%	40	30-May-15	02-Sep-15	20-Oct-15	118	0	0%																				
Parapets																															
MBEE0090	Approval of DDA to start Precast Parapets/Barriers Casting	0	04-Mar-15	0%	0		16-Oct-15		184	32	0%																				
PP6010	Procure Sub-Contractor for Precast Parapets/Barriers	40	23-Feb-15	0%	40	14-Apr-15	28-Aug-15	15-Oct-15	152	0	0%																				
PP6011	Precast Parapets/Barriers Detail Design & Procure Moulds	120	15-Apr-15	0%	120	05-Sep-15	16-Oct-15	11-Mar-16	152	0	0%																				
PP6011-02	Viaduct B - Precast Parapets/Barriers Production & Delivery	120	15-Apr-15	0%	120	05-Sep-15	12-Feb-16	09-Jul-16	247	66	0%																				
PP6011-03	Viaduct C - Precast Parapets/Barriers Production & Delivery	120	15-Apr-15	0%	120	05-Sep-15	16-Dec-15	17-May-16	203	0	0%																				
PP6011-04	Viaduct D - Precast Parapets/Barriers Production & Delivery	120	15-Apr-15	0%	120	05-Sep-15	10-Dec-15	10-May-16	198	0	0%																				
PP6011-05	Viaduct E - Precast Parapets/Barriers Production & Delivery	180	15-Apr-15	0%	180	18-Nov-15	16-Oct-15	27-May-16	152	175	0%																				
PP6011-06	Viaduct F - Precast Parapets/Barriers Production & Delivery	120	15-Apr-15	0%	120	05-Sep-15	28-Jan-16	27-Jun-16	237	273	0%																				
Materials																															
PP7010	Procure Sub-contractor for Signs & Street Furniture	90	05-Mar-15	0%	90	25-Jun-15	24-Jul-15	09-Nov-15	113	0	0%																				
H-Piles																															
PP7550	Procurement of Viaduct A Socketted H-Piles	70	23-Feb-15	0%	70	20-May-15	29-Jul-15	20-Oct-15	126	0	0%																				
Reinforcement																															
Bored Piles																															
PP7100	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct E5 & E6 Piles	185	07-Jul-14 A	40.54%	110	09-Jul-15	16-Oct-14	28-Feb-15	-105	833	40%																				
PP7170	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct E7 & E8 Piles	185	07-Jul-14 A	40.54%	110	09-Jul-15	15-Dec-14	05-May-15	-54	833	40%																				
PP7240	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct E2 Piles	106	15-Apr-14 A	50.94%	52	28-Apr-15	06-Dec-14	09-Feb-15	-61	133	50%																				
PP7380	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct D Piles	25	28-Jul-14 A	68%	8	03-Mar-15	08-Jun-15	16-Jun-15	84	6	68%																				
PP7460	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct C Piles	35	18-Aug-14 A	28.57%	25	23-Mar-15	10-Feb-15	14-Mar-15	-8	0	28%																				
PP7540	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct A Piles	21	12-Aug-14 A	14.29%	18	14-Mar-15	04-Feb-15	28-Feb-15	-12	9	14%																				
PP7620	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct F1 & F3 Piles	61	23-Feb-15	0%	61	09-May-15	17-Dec-14	04-Mar-15	-52	0	0%																				
PP7690	Rebar - Cut, Bend & Fabricate Pile Cage for Viaduct F2, F4 & F5 Piles	73	23-Feb-15	0%	73	23-May-15	14-Jan-15	16-Apr-15	-31	0	0%																				

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 8 of 41 Pages)
(Progress as of 21-Feb-15)

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21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start / FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015												
												9	26	02	09	16	23	02	09	16	23	30	06	13
Marine Pile Caps																								
PP7110	Rebar - Cut, Bend & Fabricate for Viaduct E5 & E6 Pile Caps	245	23-Feb-15	0%	245	17-Dec-15	16-Oct-14	14-Aug-15	-105	0	0%													
PP7180	Rebar - Cut, Bend & Fabricate for Viaduct E7 & E8 Pile Caps	102	23-Feb-15	0%	102	29-Jun-15	15-Dec-14	24-Apr-15	-54	0	0%													
PP7250	Rebar - Cut, Bend & Fabricate for Viaduct E2 Pile Caps	185	23-Feb-15	0%	185	07-Oct-15	06-Dec-14	27-Jul-15	-61	0	0%													
PP7320	Rebar - Cut, Bend & Fabricate for Viaduct E1 Pile Caps	67	11-Dec-14 A	7.46%	62	11-May-15	26-Nov-14	09-Feb-15	-70	0	7%													
PP7400	Rebar - Cut, Bend & Fabricate for Viaduct D Marine Pile Caps	47	18-Dec-14 A	6.38%	44	18-Apr-15	06-Mar-18	30-Apr-18	899	899	6%													
PP7480	Rebar - Cut, Bend & Fabricate for Viaduct C Marine Pile Caps	42	10-Mar-15	0%	42	02-May-15	08-Mar-18	30-Apr-18	888	888	0%													
PP7560	Rebar - Cut, Bend & Fabricate for Viaduct A Marine Pile Caps	36	26-Mar-15	0%	36	12-May-15	07-Sep-15	20-Oct-15	133	72	0%													
Marine Piers - Viaduct E																								
PP7270	Rebar - Cut, Bend & Fabricate for Viaduct E2 Piers	180	23-Mar-15	0%	180	30-Oct-15	07-Jan-15	18-Aug-15	-61	36	0%													
PP7340	Rebar - Cut, Bend & Fabricate for Viaduct E1 Piers	31	31-Mar-15	0%	31	11-May-15	05-Jan-15	09-Feb-15	-70	0	0%													
Land Pile Caps																								
PP7630	Rebar - Cut, Bend & Fabricate for Viaduct F1 & F3 Pile Caps	47	11-May-15	0%	47	07-Jul-15	08-Aug-15	03-Oct-15	74	0	0%													
PP7752	Rebar - Cut, Bend & Fabricate for Viaduct B Land Pile Caps	26	16-Jul-14 A	26.92%	19	16-Mar-15	09-Apr-18	30-Apr-18	924	924	26%													
PP7754	Rebar - Cut, Bend & Fabricate for Viaduct D Land Pile Caps	29	23-Feb-15	0%	29	27-Mar-15	08-Jun-15	13-Jul-15	84	0	0%													
PP7756	Rebar - Cut, Bend & Fabricate for Viaduct C Land Pile Caps	34	19-Mar-15	0%	34	02-May-15	10-Mar-15	23-Apr-15	-8	0	0%													
PP7758	Rebar - Cut, Bend & Fabricate for Viaduct A Land Pile Caps	12	26-Mar-15	0%	12	13-Apr-15	28-Feb-15	14-Mar-15	-21	0	0%													
Land / Marine Piers - Viaduct A, B, C, D & F																								
PP7060	Bending of Rebar for Viaduct B Piers	64	11-Aug-14 A	20.31%	51	27-Apr-15	26-Feb-18	30-Apr-18	892	892	20%													
PP7420	Bending of Rebar for Viaduct D Piers	71	23-Mar-15	0%	71	19-Jun-15	08-Jul-15	29-Sep-15	84	79	0%													
PP7500	Bending of Rebar for Viaduct C Piers	78	04-May-15	0%	78	05-Aug-15	13-Aug-15	14-Nov-15	84	7	0%													
PP7580	Bending of Rebar for Viaduct A Piers	23	14-Apr-15	0%	23	11-May-15	14-Mar-15	15-Apr-15	-21	0	0%													
In-Situ Formworks / Falseworks																								
PP7070	On-Site Preparation & Assembly of Pier Formwork for Viaduct B Piers	70	03-Sep-14 A	20%	56	04-May-15	17-Feb-15	30-Apr-15	-2	24	20%													
PP7140	On-Site Preparation & Assembly of Pier Formwork for Viaduct E5 & E6 Piers	90	30-Mar-15	0%	90	21-Jul-15	29-Nov-14	21-Mar-15	-97	23	0%													
PP7280	On-Site Preparation & Assembly of Pier Formwork for Viaduct E2 Piers	80	23-Feb-15	0%	80	02-Jun-15	01-Nov-14	06-Feb-15	-91	0	0%													
PP7350	On-Site Preparation & Assembly of Pier Formwork for Viaduct E1 Piers	60	23-Feb-15	0%	60	08-May-15	16-Dec-14	02-Mar-15	-53	4	0%													
PP7430	On-Site Preparation & Assembly of Pier Formwork for Viaduct D Piers	80	30-Mar-15	0%	80	09-Jul-15	18-Apr-15	24-Jul-15	13	0	0%													
PP7510	On-Site Preparation & Assembly of Pier Formwork for Viaduct C Piers	80	30-Mar-15	0%	80	09-Jul-15	10-Jun-15	12-Sep-15	56	0	0%													
PP7710	On-Site Preparation & Assembly of Pier Formwork for Viaduct F2, F4 & F5 Pile Caps	60	30-Mar-15	0%	60	13-Jun-15	18-Apr-15	30-Jun-15	13	0	0%													
PPPF02	Design & Fabrication of Falsework / Formwork & Delivery	120	20-Feb-14 A	75%	30	28-Mar-15	25-Oct-14	29-Nov-14	-97	0	75%													
Bearings																								
Viaduct A																								
PPBRA1	Preliminary Design of Bearings - Viaduct A	50	27-Mar-15	0%	50	30-May-15	27-Oct-15	23-Dec-15	172	0	0%													
Viaduct C																								
PPBRC1	Preliminary Design of Bearings - Viaduct C	50	22-Dec-14 A	40%	30	28-Mar-15	16-Dec-14	22-Jan-15	-53	0	40%													
PPBRC2	Confirmation of bearing assumption - Viaduct C	0		0%	0	28-Mar-15		22-Jan-15	-53	0	0%													
PPBRC3	Bearing design and submission - Viaduct C	12	30-Mar-15	0%	12	16-Apr-15	23-Jan-15	05-Feb-15	-53	0	0%													
PPBRC4	Design check by ICE - Viaduct C	24	17-Apr-15	0%	24	15-May-15	06-Feb-15	09-Mar-15	-53	0	0%													
PPBRC5	SO review & comment on design submission - Viaduct C	36	16-May-15	0%	36	29-Jun-15	10-Mar-15	24-Apr-15	-53	0	0%													
PPBRC7	Manufacture of Bearing - Viaduct C	54	16-May-15	0%	54	21-Jul-15	10-Mar-15	16-May-15	-53	0	0%													
Viaduct D																								
PPBRD4	Design check by ICE - Viaduct D	24	20-Dec-14 A	20.83%	19	16-Mar-15	31-Jan-15	25-Feb-15	-16	0	20%													
PPBRD5	SO review & comment on design submission - Viaduct D	36	17-Mar-15	0%	36	02-May-15	26-Feb-15	13-Apr-15	-16	0	0%													
PPBRD6	Bearing Design Amendment & re-issue - Viaduct D	12	04-May-15	0%	12	16-May-15	21-Apr-15	05-May-15	-10	6	0%													
PPBRD7	Manufacture of Bearing - Viaduct D	54	17-Mar-15	0%	54	23-May-15	26-Feb-15	05-May-15	-16	0	0%													
Viaduct E																								
PPBRE2	Confirmation of bearing assumption - Viaduct E (E1, E2, E5, E6, E7 & E8)	0		0%	0	23-Feb-15		30-Apr-18	943	943	0%													

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

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Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 9 of 41 Pages)
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Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																			
												February			March			April			May										
												9	25	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18		
PPBRE3	Bearing design and submission - Viaduct E (E1, E2, E5, E6, E7 & E8)	12	06-Jan-14 A	66.67%	4	26-Feb-15	26-Apr-18	30-Apr-18	939	939	65%																				
PPBRE4	Design check by ICE - Viaduct E (E1, E2, E5, E6, E7 & E8)	24	06-Jun-14 A	16.67%	20	17-Mar-15	07-Apr-18	30-Apr-18	923	923	16%																				
PPBRE5	SO review & comment on design submission - Viaduct E (E1, E2, E5, E6, E7 & E8)	36	10-Oct-14 A	5.56%	34	02-Apr-15	03-Mar-18	16-Apr-18	897	0	5%																				
PPBRE6	Bearing Design Amendment & re-issue - Viaduct E (E1, E2, E5, E6, E7 & E8)	12	08-Apr-15	0%	12	21-Apr-15	17-Apr-18	30-Apr-18	897	0	0%																				
PPBRE7	Manufacture of Bearing - Viaduct E (E1, E2, E5, E6, E7 & E8)	54	02-Jun-14 A	5.56%	51	27-Apr-15	26-Feb-18	30-Apr-18	892	892	5%																				
PPBRE8	Testing Bearing - Viaduct E (E1, E2, E5, E6, E7 & E8)	24	30-Jun-14 A	4.17%	23	21-Apr-15	03-Apr-18	30-Apr-18	897	897	5%																				
PPBRE9	Bearing Delivery - Viaduct E (E1, E2, E5, E6, E7 & E8)	48	18-Oct-14 A	4.17%	46	21-Apr-15	09-Dec-14	03-Feb-15	-59	0	5%																				
Bridge E1																															
PP7360	Site preparation Bearings for Viaduct E1	18	22-Apr-15	0%	18	15-May-15	04-Feb-15	27-Feb-15	-58	0	0%																				
Bridge E2																															
PP7290	Site preparation Bearings for Viaduct E2	18	16-May-15	0%	18	10-Jun-15	28-Feb-15	20-Mar-15	-58	0	0%																				
Viaduct F																															
PPBRF1	Preliminary Design of Bearings - Viaduct F	70	11-Mar-15	0%	70	06-Jun-15	17-Apr-15	11-Jul-15	28	0	0%																				
Movement Joints																															
PPMJ01	Design & Submission of MJ	138	08-Feb-14 A	52.9%	65	14-May-15	04-Aug-15	20-Oct-15	131	878	30%																				
PPMJ02-1	MJ Design Approval	96	26-May-14 A	39.58%	58	06-May-15	04-Aug-15	12-Oct-15	131	130	40%																				
PPMJ02-2	Manufacture & delivery of MJ	188	23-Feb-15	0%	188	10-Oct-15	04-Aug-15	19-Mar-16	131	0	0%																				
Other Sub-Contract Procurement																															
Pavement																															
PP7760-2	Procure Pavement Viaduct Sub-Contractor	36	04-Mar-15	0%	36	18-Apr-15	08-Oct-15	19-Nov-15	177	0	0%																				
PP7760-4	Pavement Viaduct Sub-Contractor - Materials approvals & MS	90	20-Apr-15	0%	90	06-Aug-15	20-Nov-15	10-Mar-16	177	97	0%																				
Structural Health Monitoring System (SHMS)																															
PP7778	SHMS - So approval of Final System Proposal	30	16-Dec-14 A	0%	30	28-Mar-15	10-Nov-14	15-Dec-14	-84	30	0%																				
PP7780	SHMS - Prepare Civil Work Provision	66	23-Feb-15	0%	66	15-May-15	06-Oct-14	22-Dec-14	-114	0	0%																				
PP7782	SHMS - Submit Precast Pile Cap Shell SHMS details for E5-E6-E7-E8	0	23-Mar-15	0%	0		03-Nov-14		-114	0	0%																				
PP7786	SHMS - Submit Segment SHMS details for E5-E6-E7-E8	0	17-Apr-15	0%	0		24-Feb-15		-41	0	0%																				
PP7788	SHMS - FAT & Delivery for Bridge E5-E6-E7-E8 equipment	54	23-Mar-15	0%	54	30-May-15	01-Dec-14	05-Feb-15	-90	14	0%																				
Site Preparation / Mobilisations																															
Temp Traffic Mgt Submission & Approval																															
TTM00610	Earliest Implementation of TTM after TMLG Meeting No. 17	0	03-Feb-15 A	100%	0						100%																				
TTM00620	Send TTMs to SO & Govt Depts for TMLG Meeting No. 18	0		100%	0	02-Feb-15 A					100%																				
TTM00630	TMLG Meeting No. 18	0		100%	0	10-Feb-15 A					100%																				
TTM00640	Earliest Implementation of TTM after TMLG Meeting No. 18	0	24-Feb-15	0%	0		08-Dec-15		205	20	0%																				
TTM00650	Send TTMs to SO & Govt Depts for TMLG Meeting No. 19	0		0%	0	23-Feb-15		14-May-15	58	0	0%																				
TTM00660	TMLG Meeting No. 19	0		0%	0	09-Mar-15*		28-May-15	58	0	0%																				
TTM00670	Earliest Implementation of TTM after TMLG Meeting No. 19	0	24-Mar-15	0%	0		08-Dec-15		185	20	0%																				
TTM00680	Send TTMs to SO & Govt Depts for TMLG Meeting No. 20	0		0%	0	23-Mar-15		11-Jun-15	58	0	0%																				
TTM00690	TMLG Meeting No. 20	0		0%	0	06-Apr-15*		25-Jun-15	58	0	0%																				
TTM00700	Earliest Implementation of TTM after TMLG Meeting No. 20	0	21-Apr-15	0%	0		08-Dec-15		165	23	0%																				
TTM00710	Send TTMs to SO & Govt Depts for TMLG Meeting No. 21	0		0%	0	20-Apr-15		09-Jul-15	58	3	0%																				
TTM00720	TMLG Meeting No. 21	0		0%	0	07-May-15*		23-Jul-15	55	0	0%																				
Tree Felling / Transplant																															
Approved Trees in Contract																															
TR00200	Tree transplant for Vaduct B - affecting Piers B11 to B17	90	17-Feb-14 A	97.78%	2	24-Feb-15	09-May-16	10-May-16	336	884	95%																				
TR00220	Tree transplant for Vaduct B - affecting Pier B18 & Abutment B	90	17-Feb-14 A	97.78%	2	24-Feb-15	09-Jan-16	11-Jan-16	243	884	95%																				
TR00240	Tree transplant for Vaduct B - affecting realigned CTR	90	17-Feb-14 A	97.78%	2	24-Feb-15	24-Feb-15	25-Feb-15	1	884	95%																				
TR00250	Tree felling for Vaduct B - affecting Slopes 9SE-B/F9, C8 & C9	48	05-May-14 A	91.67%	4	26-Feb-15	25-Apr-18	30-Apr-18	882	882	90%																				
TR00260	Tree felling for Vaduct C - affecting Piers C9 to Abutment C	24	30-Jan-14 A	83.33%	4	26-Feb-15	25-Apr-18	30-Apr-18	882	882	70%																				

<ul style="list-style-type: none"> █ Actual Work █ Planned Bar █ Critical Bar ◆ Milestone 	Project ID: J3518DWP-E-M21 Layout: J3518-DWP-3MRP Submission - M21 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.	Tuen Mun - Chek Lap Kok Link - Southern Connection 3-Month Rolling Programme (Page 10 of 41 Pages) (Progress as of 21-Feb-15)	<table border="1"> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> <tr> <td>21-Jan-15</td> <td></td> <td>DB</td> <td></td> </tr> <tr> <td>09-Mar-15</td> <td></td> <td>DB</td> <td></td> </tr> </table>	Date	Revision	Checked	Approved	21-Jan-15		DB		09-Mar-15		DB		DWG. No.: J3518/GCL/PGM/3MRP-M21
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												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04
Preliminary Works for Land Piling																											
GFXX281-3	A10 (A1b) - Pregrouting Works	24	23-Mar-15	0%	24	23-Apr-15	27-Mar-15	28-Apr-15	4	0	0%																
PA100040	A10 (A1b) - Install Geo. Instru. & Baseline Monitoring	36	09-Feb-15 A	100%	0	21-Feb-15 A					100%																
PA100050	A10 (A1b) - Set up piling platform	24	09-Feb-15 A	100%	0	21-Feb-15 A					100%																
PA100060	A10 (A1b) - Complete civil preparation works for piling to commence	0		0%	0	24-Apr-15		30-Apr-18	840	840	0%																
Socketted H-Pile installation																											
GFXX286-3	A10 (A1b) - Confirm Rockhead Levels	8	23-Feb-15	0%	8	03-Mar-15	19-May-15	28-May-15	68	40	0%																
GFXX288	A10 (A1b) - Install SH Pile (8 no.)	120	24-Apr-15	0%	120	15-Sep-15	29-May-15	20-Oct-15	28	0	0%																
Pier A11 (A1a) & Abutment A																											
Preliminary Works for Land Piling																											
GFXX281-4	A11 (A1a) - Pregrouting Works	24	23-Mar-15	0%	24	23-Apr-15	27-Mar-15	28-Apr-15	4	0	0%																
PA110020	A11 (A1a) to Approach Ramp A - Erect boundary fence / water filled barrier & set up site ingri	14	12-Jan-15 A	100%	0	24-Jan-15 A					100%																
PA110030	A11 (A1a) - Erect MTR protective fence	12	02-Feb-15 A	100%	0	02-Feb-15 A					100%																
PA110040	A11 (A1a) - Install Geo. Instru. & Baseline Monitoring	36	09-Feb-15 A	100%	0	14-Feb-15 A					100%																
PA110050	A11 (A1a) - Set up piling platform	24	09-Feb-15 A	37.5%	15	11-Mar-15	10-Mar-15	26-Mar-15	13	9	0%																
PA110060	A11 (A1a) - Completion of civil preparation works for piling to commence	0		0%	0	24-Apr-15		28-Apr-15	4	0	0%																
Socketted H-Pile installation																											
GFXX286-4	A11 (A1a) - Confirm Rockhead Levels	8	23-Feb-15	0%	8	03-Mar-15	09-Jun-15	17-Jun-15	85	41	0%																
GFXX287	A11 (A1a) - Install SH Pile (6 no.)	149	25-Apr-15	0%	149	23-Oct-15	18-Jun-15	14-Dec-15	44	0	0%																
Viaduct B																											
Bridge B3																											
Pier B1 (B3f)																											
Pier Works																											
SB3F0340	B1 (B3f) - Type 4B-MJ Pier Head Curing/Striking of Forms/Remove Scaffolding	6	08-Jan-15 A	100%	0	29-Jan-15 A					100%																
SB3F0350	B1 (B3f) - Type 4B-Bearing Plinth	6	15-Jan-15 A	100%	0	24-Jan-15 A					100%																
Pier Head Segments																											
SB3F0370	B1 (B3f) - Pier Head Segment - Temporary Platform	6	30-Jan-15 A	100%	0	02-Feb-15 A					100%																
SB3F0371	B1 (B3f) - Pier Head Segment Bearings	2	02-Feb-15 A	100%	0	09-Feb-15 A					100%																
SB3F0372	B1 (B3f) - Pier Head Segment Lift & Temp Support (2 seg)	7	12-Feb-15 A	100%	0	17-Feb-15 A					100%																
Pier B2 (B3e)																											
Pier Head Segments																											
SB3E0374	B2 (B3e) - Pier Head Segment Diaphragm - Rebar	12	19-Jan-15 A	100%	0	18-Feb-15 A					100%																
SB3E0376	B2 (B3e) - Pier Head Segment Diaphragm - Formwork & Prep for Concreting	9	22-Jan-15 A	100%	0	18-Feb-15 A					100%																
SB3E0378	B2 (B3e) - Pier Head Segment Diaphragm - Concreting	1	26-Jan-15 A	100%	0	18-Feb-15 A					100%																
SB3E0380	B2 (B3e) - Pier Head Segment Diaphragm - Curing & Striking of Forms	6	19-Feb-15 A	50%	3	25-Feb-15	23-Jan-15	27-Jan-15	-23	0	0%																
Pier B3 (B3d)																											
Pier Works																											
SB3D0180	B3 (B3d) - Type 4B Pier Rebarwork (1st Lift)	3	19-Jan-15 A	100%	0	26-Jan-15 A					100%																
SB3D0190	B3 (B3d) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	27-Jan-15 A	100%	0	04-Feb-15 A					100%																
SB3D0200	B3 (B3d) - Type 4B Pier Concreting (1st Lift)	1	05-Feb-15 A	100%	0	05-Feb-15 A					100%																
SB3D0202	B3 (B3d) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	06-Feb-15 A	100%	0	08-Feb-15 A					100%																
SB3D0300	B3 (B3d) - Type 4B Pier Head Scaffolding	4	10-Feb-15 A	100%	0	17-Feb-15 A					100%																
SB3D0310	B3 (B3d) - Type 4B Pier Head Rebarwork	5	19-Jan-15 A	100%	0	26-Jan-15 A					100%																
SB3D0320	B3 (B3d) - Type 4B Pier Head Formwork & Prep for Concreting	5	27-Jan-15 A	100%	0	04-Feb-15 A					100%																
SB3D0330	B3 (B3d) - Type 4B Pier Head Concreting	1	05-Feb-15 A	100%	0	05-Feb-15 A					100%																
SB3D0340	B3 (B3d) - Type 4B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	06-Feb-15 A	100%	0	08-Feb-15 A					100%																
Pier Head Segments																											
SB3D0370	B3 (B3d) - Pier Head Segment - Temporary Platform	6	10-Feb-15 A	100%	0	12-Feb-15 A					100%																

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 13 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start / FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015														
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27
Pier C1 (C4e)																										
Pile Cap Works																										
SC4E0070	C1 (C4e) - Marine Pile Cap M2 - Inst.Floating Seal & Casing Head Steelwork	7	16-Jan-15 A	100%	0	30-Jan-15 A					100%	[Gantt bar: 16-Jan-15 to 30-Jan-15, 100% complete]														
SC4E0080	C1 (C4e) - Marine Pile Cap M2 - Install precast shell in position	1	31-Jan-15 A	100%	0	31-Jan-15 A					100%	[Gantt bar: 31-Jan-15 to 31-Jan-15, 100% complete]														
SC4E0090	C1 (C4e) - Marine Pile Cap M2 - Inst.Access & make Watertight	3	02-Feb-15 A	100%	0	05-Feb-15 A					100%	[Gantt bar: 02-Feb-15 to 05-Feb-15, 100% complete]														
SC4E0100	C1 (C4e) - Marine Pile Cap M2 - Weld Fin plates/Plug Rebar & Concrete	9	06-Feb-15 A	33.33%	6	28-Feb-15	06-Mar-15	12-Mar-15	10	0	50%	[Gantt bar: 06-Mar-15 to 12-Mar-15, 50% complete]														
SC4E0110	C1 (C4e) - Marine Pile Cap M2 - Dewater precast shell / Remove Lifting Frame	2	02-Mar-15	0%	2	03-Mar-15	13-Mar-15	14-Mar-15	10	55	0%	[Gantt bar: 03-Mar-15 to 14-Mar-15, 0% complete]														
SC4E0120	C1 (C4e) - Marine Pile Cap M2 - Pile cut down	12	16-May-15	0%	12	01-Jun-15	16-Mar-15	28-Mar-15	-45	0	0%	[Gantt bar: 16-Mar-15 to 28-Mar-15, 0% complete]														
Pier C2 (C4d)																										
Foundation Works																										
GFXX217	C2 (C4d) - Dismantle removable panels of temp. platform	5	02-Feb-15 A	100%	0	07-Feb-15 A					100%	[Gantt bar: 02-Feb-15 to 07-Feb-15, 100% complete]														
Pier C3 (C4c)																										
Foundation Works																										
GFXX210	C3 (C4c) - Bored Piles (2.00m dia. x 3 nos)	90	08-Jan-15 A	38.89%	55	02-May-15	11-Apr-15	16-Jun-15	37	0	40%	[Gantt bar: 11-Apr-15 to 16-Jun-15, 40% complete]														
GFXX211	C3 (C4c) - Sonic & Interface Coring	12	04-May-15	0%	12	16-May-15	17-Jun-15	02-Jul-15	37	0	0%	[Gantt bar: 17-Jun-15 to 02-Jul-15, 0% complete]														
GFXX212	C3 (C4c) - Dismantle removable panels of temp. platform	5	18-May-15	0%	5	22-May-15	03-Jul-15	08-Jul-15	37	0	0%	[Gantt bar: 03-Jul-15 to 08-Jul-15, 0% complete]														
Pier C4 (C4b)																										
Foundation Works																										
GFXX205	C4 (C4b) - Bored Piles (2.00m dia. x 3 nos)	84	24-Dec-14 A	53.57%	39	13-Apr-15	06-Jan-15	23-Feb-15	-38	0	50%	[Gantt bar: 06-Jan-15 to 23-Feb-15, 50% complete]														
GFXX206	C4 (C4b) - Sonic & Interface Coring	12	14-Apr-15	0%	12	27-Apr-15	24-Feb-15	09-Mar-15	-38	0	0%	[Gantt bar: 24-Feb-15 to 09-Mar-15, 0% complete]														
GFXX207	C4 (C4b) - Dismantle removable panels of temp. platform	5	28-Apr-15	0%	5	04-May-15	10-Mar-15	14-Mar-15	-38	0	0%	[Gantt bar: 10-Mar-15 to 14-Mar-15, 0% complete]														
Pile Cap Works																										
SC4B0070	C4 (C4b) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	16-May-15	0%	7	26-May-15	16-Mar-15	23-Mar-15	-45	0	0%	[Gantt bar: 16-Mar-15 to 23-Mar-15, 0% complete]														
Pier C5 (C4a)																										
Foundation Works																										
GFXX200	C5 (C4a) - Bored Piles (2.35m dia. x 2 nos)	84	05-Dec-14 A	67.86%	27	25-Mar-15	14-Jan-15	14-Feb-15	-31	0	50%	[Gantt bar: 14-Jan-15 to 14-Feb-15, 50% complete]														
GFXX201	C5 (C4a) - Sonic & Interface Coring	12	26-Mar-15	0%	12	13-Apr-15	14-Feb-15	04-Mar-15	-31	0	0%	[Gantt bar: 14-Feb-15 to 04-Mar-15, 0% complete]														
GFXX202	C5 (C4a) - Dismantle removable panels of temp. platform	5	14-Apr-15	0%	5	18-Apr-15	04-Mar-15	10-Mar-15	-31	0	0%	[Gantt bar: 04-Mar-15 to 10-Mar-15, 0% complete]														
Pile Cap Works																										
SC4A0070	C5 (C4a) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	16-May-15	0%	7	26-May-15	10-Mar-15	18-Mar-15	-50	0	0%	[Gantt bar: 10-Mar-15 to 18-Mar-15, 0% complete]														
Pier C6 (C3f)																										
Foundation Works																										
GFXX193	C6 (C3f) - Inst.Temp.Working Platform	12	20-Jan-15 A	41.67%	7	02-Mar-15	04-Dec-14	11-Dec-14	-63	0	50%	[Gantt bar: 04-Dec-14 to 11-Dec-14, 50% complete]														
GFXX194	C6 (C3f) - Predrilling (3 nos)	12	03-Mar-15	0%	12	16-Mar-15	12-Dec-14	27-Dec-14	-63	0	0%	[Gantt bar: 12-Dec-14 to 27-Dec-14, 0% complete]														
GFXX194-2	C6 (C3f) - Confirm Rockhead Levels	8	17-Mar-15	0%	8	25-Mar-15	29-Dec-14	07-Jan-15	-63	0	0%	[Gantt bar: 29-Dec-14 to 07-Jan-15, 0% complete]														
GFXX195	C6 (C3f) - Bored Piles (2.00m dia. x 3 nos)	60	26-Mar-15	0%	60	10-Jun-15	08-Jan-15	21-Mar-15	-63	0	0%	[Gantt bar: 08-Jan-15 to 21-Mar-15, 0% complete]														
Bridge C3																										
Pier C7 (C3e)																										
Socketted H-Pile Installation																										
GFXX398	C7 (C3e) - Install SH Pile (16 no.)	120	27-Jan-15 A	16.67%	100	26-Jun-15	18-May-15	15-Sep-15	67	0	0%	[Gantt bar: 18-May-15 to 15-Sep-15, 0% complete]														
Pile Cap Works																										
SC3E0090	C7 (C3e) - Pile cap Excavation / ELS	20	23-Feb-15	0%	20	17-Mar-15	08-Aug-15	02-Sep-15	123	0	0%	[Gantt bar: 08-Aug-15 to 02-Sep-15, 0% complete]														
SC3E0092	C7 (C3e) - Pile cap Pile breakdown to cut-off etc.	4	18-Mar-15	0%	4	21-Mar-15	03-Sep-15	07-Sep-15	123	39	0%	[Gantt bar: 03-Sep-15 to 07-Sep-15, 0% complete]														
SC3E0100	C7 (C3e) - Pile cap Blinding	1	16-May-15	0%	1	16-May-15	08-Sep-15	08-Sep-15	84	0	0%	[Gantt bar: 08-Sep-15 to 08-Sep-15, 0% complete]														
SC3E0120	C7 (C3e) - Pile cap Rebarwork	4	18-May-15	0%	4	22-May-15	10-Sep-15	14-Sep-15	84	0	0%	[Gantt bar: 10-Sep-15 to 14-Sep-15, 0% complete]														
Pier C8 (C3d)																										
Socketted H-Pile Installation																										
GFXX393	C8 (C3d) - Install SH Pile (16 no.)	90	29-Nov-14 A	93.33%	6	28-Feb-15	15-Aug-15	21-Aug-15	141	0	90%	[Gantt bar: 15-Aug-15 to 21-Aug-15, 90% complete]														

■ Actual Work
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 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 19 of 41 Pages)
(Progress as of 21-Feb-15)

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21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Dur.	Act. Start / FC Early Start	Duration % Complete	Rem. Dur.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015															
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04
Pile Cap Works																											
SC3D0090	C8 (C3d) - Pile cap Excavation / ELS (incl. sheet piling)	36	16-May-15	0%	36	08-Jul-15	22-Aug-15	07-Oct-15	70	0	0%																
Pier C9 (C3c)																											
Foundation Works																											
GFXX421-1	C9 (C3c) - Sonic & Interface Coring Tests	12	19-Jan-15 A	100%	0	27-Jan-15 A							100%														
Pile Cap Works																											
SC3C0090	C9 (C3c) - Pile cap Excavation / ELS (incl. sheet piling)	18	02-Feb-15 A	83.33%	3	25-Feb-15	04-Nov-15	06-Nov-15	189	0	10%																
SC3C0092	C9 (C3c) - Pile cap Pile breakdown to cut-off etc.	4	26-Feb-15	0%	4	02-Mar-15	07-Nov-15	11-Nov-15	189	0	0%																
SC3C0100	C9 (C3c) - Pile cap Blinding	1	03-Mar-15	0%	1	03-Mar-15	12-Nov-15	12-Nov-15	189	0	0%																
SC3C0110	C9 (C3c) - Pile cap Formwork	3	09-Mar-15	0%	3	11-Mar-15	18-Nov-15	20-Nov-15	189	0	0%																
SC3C0120	C9 (C3c) - Pile cap Rebarwork	4	04-Mar-15	0%	4	07-Mar-15	13-Nov-15	17-Nov-15	189	0	0%																
SC3C0122	C9 (C3c) - Pile cap Kicker Formwork	2	13-Mar-15	0%	2	14-Mar-15	27-Nov-15	28-Nov-15	193	4	0%																
SC3C0130	C9 (C3c) - Pile cap Concreting	1	12-Mar-15	0%	1	12-Mar-15	21-Nov-15	21-Nov-15	189	0	0%																
SC3C0140	C9 (C3c) - Pile cap Curing & Striking of Forms incl. CJ prep	6	13-Mar-15	0%	6	19-Mar-15	23-Nov-15	28-Nov-15	189	0	0%																
Pier Works																											
SC3C0150	C9 (C3c) - Type 5B Pier Scaffolding (1st Lift)	2	20-Mar-15	0%	2	21-Mar-15	30-Nov-15	01-Dec-15	189	0	0%																
SC3C0160	C9 (C3c) - Type 5B Pier Rebarwork (1st Lift)	3	23-Mar-15	0%	3	25-Mar-15	02-Dec-15	04-Dec-15	189	0	0%																
SC3C0170	C9 (C3c) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	2	26-Mar-15	0%	2	27-Mar-15	05-Dec-15	07-Dec-15	189	0	0%																
SC3C0180	C9 (C3c) - Type 5B Pier Concreting (1st Lift)	1	28-Mar-15	0%	1	28-Mar-15	08-Dec-15	08-Dec-15	189	0	0%																
SC3C0182	C9 (C3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	30-Mar-15	0%	2	31-Mar-15	09-Dec-15	12-Dec-15	191	0	0%																
SC3C0190	C9 (C3c) - Type 5B Pier Scaffolding (2nd Lift)	2	01-Apr-15	0%	2	02-Apr-15	14-Dec-15	15-Dec-15	191	0	0%																
SC3C0200	C9 (C3c) - Type 5B Pier Rebarwork (2nd Lift)	3	08-Apr-15	0%	3	10-Apr-15	16-Dec-15	18-Dec-15	191	0	0%																
SC3C0210	C9 (C3c) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	3	11-Apr-15	0%	3	14-Apr-15	19-Dec-15	22-Dec-15	191	0	0%																
SC3C0220	C9 (C3c) - Type 5B Pier Concreting (2nd Lift)	1	16-Apr-15	0%	1	16-Apr-15	23-Dec-15	23-Dec-15	191	0	0%																
SC3C0222	C9 (C3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	17-Apr-15	0%	2	18-Apr-15	24-Dec-15	29-Dec-15	192	0	0%																
SC3C0230	C9 (C3c) - Type 5B Pier Scaffolding (3rd Lift)	2	20-Apr-15	0%	2	21-Apr-15	30-Dec-15	31-Dec-15	192	0	0%																
SC3C0240	C9 (C3c) - Type 5B Pier Rebarwork (3rd Lift)	2	22-Apr-15	0%	2	24-Apr-15	02-Jan-16	04-Jan-16	192	0	0%																
SC3C0250	C9 (C3c) - Type 5B Pier Formwork & Prep for Concreting (3rd Lift)	2	25-Apr-15	0%	2	27-Apr-15	05-Jan-16	06-Jan-16	192	0	0%																
SC3C0260	C9 (C3c) - Type 5B Pier Concreting (3rd Lift)	1	28-Apr-15	0%	1	28-Apr-15	07-Jan-16	07-Jan-16	192	0	0%																
SC3C0262	C9 (C3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (3rd Lift)	2	29-Apr-15	0%	2	30-Apr-15	08-Jan-16	09-Jan-16	192	0	0%																
SC3C0270	C9 (C3c) - Type 5B Pier Head Scaffolding	3	02-May-15	0%	3	05-May-15	11-Jan-16	13-Jan-16	192	0	0%																
SC3C0280	C9 (C3c) - Type 5B Pier Head Rebarwork	4	06-May-15	0%	4	09-May-15	14-Jan-16	18-Jan-16	192	0	0%																
SC3C0290	C9 (C3c) - Type 5B Pier Head Formwork & Prep for Concreting	4	11-May-15	0%	4	15-May-15	19-Jan-16	22-Jan-16	192	0	0%																
SC3C0300	C9 (C3c) - Type 5B Pier Head Concreting	1	16-May-15	0%	1	16-May-15	23-Jan-16	23-Jan-16	192	0	0%																
SC3C0310	C9 (C3c) - Type 5B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	18-May-15	0%	6	26-May-15	25-Jan-16	30-Jan-16	192	0	0%																
Pier C10 (C3b)																											
Foundation Works																											
GFXX418	C10 (C3b) - Bored Pile (2.20m dia. x 2 nos)	51	22-Jan-15 A	21.57%	40	14-Apr-15	20-Mar-15	11-May-15	22	0	20%																
Pier C11 (C3a)																											
Foundation Works																											
GFXX416	C11 (C3a) - Bored Pile (2.00m dia. x 2 nos)	45	22-Jan-15 A	31.11%	31	30-Mar-15	23-Jul-15	27-Aug-15	121	22	30%																
GFXX421-3	C11 (C3a) - Sonic & Interface Coring Tests	12	30-Apr-15	0%	12	14-May-15	28-Aug-15	10-Sep-15	99	0	0%																
Bridge C2																											
Pier C12 (C2f)																											
Foundation Works																											
GFXX412	C12 (C2f) - Bored Pile (2.00m dia. x 2 nos)	66	21-Jan-15 A	37.88%	41	15-Apr-15	26-Jun-15	13-Aug-15	99	0	50%																
GFXX413	C12 (C2f) - Sonic & Interface Coring Tests	12	16-Apr-15	0%	12	29-Apr-15	14-Aug-15	27-Aug-15	99	0	0%																
GFXX422-4	C12 (C2f) - Selection of bored pile for Full Depth Coring	24	16-Apr-15	0%	24	14-May-15	09-Oct-15	06-Nov-15	145	0	0%																

■ Actual Work
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■ Critical Bar
◆ Milestone

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Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 20 of 41 Pages)
(Progress as of 21-Feb-15)

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21-Jan-15		DB	
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DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start / FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11
GFXX422-8	C12 (C2f) - Bored Pile Full Depth Coring & Testing	24	15-May-15	0%	24	12-Jun-15	07-Nov-15	04-Dec-15	145	0	0%																	
Pier C13 (C2e) Portal																												
Socketted H-Pile Installation																												
GFXX388	C13 (C2e) - Install SH Pile (10 nr.)	66	15-Dec-14 A	100%	0	05-Feb-15 A					100%																	
GFXX399-4	C13 (C2e) - Seclion of pile for Loading Test	24	23-Feb-15	0%	24	21-Mar-15	22-Aug-15	18-Sep-15	147	0	0%																	
GFXX399-6	C13 (C2e) - Loading Test for pre-bored H-pile	36	23-Mar-15	0%	36	08-May-15	19-Sep-15	03-Nov-15	147	6	0%																	
Pile Cap Works																												
SC2ER090	C13B (C2e-R) - Pile cap Excavation / ELS	18	16-May-15	0%	18	10-Jun-15	04-Nov-15	24-Nov-15	126	0	0%																	
Pier C14 (C2d)																												
Socketted H-Pile Installation																												
GFXX381-2	C14 (C2d) - Install SH Pile (12 nr)	60	07-Jan-15 A	78.33%	13	09-Mar-15	08-Dec-15	22-Dec-15	236	0	80%																	
Pier C15 (C2c)																												
Socketted H-Pile Installation																												
GFXX381-3	C15 (C2c) - Install SH Pile (13 nr)	60	19-Jan-15 A	68.33%	19	16-Mar-15	14-Dec-15	07-Jan-16	241	0	70%																	
Pier C16 (C2b)																												
Foundation Works																												
GFXX408	C16 (C2b) - Bored Pile (2.00m dia. x 2 nos)	52	19-May-15	0%	52	21-Jul-15	17-Aug-15	17-Oct-15	74	0	0%																	
Bridge C1																												
Pier C17 (C2a)																												
Foundation Works																												
GFXX406	C17 (C2a) - Bored Pile (2.00m dia. x 2 nos)	52	15-Apr-15	0%	52	16-Jun-15	15-Jul-15	12-Sep-15	74	0	0%																	
Pier C18 (C3d) Portal																												
Socketted H-Pile Installation																												
GFXX374	C18 (C1e) - Install SH Pile (10 nr)	56	17-Nov-14 A	100%	0	29-Jan-15 A					100%																	
Pile Cap Works																												
SC1EL092	C18A (C1e-L) - Pile cap Pile breakdown to cut-off etc	4	19-Jan-15 A	100%	0	22-Jan-15 A					100%																	
SC1EL100	C18A (C1e-L) - Pile cap Blinding	1	23-Jan-15 A	100%	0	23-Jan-15 A					100%																	
SC1EL110	C18A (C1e-L) - Pile cap Formwork	3	24-Jan-15 A	100%	0	27-Jan-15 A					100%																	
SC1EL120	C18A (C1e-L) - Pile cap Rebarwork	4	28-Jan-15 A	100%	0	31-Jan-15 A					100%																	
SC1EL122	C18A (C1e-L) - Pile cap Kicker Formwork	3	02-Feb-15 A	100%	0	04-Feb-15 A					100%																	
SC1EL130	C18A (C1e-L) - Pile cap Concreting	1	28-Jan-15 A	100%	0	28-Jan-15 A					100%																	
SC1EL140	C18A (C1e-L) - Pile cap Curing & Striking of Forms incl. CJ prep	6	29-Jan-15 A	100%	0	04-Feb-15 A					100%																	
SC1ER090	C18B (C1e-R) - Pile cap Excavation / ELS	18	23-Feb-15	0%	18	14-Mar-15	15-Apr-16	09-May-16	318	0	0%																	
SC1ER092	C18B (C1e-R) - Pile cap Pile breakdown to cut-off etc	4	16-Mar-15	0%	4	19-Mar-15	09-May-16	13-May-16	318	41	0%																	
SC1ER100	C18B (C1e-R) - Pile cap Blinding	1	16-May-15	0%	1	16-May-15	13-May-16	16-May-16	277	0	0%																	
SC1ER120	C18B (C1e-R) - Pile cap Rebarwork	4	18-May-15	0%	4	22-May-15	16-May-16	21-May-16	277	0	0%																	
Pier Works																												
SC1EL150	C18A (C1e-L) - Pier Scaffolding (1st Lift)	3	23-Feb-15	0%	3	25-Feb-15	31-May-16	03-Jun-16	352	0	0%																	
SC1EL160	C18A (C1e-L) - Pier Rebarwork (1st Lift)	3	26-Feb-15	0%	3	28-Feb-15	04-Jun-16	08-Jun-16	352	0	0%																	
SC1EL170	C18A (C1e-L) - Pier Formwork & Prep for Concreting (1st Lift)	4	02-Mar-15	0%	4	05-Mar-15	10-Jun-16	14-Jun-16	352	0	0%																	
SC1EL180	C18A (C1e-L) - Pier Concreting (1st Lift)	1	06-Mar-15	0%	1	06-Mar-15	16-Jun-16	16-Jun-16	352	0	0%																	
SC1EL182	C18A (C1e-L) - Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	07-Mar-15	0%	2	09-Mar-15	25-Jun-16	27-Jun-16	357	78	0%																	
Pier C19 (C1d)																												
Pile Cap Works																												
SC1D0090	C19 (C1d) - Pile cap Excavation / ELS (incl. sheet piling)	18	08-Jan-15 A	100%	0	24-Jan-15 A					100%																	
SC1D0092	C19 (C1d) - Pile Breakdown to cut-off etc.	4	26-Jan-15 A	100%	0	29-Jan-15 A					100%																	
SC1D0100	C19 (C1d) - Pile cap Blinding	7	23-Jan-15 A	100%	0	30-Jan-15 A					100%																	
SC1D0110	C19 (C1d) - Pile cap Formwork	3	31-Jan-15 A	100%	0	03-Feb-15 A					100%																	

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 21 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																				
												February			March			April			May											
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18			
Pier D1 (D4f)																																
Pile Cap Works																																
SD4F0120	D1 (D4f) - Marine Pile Cap M2 - Pile cut down	12	13-Jan-15 A	100%	0	26-Jan-15 A					100%																					
SD4F0130	D1 (D4f) - Marine Pile Cap M2 - Rebar fixing, inst.inserts etc	12	27-Jan-15 A	100%	0	16-Feb-15 A					100%																					
SD4F0140	D1 (D4f) - Marine Pile Cap M2 - Concreting	1	17-Feb-15 A	100%	0	17-Feb-15 A					100%																					
SD4F0164	D1 (D4f) - Marine Pile Cap M2 - Curing incl. CJ preparation	6	18-Feb-15 A	0%	6	28-Feb-15	16-May-15	26-May-15	64	0	50%																					
Pier Works																																
SD4F0170	D1 (D4f) - Type 4B-MJ Pier Temp. Support Platform	6	23-Feb-15	0%	6	28-Feb-15	16-May-15	26-May-15	64	0	0%																					
SD4F0172	D1 (D4f) - Type 4B-MJ Pier Scaffolding (1st Lift)	1	02-Mar-15	0%	1	02-Mar-15	26-May-15	27-May-15	64	0	0%																					
SD4F0180	D1 (D4f) - Type 4B-MJ Pier Rebarwork (1st Lift)	3	03-Mar-15	0%	3	05-Mar-15	27-May-15	30-May-15	64	0	0%																					
SD4F0190	D1 (D4f) - Type 4B-MJ Pier Formwork & Prep for Concreting (1st Lift)	2	06-Mar-15	0%	2	07-Mar-15	30-May-15	02-Jun-15	64	0	0%																					
SD4F0200	D1 (D4f) - Type 4B-MJ Pier Concreting (1st Lift)	1	09-Mar-15	0%	1	09-Mar-15	02-Jun-15	04-Jun-15	64	0	0%																					
SD4F0202	D1 (D4f) - Type 4B-MJ Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	10-Mar-15	0%	2	11-Mar-15	04-Jun-15	06-Jun-15	64	0	0%																					
SD4F0210	D1 (D4f) - Type 4B-MJ Pier Scaffolding (2nd Lift)	2	12-Mar-15	0%	2	13-Mar-15	06-Jun-15	10-Jun-15	64	0	0%																					
SD4F0220	D1 (D4f) - Type 4B-MJ Pier Rebarwork (2nd Lift)	3	14-Mar-15	0%	3	17-Mar-15	10-Jun-15	15-Jun-15	64	0	0%																					
SD4F0230	D1 (D4f) - Type 4B-MJ Pier Formwork & Prep for Concreting (2nd Lift)	3	18-Mar-15	0%	3	20-Mar-15	15-Jun-15	19-Jun-15	64	0	0%																					
SD4F0240	D1 (D4f) - Type 4B-MJ Pier Concreting (2nd Lift)	1	21-Mar-15	0%	1	21-Mar-15	19-Jun-15	22-Jun-15	64	0	0%																					
SD4F0242	D1 (D4f) - Type 4B-MJ Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	23-Mar-15	0%	2	24-Mar-15	22-Jun-15	26-Jun-15	64	0	0%																					
SD4F0300	D1 (D4f) - Type 4B-MJ Pier Head Scaffolding	4	25-Mar-15	0%	4	28-Mar-15	26-Jun-15	02-Jul-15	64	0	0%																					
SD4F0310	D1 (D4f) - Type 4B-MJ Pier Head Rebarwork	5	30-Mar-15	0%	5	08-Apr-15	02-Jul-15	09-Jul-15	65	0	0%																					
SD4F0320	D1 (D4f) - Type 4B-MJ Pier Head Formwork & Prep for Concreting	5	09-Apr-15	0%	5	14-Apr-15	10-Jul-15	15-Jul-15	65	0	0%																					
SD4F0330	D1 (D4f) - Type 4B-MJ Pier Head Concreting	1	16-Apr-15	0%	1	16-Apr-15	17-Jul-15	17-Jul-15	65	0	0%																					
SD4F0340	D1 (D4f) - Type 4B-MJ Pier Head Curing/Striking of Forms/Remove Scaffolding	6	17-Apr-15	0%	6	24-Apr-15	18-Jul-15	24-Jul-15	65	0	0%																					
SD4F372	D1 (D4f) - Type 4B-Bearing Plinth	6	17-Apr-15	0%	6	24-Apr-15	18-Jul-15	24-Jul-15	65	0	0%																					
Pier Head Segments																																
SD4F0370	D1 (D4f) - Pier Head Segment - Temporary Platform	6	25-Apr-15	0%	6	02-May-15	25-Jul-15	01-Aug-15	65	79	0%																					
Pier D2 (D4e)																																
Foundation Works																																
GFXX257	D2 (D4e) - Sonic & Interface Coring	12	20-Jan-15 A	100%	0	31-Jan-15 A					100%																					
GFXX258	D2 (D4e) - Dismantle removable panels of temp. platform	5	02-Feb-15 A	100%	0	06-Feb-15 A					100%																					
Pile Cap Works																																
SD4E0070	D2 (D4e) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	23-Feb-15	0%	7	02-Mar-15	29-Jan-15	05-Feb-15	-18	0	0%																					
SD4E0080	D2 (D4e) - Marine Pile Cap M2b - Install precast shell in position	1	03-Mar-15	0%	1	03-Mar-15	06-Feb-15	06-Feb-15	-18	0	0%																					
SD4E0090	D2 (D4e) - Marine Pile Cap M2b - Inst.Access & make Watertight	3	04-Mar-15	0%	3	06-Mar-15	10-Nov-15	12-Nov-15	186	0	0%																					
SD4E0100	D2 (D4e) - Marine Pile Cap M2b - Weld Fin plates/Plug Rebar & Concrete	9	07-Mar-15	0%	9	17-Mar-15	13-Nov-15	23-Nov-15	186	0	0%																					
SD4E0120	D2 (D4e) - Marine Pile Cap M2b - Dewater precast shell / Remove Lifting Frame	2	18-Mar-15	0%	2	19-Mar-15	24-Nov-15	25-Nov-15	186	0	0%																					
SD4E0130	D2 (D4e) - Marine Pile Cap M2b - Pile cut down	8	20-Mar-15	0%	8	28-Mar-15	26-Nov-15	04-Dec-15	186	0	0%																					
SD4E0140	D2 (D4e) - Marine Pile Cap M2b - Rebar fixing, inst.inserts etc	12	30-Mar-15	0%	12	17-Apr-15	05-Dec-15	18-Dec-15	186	0	0%																					
SD4E0150	D2 (D4e) - Marine Pile Cap M2b - Concreting	1	18-Apr-15	0%	1	18-Apr-15	19-Dec-15	19-Dec-15	186	0	0%																					
SD4E0160	D2 (D4e) - Marine Pile Cap M2b - Curing incl. CJ Preparation	6	20-Apr-15	0%	6	27-Apr-15	21-Dec-15	29-Dec-15	186	0	0%																					
Pier Works																																
SD4E0170	D2 (D4e) - Type 4B Pier Temp. Support Platform	6	20-Apr-15	0%	6	27-Apr-15	21-Dec-15	29-Dec-15	186	0	0%																					
SD4E0172	D2 (D4e) - Type 4B Pier Scaffolding (1st Lift)	1	28-Apr-15	0%	1	28-Apr-15	30-Dec-15	30-Dec-15	186	0	0%																					
SD4E0180	D2 (D4e) - Type 4B Pier Rebarwork (1st Lift)	3	29-Apr-15	0%	3	02-May-15	31-Dec-15	04-Jan-16	186	0	0%																					
SD4E0190	D2 (D4e) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	04-May-15	0%	2	05-May-15	05-Jan-16	06-Jan-16	186	0	0%																					
SD4E0200	D2 (D4e) - Type 4B Pier Concreting (1st Lift)	1	06-May-15	0%	1	06-May-15	07-Jan-16	07-Jan-16	186	0	0%																					
SD4E0202	D2 (D4e) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	07-May-15	0%	2	08-May-15	08-Jan-16	09-Jan-16	186	0	0%																					
SD4E0210	D2 (D4e) - Type 4B Pier Scaffolding (2nd Lift)	2	09-May-15	0%	2	11-May-15	11-Jan-16	12-Jan-16	186	0	0%																					

- Actual Work
- Planned Bar
- Critical Bar
- ◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 23 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start / FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																
												February				March				April				May				
												9	26	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18
SD4E0220	D2 (D4e) - Type 4B Pier Rebarwork (2nd Lift)	3	13-May-15	0%	3	15-May-15	13-Jan-16	15-Jan-16	186	0	0%																	
SD4E0230	D2 (D4e) - Type 4B Pier Formwork & Prep for Concreting (2nd Lift)	3	16-May-15	0%	3	19-May-15	16-Jan-16	19-Jan-16	186	0	0%																	
SD4E0240	D2 (D4e) - Type 4B Pier Concreting (2nd Lift)	1	20-May-15	0%	1	20-May-15	20-Jan-16	20-Jan-16	186	0	0%																	
Pier D3 (D4d)																												
Foundation Works																												
GFXX253	D3 (D4d) - Dismantle removable panels of temp. platform	5	19-Jan-15 A	100%	0	24-Jan-15 A					100%																	
Pile Cap Works																												
SD4D0070	D3 (D4d) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	27-Jan-15 A	100%	0	04-Feb-15 A					100%																	
SD4D0080	D3 (D4d) - Marine Pile Cap M2b - Install precast shell in position	1	04-Mar-15	0%	1	04-Mar-15	07-Feb-15	07-Feb-15	-18	0	0%																	
SD4D0090	D3 (D4d) - Marine Pile Cap M2b - Inst.Access & make Watertight	3	05-Mar-15	0%	3	07-Mar-15	20-Apr-15	22-Apr-15	34	0	0%																	
SD4D0100	D3 (D4d) - Marine Pile Cap M2b - Weld Fin plates/Plug Rebar & Concrete	9	09-Mar-15	0%	9	18-Mar-15	24-Apr-15	05-May-15	34	0	0%																	
SD4D0120	D3 (D4d) - Marine Pile Cap M2b - Dewater precast shell / Remove Lifting Frame	2	19-Mar-15	0%	2	20-Mar-15	06-May-15	07-May-15	34	0	0%																	
SD4D0130	D3 (D4d) - Marine Pile Cap M2b - Pile cut down	12	21-Mar-15	0%	12	08-Apr-15	08-May-15	23-May-15	34	0	0%																	
SD4D0140	D3 (D4d) - Marine Pile Cap M2b - Rebar fixing, inst.inserts etc	12	09-Apr-15	0%	12	24-Apr-15	26-May-15	10-Jun-15	34	0	0%																	
SD4D0150	D3 (D4d) - Marine Pile Cap M2b - Concreting	1	25-Apr-15	0%	1	25-Apr-15	12-Jun-15	12-Jun-15	34	0	0%																	
SD4D0160	D3 (D4d) - Marine Pile Cap M2b - Curing incl. CJ Preparation	6	27-Apr-15	0%	6	04-May-15	13-Jun-15	22-Jun-15	34	0	0%																	
Pier Works																												
SD4D0170	D3 (D4d) - Type 4B Pier Temp. Support Platform	6	27-Apr-15	0%	6	04-May-15	23-Nov-15	30-Nov-15	157	0	0%																	
SD4D0172	D3 (D4d) - Type 4B Pier Scaffolding (1st Lift)	1	05-May-15	0%	1	05-May-15	30-Nov-15	01-Dec-15	157	0	0%																	
SD4D0180	D3 (D4d) - Type 4B Pier Rebarwork (1st Lift)	3	06-May-15	0%	3	08-May-15	01-Dec-15	04-Dec-15	157	0	0%																	
SD4D0190	D3 (D4d) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	09-May-15	0%	2	11-May-15	04-Dec-15	07-Dec-15	157	0	0%																	
SD4D0200	D3 (D4d) - Type 4B Pier Concreting (1st Lift)	1	13-May-15	0%	1	13-May-15	07-Dec-15	08-Dec-15	157	0	0%																	
SD4D0202	D3 (D4d) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	14-May-15	0%	2	15-May-15	08-Dec-15	10-Dec-15	157	0	0%																	
SD4D0210	D3 (D4d) - Type 4B Pier Scaffolding (2nd Lift)	2	16-May-15	0%	2	18-May-15	10-Dec-15	12-Dec-15	157	0	0%																	
SD4D0220	D3 (D4d) - Type 4B Pier Rebarwork (2nd Lift)	2	19-May-15	0%	2	20-May-15	12-Dec-15	15-Dec-15	157	0	0%																	
Pier D4 (D4c)																												
Foundation Works																												
GFXX246	D4 (D4c) - Bored Piles (2.20m dia. x 3 nos)	62	06-Nov-14 A	100%	0	03-Feb-15 A					100%																	
GFXX247	D4 (D4c) - Sonic & Interface Coring	12	23-Feb-15	0%	12	07-Mar-15	12-Jan-15	24-Jan-15	-33	0	0%																	
GFXX248	D4 (D4c) - Dismantle removable panels of temp. platform	5	09-Mar-15	0%	5	13-Mar-15	26-Jan-15	30-Jan-15	-33	0	0%																	
Pile Cap Works																												
SD4C0070	D4 (D4c) - Marine Pile Cap M2b - Inst.Floating Seal & Casing Head Steelwork	7	14-Mar-15	0%	7	21-Mar-15	31-Jan-15	07-Feb-15	-33	0	0%																	
SD4C0080	D4 (D4c) - Marine Pile Cap M2b - Install precast shell in position	1	23-Mar-15	0%	1	23-Mar-15	09-Feb-15	09-Feb-15	-33	0	0%																	
SD4C0090	D4 (D4c) - Marine Pile Cap M2b - Inst.Access & make Watertight	3	24-Mar-15	0%	3	26-Mar-15	10-Feb-15	12-Feb-15	-33	0	0%																	
SD4C0100	D4 (D4c) - Marine Pile Cap M2b - Weld Fin plates/Plug Rebar & Concrete	9	27-Mar-15	0%	9	10-Apr-15	13-Feb-15	26-Feb-15	-33	0	0%																	
SD4C0120	D4 (D4c) - Marine Pile Cap M2b - Dewater precast shell / Remove Lifting Frame	2	11-Apr-15	0%	2	13-Apr-15	27-Feb-15	28-Feb-15	-33	0	0%																	
SD4C0130	D4 (D4c) - Marine Pile Cap M2b - Pile cut down	12	14-Apr-15	0%	12	29-Apr-15	02-Mar-15	14-Mar-15	-33	0	0%																	
SD4C0140	D4 (D4c) - Marine Pile Cap M2b - Rebar fixing, inst.inserts etc	12	30-Apr-15	0%	12	15-May-15	16-Mar-15	28-Mar-15	-33	0	0%																	
SD4C0150	D4 (D4c) - Marine Pile Cap M2b - Concreting	1	16-May-15	0%	1	16-May-15	30-Mar-15	30-Mar-15	-33	0	0%																	
SD4C0160	D4 (D4c) - Marine Pile Cap M2b - Curing incl. CJ Preparation	6	18-May-15	0%	6	26-May-15	31-Mar-15	10-Apr-15	-33	0	0%																	
Pier Works																												
SD4C0170	D4 (D4c) - Type 4B Pier Temp. Support Platform	6	18-May-15	0%	6	26-May-15	31-Mar-15	10-Apr-15	-33	0	0%																	
Pier D5 (D4b)																												
Foundation Works																												
GFXX241	D5 (D4b) - Bored Piles (2.2m dia. x 2 nos)	58	12-Dec-14 A	87.93%	7	02-Mar-15	22-Jan-15	29-Jan-15	-24	0	90%																	
GFXX242	D5 (D4b) - Sonic & Interface Coring	12	03-Mar-15	0%	12	16-Mar-15	30-Jan-15	12-Feb-15	-24	0	0%																	
GFXX243	D5 (D4b) - Dismantle removable panels of temp. platform	5	17-Mar-15	0%	5	21-Mar-15	13-Feb-15	18-Feb-15	-24	0	0%																	
Pile Cap Works																												

- Actual Work
- Planned Bar
- Critical Bar
- ◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 24 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																	
												February				March				April				May					
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18
Pile Cap Works																													
SD3D0088	D8 (D3d) - Pile cap - Pipe Pile Wall for ELS	24	29-Jan-15 A	100%	0	10-Feb-15 A					100%																		
SD3D0090	D8 (D3d) - Pile cap Excavation / ELS	36	23-Feb-15	0%	36	09-Apr-15	23-Mar-15	13-May-15	24	0	0%																		
SD3D0092	D8 (D3d) - Pile cap Pile breakdown to cut-off etc.	4	10-Apr-15	0%	4	14-Apr-15	13-May-15	18-May-15	24	0	0%																		
SD3D0100	D8 (D3d) - Pile cap Blinding	1	16-Apr-15	0%	1	16-Apr-15	18-May-15	19-May-15	24	0	0%																		
SD3D0110	D8 (D3d) - Pile cap Formwork	3	22-Apr-15	0%	3	25-Apr-15	26-May-15	29-May-15	24	0	0%																		
SD3D0120	D8 (D3d) - Pile cap Rebarwork	4	17-Apr-15	0%	4	21-Apr-15	19-May-15	26-May-15	24	0	0%																		
SD3D0122	D8 (D3d) - Pile cap Kicker Formwork	2	28-Apr-15	0%	2	29-Apr-15	06-Jun-15	08-Jun-15	29	4	0%																		
SD3D0130	D8 (D3d) - Pile cap Concreting	1	27-Apr-15	0%	1	27-Apr-15	29-May-15	30-May-15	24	0	0%																		
SD3D0140	D8 (D3d) - Pile cap Curing & Striking of Forms incl. CJ prep	6	28-Apr-15	0%	6	05-May-15	30-May-15	08-Jun-15	25	0	0%																		
Pier Works																													
SD3D0150	D8 (D3d) - Type 5B Pier Scaffolding (1st Lift)	2	06-May-15	0%	2	07-May-15	10-Jun-15	12-Jun-15	25	0	0%																		
SD3D0160	D8 (D3d) - Type 5B Pier Rebarwork (1st Lift)	2	08-May-15	0%	2	09-May-15	13-Jun-15	15-Jun-15	25	0	0%																		
SD3D0170	D8 (D3d) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	2	11-May-15	0%	2	13-May-15	16-Jun-15	18-Jun-15	25	0	0%																		
SD3D0180	D8 (D3d) - Type 5B Pier Concreting (1st Lift)	1	14-May-15	0%	1	14-May-15	19-Jun-15	19-Jun-15	25	0	0%																		
SD3D0182	D8 (D3d) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	15-May-15	0%	2	15-May-15	22-Jun-15	24-Jun-15	25	0	0%																		
SD3D0190	D8 (D3d) - Type 5B Pier Scaffolding (2nd Lift)	2	18-May-15	0%	2	19-May-15	26-Jun-15	27-Jun-15	25	0	0%																		
SD3D0200	D8 (D3d) - Type 5B Pier Rebarwork (2nd Lift)	2	20-May-15	0%	2	22-May-15	29-Jun-15	30-Jun-15	25	0	0%																		
Pier D9 (D3c)																													
Socketted H-Pile Installation																													
GFXX466	D9 (D3c) - Installation of SH Pile (16 nr)	80	20-Nov-14 A	92.5%	6	28-Feb-15	27-Mar-17	01-Apr-17	621	0	90%																		
Pile Cap Works																													
SD3C0090	D9 (D3c) - Pile cap Excavation / ELS (incl. sheet piling)	45	27-Sep-14 A	28.89%	32	31-Mar-15	15-May-15	02-Jul-15	62	0	30%																		
SD3C0092	D9 (D3c) - Pile cap Pile breakdown to cut-off etc.	4	01-Apr-15	0%	4	09-Apr-15	03-Jul-15	07-Jul-15	62	0	0%																		
SD3C0100	D9 (D3c) - Pile cap Blinding	1	10-Apr-15	0%	1	10-Apr-15	08-Jul-15	08-Jul-15	62	0	0%																		
SD3C0110	D9 (D3c) - Pile cap Formwork	3	17-Apr-15	0%	3	20-Apr-15	14-Jul-15	17-Jul-15	62	0	0%																		
SD3C0120	D9 (D3c) - Pile cap Rebarwork	4	11-Apr-15	0%	4	16-Apr-15	09-Jul-15	13-Jul-15	62	0	0%																		
SD3C0122	D9 (D3c) - Pile cap Kicker Formwork	2	22-Apr-15	0%	2	24-Apr-15	24-Jul-15	25-Jul-15	66	4	0%																		
SD3C0130	D9 (D3c) - Pile cap Concreting	1	21-Apr-15	0%	1	21-Apr-15	18-Jul-15	18-Jul-15	62	0	0%																		
SD3C0140	D9 (D3c) - Pile cap Curing & Striking of Forms incl. CJ prep	6	22-Apr-15	0%	6	29-Apr-15	20-Jul-15	25-Jul-15	62	0	0%																		
Pier Works																													
SD3C0150	D9 (D3c) - Type 5B Pier Scaffolding (1st Lift)	2	30-Apr-15	0%	2	02-May-15	27-Jul-15	28-Jul-15	62	0	0%																		
SD3C0160	D9 (D3c) - Type 5B Pier Rebarwork (1st Lift)	3	04-May-15	0%	3	06-May-15	30-Jul-15	01-Aug-15	62	0	0%																		
SD3C0170	D9 (D3c) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	2	07-May-15	0%	2	08-May-15	03-Aug-15	04-Aug-15	62	0	0%																		
SD3C0180	D9 (D3c) - Type 5B Pier Concreting (1st Lift)	1	09-May-15	0%	1	09-May-15	05-Aug-15	05-Aug-15	62	0	0%																		
SD3C0182	D9 (D3c) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	11-May-15	0%	2	13-May-15	06-Aug-15	07-Aug-15	62	0	0%																		
SD3C0190	D9 (D3c) - Type 5B Pier Scaffolding (2nd Lift)	2	14-May-15	0%	2	15-May-15	08-Aug-15	10-Aug-15	62	0	0%																		
SD3C0200	D9 (D3c) - Type 5B Pier Rebarwork (2nd Lift)	3	16-May-15	0%	3	19-May-15	12-Aug-15	14-Aug-15	62	0	0%																		
SD3C0210	D9 (D3c) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	3	20-May-15	0%	3	23-May-15	15-Aug-15	18-Aug-15	62	0	0%																		
Pier D10 (D3b)																													
Socketted H-Pile Installation D10																													
GFXX461-1	D10A (D3b) - Installation of SH Pile (6 nr)	80	10-Nov-14 A	100%	0	27-Jan-15 A					100%																		
GFXX461-5	D10B (D3b) - Installation of SH Pile (6 nr) - Resources Refer to D10A	80	23-Feb-15	0%	80	02-Jun-15	27-Feb-15	06-Jun-15	4	0	0%																		
Pier D11 (D3a)																													
Socketted H-Pile Installation - D11 (D3a)																													
GFXX461-2	D11A (D3a) - Installation of SH Pile (7 nr)	90	28-Nov-14 A	100%	0	12-Feb-15 A					100%																		
GFXX461-7	D11B (D3a) - Installation of SH Pile (7 nr) - Resources Refer to D11A	90	23-Feb-15	0%	90	13-Jun-15	07-Mar-15	29-Jun-15	11	0	0%																		
Pier D12 (D2e)																													

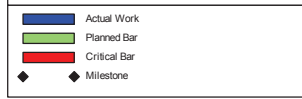
Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 26 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start / FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015											
												9	26	02	09	16	23	02	09	16	23	30	06
Preliminary Works for Land Piling																							
PD120020	D12 (D2e) - Set up piling platform	30	03-Nov-14 A	50%	15	11-Mar-15	11-Apr-18	30-Apr-18	871	0	50%												
PD120030	D12 (D2e) - Complete Civil Preparation Works for piling to commence	0		0%	0	11-Mar-15		30-Apr-18	871	871	0%												
Socketted H-Pile Installation - D12 (D2e)																							
GFX461-3	D12A (D2e) - Installation of SH Pile (8 nr)	104	23-Feb-15	0%	104	02-Jul-15	30-Apr-15	02-Sep-15	53	0	0%												
GFX461-9	D12B (D2e) - Installation of SH Pile (8 nr)	104	23-Feb-15	0%	104	02-Jul-15	14-Mar-15	22-Jul-15	17	0	0%												
Pile Cap Works																							
SD2EL090	D12A (D2e-L) - Pile cap Excavation / ELS	34	03-Nov-14 A	0%	103	13-Jul-15	16-Apr-15	02-Sep-15	40	0	0%												
Pier D13 (D2d)																							
Socketted H-Pile Installation - D13 (D2d)																							
GFX454	D13 (D2d) - Installation of SH Pile (16 nos)	104	09-Feb-15 A	8.65%	95	19-Jun-15	24-Apr-15	17-Aug-15	48	0	10%												
Bridge D1																							
Pier D14 (D2c)																							
Pile Cap Works																							
SD2CL092	D14A (D2c-L) - Pile cap Pile breakdown to cut-off etc	4	06-Jan-15 A	100%	0	23-Jan-15 A					100%												
SD2CL110	D14A (D2c-L) - Pile cap Formwork	3	24-Jan-15 A	100%	0	26-Jan-15 A					100%												
SD2CL120	D14A (D2c-L) - Pile cap Rebarwork	4	27-Jan-15 A	100%	0	29-Jan-15 A					100%												
SD2CL122	D14A (D2c-L) - Pile cap Kicker Formwork	2	29-Jan-15 A	100%	0	29-Jan-15 A					100%												
SD2CL130	D14A (D2c-L) - Pile cap Concreting	1	31-Jan-15 A	100%	0	31-Jan-15 A					100%												
SD2CL140	D14A (D2c-L) - Pile cap Curing & Striking of Forms incl. CJ prep	6	01-Feb-15 A	100%	0	06-Feb-15 A					100%												
SD2CR090	D14B (D2c-R) - Pile cap Excavation / ELS	25	19-Jan-15 A	100%	0	22-Jan-15 A					100%												
SD2CR092	D14B (D2c-R) - Pile cap Pile breakdown to cut-off etc	4	09-Feb-15 A	100%	0	13-Feb-15 A					100%												
SD2CR100	D14B (D2c-R) - Pile cap Blinding	1	07-Feb-15 A	100%	0	07-Feb-15 A					100%												
SD2CR110	D14B (D2c-R) - Pile cap Formwork	3	13-Feb-15 A	0%	3	25-Feb-15	05-Oct-15	07-Oct-15	166	0	0%												
SD2CR120	D14B (D2c-R) - Pile cap Rebarwork	4	23-Feb-15	0%	4	26-Feb-15	25-Apr-18	30-Apr-18	882	882	0%												
SD2CR122	D14B (D2c-R) - Pile cap Kicker Formwork	2	27-Feb-15	0%	2	28-Feb-15	15-Oct-15	16-Oct-15	170	4	0%												
SD2CR130	D14B (D2c-R) - Pile cap Concreting	1	26-Feb-15	0%	1	26-Feb-15	08-Oct-15	08-Oct-15	166	0	0%												
SD2CR140	D14B (D2c-R) - Pile cap Curing & Striking of Forms incl. CJ prep	6	27-Feb-15	0%	6	05-Mar-15	09-Oct-15	16-Oct-15	166	0	0%												
Pier Works																							
SD2CL150	D14A (D2c-L) - Pier Scaffolding (1st Lift)	1	23-Feb-15	0%	1	23-Feb-15	06-Oct-15	06-Oct-15	167	0	0%												
SD2CL160	D14A (D2c-L) - Pier Rebarwork (1st Lift)	2	24-Feb-15	0%	2	25-Feb-15	07-Oct-15	08-Oct-15	167	0	0%												
SD2CL170	D14A (D2c-L) - Pier Formwork & Prep for Concreting (1st Lift)	1	26-Feb-15	0%	1	26-Feb-15	09-Oct-15	09-Oct-15	167	0	0%												
SD2CL180	D14A (D2c-L) - Pier Concreting (1st Lift)	1	27-Feb-15	0%	1	27-Feb-15	10-Oct-15	10-Oct-15	167	0	0%												
SD2CL182	D14A (D2c-L) - Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	28-Feb-15	0%	2	02-Mar-15	12-Oct-15	13-Oct-15	167	0	0%												
SD2CL190	D14A (D2c-L) - Pier Scaffolding (2nd Lift)	2	03-Mar-15	0%	2	04-Mar-15	15-Oct-15	16-Oct-15	167	0	0%												
SD2CL200	D14A (D2c-L) - Pier Rebarwork (2nd Lift)	3	05-Mar-15	0%	3	07-Mar-15	17-Oct-15	20-Oct-15	167	0	0%												
SD2CL210	D14A (D2c-L) - Pier Formwork & Prep for Concreting (2nd Lift)	3	09-Mar-15	0%	3	11-Mar-15	22-Oct-15	24-Oct-15	167	0	0%												
SD2CL220	D14A (D2c-L) - Pier Concreting (2nd Lift)	1	12-Mar-15	0%	1	12-Mar-15	26-Oct-15	26-Oct-15	167	0	0%												
SD2CL222	D14A (D2c-L) - Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	13-Mar-15	0%	2	14-Mar-15	27-Oct-15	28-Oct-15	167	29	0%												
SD2CR150	D14B (D2c-R) - Pier Scaffolding (1st Lift)	2	06-Mar-15	0%	2	07-Mar-15	17-Oct-15	19-Oct-15	166	0	0%												
SD2CR160	D14B (D2c-R) - Pier Rebarwork (1st Lift)	2	09-Mar-15	0%	2	10-Mar-15	20-Oct-15	22-Oct-15	166	0	0%												
SD2CR170	D14B (D2c-R) - Pier Formwork & Prep for Concreting (1st Lift)	2	11-Mar-15	0%	2	12-Mar-15	23-Oct-15	24-Oct-15	166	0	0%												
SD2CR180	D14B (D2c-R) - Pier Concreting (1st Lift)	1	13-Mar-15	0%	1	13-Mar-15	26-Oct-15	26-Oct-15	166	0	0%												
SD2CR182	D14B (D2c-R) - Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	14-Mar-15	0%	2	16-Mar-15	27-Oct-15	28-Oct-15	166	28	0%												
Portal																							
SD2CR280	D14 (D2c) - Portal Beam Scaffolding	12	25-Apr-15	0%	12	09-May-15	30-Oct-15	12-Nov-15	138	0	0%												
SD2CR290	D14 (D2c) - Portal Beam Soffit Formwork	12	11-May-15	0%	12	27-May-15	13-Nov-15	26-Nov-15	138	0	0%												
Pier D15 (D2b)																							



Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 27 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start/ FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish/ FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015															
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04
Socketted H-Pile Installation																											
GFXX446-2	D15 (D2b) - Installation of SH Pile (13 nr)	90	19-Jan-15 A	31.11%	62	11-May-15	03-Mar-15	19-May-15	7	0	30%																
Pile Cap Works																											
SD2B0090	D15 (D2b) - Pile cap Excavation / ELS (incl. sheet piling)	45	13-May-15	0%	45	15-Jul-15	20-May-15	23-Jul-15	6	0	0%																
Pier D16 (D2a)																											
Pile Cap Works																											
SD2A0090	D16 (D2a) - Pile cap Excavation / ELS (incl. sheet piling)	22	23-Feb-15	0%	22	19-Mar-15	28-Apr-15	27-May-15	49	0	0%																
SD2A0092	D16 (D2a) - Pile cap Pile breakdown to cut-off etc.	4	20-Mar-15	0%	4	24-Mar-15	28-May-15	01-Jun-15	49	0	0%																
SD2A0100	D16 (D2a) - Pile cap Blinding	1	25-Mar-15	0%	1	25-Mar-15	02-Jun-15	02-Jun-15	49	0	0%																
SD2A0110	D16 (D2a) - Pile cap Formwork	3	31-Mar-15	0%	3	02-Apr-15	10-Jun-15	13-Jun-15	49	0	0%																
SD2A0120	D16 (D2a) - Pile cap Rebarwork	4	26-Mar-15	0%	4	30-Mar-15	04-Jun-15	08-Jun-15	49	0	0%																
SD2A0122	D16 (D2a) - Pile cap Kicker Formwork	2	09-Apr-15	0%	2	10-Apr-15	24-Jun-15	26-Jun-15	53	4	0%																
SD2A0130	D16 (D2a) - Pile cap Concreting	1	08-Apr-15	0%	1	08-Apr-15	15-Jun-15	15-Jun-15	49	0	0%																
SD2A0140	D16 (D2a) - Pile cap Curing & Striking of Forms incl. CJ prep	6	09-Apr-15	0%	6	16-Apr-15	16-Jun-15	26-Jun-15	49	0	0%																
Pier Works																											
SD2A0150	D16 (D2a) - Type 5B Pier Scaffolding (1st Lift)	2	17-Apr-15	0%	2	18-Apr-15	27-Jun-15	29-Jun-15	49	0	0%																
SD2A0160	D16 (D2a) - Type 5B Pier Rebarwork (1st Lift)	3	20-Apr-15	0%	3	22-Apr-15	30-Jun-15	03-Jul-15	49	0	0%																
SD2A0170	D16 (D2a) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	2	24-Apr-15	0%	2	25-Apr-15	04-Jul-15	06-Jul-15	49	0	0%																
SD2A0180	D16 (D2a) - Type 5B Pier Concreting (1st Lift)	1	27-Apr-15	0%	1	27-Apr-15	07-Jul-15	07-Jul-15	49	0	0%																
SD2A0182	D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	28-Apr-15	0%	2	29-Apr-15	08-Jul-15	09-Jul-15	49	0	0%																
SD2A0190	D16 (D2a) - Type 5B Pier Scaffolding (2nd Lift)	2	30-Apr-15	0%	2	02-May-15	10-Jul-15	11-Jul-15	49	0	0%																
SD2A0200	D16 (D2a) - Type 5B Pier Rebarwork (2nd Lift)	3	04-May-15	0%	3	06-May-15	13-Jul-15	15-Jul-15	49	0	0%																
SD2A0210	D16 (D2a) - Type 5B Pier Formwork & Prep for Concreting (2nd Lift)	3	07-May-15	0%	3	09-May-15	17-Jul-15	20-Jul-15	49	0	0%																
SD2A0220	D16 (D2a) - Type 5B Pier Concreting (2nd Lift)	1	11-May-15	0%	1	11-May-15	21-Jul-15	21-Jul-15	49	0	0%																
SD2A0222	D16 (D2a) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	13-May-15	0%	2	14-May-15	22-Jul-15	23-Jul-15	49	0	0%																
SD2A0230	D16 (D2a) - Type 5B Pier Head Scaffolding	3	15-May-15	0%	3	18-May-15	24-Jul-15	27-Jul-15	49	0	0%																
SD2A0240	D16 (D2a) - Type 5B Pier Head Rebarwork	4	19-May-15	0%	4	23-May-15	28-Jul-15	01-Aug-15	49	0	0%																
Pier D17 (D1d)																											
Pile Cap Works																											
SD1D0090	D17 (D1d) - Pile cap Excavation / ELS (incl. sheet piling)	45	09-Feb-15 A	100%	0	11-Feb-15 A					100%																
SD1D0092	D17 (D1d) - Pile cap Pile breakdown to cut-off etc.	4	14-Feb-15 A	0%	4	26-Feb-15	25-Apr-18	30-Apr-18	882	882	0%																
SD1D0100	D17 (D1d) - Pile cap Blinding	1	12-Feb-15 A	100%	0	12-Feb-15 A					100%																
SD1D0110	D17 (D1d) - Pile cap Formwork	3	27-Feb-15	0%	3	02-Mar-15	28-Jul-15	31-Jul-15	110	0	0%																
SD1D0120	D17 (D1d) - Pile cap Rebarwork	4	23-Feb-15	0%	4	26-Feb-15	23-Jul-15	27-Jul-15	110	0	0%																
SD1D0122	D17 (D1d) - Pile cap Kicker Formwork	2	04-Mar-15	0%	2	05-Mar-15	07-Aug-15	08-Aug-15	114	4	0%																
SD1D0130	D17 (D1d) - Pile cap Concreting	1	03-Mar-15	0%	1	03-Mar-15	01-Aug-15	01-Aug-15	110	0	0%																
SD1D0140	D17 (D1d) - Pile cap Curing & Striking of Forms incl. CJ prep	6	04-Mar-15	0%	6	10-Mar-15	03-Aug-15	08-Aug-15	110	0	0%																
Pier Works																											
SD1D0150	D17 (D1d) - Type 5B-B Pier Scaffolding (1st Lift)	2	11-Mar-15	0%	2	12-Mar-15	10-Aug-15	12-Aug-15	110	0	0%																
SD1D0160	D17 (D1d) - Type 5B-B Pier Rebarwork (1st Lift)	3	13-Mar-15	0%	3	16-Mar-15	13-Aug-15	15-Aug-15	110	0	0%																
SD1D0170	D17 (D1d) - Type 5B-B Pier Formwork & Prep for Concreting (1st Lift)	3	17-Mar-15	0%	3	19-Mar-15	17-Aug-15	19-Aug-15	110	0	0%																
SD1D0180	D17 (D1d) - Type 5B-B Pier Concreting (1st Lift)	1	20-Mar-15	0%	1	20-Mar-15	21-Aug-15	21-Aug-15	110	0	0%																
SD1D0182	D17 (D1d) - Type 5B-B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	21-Mar-15	0%	2	23-Mar-15	22-Aug-15	24-Aug-15	110	0	0%																
SD1D0190	D17 (D1d) - Type 5B-B Pier Head Scaffolding	3	24-Mar-15	0%	3	26-Mar-15	25-Aug-15	27-Aug-15	110	0	0%																
SD1D0200	D17 (D1d) - Type 5B-B Pier Head Rebarwork	4	27-Mar-15	0%	4	31-Mar-15	28-Aug-15	01-Sep-15	110	0	0%																
SD1D0210	D17 (D1d) - Type 5B-B Pier Head Formwork & Prep for Concreting	4	01-Apr-15	0%	4	09-Apr-15	02-Sep-15	05-Sep-15	110	0	0%																
SD1D0220	D17 (D1d) - Type 5B-B Pier Head Concreting	1	10-Apr-15	0%	1	10-Apr-15	07-Sep-15	07-Sep-15	110	0	0%																
SD1D0310	D17 (D1d) - Type 5B-B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	11-Apr-15	0%	6	18-Apr-15	08-Sep-15	15-Sep-15	110	0	0%																

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 28 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start / FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11
SD1D0320	D17 (D1d) - Type 5B-B Pier Backfilling Works	4	20-Apr-15	0%	4	24-Apr-15	16-Sep-15	21-Sep-15	110	0	0%																	
Pier Head Segments																												
SD1D0370	D17 (D1d) - Pier Head Segment - Temporary Platform	6	25-Apr-15	0%	6	02-May-15	22-Sep-15	29-Sep-15	110	79	0%																	
Pier D18 (D1c)																												
Pile Cap Works																												
SD1C0092	D18 (D1c) - Pile cap Pile breakdown to cut-off etc.	4	21-Jan-15 A	100%	0	23-Jan-15 A					100%																	
SD1C0110	D18 (D1c) - Pile cap Formwork	3	05-Feb-15 A	100%	0	06-Feb-15 A					100%																	
SD1C0120	D18 (D1c) - Pile cap Rebarwork	4	07-Feb-15 A	100%	0	11-Feb-15 A					100%																	
SD1C0122	D18 (D1c) - Pile cap Kicker Formwork	2	19-Feb-15 A	100%	0	19-Feb-15 A					100%																	
SD1C0130	D18 (D1c) - Pile cap Concreting	1	13-Feb-15 A	100%	0	13-Feb-15 A					100%																	
SD1C0140	D18 (D1c) - Pile cap Curing & Striking of Forms incl. CJ prep	6	14-Feb-15 A	100%	0	19-Feb-15 A					100%																	
Pier Works																												
SD1C0150	D18 (D1c) - Type 5B-B Pier Scaffolding (1st Lift)	2	23-Feb-15	0%	2	24-Feb-15	05-Sep-15	07-Sep-15	145	0	0%																	
SD1C0160	D18 (D1c) - Type 5B-B Pier Rebarwork (1st Lift)	3	25-Feb-15	0%	3	27-Feb-15	08-Sep-15	11-Sep-15	145	0	0%																	
SD1C0170	D18 (D1c) - Type 5B-B Pier Formwork & Prep for Concreting (1st Lift)	3	28-Feb-15	0%	3	03-Mar-15	12-Sep-15	15-Sep-15	145	0	0%																	
SD1C0180	D18 (D1c) - Type 5B-B Pier Concreting (1st Lift)	1	04-Mar-15	0%	1	04-Mar-15	16-Sep-15	16-Sep-15	145	0	0%																	
SD1C0182	D18 (D1c) - Type 5B-B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	05-Mar-15	0%	2	06-Mar-15	18-Sep-15	19-Sep-15	145	0	0%																	
SD1C0190	D18 (D1c) - Type 5B-B Pier Head Scaffolding	3	07-Mar-15	0%	3	10-Mar-15	21-Sep-15	23-Sep-15	145	0	0%																	
SD1C0200	D18 (D1c) - Type 5B-B Pier Head Rebarwork	4	11-Mar-15	0%	4	14-Mar-15	24-Sep-15	29-Sep-15	145	0	0%																	
SD1C0210	D18 (D1c) - Type 5B-B Pier Head Formwork & Prep for Concreting	4	16-Mar-15	0%	4	19-Mar-15	30-Sep-15	05-Oct-15	145	0	0%																	
SD1C0220	D18 (D1c) - Type 5B-B Pier Head Concreting	1	20-Mar-15	0%	1	20-Mar-15	06-Oct-15	06-Oct-15	145	0	0%																	
SD1C0310	D18 (D1c) - Type 5B-B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	21-Mar-15	0%	6	27-Mar-15	07-Oct-15	13-Oct-15	145	0	0%																	
SD1C0320	D18 (D1c) - Type 5B-B Pier Backfilling Works	4	28-Mar-15	0%	4	01-Apr-15	15-Oct-15	19-Oct-15	145	14	0%																	
Pier Head Segments																												
SD1C0370	D18 (D1c) - Pier Head Segment - Temporary Platform	6	25-Apr-15	0%	6	02-May-15	20-Oct-15	27-Oct-15	131	79	0%																	
Pier D19 (D1b) & Abutment D																												
Pile Cap Works																												
SD1B0090	D19 (D1b) - Pile cap Excavation / ELS	45	30-Jan-15 A	100%	0	02-Feb-15 A					100%																	
SD1B0092	D19 (D1b) - Pile Breakdown to cut-off etc.	7	23-Feb-15	0%	7	02-Mar-15	24-Nov-15	01-Dec-15	206	0	0%																	
SD1B0100	D19 (D1b) - Pile cap Blinding	1	03-Mar-15	0%	1	03-Mar-15	02-Dec-15	02-Dec-15	206	0	0%																	
SD1B0110	D19 (D1b) - Pile cap Formwork	3	12-Mar-15	0%	3	14-Mar-15	11-Dec-15	14-Dec-15	206	0	0%																	
SD1B0120	D19 (D1b) - Pile cap Rebarwork	7	04-Mar-15	0%	7	11-Mar-15	03-Dec-15	10-Dec-15	206	0	0%																	
SD1B0122	D19 (D1b) - Pile cap Kicker Formwork	3	17-Mar-15	0%	3	19-Mar-15	19-Dec-15	22-Dec-15	209	3	0%																	
SD1B0130	D19 (D1b) - Pile cap Concreting	1	16-Mar-15	0%	1	16-Mar-15	15-Dec-15	15-Dec-15	206	0	0%																	
SD1B0140	D19 (D1b) - Pile cap Curing & Striking of Forms incl. CJ prep	6	17-Mar-15	0%	6	23-Mar-15	16-Dec-15	22-Dec-15	206	0	0%																	
Pier Works																												
SD1B0150	D19 (D1b) - Pier/Pier Head Scaffolding	4	24-Mar-15	0%	4	27-Mar-15	23-Dec-15	29-Dec-15	206	0	0%																	
SD1B0160	D19 (D1b) - Pier/Pier Head Rebarwork	6	28-Mar-15	0%	6	08-Apr-15	30-Dec-15	06-Jan-16	206	0	0%																	
SD1B0170	D19 (D1b) - Pier/Pier Head Formwork	8	09-Apr-15	0%	8	18-Apr-15	07-Jan-16	15-Jan-16	206	0	0%																	
SD1B0180	D19 (D1b) - Pier/Pier Head Concreting	1	20-Apr-15	0%	1	20-Apr-15	16-Jan-16	16-Jan-16	206	0	0%																	
SD1B0190	D19 (D1b) - Pier/Pier Head Curing & Striking of Forms incl. CJ prep	6	21-Apr-15	0%	6	28-Apr-15	18-Jan-16	23-Jan-16	206	0	0%																	
Pier Head Segments																												
SD1B0370	D19 (D1b) - Pier Head Segment - Temporary Platform	6	29-Apr-15	0%	6	06-May-15	25-Jan-16	30-Jan-16	206	76	0%																	
Abutment & Approach Ramp D																												
SD1B0200	Abutment D - Walls & Staircase	48	23-Feb-15	0%	48	25-Apr-15	17-Apr-15	24-Jun-15	41	47	0%																	
SD1B0250	AR-D - RE Walls - Erect MTR boundary fence, Excavation/formation/drainage filter & bottom	24	25-Apr-15	0%	24	27-May-15	17-Apr-15	18-May-15	-6	0	0%																	
Viaduct E																												
Viaduct E1																												

- Actual Work
- Planned Bar
- Critical Bar
- ◆ Milestone

Project ID: J3518DWP/E-M21
Layout: J3518-DWP-3MRP Submission - M21
Filter: TASK filters: 3-Month Lookahead, No CC
Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 29 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durn.	Act. Start/ FC Early Start	Duration % Complete	Rem. Durn.	Act. Finish/ FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																										
												February					March					April					May											
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18									
Bridge E1 - Piling & Substructure																																						
E1A, E1B, E1C & E1D (E1a1-2-3-4)																																						
Pile Cap Works - E1A, E1B, E1C & E1D																																						
Pile Cap Works - E1A (E1a4)																																						
SE1A4130	E1A (E1a4) - Marine Pile Cap M1 - Pile cut down	8	11-Jan-15 A	100%	0	24-Jan-15 A					100%																											
SE1A4140	E1A (E1a4) - Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	10	26-Jan-15 A	100%	0	05-Feb-15 A					100%																											
SE1A4150	E1A (E1a4) - Marine Pile Cap M1 - Concreting	1	06-Feb-15 A	100%	0	06-Feb-15 A					100%																											
SE1A4160	E1A (E1a4) - Marine Pile Cap M1 - Curing incl. CJ Preparation	6	07-Feb-15 A	100%	0	13-Feb-15 A					100%																											
Pile Cap Works - E1B (E1a3)																																						
SE1A3140	E1B (E1a3) - Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	10	16-Jan-15 A	100%	0	23-Jan-15 A					100%																											
SE1A3150	E1B (E1a3) - Marine Pile Cap M1 - Concreting	1	24-Jan-15 A	100%	0	24-Jan-15 A					100%																											
SE1A3160	E1B (E1a3) - Marine Pile Cap M1 - Curing incl. CJ Preparation	6	26-Jan-15 A	100%	0	31-Jan-15 A					100%																											
Pile Cap Works - E1C/D (E1a2/E1a1)																																						
SE1A2070	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Inst.Floating Seal & Casing Head Steelwork	6	23-Feb-15	0%	6	28-Feb-15	05-Jan-15	12-Jan-15	-39	0	0%																											
SE1A2080	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Install precast shell in position	1	02-Mar-15	0%	1	02-Mar-15	12-Jan-15	13-Jan-15	-39	0	0%																											
SE1A2090	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Inst.Access & make Watertight	3	03-Mar-15	0%	3	05-Mar-15	13-Jan-15	16-Jan-15	-39	0	0%																											
SE1A2100	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Weld Fin Plates/Plug Rebar & Concrete	9	06-Mar-15	0%	9	16-Mar-15	16-Jan-15	27-Jan-15	-39	0	0%																											
SE1A2120	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Dewater precast shell / Remove Lifting Frame	2	17-Mar-15	0%	2	18-Mar-15	27-Jan-15	29-Jan-15	-39	0	0%																											
SE1A2130	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Pile cut down	8	19-Mar-15	0%	8	27-Mar-15	29-Jan-15	07-Feb-15	-39	0	0%																											
SE1A2140	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	14	28-Mar-15	0%	14	18-Apr-15	07-Feb-15	27-Feb-15	-39	0	0%																											
SE1A2150	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Concreting	1	20-Apr-15	0%	1	20-Apr-15	27-Feb-15	28-Feb-15	-39	0	0%																											
SE1A2160	E1C/D (E1a2/E1a1) - Marine Pile Cap M1 - Curing incl. CJ Preparation	6	21-Apr-15	0%	6	28-Apr-15	28-Feb-15	07-Mar-15	-39	0	0%																											
Pier Works - E1A, E1B, E1C & E1D																																						
Pier Works - E1A (E1a4)																																						
SE1A4170	E1A (E1a4) - Type 4B Pier Temp. Support Platform	6	23-Feb-15	0%	6	28-Feb-15	14-Jan-15	21-Jan-15	-31	0	0%																											
SE1A4172	E1A (E1a4) - Type 4B Pier Scaffolding (1st Lift)	1	02-Mar-15	0%	1	02-Mar-15	21-Jan-15	22-Jan-15	-31	35	0%																											
SE1A4180	E1A (E1a4) - Type 4B Pier Rebarwork (1st Lift)	3	18-Apr-15	0%	3	21-Apr-15	22-Jan-15	26-Jan-15	-66	0	0%																											
SE1A4190	E1A (E1a4) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	3	22-Apr-15	0%	3	25-Apr-15	26-Jan-15	29-Jan-15	-66	0	0%																											
SE1A4200	E1A (E1a4) - Type 4B Pier Concreting (1st Lift)	1	27-Apr-15	0%	1	27-Apr-15	29-Jan-15	30-Jan-15	-66	0	0%																											
SE1A4202	E1A (E1a4) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	28-Apr-15	0%	2	29-Apr-15	30-Jan-15	02-Feb-15	-66	0	0%																											
SE1A4300	E1A (E1a4) - Type 4B Pier Head Scaffolding	4	30-Apr-15	0%	4	05-May-15	02-Feb-15	06-Feb-15	-66	0	0%																											
SE1A4310	E1A (E1a4) - Type 4B Pier Head Rebarwork	5	06-May-15	0%	5	11-May-15	06-Feb-15	12-Feb-15	-66	0	0%																											
SE1A4320	E1A (E1a4) - Type 4B Pier Head Formwork & Prep for Concreting	5	13-May-15	0%	5	18-May-15	12-Feb-15	18-Feb-15	-66	0	0%																											
SE1A4330	E1A (E1a4) - Type 4B Pier Head Concreting	1	19-May-15	0%	1	19-May-15	18-Feb-15	23-Feb-15	-66	0	0%																											
SE1A4340	E1A (E1a4) - Type 4B Pier Head Curing/Striking of Forms/Remove Scaffolding	6	20-May-15	0%	6	28-May-15	23-Feb-15	02-Mar-15	-66	0	0%																											
Pier Works - E1B (E1a3)																																						
SE1A3170	E1B (E1a3) - Type 4B Pier Temp. Support Platform	6	23-Feb-15	0%	6	28-Feb-15	10-Apr-15	18-Apr-15	36	0	0%																											
SE1A3172	E1B (E1a3) - Type 4B Pier Scaffolding (1st Lift)	1	02-Mar-15	0%	1	02-Mar-15	18-Apr-15	20-Apr-15	36	35	0%																											
SE1A3180	E1B (E1a3) - Type 4B Pier Rebarwork (1st Lift)	2	18-Apr-15	0%	2	20-Apr-15	20-Apr-15	22-Apr-15	1	0	0%																											
SE1A3190	E1B (E1a3) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	21-Apr-15	0%	2	22-Apr-15	22-Apr-15	25-Apr-15	1	0	0%																											
SE1A3200	E1B (E1a3) - Type 4B Pier Concreting (1st Lift)	1	24-Apr-15	0%	1	24-Apr-15	25-Apr-15	27-Apr-15	1	0	0%																											
SE1A3202	E1B (E1a3) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	25-Apr-15	0%	2	27-Apr-15	27-Apr-15	29-Apr-15	1	0	0%																											
SE1A3210	E1B (E1a3) - Type 4B Pier Scaffolding (2nd Lift)	2	28-Apr-15	0%	2	29-Apr-15	29-Apr-15	02-May-15	1	0	0%																											
SE1A3220	E1B (E1a3) - Type 4B Pier Rebarwork (2nd Lift)	3	30-Apr-15	0%	3	04-May-15	02-May-15	06-May-15	1	0	0%																											
SE1A3230	E1B (E1a3) - Type 4B Pier Formwork & Prep for Concreting (2nd Lift)	2	05-May-15	0%	2	06-May-15	06-May-15	08-May-15	1	0	0%																											
SE1A3240	E1B (E1a3) - Type 4B Pier Concreting (2nd Lift)	1	07-May-15	0%	1	07-May-15	08-May-15	09-May-15	1	0	0%																											
SE1A3242	E1B (E1a3) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	08-May-15	0%	2	09-May-15	09-May-15	13-May-15	1	0	0%																											
SE1A3300	E1B (E1a3) - Type 4B Pier Head Scaffolding	4	11-May-15	0%	4	15-May-15	13-May-15	18-May-15	1	0	0%																											

- Actual Work
- Planned Bar
- Critical Bar
- ◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection
 3-Month Rolling Programme (Page 30 of 41 Pages)
 (Progress as of 21-Feb-15)**

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start / FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																
												February			March			April			May							
												9	26	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18
SE1A3310	E1B (E1a3) - Type 4B Pier Head Rebarwork	5	16-May-15	0%	5	22-May-15	18-May-15	26-May-15	1	0	0%																	
Pier Works - E1C (E1a2)																												
SE1A2170	E1C (E1a2) - Type 4B Pier Temp. Support Platform	6	21-Apr-15	0%	6	28-Apr-15	07-Aug-15	15-Aug-15	78	0	0%																	
SE1A2172	E1C (E1a2) - Type 4B Pier Scaffolding (1st Lift)	1	29-Apr-15	0%	1	29-Apr-15	15-Aug-15	17-Aug-15	78	2	0%																	
SE1A2180	E1C (E1a2) - Type 4B Pier Rebarwork (1st Lift)	2	04-May-15	0%	2	05-May-15	17-Aug-15	19-Aug-15	76	0	0%																	
SE1A2190	E1C (E1a2) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	2	06-May-15	0%	2	07-May-15	19-Aug-15	22-Aug-15	76	0	0%																	
SE1A2200	E1C (E1a2) - Type 4B Pier Concreting (1st Lift)	1	08-May-15	0%	1	08-May-15	22-Aug-15	24-Aug-15	76	0	0%																	
SE1A2202	E1C (E1a2) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	09-May-15	0%	2	11-May-15	24-Aug-15	28-Aug-15	78	0	0%																	
SE1A2210	E1C (E1a2) - Type 4B Pier Scaffolding (2nd Lift)	2	13-May-15	0%	2	14-May-15	28-Aug-15	31-Aug-15	78	0	0%																	
SE1A2220	E1C (E1a2) - Type 4B Pier Rebarwork (2nd Lift)	3	15-May-15	0%	3	18-May-15	31-Aug-15	03-Sep-15	78	0	0%																	
SE1A2230	E1C (E1a2) - Type 4B Pier Formwork & Prep for Concreting (2nd Lift)	2	19-May-15	0%	2	20-May-15	03-Sep-15	05-Sep-15	78	0	0%																	
Pier Works - E1D (E1a1)																												
SE1A1170	E1D (E1a1) - Type 4B Pier Temp. Support Platform	6	21-Apr-15	0%	6	28-Apr-15	28-Feb-15	07-Mar-15	-39	0	0%																	
SE1A1172	E1D (E1a1) - Type 4B Pier Scaffolding (1st Lift)	1	29-Apr-15	0%	1	29-Apr-15	07-Mar-15	09-Mar-15	-39	2	0%																	
SE1A1180	E1D (E1a1) - Type 4B Pier Rebarwork (1st Lift)	2	04-May-15	0%	2	05-May-15	09-Mar-15	11-Mar-15	-41	0	0%																	
SE1A1190	E1D (E1a1) - Type 4B Pier Formwork & Prep for Concreting (1st Lift)	1	06-May-15	0%	1	06-May-15	11-Mar-15	12-Mar-15	-41	0	0%																	
SE1A1200	E1D (E1a1) - Type 4B Pier Concreting (1st Lift)	1	07-May-15	0%	1	07-May-15	12-Mar-15	13-Mar-15	-41	0	0%																	
SE1A1202	E1D (E1a1) - Type 4B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	08-May-15	0%	2	09-May-15	13-Mar-15	16-Mar-15	-41	0	0%																	
SE1A1210	E1D (E1a1) - Type 4B Pier Scaffolding (2nd Lift)	2	11-May-15	0%	2	13-May-15	16-Mar-15	18-Mar-15	-41	0	0%																	
SE1A1220	E1D (E1a1) - Type 4B Pier Rebarwork (2nd Lift)	3	14-May-15	0%	3	16-May-15	18-Mar-15	21-Mar-15	-41	0	0%																	
SE1A1230	E1D (E1a1) - Type 4B Pier Formwork & Prep for Concreting (2nd Lift)	2	18-May-15	0%	2	19-May-15	21-Mar-15	24-Mar-15	-41	0	0%																	
SE1A1240	E1D (E1a1) - Type 4B Pier Concreting (2nd Lift)	1	20-May-15	0%	1	20-May-15	24-Mar-15	25-Mar-15	-41	0	0%																	
E2A, E2B, E2C & E2D (E1b1-2-3-4)																												
Pile Cap Works - E2A, E2B, E2C & E2D																												
Pile Cap Works - E2A (E1b4)																												
SE1B4070	E2A (E1b4) - Marine Pile Cap M1 - Inst.Floating Seal & Casing Head Steelwork	6	10-Jan-15 A	100%	0	23-Jan-15 A					100%																	
SE1B4080	E2A (E1b4) - Marine Pile Cap M1 - Install precast shell in position	1	24-Jan-15 A	100%	0	24-Jan-15 A					100%																	
SE1B4090	E2A (E1b4) - Marine Pile Cap M1 - Inst.Access & make Watertight	3	26-Jan-15 A	100%	0	31-Jan-15 A					100%																	
SE1B4100	E2A (E1b4) - Marine Pile Cap M1 - Weld Fin Plates/Plug Rebar & Concrete	9	06-Feb-15 A	100%	0	10-Feb-15 A					100%																	
SE1B4120	E2A (E1b4) - Marine Pile Cap M1 - Dewater precast shell / Remove Lifting Frame	2	23-Feb-15	0%	2	24-Feb-15	07-Jan-15	08-Jan-15	-37	0	0%																	
SE1B4130	E2A (E1b4) - Marine Pile Cap M1 - Pile cut down	8	25-Feb-15	0%	8	05-Mar-15	09-Jan-15	17-Jan-15	-37	0	0%																	
SE1B4140	E2A (E1b4) - Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	10	06-Mar-15	0%	10	17-Mar-15	19-Jan-15	29-Jan-15	-37	0	0%																	
SE1B4150	E2A (E1b4) - Marine Pile Cap M1 - Concreting	1	18-Mar-15	0%	1	18-Mar-15	30-Jan-15	30-Jan-15	-37	0	0%																	
SE1B4160	E2A (E1b4) - Marine Pile Cap M1 - Curing incl. CJ Preparation	6	19-Mar-15	0%	6	25-Mar-15	31-Jan-15	06-Feb-15	-37	0	0%																	
Pile Cap Works - E2B (E1b3)																												
SE1B3070	E2B (E1b3) - Marine Pile Cap M1 - Inst.Floating Seal & Casing Head Steelwork	6	23-Feb-15	0%	6	28-Feb-15	18-Dec-14	24-Dec-14	-51	0	0%																	
SE1B3080	E2B (E1b3) - Marine Pile Cap M1 - Install precast shell in position	1	02-Mar-15	0%	1	02-Mar-15	27-Dec-14	27-Dec-14	-51	0	0%																	
SE1B3090	E2B (E1b3) - Marine Pile Cap M1 - Inst.Access & make Watertight	3	03-Mar-15	0%	3	05-Mar-15	29-Dec-14	31-Dec-14	-51	0	0%																	
SE1B3100	E2B (E1b3) - Marine Pile Cap M1 - Weld Fin Plates/Plug Rebar & Concrete	9	06-Mar-15	0%	9	16-Mar-15	02-Jan-15	12-Jan-15	-51	0	0%																	
SE1B3120	E2B (E1b3) - Marine Pile Cap M1 - Dewater precast shell / Remove Lifting Frame	2	17-Mar-15	0%	2	18-Mar-15	13-Jan-15	14-Jan-15	-51	0	0%																	
SE1B3130	E2B (E1b3) - Marine Pile Cap M1 - Pile cut down	8	19-Mar-15	0%	8	27-Mar-15	15-Jan-15	23-Jan-15	-51	0	0%																	
SE1B3140	E2B (E1b3) - Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	18	28-Mar-15	0%	18	24-Apr-15	24-Jan-15	13-Feb-15	-51	0	0%																	
SE1B3150	E2B (E1b3) - Marine Pile Cap M1 - Concreting	1	25-Apr-15	0%	1	25-Apr-15	14-Feb-15	14-Feb-15	-51	0	0%																	
SE1B3160	E2B (E1b3) - Marine Pile Cap M1 - Curing incl. CJ Preparation	6	27-Apr-15	0%	6	04-May-15	16-Feb-15	25-Feb-15	-51	0	0%																	
Pier Works - E2A, E2B, E2C & E2D																												
Pier Works - E2A (E1b4)																												
SE1B4170	E2A (E1b4) - Type 4B Pier Temp. Support Platform	6	19-Mar-15	0%	6	25-Mar-15	31-Jan-15	06-Feb-15	-37	0	0%																	
SE1B4172	E2A (E1b4) - Type 4B Pier Scaffolding (1st Lift)	2	26-Mar-15	0%	2	27-Mar-15	07-Feb-15	09-Feb-15	-37	31	0%																	

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 31 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start/ FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish/ FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015														
												9	26	February	02	09	16	23	02	09	16	23	30	06	13	20
E4A & E4B (E2b - 1/2)																										
Pile Cap Works - E4A & E4B																										
Pile Cap Works																										
SE2B0070	E4 (E2b1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelwork	6	06-Feb-15 A	0%	6	28-Feb-15	09-Dec-14	16-Dec-14	-59	0	0%															
SE2B0080	E4 (E2b1/2) - Marine Pile Cap - Install precast shell in position (3 units)	4	02-Mar-15	0%	4	05-Mar-15	16-Dec-14	20-Dec-14	-59	0	0%															
SE2B0090	E4 (E2b1/2) - Marine Pile Cap - Inst.Access & make Watertight	6	06-Mar-15	0%	6	12-Mar-15	20-Dec-14	30-Dec-14	-59	0	0%															
SE2B0100	E4 (E2b1/2) - Marine Pile Cap - Weld Fin Plates / Plug Rebar & Concrete	2	13-Mar-15	0%	2	14-Mar-15	30-Dec-14	02-Jan-15	-59	0	0%															
SE2B0110	E4 (E2b1/2) - Marine Pile Cap - Dewater precast shell / Remove Lifting Frame	2	16-Mar-15	0%	2	17-Mar-15	02-Jan-15	05-Jan-15	-59	0	0%															
SE2B0120	E4 (E2b1/2) - Marine Pile Cap - Pile cut down 4nr	6	18-Mar-15	0%	6	24-Mar-15	05-Jan-15	12-Jan-15	-59	0	0%															
SE2B0130	E4 (E2b1/2) - Marine Pile Cap - Rebar fixing (1st pour)	6	25-Mar-15	0%	6	31-Mar-15	12-Jan-15	19-Jan-15	-59	0	0%															
SE2B0140	E4 (E2b1/2) - Marine Pile Cap - Concreting (First pour)	1	01-Apr-15	0%	1	01-Apr-15	19-Jan-15	20-Jan-15	-59	0	0%															
SE2B0150	E4 (E2b1/2) - Marine Pile Cap - C/J preparation	2	02-Apr-15	0%	2	08-Apr-15	20-Jan-15	22-Jan-15	-59	0	0%															
SE2B0160	E4 (E2b1/2) - Marine Pile Cap - Rebar fixing (Final pour)	4	09-Apr-15	0%	4	13-Apr-15	22-Jan-15	27-Jan-15	-59	0	0%															
SE2B0162	E4 (E2b1/2) - Marine Pile Cap - Concreting (Final pour)	1	14-Apr-15	0%	1	14-Apr-15	27-Jan-15	28-Jan-15	-59	0	0%															
SE2B0164	E4 (E2b1/2) - Marine Pile Cap - Curing incl. C/J preparation	4	16-Apr-15	0%	4	20-Apr-15	28-Jan-15	02-Feb-15	-59	0	0%															
Pier Works - E4A & E4B																										
Pier Works - E4A (E2b2)																										
SE2B2020	E4A (E2b2) - Seagull Pier Falsework & Scaffolding (1st wall pour)	1	21-Apr-15	0%	1	21-Apr-15	02-Feb-15	03-Feb-15	-59	0	0%															
SE2B2030	E4A (E2b2) - Seagull Pier Rebar Fixing (1st wall pour)	3	22-Apr-15	0%	3	25-Apr-15	03-Feb-15	06-Feb-15	-59	28	0%															
E5A & E5B (E2c - 1/2)																										
Foundation Works - E5A & E5B																										
Foundation Works																										
GFXX041	E5 (E2c) - Relocation & Install Temporary Removable Platform from E4 to E5, Piling Plant fr	6	26-Jan-15 A	100%	0	31-Jan-15 A					100%															
GFXX047	E5 (E2c) - Bored Piles (2.20m dia. x 4 nos)	74	02-Feb-15 A	20.27%	59	07-May-15	18-Dec-14	04-Mar-15	-51	0	20%															
GFXX048	E5 (E2c) - Sonic & Interface Coring	12	08-May-15	0%	12	21-May-15	04-Mar-15	18-Mar-15	-51	0	0%															
E6A & E6B (E2d - 1/2)																										
Foundation Works - E6A & E6B																										
Foundation Works																										
GFXX050	E6 (E2d) - Inst.Temp.Working Platform (Heavy)	18	15-Dec-14 A	100%	0	21-Jan-15 A					100%															
GFXX051	E6 (E2d) - Inst.Temp.Working Platform (Light)	7	22-Jan-15 A	100%	0	03-Feb-15 A					100%															
GFXX051	E6 (E2d) - Predrilling (4 nos)	18	05-Feb-15 A	66.67%	6	28-Feb-15	07-Jan-15	14-Jan-15	-37	0	30%															
GFXX05	E6 (E2d) - Confirm Rockhead levels	8	02-Mar-15	0%	8	10-Mar-15	14-Jan-15	23-Jan-15	-37	0	0%															
GFXX052	E6 (E2d) - Bored Piles (2.50m dia. x 4 nr)	72	02-Mar-15	0%	72	30-May-15	14-Jan-15	16-Apr-15	-37	0	0%															
E7A & E7B (E2e - 1/2)																										
Foundation Works - E7A & E7B																										
Foundation Works																										
GFXX056	E7 (E2e) - Predrilling (4 nos)	14	13-Jan-15 A	100%	0	07-Feb-15 A					100%															
GFXX051	E7 (E2e) - Confirm Rockhead levels	8	23-Feb-15	0%	8	03-Mar-15	25-Nov-14	04-Dec-14	-71	6	0%															
GFXX051	E7 (E2e) - Relocation & Install, Temporary Removable Platform from E11 to E7	6	23-Feb-15	0%	6	28-Feb-15	18-Nov-14	25-Nov-14	-77	0	0%															
GFXX057	E7 (E2e) - Bored Piles (2.50m dia. x 4 nr)	78	02-Mar-15	0%	78	06-Jun-15	25-Nov-14	03-Mar-15	-77	0	0%															
E8A & E8B (E2f - 1/2)																										
Foundation Works - E8A & E8B																										
Foundation Works																										
GFXX062	E8 (E2f) - Bored Piles (2.50m dia. x 4 nr)	102	24-Dec-14 A	46.08%	55	02-May-15	11-Mar-15	20-May-15	15	0	40%															
GFXX063	E8 (E2f) - Sonic & Interface Coring	12	04-May-15	0%	12	16-May-15	20-May-15	04-Jun-15	15	0	0%															
GFXX064	E8 (E2f) - Dismantle Temporary Removable Piling Platform	7	18-May-15	0%	7	26-May-15	04-Jun-15	12-Jun-15	15	0	0%															
E9A & E9B (E2g - 1/2)																										
Pile Cap Works - E9A & E9B																										

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-E-M21
 Layout: J3518-DWP-3MRP Submission - M21
 Filter: TASK filters: 3-Month Lookahead, No CC
 Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 34 of 41 Pages)
(Progress as of 21-Feb-15)

Date	Revision	Checked	Approved
21-Jan-15		DB	
09-Mar-15		DB	

DWG. No.:
J3518/GCL/PGM/3MRP-M21

Activity ID	Activity Name	Orig. Durm.	Act. Start/ FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish/ FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																	
												February			March			April			May								
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18
Pile Cap Works																													
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelwork	6	12-Feb-15 A	0%	6	28-Feb-15	08-Dec-14	15-Dec-14	-59	0	0%																		
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Install precast shell in position (3 units)	4	02-Mar-15	0%	4	05-Mar-15	15-Dec-14	19-Dec-14	-59	0	0%																		
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Inst.Access & make Watertight	6	06-Mar-15	0%	6	12-Mar-15	19-Dec-14	29-Dec-14	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Weld Fin Plates / Plug Rebar & Concrete	2	13-Mar-15	0%	2	14-Mar-15	29-Dec-14	31-Dec-14	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Dewater precast shell / Remove Lifting Frame	2	16-Mar-15	0%	2	17-Mar-15	31-Dec-14	03-Jan-15	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Pile cut down 6nr	9	18-Mar-15	0%	9	27-Mar-15	03-Jan-15	14-Jan-15	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Rebar fixing (1st pour)	8	28-Mar-15	0%	8	10-Apr-15	14-Jan-15	23-Jan-15	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Concreting (First pour)	1	11-Apr-15	0%	1	11-Apr-15	23-Jan-15	24-Jan-15	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - CJ preparation	3	13-Apr-15	0%	3	16-Apr-15	24-Jan-15	28-Jan-15	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Rebar fixing (Final pour)	6	17-Apr-15	0%	6	24-Apr-15	28-Jan-15	04-Feb-15	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Concreting (Final pour)	1	25-Apr-15	0%	1	25-Apr-15	04-Feb-15	05-Feb-15	-59	0	0%																		
SE2G01	E9 (E2g1/2) - Marine Pile Cap - Curing incl. CJ preparation	6	27-Apr-15	0%	6	04-May-15	05-Feb-15	12-Feb-15	-59	0	0%																		
Pier Works - E9A & E9B																													
Pier Works - E9B (E2g1)																													
SE2G10	E9B (E2g1) - Seagull Pier Falsework & Scaffolding (1st wall pour)	2	27-Apr-15	0%	2	28-Apr-15	05-Feb-15	07-Feb-15	-59	0	0%																		
SE2G10	E9B (E2g1) - Seagull Pier Rebar Fixing (1st wall pour)	3	29-Apr-15	0%	3	02-May-15	07-Feb-15	11-Feb-15	-59	0	0%																		
SE2G10	E9B (E2g1) - Seagull Pier Formwork & Prep. for concreting (1st wall pour)	2	04-May-15	0%	2	05-May-15	11-Feb-15	13-Feb-15	-59	0	0%																		
SE2G10	E9B (E2g1) - Seagull Pier Concreting (1st wall pour)	1	06-May-15	0%	1	06-May-15	13-Feb-15	14-Feb-15	-59	0	0%																		
SE2G10	E9B (E2g1) - Seagull Pier Curing & Striking of Forms incl. CJ Prep. (1st wall pour)	2	07-May-15	0%	2	08-May-15	14-Feb-15	17-Feb-15	-59	0	0%																		
SE2G10	E9B (E2g1) - Seagull Pier Falsework & Scaffolding (2nd wall pour)	2	09-May-15	0%	2	11-May-15	17-Feb-15	23-Feb-15	-59	0	0%																		
SE2G10	E9B (E2g1) - Seagull Pier Rebar Fixing (2nd wall pour)	4	13-May-15	0%	4	16-May-15	23-Feb-15	27-Feb-15	-59	0	0%																		
SE2G10	E9B (E2g1) - Seagull Pier Formwork & Prep. for concreting (2nd wall pour)	2	18-May-15	0%	2	19-May-15	27-Feb-15	02-Mar-15	-59	0	0%																		
SE2G11	E9B (E2g1) - Seagull Pier Concreting (2nd wall pour)	1	20-May-15	0%	1	20-May-15	02-Mar-15	03-Mar-15	-59	0	0%																		
E10A & E10B (E2h - 1/2)																													
Foundation Works - E10A & E10B																													
Foundation Works																													
GFXX074	E10 (E2h) - Dismantle temp. removable piling platform	7	30-Dec-14 A	100%	0	24-Jan-15 A					100%																		
Pile Cap Works - E10A & E10B																													
Pile Cap Works																													
SE2H00	E10 (E2h1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelwork	6	08-May-15	0%	6	15-May-15	14-Mar-15	21-Mar-15	-40	0	0%																		
SE2H00	E10 (E2h1/2) - Marine Pile Cap - Install precast shell in position (3 units)	4	16-May-15	0%	4	20-May-15	21-Mar-15	26-Mar-15	-40	0	0%																		
Viaduct E5, E6, E7 & E8																													
Milestones - Marine Foundation																													
GFXX105	Piling Works Completion of E5E6a/E7E8a in Bridge E5 - E8	0		0%	0	10-Apr-15		15-Jan-15	-67	0	0%																		
GFXX106	Piling Works Completion of E5b/E6b, E7b/E8b, Dolphin E5b & E8b in Bridge E5 - E8	0		0%	0	23-Apr-15		08-Jun-15	37	34	0%																		
Milestones - Land Foundation																													
GFXX012	Land Access to BCF (Available in Month 17)	0	21-Feb-15	0%	0		01-Nov-14		-111	2	0%																		
GFXX546-1	E14D (E5d) - Start date for piling	0	23-Apr-15	0%	0		02-May-15		8	102	0%																		
GFXX547-1	E14C (E6d) - Start date for piling	0	23-Apr-15	0%	0		13-Aug-15		92	93	0%																		
E11A & E11B (E5E6a/E7E8a)																													
Foundation Works - E11A & E11B																													
Foundation Works																													
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.5m dia. x 10 nr)	130	10-Jul-14 A	85.38%	19	16-Mar-15	29-Nov-14	22-Dec-14	-67	0	80%																		
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.5m dia. x 10 nr) 25% in total	130	10-Jul-14 A	85.38%	19	16-Mar-15	29-Nov-14	22-Dec-14	-67	0	80%																		
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.5m dia. x 10 nr) 25% in total	130	10-Jul-14 A	85.38%	19	16-Mar-15	29-Nov-14	22-Dec-14	-67	0	80%																		
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.5m dia. x 10 nr) 25% in total	130	10-Jul-14 A	85.38%	19	16-Mar-15	29-Nov-14	22-Dec-14	-67	0	80%																		
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.5m dia. x 10 nr) 25% in total	130	10-Jul-14 A	85.38%	19	16-Mar-15	29-Nov-14	22-Dec-14	-67	0	80%																		

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: J3518DWP-E-M21
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Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 35 of 41 Pages)
(Progress as of 21-Feb-15)

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Activity ID	Activity Name	Orig. Durm.	Act. Start/ FC Early Start	Duration % Complete	Rem. Durm.	Act. Finish/ FC Early Finish	Late Start	Late Finish	Total Float	Free Float	Physical % Complete	2015																										
												February			March			April			May																	
												9	26	02	09	16	23	02	09	16	23	30	06	13	20	27	04	11	18									
D100010-1	Pier D19 (D1b) ready for Viaduct D1 PH segment erection	0		0%	0	28-Apr-15		23-Jan-16	206	0	0%																											
D100020-1	Pier D18 (D1c) ready for Viaduct D1 PH segment erection	0		0%	0	27-Mar-15		19-Oct-15	149	18	0%																											
D100030-1	Pier D17 (D1d) ready for Viaduct D1 PH segment erection	0		0%	0	18-Apr-15		15-Sep-15	110	0	0%																											
Viaduct E																																						
Bridge E1 Superstructure																																						
Milestones																																						
Milestones Ready for PH Segment Erection																																						
E100030-1	Pier D1 (D4f) ready for Viaduct E1 PH segment erection	0		0%	0	24-Apr-15		24-Jul-15	65	0	0%																											
E100040-1	Pier B1 (B3f) ready for Viaduct E1 PH segment erection	0		100%	0	24-Jan-15 A					100%	◆																										
Milestones Ready for Deck Segment Erection																																						
E100040	Pier B1 (B3f) ready for Viaduct E1 deck segment erection	0		100%	0	17-Feb-15 A					100%	◆																										
Bridge E2 Superstructure																																						
Milestones																																						
Milestones Ready for Deck Segment Erection																																						
E507060-1	Viaduct E5 - Complete segment erection for interface span E13D(E5c) to E14D(E5d) with Hr	0		0%	0	23-Feb-15		18-Jun-16	364	444	0%																											
At-Grade Roadworks and Other Works along Cheung Tung Road																																						
Re-alignment of Cheung Tung Road adjacent to Viaduct B																																						
RP00020	Construct new ESS adjacent to Viaduct B	60	15-Sep-14 A	28.33%	43	18-Apr-15	14-Feb-15	13-Apr-15	-4	0	28%	■																										
RP00030	Inst. new equip. & testing / commissioning of new ESS	60	20-Apr-15	0%	60	13-Jul-15	14-Apr-15	08-Jul-15	-4	0	0%	■																										
RW50020	CTR Re-alignment adj. to Via.B - Diversion of watermain	140	04-Mar-15	0%	140	08-Sep-15	24-Feb-15	31-Aug-15	-7	0	0%	■																										
RW50090	CTR Re-alignment adj. to Via.B - Diversion of Drainage	120	01-Apr-15	0%	120	14-Sep-15	24-Mar-15	04-Sep-15	-7	0	0%	■																										
Box Culvert Extension																																						
BCE0110	Construct staircases & backfill to required elevation	12	23-Feb-15	0%	12	07-Mar-15	22-Aug-15	04-Sep-15	133	0	0%	■																										
BCE0120	Construct step irons at 300c/c staggered & new railings	6	05-Jan-15 A	0%	6	28-Feb-15	29-Aug-15	04-Sep-15	139	6	50%	■																										
BCE0130	Construct all proposed connecting U-Channels	12	23-Feb-15	0%	12	07-Mar-15	22-Aug-15	04-Sep-15	133	140	0%	■																										
Viaduct B Slope Works																																						
Slope 9SE-B/C9																																						
Zone A & B																																						
SWVB1110	9SE-B/C9 Zone A1 - Soil nail 22 nr @ +13.00 Row C	9	13-Jan-15 A	100%	0	24-Jan-15 A					100%	■																										
SWVB1130	9SE-B/C9 Zone A1 - Soil nail 30 nr @ +11.00 Row B	12	08-Dec-14 A	100%	0	04-Feb-15 A					100%	■																										
SWVB1160	9SE-B/C9 Zone A1 - Soil nail 31 nr @ +9.00 Row A	12	18-Dec-14 A	100%	0	31-Jan-15 A					100%	■																										
SWVB1170	9SE-B/C9 Zone A1 - Raking Drain 15 nr @ +8.5	5	19-Jan-15 A	50%	3	25-Feb-15	27-Apr-18	30-Apr-18	884	884	50%	■																										
SWVB1190	9SE-B/C9 Zone A1 - Form 375UC @ +5.5	12	23-Feb-15	0%	12	07-Mar-15	08-Aug-15	24-Aug-15	123	0	0%	■																										
SWVB1270	9SE-B/C9 Zone A2 & B - Inst. 300UC @ +15.0	10	23-Feb-15	0%	10	05-Mar-15	18-Apr-18	30-Apr-18	876	876	0%	■																										
SWVB1340	9SE-B/C9 Zone A2 & B - Raking Drain 13 nr @ +10.5	4	02-Feb-15 A	0%	4	26-Feb-15	25-Apr-18	30-Apr-18	882	882	50%	■																										
SWVB1360	9SE-B/C9 Zone A2 & B - Soil nail 34 nr @ +9.00 Row A	13	19-Jan-15 A	0%	13	09-Mar-15	13-Apr-18	30-Apr-18	873	873	90%	■																										
SWVB1370	9SE-B/C9 Zone A2 & B - Raking Drain 13 nr @ +8.5	5	06-Feb-15 A	100%	0	11-Feb-15 A					100%	■																										
SWVB1390	9SE-B/C9 Zone A2 & B - Form 375UC @ +5.5	12	23-Feb-15	0%	12	07-Mar-15	08-Aug-15	24-Aug-15	123	0	0%	■																										
SWVB1399	9SE-B/C9 Zone A & B - Hydroseeding	6	09-Mar-15	0%	6	14-Mar-15	25-Aug-15	31-Aug-15	123	26	0%	■																										
Zone C & D																																						
SWVB1470	9SE-B/C9 Zone C & D - Raking Drain 12 nr @ +19.0	4	23-Feb-15	0%	4	26-Feb-15	25-Apr-18	30-Apr-18	882	882	0%	■																										
SWVB1500	9SE-B/C9 Zone C & D - Raking Drain 14 nr @ +17.0	4	23-Feb-15	0%	4	26-Feb-15	30-Oct-15	03-Nov-15	185	0	0%	■																										
SWVB1510	9SE-B/C9 Zone C & D - Form 375UC @ approx +16.0	18	27-Feb-15	0%	18	19-Mar-15	07-Apr-18	30-Apr-18	864	864	0%	■																										
SWVB1530	9SE-B/C9 Zone C & D - Raking Drain 9 nr @ +8.0 in rock	8	17-Feb-15 A	0%	8	03-Mar-15	24-Oct-15	03-Nov-15	181	0	50%	■																										
SWVB1550	9SE-B/C9 Zone C & D - Form 375UC @ +5.5	18	23-Feb-15	0%	18	14-Mar-15	18-Nov-15	08-Dec-15	201	20	0%	■																										
SWVB1560	9SE-B/C9 Zone C & D - Install Geo. Instru. & Baseline Monitoring	30	04-Mar-15	0%	30	11-Apr-15	04-Nov-15	08-Dec-15	181	0	0%	■																										
SWVB1570	9SE-B/C9 Zone C & D - Hydroseeding	12	13-Apr-15	0%	12	28-Apr-15	09-Dec-15	22-Dec-15	181	28	0%	■																										

	Project ID: J3518DWP-E-M21	Tuen Mun - Chek Lap Kok Link - Southern Connection 3-Month Rolling Programme (Page 40 of 41 Pages) (Progress as of 21-Feb-15)	Date	Revision	Checked	Approved	DWG. No.: J3518/GCL/PGM/3MRP-M21
	Layout: J3518-DWP-3MRP Submission - M21 Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.		21-Jan-15		DB		
			09-Mar-15		DB		

Appendix C

Environmental Mitigation and Enhancement Measure Implementation Schedules

(In reference to CINOTECH (2011) Agreement No.
CE35/2011 EP Baseline Environmental Monitoring for
Hong Kong-Zhuhai-Macao Bridge Tuen Mun-Chek Lap
Kok Link - Investigation. Updated EM&A Manual for
Tuen Mun-Chek Lap Kok Link)

*Contract No. HY/2012/07
Tuen Mun – Chek Lap Kok Link
Southern Connection Viaduct Section
Environmental Mitigation and Enhancement Measure Implementation Schedule*

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
AIR QUALITY									
4.8.1	3.8	An effective watering programme of eight daily watering with complete coverage, is estimated to reduce by 50%. This is recommended for all areas in order to reduce dust levels to a minimum;	All areas / throughout construction period	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓
4.8.1	3.8	The Contractor shall, to the satisfaction of the Engineer, install effective dust suppression measures and take such other measures as may be necessary to ensure that at the Site boundary and any nearby sensitive receiver, dust levels are kept to acceptable levels.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		↔
4.8.1	3.8	The Contractor shall not burn debris or other materials on the works areas.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	In hot, dry or windy weather, the watering programme shall maintain all exposed road surfaces and dust sources wet.	All unpaved haul roads / throughout construction period in hot, dry or windy weather	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		✓
4.8.1	3.8	Where breaking of oversize rock/concrete is required, watering shall be implemented to control dust. Water spray shall be used during the handling of fill material at the site and at active cuts, excavation and fill sites where dust is likely to be created.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	Open dropping heights for excavated materials shall be controlled to a maximum height of 2m to minimise the fugitive dust arising from unloading.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	During transportation by truck, materials shall not be loaded to a level higher than the side and tail boards, and shall be dampened or covered before transport.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
4.8.1	3.8	Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. The tarpaulin shall be properly secured and shall extend at least 300mm over the edges of the side and tail boards.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	No earth, mud, debris, dust and the like shall be deposited on public roads. Wheel washing facility shall be usable prior to any earthworks excavation activity on the site.	All site exits / throughout construction period	Contractor	TMEIA Avoid dust		Y		✓
4.8.1	3.8	Areas of exposed soil shall be minimised to areas in which works have been completed shall be restored as soon as is practicable.	All exposed surfaces / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	All stockpiles of aggregate or spoil shall be enclosed or covered and water applied in dry or windy condition.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		↔
4.11	Section 3	EM&A in the form of 1 hour and 24 hour dust monitoring and site audit	All representative existing ASRs / throughout construction period	Contractor	EM&A Manual		Y		✓
NOISE									
5.11	Section 4	Noise monitoring	All existing representative sensitive receivers / during North Lantau Viaduct construction	Contractor	EM&A Manual		Y		✓
WATER QUALITY									
<i>General Marine Works</i>									
6.10	-	Bored piling to be undertaken within a metal casing.	Marine viaducts of TM-CLKL and HKLR/ bored piling	Contractor	TM-EIAO		Y		✓
6.10	-	Barges and hopper dredgers shall have tight fitting seals to their bottom openings to prevent leakage of material.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	Any pipe leakages shall be repaired quickly. Plant should not be operated with leaking pipes.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	Loading of barges and hoppers shall be controlled to prevent splashing of dredged material to the surrounding water. Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action;	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
6.10	-	The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site.	All areas/ throughout construction period	Contractor	Marine Fill Committee Guidelines. DASO permit conditions.		Y		✓
<i>Temporary Staging work</i>									
	5.2	Regular inspection for the accumulation of floating refuse and collection of floating refuse if required	During temporary staging works	Contractor			Y		✓
	5.2	Provision of temporary drainage system on the temporary staging for collection of construction site runoff to allow appropriate treatment before discharge into the sea	During temporary staging works	Contractor			Y		✓
	5.2	Wastewater generated from construction works such as bored / drilling water will be collected, treated, neutralized and de-silted through silt trap or sedimentation tank before disposal	During temporary staging works	Contractor			Y		✓
	5.2	One additional water quality monitoring station is	During temporary	Contractor			Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		proposed at station SR4a In case elevated SS or turbidity is identified during the water quality monitoring, the source of pollution will be tracked down and be removed as soon as possible. In case depletion of dissolved oxygen is identified, artificial aeration will be arranged at the monitoring station SR4a,	staging works						
<i>Land Works</i>									
6.10	-	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Sewage effluent and discharges from on- site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<>
6.10	-	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	Open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<>
6.10	5.8	Manholes (including any newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	All vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<>
6.10	-	Wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for offsite disposal.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<>
6.10	-	The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	All areas/ throughout construction period	Contractor	TM-EIAO Waste Disposal Ordinance		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
6.10	-	All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<>
6.10	-	Surface run-off from bunded areas should pass through oil/ grease traps prior to discharge to the stormwater system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Roadside gullies to trap silt and grit shall be provided prior to discharging the stormwater into the marine environment. The sumps will be maintained and cleaned at regular intervals.	Roadside/ design and operation	Design Consultant/ Contractor	TM-EIAO	Y		Y	n/a
6.10	Section 5	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice.	All areas/ throughout construction period	Contractor	EM&A Manual		Y		✓
<i>Water Quality Monitoring</i>									
6.10	Section 5	Water quality monitoring shall be undertaken for suspended solids, turbidity, and dissolved oxygen. Nutrients and metal parameters shall also be measured for Mf sediment operations (only HKBCF and HKLR required handling of Mf sediment) during baseline, backfilling and post construction period. One year operation phase water quality monitoring at designated stations	Designated monitoring stations as defined in EM&A Manual, Section 5/ Before, through-out marine construction period, post construction and monthly operational phase water quality monitoring for a year.	Contractor	EM&A Manual		Y	Y	✓
ECOLOGY									
8.14	6.3	Specification for and implement pre, during and post construction dolphin abundance monitoring.	All Areas/ Detailed Design/ during construction works/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y	✓
8.14	6.3	Specification for bored piling monitoring	Detailed Design	Design Consultant	TMEIA	Y			n/a
8.14	6.3	Implement any recommendations of the bored piling monitoring	Southern marine viaduct/ Throughout	Contractor	TMEIA		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
			construction during bored piling						
8.14	6.3,6.5	Avoidance of peak CWD calving season in May and June for driving of metal caissons during bored piling works	Southern marine viaduct/ May and June during bored piling	Contractor	TMEIA		Y		n/a
8.14	6.3,6.5	Specification and implementation of 250m dolphin exclusion zone.	All marine bored piling and temporary staging works areas/Detailed Design/during all marine bored piling and temporary staging works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.5	Specification and deployment of an artificial reef of an area of 3,600 m ² in an area where fishing activities are prohibited.	Area of prohibited fishing activities/Detailed Design/towards end of construction period	TM-CLKL/ HKBCF Design Consultant/ TM-CLKL/ HKBCF Contractor	TMEIA	Y		Y	n/a To be enforced by AFCD.
8.14	6.3, 6.5	Specification and implementation of marine vessel control specifications	All areas/Detailed Design/during construction works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.14	6.3, 6.5	Design and implementation of acoustic decoupling methods for marine bored piling and the whole lifespan of temporary staging works.	All areas/ Detailed Design/during marine bored piling and temporary staging works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.4	Pre-construction phase survey and coral translocation	Tai Ho Wan (donor site) and Yam Tsui Wan (receptor site) /Detailed Design/Prior to construction	Design Consultant/ Contractor	TMEIA	Y	Y		n/a
8.15	6.5	Audit coral translocation success	Yam Tsui Wan (receptor site)/Post translocation	Contractor	TMEIA		Y		✓
7.13	6.5	Undertaken gabion wall works in Stream NL1 in the dry season	North Lantau slope works/dry	Contractor	TMEIA		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
			season/construction phase						
7.13	6.5	The loss of habitat shall be supplemented by enhancement planting in accordance with the landscape mitigation schedule.	All areas / As soon as accessible	Contractor	TMEIA		Y		n/a. To be approved by AFCD/LCSD
7.13	6.5	Spoil heaps shall be covered at all times.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Avoid damage and disturbance to the remaining and surrounding natural habitat	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Placement of equipment in designated areas within the existing disturbed land	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Disturbed areas to be reinstated immediately after completion of the works.	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
7.13	6.5	Construction activities should be restricted to the proposed works boundary	All areas / Throughout construction period	Contractor	TMEIA		Y		✓
LANDSCAPE AND VISUAL									
10.9	7.6	Round angle, patterned finishes, and oval shaped pier were considered in the viaduct design, and further details will be developed under ACABAS submission (DM3)	All areas/detailed design	Design Consultant	TMEIA	Y			n/a
10.9	7.6	Details of the street furniture will be developed in the detailed design stage (DM4)	All areas/detailed design	Design Consultant	TMEIA	Y			n/a
10.9	7.6	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission (DM5)	All areas/detailed design	Design Consultant	TMEIA	Y			n/a
10.9	7.6	Existing trees on boundary of the Project Area shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas. (Tree protection measures will be detailed at Tree Removal Application stage) (CM1)							
10.9	7.6	Trees unavoidably affected by the works shall be transplanted where practical. Trees will be transplanted straight to their final receptor site and not held in a temporary nursery. A detailed Tree Transplanting Specification shall be provided in the Contract Specification. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme (CM2)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Hillside and roadside screen planting to proposed roads, associated structures and slope works (CM3).	All areas/detailed design/ during construction/post construction	Design Consultant/	TMEIA	Y	Y		✓
10.9	7.6	Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material (in earth tone) (CM4)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		<>
10.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Recycle/Reuse all felled trees and vegetation, e.g.	All areas/detailed	Design	TMEIA	Y	Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		mulching (CM9)	design/ during construction	Consultant/ Contractor					
10.9	7.6	Compensatory tree planting shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006 (CM10).	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Re-vegetation of affected woodland/shrubland with native species (OM1)	All areas/detailed design/ during construction/ during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be implemented by AFCD/HyD/ L CSD
10.9	7.6	Tall buffer screen tree / shrub / climber planting should be incorporated to soften hard engineering structures and facilities (OM2)	All areas/detailed design/ during construction/ during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a To be implemented by HyD/LCSD
10.9	7.6	Streetscape elements (e.g. paving, signage, street furniture, lighting etc.) shall be sensitively designed in a manner that responds to the local context, and minimises potential negative landscape and visual impacts. Lighting units should be directional and minimise unnecessary light spill (OM3)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be implemented by HyD/LCSD
10.9	7.6	Structure, ornamental tree / shrub / climber planting should be provided along roadside amenity strips, central dividers and newly formed slopes to enhance the townscape quality and further greenery enhancement (OM4)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be implemented by HyD/LCSD
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and	All areas/detailed design/ during	Design Consultant/	TMEIA	Y	Y	Y	n/a. To be

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		finishes	construction / during operation	Contractor					implemented by HyD
WASTE									
12.6		The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		✓
12.6		The Contractor shall prepare and implement a Waste Management Plan which specifies procedures such as a ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of wastes does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposed. A recording system for the amount of waste generated, recycled and disposed (locations) should be established.	Contract mobilisation	Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Y		✓
12.6		The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Contract mobilisation	Contractor	TMEIA, Land (Miscellaneous Provisions) Ordinance (Cap 28); Waste Disposal Ordinance (Cap 354); Dumping at Sea Ordinance (Cap 466); Water Pollution Control Ordinance.		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures including waste reduction, reuse and recycling.	Contract Mobilisation	Contractor	TMEIA		Y		✓
12.6	8.1	The extent of cutting operation should be optimised where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.	All areas / throughout construction period	Contractor	TMEIA		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
12.6	8.1	Rock armour from the existing seawall should be reused on the new sloping seawall as far as possible	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Provisions to be made in contract documents to allow and promote the use of recycled aggregates where appropriate.	Detailed Design	Design Consultant	TMEIA	Y			n/a
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		↔
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		↔
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction materials should avoid over-ordering and wastage.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The Contractor should recycle as many C&D	All areas / throughout	Contractor	TMEIA		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		materials (this is a waste section) as possible on-site. The public fill and C&D waste should be segregated and stored in separate containers or skips to facilitate the reuse or recycling of materials and proper disposal. Where practicable, the concrete and masonry should be crushed and used as fill materials. Steel reinforcement bar should be collected for use by scrap steel mills. Different areas of the sites should be considered for segregation and storage activities.	construction period						
12.6	8.1	All falsework will be steel instead of wood.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Chemical waste producers should register with the EPD. Chemical waste should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows: <ul style="list-style-type: none"> - suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; - Having a capacity of <450L unless the specifications have been approved by the EPD; and - Displaying a label in English and Chinese according to the instructions prescribed in Schedule 2 of the Regulations. Clearly labelled and used solely for the storage of chemical wastes; - Enclosed with at least 3 sides; - Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest; - Adequate ventilation; - Sufficiently covered to prevent rainfall entering 	All areas / throughout construction period	Contractor	TMEIA		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		(water collected within the bund must be tested and disposed of as chemical waste, if necessary); and - Incompatible materials are adequately separated.							
12.6	8.1	Waste oils, chemicals or solvents shall not be disposed of to drain,	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Adequate numbers of portable toilets should be provided for on-site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilising them.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Night soil should be regularly collected by licensed collectors.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes. Sufficient dustbins shall be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By-laws. In addition, general refuse shall be cleared daily and shall be disposed of to the nearest licensed landfill or refuse transfer station. Burning of refuse on construction sites is prohibited.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	All waste containers shall be in a secure area on hardstanding;	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including waste reduction, reuse and recycling.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local	Site Offices/ throughout construction period	Contractor	TMEIA		Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.							
12.6	Section 8	EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site audit programme shall be undertaken.	All areas / throughout construction period	Contractor	EM&A Manual		Y		✓
CULTURAL HERITAGE									
11.8	Section 9	EM&A in the form of audit of the mitigation measures	All areas / throughout construction period	Highways Department	EIAO-TM		Y		n/a

Notes:

Legend: D=Design, C=Construction, O=Operation

Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

Status:

- ✓ Compliance of Mitigation Measures
- <> Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Contractor
- Δ Deficiency of Mitigation Measures but rectified by Contractor
- n/a Not Applicable in Reporting Period

Appendix D

Summary of Action and Limit Levels

Table D1 *Action and Limit Levels for 1-hour and 24-hour TSP*

Parameters	Action	Limit
24 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR9A/ASR8A = 178 ASR9C/ASR8/ASR9 = 178	260
1 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR9A/ASR8A = 394 ASR9C/ASR8/ASR9 = 393	500

Table D2 *Action and Limit Levels for Construction Noise (0700-1900 hrs of normal weekdays)*

Time Period	Action	Limit
0700-1900 hrs on normal weekdays	When one documented complaint is received	75* dB(A)

Table D3 *Action and Limit Levels for Water Quality*

Parameter	Action Level#	Limit Level#
DO in mg/L ^(a)	<u>Surface and Middle</u> 5.0 mg/L	<u>Surface and Middle</u> 4.2 mg/L
	<u>Bottom</u> 4.7 mg/L	<u>Bottom</u> 3.6 mg/L
Turbidity in NTU (Depth-averaged ^{(b), (c)})	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., 27.5 NTU	130% of upstream control station at the same tide of the same day and 99%-ile of baseline data, i.e., 47.0 NTU
SS in mg/L (Depth-averaged ^{(b), (c)})	120% of upstream control station at the same tide of the same day and 95%-ile of baseline data, i.e., 23.5 mg/L	130% of upstream control station at the same tide of the same day and 10mg/L for WSD Seawater Intakes at Tuen Mun and 99%-ile of baseline data, i.e., 34.4 mg/L

Notes:

Baseline data: data from HKZMB Baseline Water Quality Monitoring between 6 and 31 October 2011.

- (a) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
- (b) "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths
- (c) For turbidity and SS, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.
- (d) All figures given in the table are used for reference only, and EPD may amend the figures whenever it is considered as necessary

Parameter	Action Level#	Limit Level#
(e)	The 1%-ile of baseline data for surface and middle DO is 4.2 mg/L, whilst for bottom DO is 3.6 mg/L.	

Table D4 *Action and Limit Levels for Impact Dolphin Monitoring*

	North Lantau Social Cluster	
	NEL	NWL
Action Level	STG < 70% of baseline & ANI < 70% of baseline	STG < 70% of baseline & ANI < 70% of baseline
Limit Level	[STG < 40% of baseline & ANI < 40% of baseline] and STG < 40% of baseline & ANI < 40% of baseline	

Notes:

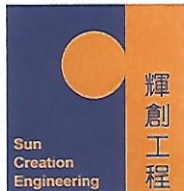
1. STG means quarterly encounter rate of number of dolphin sightings, which is **6.00 in NEL** and **9.85 in NWL** during the baseline monitoring period
2. ANI means quarterly encounter rate of total number of dolphins, which is **22.19 in NEL** and **44.66 in NWL** during the baseline monitoring period
3. For North Lantau Social Cluster, AL will be trigger if NEL or NWL fall below the criteria; LL will be triggered if both NEL and NWL fall below the criteria.

Table D5 *Derived Value of Action Level (AL) and Limit Level (LL)*

	North Lantau Social Cluster	
	NEL	NWL
Action Level	STG < 4.2 & ANI < 15.5	STG < 6.9 & ANI < 31.3
Limit Level	[STG < 2.4 & ANI < 8.9] and [STG < 3.9 & ANI < 17.9]	

Appendix E

Calibration Certificates of Monitoring Equipments



輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration

校正證書

Certificate No. : C146966

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC14-2877) Date of Receipt / 收件日期 : 12 November 2014

Description / 儀器名稱 : Anemometer

Manufacturer / 製造商 : Lutron

Model No. / 型號 : AM-4201

Serial No. / 編號 : AF.27513

Supplied By / 委託者 : Envirotech Services Co.

Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,
Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : $(23 \pm 2)^{\circ}\text{C}$

Relative Humidity / 相對濕度 : $(55 \pm 20)\%$

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 14 November 2014

TEST RESULTS / 測試結果

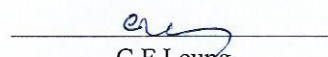
The results apply to the particular unit-under-test only.

The results are detailed in the subsequent page(s).


The test equipment used for calibration are traceable to National Standards via :

- Testo Industrial Services GmbH, Germany

Tested By :
測試


C F Leung
Project Engineer

Certified By :
核證


H C Chan
Engineer

Date of Issue : 18 November 2014
簽發日期

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室所書面批准。

Sun Creation Engineering Limited - Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗室

c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

Page 1 of 2

Certificate of Calibration

校正證書

Certificate No. : C146966

證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
2. The results presented are the mean of 10 measurements at each calibration point.
3. Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL386	Multi-function Measuring Instrument	S12109

4. Test procedure : MA130N.

5. Results :

Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.0	1.7	+0.3	0.2	2.0
4.1	3.8	+0.3	0.3	2.0
6.1	5.8	+0.3	0.3	2.0
8.0	7.8	+0.2	0.3	2.0
10.0	9.9	+0.1	0.4	2.0

Remarks : - The Measured Corrections are defined as :
Value = Applied Value - UUT Reading

- The expanded uncertainties are for a level of confidence of 95 %.

Note :

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗室所書面批准。

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輝創工程有限公司 – 校正及檢測實驗室

c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

ENVIROTECH SERVICES CO.

Calibration Report of Wind Meter

Date of Calibration : 20 November 2014

Brand of Test Meter: Global Water

Model: Speed Sensor: WE550 (S/N:EC0000)

Direction Sensor: WE570 (S/N:ED0000)

Location : Pak Mong, Siu Ho Wan

Procedures :

- 1. Wind Still Test: The wind speed sensor was hold by hand until it keep still
- 2. Wind Speed Test: The wind meter was on-site calibrated against the Anemometer
- 3. Wind Direction Test : The wind meter was on-site calibrated against the marine compass at four directions

Results:

Wind Still Test

Wind Speed (m/s)
0.00

Wind Speed Test

Global Wate (m/s)	Anemomete (m/s)
0.35	0.4
1.49	1.6
3.01	3.1

Wind Direction Test

Global Wate (o)	Marine Compass (o)
270.21	270
0.01	0
90.12	90
179.05	180

Calibrated by: Fai
Yeung Ping Fai
(Technical Officer)

Checked by : Fat
Ho Kam Fat
(Senior Technical Officer)



Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No. : <u>ET/EW/008/006</u>	Manufacturer : <u>YSI</u>
Model No. : <u>Pro 2030</u>	Serial No. : <u>12A 100554</u>
Date of Calibration : <u>17/03/2015</u>	Calibration Due Date : <u>16/06/2015</u>

Temperature Verification

Ref. No. of Reference Thermometer : ET/0521/008

Ref. No. of Water Bath : ---

		Temperature (°C)		
Reference Thermometer reading	Measured	20.0	Corrected	19.4
DO Meter reading	Measured	19.2	Difference	0.2

Standardization of sodium thiosulphate ($Na_2S_2O_3$) solution

Reagent No. of $Na_2S_2O_3$ titrant	CPE/012/4.5/001/11	Reagent No. of 0.025N $K_2Cr_2O_7$	CPE/012/4.4/001/35
		Trial 1	Trial 2
Initial Vol. of $Na_2S_2O_3$ (ml)		0.00	10.15
Final Vol. of $Na_2S_2O_3$ (ml)		10.15	20.40
Vol. of $Na_2S_2O_3$ used (ml)		10.15	10.25
Normality of $Na_2S_2O_3$ solution (N)		0.02463	0.02439
Average Normality (N) of $Na_2S_2O_3$ solution (N)		0.02451	
Acceptance criteria, Deviation		Less than $\pm 0.001N$	

Calculation: Normality of $Na_2S_2O_3$, $N = 0.25 / ml Na_2S_2O_3$ used

Linearity Checking

Determination of dissolved oxygen content by Winkler Titration *

Purging Time (min)	2		5		10	
	1	2	1	2	1	2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	11.20	22.60	0.00	6.80	10.40
Final Vol. of $Na_2S_2O_3$ (ml)	11.20	22.60	29.20	6.80	10.40	14.10
Vol. (V) of $Na_2S_2O_3$ used (ml)	11.20	11.40	6.60	6.80	3.60	3.70
Dissolved Oxygen (DO), mg/L	7.37	7.50	4.34	4.47	2.37	2.43
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: $DO (mg/L) = V \times N \times 8000/298$

Purging time, min	DO meter reading, mg/L			Winkler Titration result *, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.42	7.90	7.66	7.37	7.50	7.44	2.91
5	4.38	4.10	4.24	4.34	4.47	4.41	3.93
10	2.50	2.48	2.49	2.37	2.43	2.40	3.68
Linear regression coefficient				0.9954			



Internal Calibration Report of Dissolved Oxygen Meter

Zero Point Checking

DO meter reading, mg/L	0.00
------------------------	------

Salinity Checking

Reagent No. of NaCl (10ppt)	CPE/012/4.7/002/34	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/34
-----------------------------	--------------------	-----------------------------	--------------------

*Determination of dissolved oxygen content by Winkler Titration ***

Salinity (ppt)	10		30	
	1	2	1	2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)	0.00	11.90	23.50	34.00
Final Vol. of Na ₂ S ₂ O ₃ (ml)	11.90	23.50	34.00	44.30
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	11.90	11.60	10.50	10.30
Dissolved Oxygen (DO), mg/L	7.83	7.63	6.91	6.78
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: $DO (mg/L) = V \times N \times 8000/298$

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result**, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	7.20	7.65	7.43	7.83	7.63	7.73	3.96
30	6.90	6.40	6.65	6.91	6.78	6.85	2.96

Acceptance Criteria

- (1) Difference between temperature readings from temperature sensor of DO probe and reference thermometer : < 0.5 °C
- (2) Linear regression coefficient : > 0.99
- (3) Zero checking: 0.0mg/L
- (4) Difference (%) of DO content from the meter reading and by winkler titration : within ± 5%

The equipment complies # / does not comply # with the specified requirements and is deemed acceptable # / unacceptable # for use.

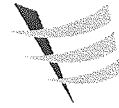
Delete as appropriate

Calibrated by

: 

Approved by :





Performance Check of Salinity Meter

Equipment Ref. No. : ET/EW/008/006 Manufacturer : YSI
Model No. : Pro 2030 Serial No. : 12A 100554
Date of Calibration : 17/03/2015 Due Date : 16/06/2015

Ref. No. of Salinity Standard used (30ppt)

S/001/5

Salinity Standard (ppt)	Measured Salinity (ppt)	Difference %
30.0	30.3	1.0

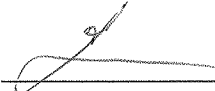
(*) Difference (%) = (Measured Salinity – Salinity Standard value) / Salinity Standard value x 100

Acceptance Criteria

Difference : -10 % to 10 %

The salinity meter complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use. Measurements are traceable to national standards.

Checked by : 

Approved by : 



Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No. : <u>ET/EW/008/006</u>	Manufacturer : <u>YSI</u>
Model No. : <u>Pro 2030</u>	Serial No. : <u>12A 100554</u>
Date of Calibration : <u>17/12/2014</u>	Calibration Due Date : <u>16/03/2015</u>

Temperature Verification

Ref. No. of Reference Thermometer : ET/0521/008

Ref. No. of Water Bath : ---

		Temperature (°C)		
Reference Thermometer reading	Measured	20.0	Corrected	19.4
DO Meter reading	Measured	19.4	Difference	0.0

Standardization of sodium thiosulphate (Na₂S₂O₃) solution

Reagent No. of Na ₂ S ₂ O ₃ titrant	CPE/012/4.5/001/9	Reagent No. of 0.025N K ₂ Cr ₂ O ₇	CPE/012/4.4/001/32
		Trial 1	Trial 2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)		0.00	10.15
Final Vol. of Na ₂ S ₂ O ₃ (ml)		10.15	20.35
Vol. of Na ₂ S ₂ O ₃ used (ml)		10.15	10.20
Normality of Na ₂ S ₂ O ₃ solution (N)		0.02463	0.02451
Average Normality (N) of Na ₂ S ₂ O ₃ solution (N)		0.02457	
Acceptance criteria, Deviation		Less than ± 0.001N	

Calculation: Normality of Na₂S₂O₃, N = 0.25 / ml Na₂S₂O₃ used

Lineality Checking

Determination of dissolved oxygen content by Winkler Titration *

Purging Time (min)	2		5		10	
	1	2	1	2	1	2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)	0.00	11.40	22.80	0.00	6.60	10.30
Final Vol. of Na ₂ S ₂ O ₃ (ml)	11.40	22.80	29.30	6.60	10.30	14.00
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	11.40	11.40	6.50	6.60	3.70	3.70
Dissolved Oxygen (DO), mg/L	7.52	7.52	4.29	4.35	2.44	2.44
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: DO (mg/L) = V x N x 8000/298

Purging time, min	DO meter reading, mg/L			Winkler Titration result *, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.61	7.20	7.41	7.52	7.52	7.52	1.47
5	4.28	4.75	4.52	4.29	4.35	4.32	4.52
10	2.50	2.49	2.50	2.44	2.44	2.44	2.43
Linear regression coefficient				0.9978			



Internal Calibration Report of Dissolved Oxygen Meter

Zero Point Checking

DO meter reading, mg/L	0.00
------------------------	------

Salinity Checking

Reagent No. of NaCl (10ppt)	CPE/012/4.7/002/29	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/29
-----------------------------	--------------------	-----------------------------	--------------------

Determination of dissolved oxygen content by Winkler Titration **

Salinity (ppt)	10		30	
	1	2	1	2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)	0.00	11.90	23.80	34.40
Final Vol. of Na ₂ S ₂ O ₃ (ml)	11.90	23.80	34.40	44.90
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	11.90	11.90	10.60	10.50
Dissolved Oxygen (DO), mg/L	7.85	7.85	6.99	6.93
Acceptance criteria, Deviation	Less than + 0.3mg/L		Less than + 0.3mg/L	

Calculation: DO (mg/L) = V x N x 8000/298

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result**, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	7.68	7.78	7.73	7.85	7.85	7.85	1.54
30	6.88	6.89	6.89	6.99	6.93	6.96	1.01

Acceptance Criteria

- (1) Difference between temperature readings from temperature sensor of DO probe and reference thermometer : < 0.5 °C
- (2) Linear regression coefficient : >0.99
- (3) Zero checking: 0.0mg/L
- (4) Difference (%) of DO content from the meter reading and by winkler titration : within ± 5%

The equipment complies # / does not comply # with the specified requirements and is deemed acceptable # / unacceptable # for use.

Delete as appropriate

Calibrated by :

Approved by :

Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/005 Manufacturer : HANNA
 Model No. : HI 8314 Serial No. : 8246095
 Date of Calibration : 07/03/2015 Calibration Due Date : 06/04/2015

Liquid Junction Error

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/001/23
 Temperature of Solution : 20.0 $\Delta\text{pH}_{1/2} = +0.08$
 pH value of diluted buffer : 6.78 pH (S) = 6.881
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.101}$ (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.021}$

Shift on Stirring

pH of buffer solution (with stirring), $\text{pH}_s = \underline{6.91}$
 Shift on stirring, $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{0.008}$

Noise

Noise, $\Delta\text{pH}_n =$ difference between max and min reading : 0.00

Verification of ATC


Ref. No. of reference thermometer used: ET/0521/008
 Temperature record from the reference thermometer (T_R): 19.9 °C
 Temperature record from the ATC (T_{ATC}): 19.8 °C
 Temperature Difference, $|T_R - T_{ATC}|$: 0.1 °C


Acceptance Criteria

Performance Characteristic	Acceptable Range
Liquid Junction Error ΔpH_j	≤ 0.05
Shift on Stirring ΔpH_s	≤ 0.02
Noise ΔpH_n	≤ 0.02
Verification of ATC Temperature Difference	$\leq 0.5^\circ\text{C}$

The pH meter complies * / does not comply * with the specified requirements and is deemed acceptable * / unacceptable * for use. Measurements are traceable to national standards.

* Delete as appropriate

Calibrated by : 

Checked by : 



Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/005 Manufacturer : HANNA
 Model No. : HI 8314 Serial No. : 8246095
 Date of Calibration : 07/02/2015 Calibration Due Date : 06/03/2015

Liquid Junction Error

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/001/21
 Temperature of Solution : 20.0 $\Delta pH_{1/2} = \underline{+0.08}$
 pH value of diluted buffer : 6.79 pH (S) = 6.881
 $\Delta pH = pH(S) - pH \text{ of diluted buffer} = \underline{0.091}$ (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta pH - \Delta pH_{1/2} = \underline{0.011}$

Shift on Stirring

pH of buffer solution (with stirring), $pH_s = \underline{6.90}$
 Shift on stirring, $\Delta pH_s = pH_s - pH(S) - \Delta pH_j = \underline{0.008}$

Noise

Noise, $\Delta pH_n = \text{difference between max and min reading} : \underline{0.00}$

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008
 Temperature record from the reference thermometer (T_R): 19.9 °C
 Temperature record from the ATC (T_{ATC}): 20.0 °C
 Temperature Difference, $|T_R - T_{ATC}|$: -0.1 °C

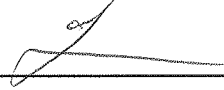
Acceptance Criteria

Performance Characteristic		Acceptable Range
Liquid Junction Error	ΔpH_j	≤ 0.05
Shift on Stirring	ΔpH_s	≤ 0.02
Noise	ΔpH_n	≤ 0.02
Verification of ATC	Temperature Difference	$\leq 0.5^\circ\text{C}$

The pH meter complies * / does not comply * with the specified requirements and is deemed acceptable * / unacceptable * for use. Measurements are traceable to national standards.

* Delete as appropriate

Calibrated by : 

Checked by : 



Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/011 Manufacturer : HACH

Model No. : 2100Q Serial No. : 12060 C 018534

Date of Calibration : 05/01/2015 Due Date : 04/04/2015

Ref. No. of Turbidity Standard used (4000NTU)

005/6.1/001/7

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	19.8	-1.00
100	104	4.00
800	788	-1.50

(*) Difference = (Measured Value – Theoretical Value) / Theoretical Value x 100

Acceptance Criteria

Difference : -5 % to 5 %

The turbidity meter complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use. Measurements are traceable to national standards.

Prepared by : hy

Checked by : [Signature]



輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration 校正證書

Certificate No. : C144558

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC14-1853)

Date of Receipt / 收件日期 : 22 July 2014

Description / 儀器名稱 : Sound Level Meter

Manufacturer / 製造商 : Rion

Model No. / 型號 : NL-31

Serial No. / 編號 : 00603867

Supplied By / 委託者 : Envirotech Services Co.

Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,
Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C

Relative Humidity / 相對濕度 : (55 ± 20)%

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 29 July 2014

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

All results are within manufacturer's specification.

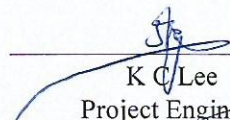
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA
- Agilent Technologies, USA

Tested By :

測試


K C Lee
Project Engineer

Certified By :

核證


K M Wu
Engineer

Date of Issue :

簽發日期

30 July 2014

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

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Sun Creation Engineering Limited - Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗室

c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

Page 1 of 4

Certificate of Calibration

校正證書

Certificate No. : C144558

證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- Self-calibration was performed before the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL280	40 MHz Arbitrary Waveform Generator	C140016
CL281	Multifunction Acoustic Calibrator	DC130171

- Test procedure : MA101N.

- Results :

- 6.1 Sound Pressure Level

- 6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L _A	A	Fast	94.00	1	93.6	± 1.1

- 6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 120	L _A	A	Fast	94.00	1	93.6 (Ref.)
				104.00		103.6
				114.00		113.6

IEC 61672 Class 1 Spec. : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

- 6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L _A	A	Fast	94.00	1	93.6	Ref.
			Slow			93.5	± 0.3

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Certificate of Calibration

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Certificate No. : C144558

證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L _A	A	Fast	94.00	63 Hz	67.3	-26.2 ± 1.5
					125 Hz	77.3	-16.1 ± 1.5
					250 Hz	84.9	-8.6 ± 1.4
					500 Hz	90.3	-3.2 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	94.9	+1.2 ± 1.6
					4 kHz	94.7	+1.0 ± 1.6
					8 kHz	92.5	-1.1 (+2.1 ; -3.1)
					12.5 kHz	89.7	-4.3 (+3.0 ; -6.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L _C	C	Fast	94.00	63 Hz	92.7	-0.8 ± 1.5
					125 Hz	93.4	-0.2 ± 1.5
					250 Hz	93.6	0.0 ± 1.4
					500 Hz	93.6	0.0 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	93.5	-0.2 ± 1.6
					4 kHz	92.9	-0.8 ± 1.6
					8 kHz	90.6	-3.0 (+2.1 ; -3.1)
					12.5 kHz	87.8	-6.2 (+3.0 ; -6.0)

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Certificate of Calibration

校正證書

Certificate No. : C144558
證書編號

Remarks : - UUT Microphone Model No. : UC-53A & S/N : 316987

- Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value : 94 dB : 63 Hz - 125 Hz : ± 0.35 dB
250 Hz - 500 Hz : ± 0.30 dB
1 kHz : ± 0.20 dB
2 kHz - 4 kHz : ± 0.35 dB
8 kHz : ± 0.45 dB
12.5 kHz : ± 0.70 dB
104 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)
114 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)

- The uncertainties are for a confidence probability of not less than 95 %.

Note :

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

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Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 – 校正及檢測實驗室

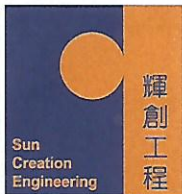
c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



輝創工程有限公司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration

校正證書

Certificate No. : C143980

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC14-1497)

Date of Receipt / 收件日期 : 23 June 2014

Description / 儀器名稱 : Sound Level Calibrator

Manufacturer / 製造商 : Rion

Model No. / 型號 : NC-73

Serial No. / 編號 : 10997142

Supplied By / 委託者 : Envirotech Services Co.

Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,
Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C

Relative Humidity / 相對濕度 : (55 ± 20)%

Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 28 June 2014

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

All results are within manufacturer's specification.

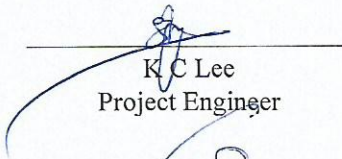
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA
- Agilent Technologies, USA

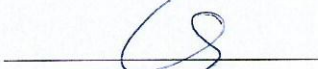
Tested By :

測試


K C Lee
Project Engineer

Certified By :

核證


K M Wu
Engineer

Date of Issue :

簽發日期

2 July 2014

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

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Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 – 校正及檢測實驗室

c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



Certificate of Calibration 校正證書

Certificate No. : C143980
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL130	Universal Counter	C143868
CL281	Multifunction Acoustic Calibrator	DC130171
TST150A	Measuring Amplifier	C141558

- Test procedure : MA100N.

- Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.7	± 0.5	± 0.2

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	0.987	1 kHz ± 2 %	± 1

Remark : The uncertainties are for a confidence probability of not less than 95 %.

Note :

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

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ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 24, 2015 Rootmeter S/N 0438320 Ta (K) - 292
 Operator Tisch Orifice I.D. - 2454 Pa (mm) - 756.92

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.4460	3.2	2.00
2	NA	NA	1.00	1.0300	6.4	4.00
3	NA	NA	1.00	0.9180	7.9	5.00
4	NA	NA	1.00	0.8780	8.7	5.50
5	NA	NA	1.00	0.7240	12.6	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
1.0121	0.6999	1.4258	0.9958	0.6886	0.8784
1.0078	0.9785	2.0163	0.9916	0.9627	1.2422
1.0057	1.0955	2.2543	0.9895	1.0779	1.3888
1.0047	1.1443	2.3644	0.9885	1.1258	1.4566
0.9994	1.3805	2.8515	0.9833	1.3582	1.7568
Qstd slope (m) = 2.09532			Qa slope (m) = 1.31205		
intercept (b) = -0.03812			intercept (b) = -0.02349		
coefficient (r) = 0.99994			coefficient (r) = 0.99994		
y axis = SQRT[H2O(Pa/760) (298/Ta)]			y axis = SQRT[H2O(Ta/Pa)]		

CALCULATIONS

Vstd = Diff. Vol [(Pa-Diff. Hg) / 760] (298/Ta)
 Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg) / Pa]
 Qa = Va/Time

For subsequent flow rate calculations:

Qstd = 1/m { [SQRT(H2O(Pa/760) (298/Ta))] - b }
 Qa = 1/m { [SQRT H2O(Ta/Pa)] - b }



TISCH ENVIRONMENTAL, INC.
 145 SOUTH MIAMI AVE
 VILLAGE OF CLEVELAND, OH
 45002
 513.467.9000
 877.263.7610 TOLL FREE
 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 24, 2014 Rootmeter S/N 0438320 Ta (K) - 293
 Operator Tisch Orifice I.D. - 2454 Pa (mm) - 758.19

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.4740	3.2	2.00
2	NA	NA	1.00	1.0340	6.4	4.00
3	NA	NA	1.00	0.9240	7.9	5.00
4	NA	NA	1.00	0.8820	8.8	5.50
5	NA	NA	1.00	0.7270	12.7	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
1.0103	0.6854	1.4245	0.9958	0.6755	0.8791
1.0061	0.9730	2.0146	0.9916	0.9590	1.2433
1.0040	1.0866	2.2524	0.9895	1.0709	1.3900
1.0028	1.1370	2.3623	0.9884	1.1206	1.4579
0.9976	1.3722	2.8491	0.9832	1.3524	1.7583
Qstd slope (m)	=	2.07593	Qa slope (m)	=	1.29991
intercept (b)	=	-0.00102	intercept (b)	=	-0.00063
coefficient (r)	=	0.99996	coefficient (r)	=	0.99996
y axis = SQRT[H2O(Pa/760)(298/Ta)]			y axis = SQRT[H2O(Ta/Pa)]		

CALCULATIONS

Vstd = Diff. Vol [(Pa-Diff. Hg)/760] (298/Ta)
 Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]
 Qa = Va/Time

For subsequent flow rate calculations:

Qstd = 1/m{ [SQRT(H2O(Pa/760)(298/Ta))] - b}
 Qa = 1/m{ [SQRT H2O(Ta/Pa)] - b}

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR8(A)
 Calibrated by : P.F. Yeung
 Date : 28/03/2015

Sampler

Model : TE-5170
 Serial Number : S/N 3956

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 24 Mar 2015
 Slope (m) : 2.09532
 Intercept (b) : -0.03812
 Correlation Coefficient(r) : 0.99994

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1024
 Ta(K) : 292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	10.6	3.307	1.596	60	60.94
2	13 holes	8.2	2.909	1.406	54	54.85
3	10 holes	6.2	2.529	1.225	49	49.77
4	7 holes	4.0	2.031	0.988	41	41.64
5	5 holes	2.4	1.574	0.769	34	34.53

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 31.890 Intercept(b): 10.177 Correlation Coefficient(r): 0.9996

Checked by: Magnum Fan

Date: 01/04/2015

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR9
 Calibrated by : P.F. Yeung
 Date : 28/03/2015

Sampler

Model : TE-5170
 Serial Number : S/N 3958

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 24 Mar 2015
 Slope (m) : 2.09532
 Intercept (b) : -0.03812
 Correlation Coefficient(r) : 0.99994

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1024
 Ta(K) : 292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	10.4	3.276	1.581	53	53.83
2	13 holes	8.4	2.944	1.423	48	48.75
3	10 holes	5.5	2.382	1.155	41	41.64
4	7 holes	3.6	1.927	0.938	34	34.53
5	5 holes	2.2	1.507	0.737	28	28.44

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 29.862 Intercept(b): 6.593 Correlation Coefficient(r): 0.9994

Checked by: Magnum Fan

Date: 01/04/2015

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR8(A)
 Calibrated by : P.F. Yeung
 Date : 28/01/2015

Sampler

Model : TE-5170
 Serial Number : S/N 3956

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 24 Mar 2014
 Slope (m) : 2.07593
 Intercept (b) : -0.00102
 Correlation Coefficient(r) : 0.99996

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1018
 Ta(K) : 293

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.6	3.443	1.659	56	56.62
2	13 holes	9.6	3.132	1.509	51	51.56
3	10 holes	7.1	2.694	1.298	45	45.49
4	7 holes	4.6	2.168	1.045	37	37.41
5	5 holes	2.8	1.692	0.815	29	29.32

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 31.968 Intercept(b): 3.625 Correlation Coefficient(r): 0.9994

Checked by: Magnum Fan

Date: 31/01/2015

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR9
 Calibrated by : P.F. Yeung
 Date : 28/01/2015

Sampler

Model : TE-5170
 Serial Number : S/N 3958

Calibration Orifice and Standard Calibration Relationship

Serial Number : 2454
 Service Date : 24 Mar 2014
 Slope (m) : 2.07593
 Intercept (b) : -0.00102
 Correlation Coefficient(r) : 0.99996

Standard Condition

Pstd (hpa) : 1013
 Tstd (K) : 298.18

Calibration Condition

Pa (hpa) : 1018
 Ta(K) : 293

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.5	3.428	1.652	55	55.60
2	13 holes	9.7	3.149	1.517	50	50.55
3	10 holes	6.8	2.636	1.270	42	42.46
4	7 holes	4.6	2.168	1.045	35	35.38
5	5 holes	2.8	1.692	0.815	28	28.31

Notes: $Z = \sqrt{dH(Pa/Pstd)(Tstd/Ta)}$, $X = Z/m - b$, $Y(\text{Corrected Flow}) = IC * \{\sqrt{Pa/Pstd}(Tstd/Ta)\}$

Sampler Calibration Relationship (Linear Regression)

Slope(m): 32.439 Intercept(b): 1.587 Correlation Coefficient(r): 0.9995

Checked by: Magnum Fan

Date: 31/01/2015

Appendix F

EM&A Monitoring Schedules

**HY/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Marine Water Quality Monitoring (WQM) Schedule (March 15)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Mar	02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar
		WQM Mid-Ebb 12:12 (10:27 - 13:57) Mid-Flood 17:39 (15:54 - 19:24)		WQM Mid-Ebb 13:02 (11:17 - 14:47) Mid-Flood 18:53 (17:08 - 20:38)		WQM Mid-Flood 8:08 (06:23 - 09:53) Mid-Ebb 13:56 (12:11 - 15:41)
08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar
		WQM Mid-Flood 9:21 (07:36 - 11:06) Mid-Ebb 15:35 (13:50 - 17:20)		WQM Mid-Flood 10:21 (08:36 - 12:06) Mid-Ebb 17:05 (15:20 - 18:50)		WQM Mid-Flood 11:56 (10:11 - 13:41) Mid-Ebb 19:27 (17:42 - 21:12)
15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar
		WQM Mid-Ebb 11:04 (09:19 - 12:49) Mid-Flood 16:16 (14:31 - 18:01)		WQM Mid-Ebb 12:27 (10:42 - 14:12) Mid-Flood 18:08 (16:23 - 19:53)		WQM Mid-Flood 7:40 (05:55 - 09:25) Mid-Ebb 13:45 (12:00 - 15:30)
22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar
		WQM Mid-Flood 9:17 (07:32 - 11:02) Mid-Ebb 15:53 (14:08 - 17:38)		WQM Mid-Flood 10:27 (08:42 - 12:12) Mid-Ebb 17:35 (15:50 - 19:20)		WQM Mid-Flood 7:36 (05:51 - 09:21) Mid-Ebb 20:18 (18:33 - 22:03)
29-Mar	30-Mar	31-Mar				
		WQM Mid-Ebb 11:21 (09:36 - 13:06) Mid-Flood 16:46 (15:01 - 18:31)				

**HY/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Marine Water Quality Monitoring (WQM) Schedule (April 15)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Apr	02-Apr	03-Apr	04-Apr
				WQM Mid-Ebb 12:11 (10:26 - 13:56) Mid-Flood 18:08 (16:23 - 19:53)		WQM Mid-Ebb 13:04 (11:19 - 14:49) Mid-Flood 19:21 (17:36 - 21:06)
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
		WQM Mid-Flood 8:15 (06:30 - 10:00) Mid-Ebb 14:36 (12:51 - 16:21)		WQM Mid-Flood 9:14 (07:29 - 10:59) Mid-Ebb 15:53 (14:08 - 17:38)		WQM Mid-Flood 10:29 (08:44 - 12:14) Mid-Ebb 17:40 (15:55 - 19:25)
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
		WQM Mid-Ebb 9:53 (08:08 - 11:38) Mid-Flood 14:57 (13:12 - 16:42)		WQM Mid-Ebb 11:25 (09:40 - 13:10) Mid-Flood 17:08 (15:23 - 18:53)		WQM Mid-Ebb 12:43 (10:58 - 14:28) Mid-Flood 18:57 (17:12 - 20:42)
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
		WQM Mid-Flood 8:08 (06:23 - 09:53) Mid-Ebb 14:48 (13:03 - 16:33)		WQM Mid-Flood 9:16 (07:31 - 11:01) Mid-Ebb 16:16 (14:27 - 17:57)		WQM Mid-Flood 10:33 (08:48 - 12:18) Mid-Ebb 17:57 (16:12 - 19:42)
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr		
		WQM Mid-Ebb 10:07 (08:22 - 11:52) Mid-Flood 15:25 (13:40 - 17:10)		WQM Mid-Ebb 11:14 (09:29 - 12:59) Mid-Flood 17:11 (15:26 - 18:56)		

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Tentative Impact Noise Monitoring Schedule (1 to 31 March 2015)**

Alternative Noise Monitoring at Pak Mong Village Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Mar	02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar
			Noise Impact Monitoring			
08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar
		Noise Impact Monitoring				
15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar
	Noise Impact Monitoring			Noise Impact Monitoring		
22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar
			Noise Impact Monitoring			
29-Mar	30-Mar	31-Mar				
		Noise Impact Monitoring				

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Tentative Impact Air Quality Monitoring Schedule (1 to 31 March 2015)**

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Mar	02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar
			1-hr TSP Monitoring 24-hr TSP Monitoring			
08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar
		1-hr TSP Monitoring 24-hr TSP Monitoring				
15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar
	1-hr TSP Monitoring 24-hr TSP Monitoring			1-hr TSP Monitoring 24-hr TSP Monitoring		
22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar
			1-hr TSP Monitoring 24-hr TSP Monitoring			
29-Mar	30-Mar	31-Mar				
		1-hr TSP Monitoring 24-hr TSP Monitoring				

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Tentative Impact Noise Monitoring Schedule (1 to 30 April 2015)**

Alternative Noise Monitoring at Pak Mong Village Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Apr	02-Apr	03-Apr	04-Apr
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
Noise Impact Monitoring				Noise Impact Monitoring		
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
			Noise Impact Monitoring			
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
		Noise Impact Monitoring				
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr		
Noise Impact Monitoring				Noise Impact Monitoring		

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Tentative Impact Air Quality Monitoring Schedule (1 to 30 April 2015)**

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Mar	02-Mar	03-Mar	01-Apr	02-Apr	03-Apr	04-Apr
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
1-hr TSP Monitoring 24-hr TSP Monitoring				1-hr TSP Monitoring 24-hr TSP Monitoring		
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
			1-hr TSP Monitoring 24-hr TSP Monitoring			
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
		1-hr TSP Monitoring 24-hr TSP Monitoring				
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr		
1-hr TSP Monitoring 24-hr TSP Monitoring				1-hr TSP Monitoring 24-hr TSP Monitoring		

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Dolphin Monitoring Survey Schedule (1 to 31 March 2015)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Mar	02-Mar	03-Mar	04-Mar	05-Mar	06-Mar	07-Mar
			Impact Dolphin Monitoring			
08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar
			Impact Dolphin Monitoring			
15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar	21-Mar
		Impact Dolphin Monitoring				
22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar	28-Mar
				Impact Dolphin Monitoring		
29-Mar	30-Mar	31-Mar				

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Dolphin Monitoring Survey Schedule (1 to 30 April 2015)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Apr	02-Apr	03-Apr	04-Apr
05-Apr	06-Apr	07-Apr	08-Apr	09-Apr	10-Apr	11-Apr
			Impact Dolphin Monitoring			
12-Apr	13-Apr	14-Apr	15-Apr	16-Apr	17-Apr	18-Apr
		Impact Dolphin Monitoring			Impact Dolphin Monitoring	
19-Apr	20-Apr	21-Apr	22-Apr	23-Apr	24-Apr	25-Apr
			Impact Dolphin Monitoring			
26-Apr	27-Apr	28-Apr	29-Apr	30-Apr		

The schedule is subject to agreement from the EPD on the monitoring times. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

Appendix G

Impact Air Quality
Monitoring Results and
Graphical Presentation

1-hour TSP Monitoring Results at Air Quality Monitoring Station ASR8A

Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Parameter	Results (ug/m3)	Action Level (ug/m3)	Limit Level (ug/m3)		
TMCLKL	HY/2012/07	2015-03-04	ASR8A	8:27	1-hr TSP	108	394	500		
TMCLKL	HY/2012/07	2015-03-04	ASR8A	9:29	1-hr TSP	68				
TMCLKL	HY/2012/07	2015-03-04	ASR8A	10:31	1-hr TSP	83				
TMCLKL	HY/2012/07	2015-03-10	ASR8A	8:30	1-hr TSP	83				
TMCLKL	HY/2012/07	2015-03-10	ASR8A	9:32	1-hr TSP	75				
TMCLKL	HY/2012/07	2015-03-10	ASR8A	10:34	1-hr TSP	65				
TMCLKL	HY/2012/07	2015-03-16	ASR8A	8:25	1-hr TSP	82				
TMCLKL	HY/2012/07	2015-03-16	ASR8A	9:27	1-hr TSP	58				
TMCLKL	HY/2012/07	2015-03-16	ASR8A	10:29	1-hr TSP	60				
TMCLKL	HY/2012/07	2015-03-19	ASR8A	8:22	1-hr TSP	75				
TMCLKL	HY/2012/07	2015-03-19	ASR8A	9:24	1-hr TSP	60				
TMCLKL	HY/2012/07	2015-03-19	ASR8A	10:26	1-hr TSP	88				
TMCLKL	HY/2012/07	2015-03-25	ASR8A	8:10	1-hr TSP	139				
TMCLKL	HY/2012/07	2015-03-25	ASR8A	9:12	1-hr TSP	100				
TMCLKL	HY/2012/07	2015-03-25	ASR8A	10:14	1-hr TSP	156				
TMCLKL	HY/2012/07	2015-03-31	ASR8A	8:20	1-hr TSP	111				
TMCLKL	HY/2012/07	2015-03-31	ASR8A	9:22	1-hr TSP	88				
TMCLKL	HY/2012/07	2015-03-31	ASR8A	10:24	1-hr TSP	84				
				Average		88				
				Min.		58				
				Max.		156				

1-hour TSP Monitoring Results at Air Quality Monitoring Station ASR9

Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Parameter	Results (ug/m3)	Action Level (ug/m3)	Limit Level (ug/m3)		
TMCLKL	HY/2012/07	2015-03-04	ASR9	8:38	1-hr TSP	63	393	500		
TMCLKL	HY/2012/07	2015-03-04	ASR9	9:40	1-hr TSP	60				
TMCLKL	HY/2012/07	2015-03-04	ASR9	10:42	1-hr TSP	64				
TMCLKL	HY/2012/07	2015-03-10	ASR9	8:42	1-hr TSP	121				
TMCLKL	HY/2012/07	2015-03-10	ASR9	9:44	1-hr TSP	101				
TMCLKL	HY/2012/07	2015-03-10	ASR9	10:46	1-hr TSP	109				
TMCLKL	HY/2012/07	2015-03-16	ASR9	8:36	1-hr TSP	120				
TMCLKL	HY/2012/07	2015-03-16	ASR9	9:38	1-hr TSP	76				
TMCLKL	HY/2012/07	2015-03-16	ASR9	10:40	1-hr TSP	89				
TMCLKL	HY/2012/07	2015-03-19	ASR9	8:33	1-hr TSP	87				
TMCLKL	HY/2012/07	2015-03-19	ASR9	9:35	1-hr TSP	72				
TMCLKL	HY/2012/07	2015-03-19	ASR9	10:37	1-hr TSP	83				
TMCLKL	HY/2012/07	2015-03-25	ASR9	8:20	1-hr TSP	235				
TMCLKL	HY/2012/07	2015-03-25	ASR9	9:22	1-hr TSP	135				
TMCLKL	HY/2012/07	2015-03-25	ASR9	10:24	1-hr TSP	187				
TMCLKL	HY/2012/07	2015-03-31	ASR9	8:31	1-hr TSP	161				
TMCLKL	HY/2012/07	2015-03-31	ASR9	9:33	1-hr TSP	95				
TMCLKL	HY/2012/07	2015-03-31	ASR9	10:35	1-hr TSP	96				
				Average		109				
				Min.		60				
				Max.		235				

24-hour TSP Monitoring Results at Air Quality Monitoring Station ASR8A

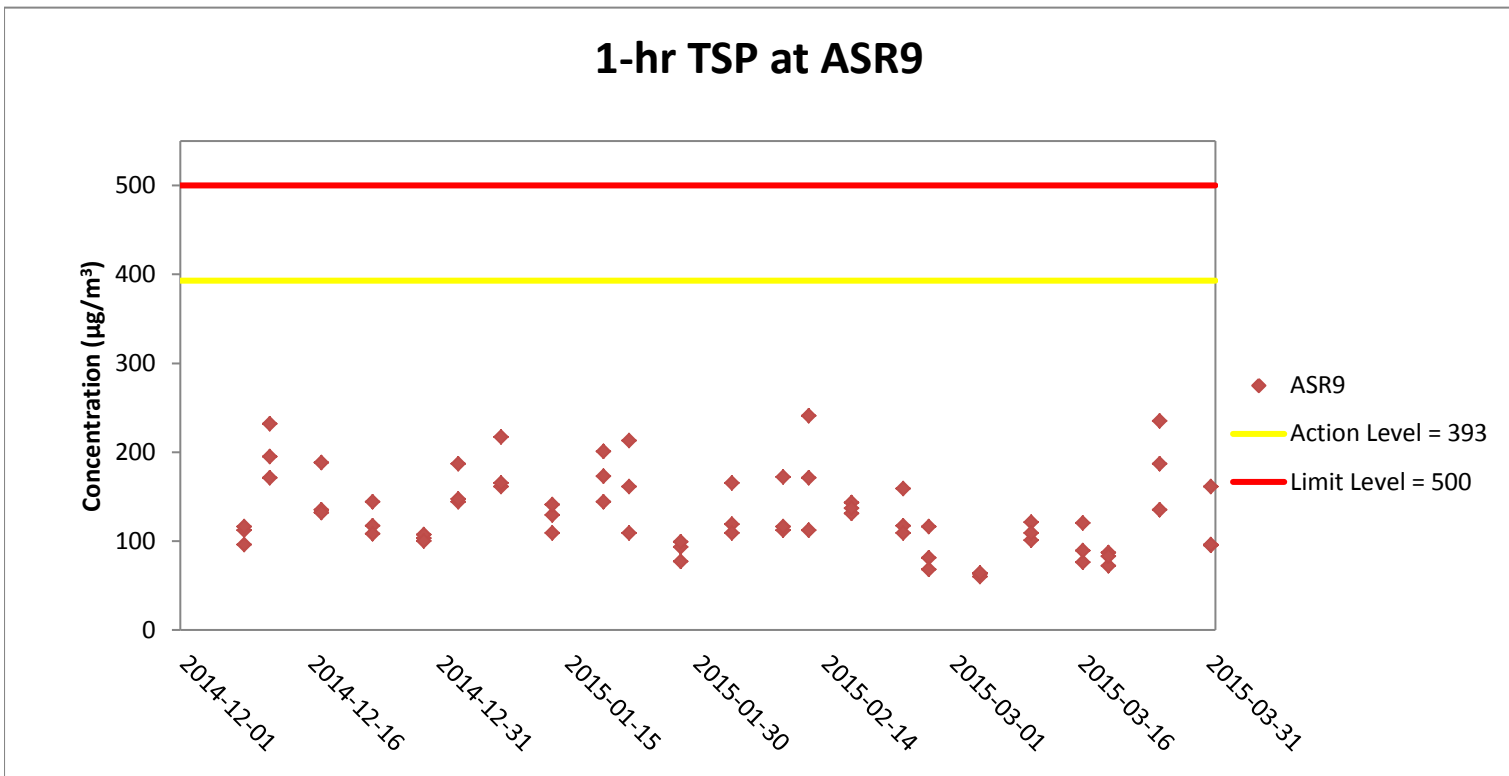
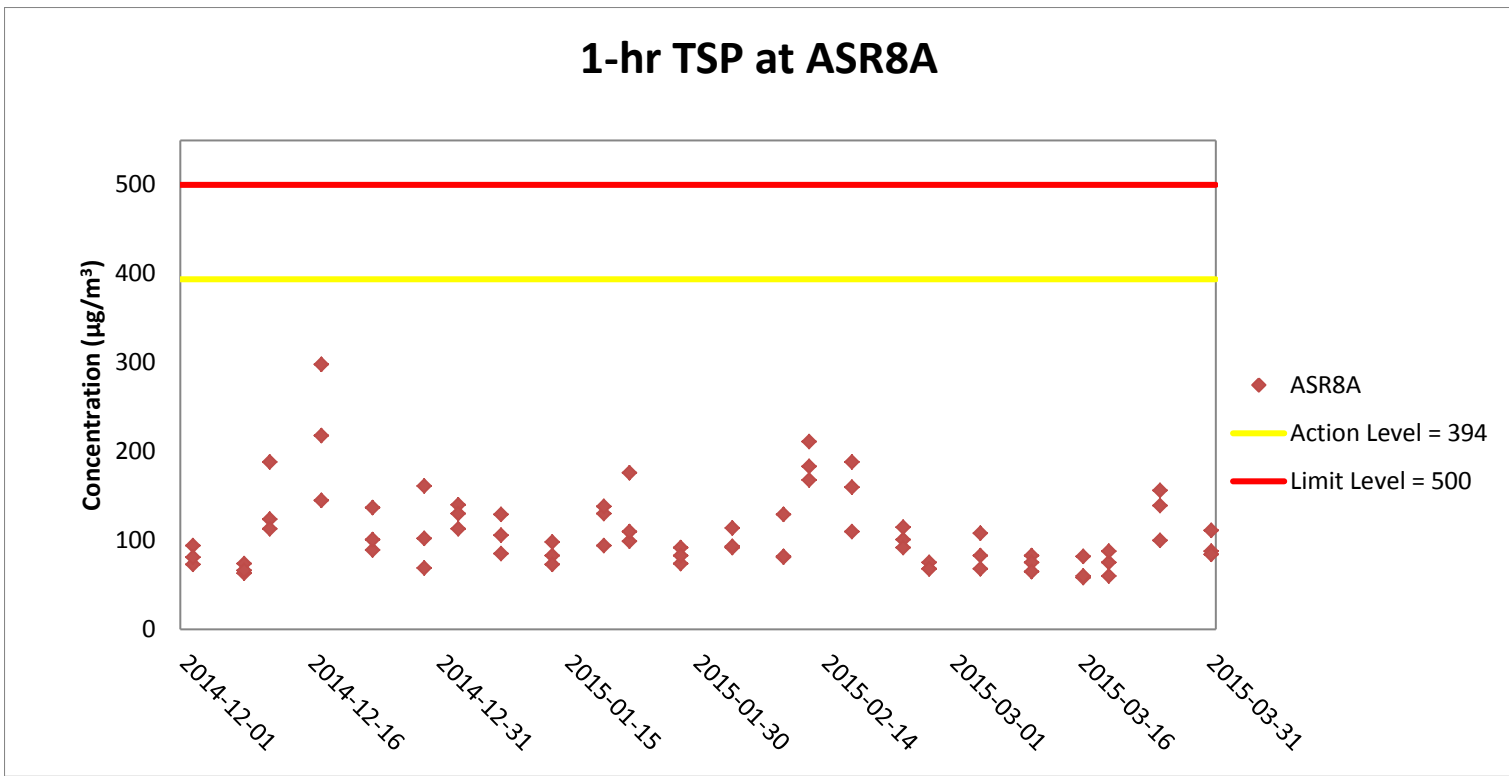
Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Parameter	Results (ug/m3)	Action Level (ug/m3)	Limit Level (ug/m3)
TMCLKL	HY/2012/07	2015-03-04	ASR8A	11:33	24-hr TSP	57	178	260
TMCLKL	HY/2012/07	2015-03-10	ASR8A	11:36	24-hr TSP	76		
TMCLKL	HY/2012/07	2015-03-16	ASR8A	11:31	24-hr TSP	49		
TMCLKL	HY/2012/07	2015-03-19	ASR8A	11:28	24-hr TSP	43		
TMCLKL	HY/2012/07	2015-03-25	ASR8A	11:16	24-hr TSP	72		
TMCLKL	HY/2012/07	2015-03-31	ASR8A	11:26	24-hr TSP	47		
						Average	57	
						Min.	43	
						Max.	76	

24-hour TSP Monitoring Results at Air Quality Monitoring Station ASR9

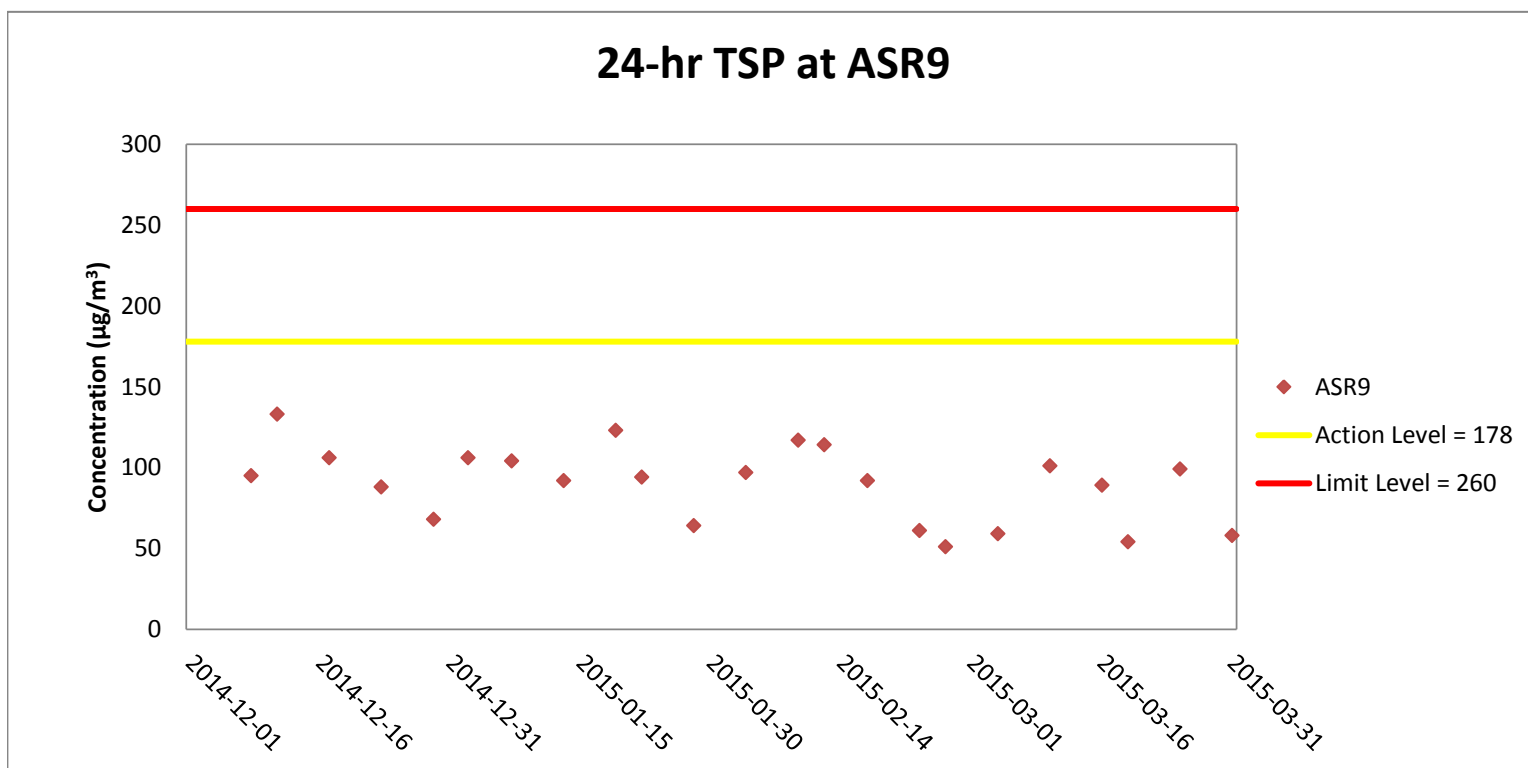
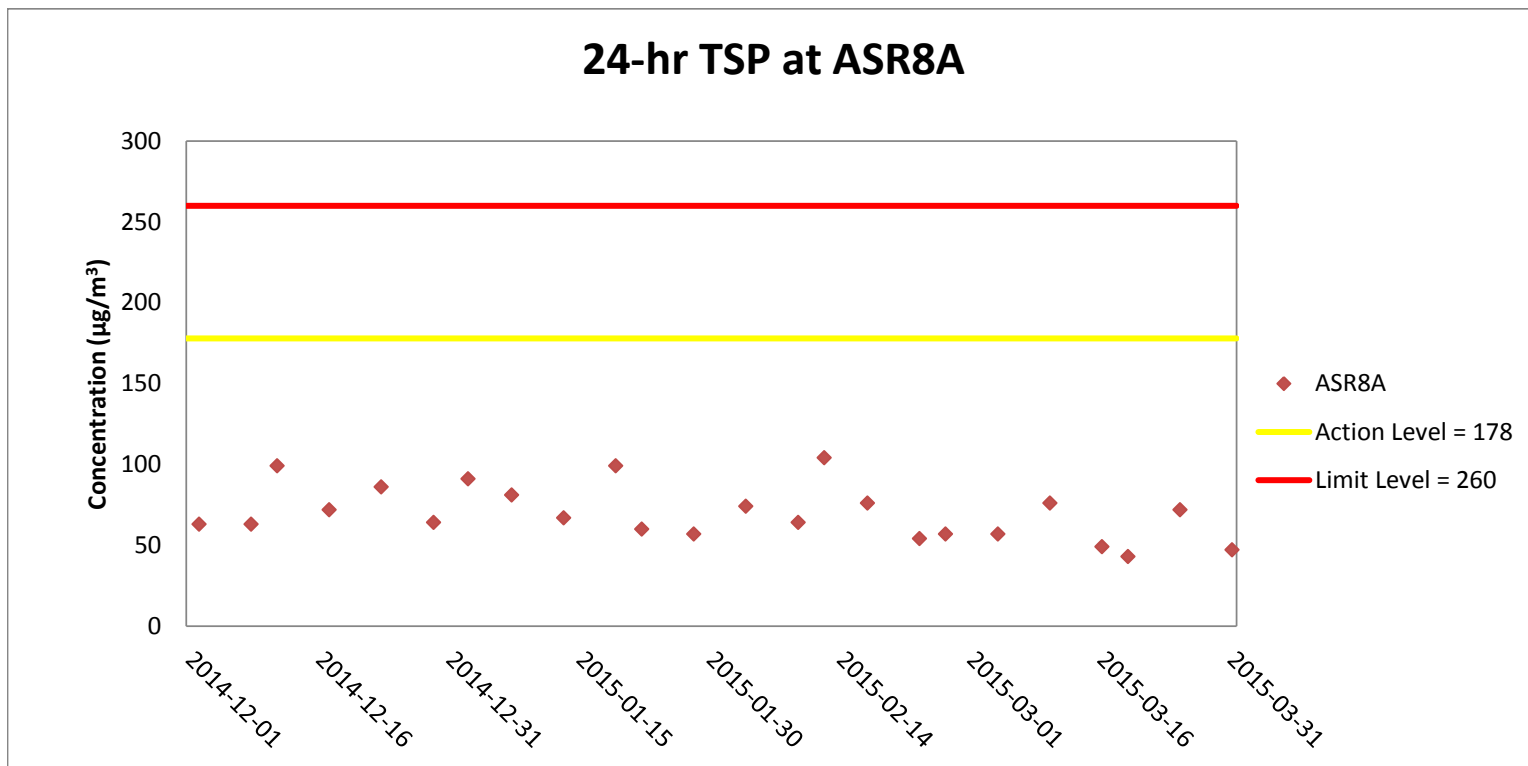
Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Parameter	Results (ug/m3)	Action Level (ug/m3)	Limit Level (ug/m3)
TMCLKL	HY/2012/07	2015-03-04	ASR9	11:44	24-hr TSP	59	178	260
TMCLKL	HY/2012/07	2015-03-10	ASR9	11:48	24-hr TSP	101		
TMCLKL	HY/2012/07	2015-03-16	ASR9	10:40	24-hr TSP	89		
TMCLKL	HY/2012/07	2015-03-19	ASR9	11:39	24-hr TSP	54		
TMCLKL	HY/2012/07	2015-03-25	ASR9	11:26	24-hr TSP	99		
TMCLKL	HY/2012/07	2015-03-31	ASR9	11:37	24-hr TSP	58		
						Average	77	
						Min.	54	
						Max.	101	

Action Level Exceedance

Limit Level Exceedance



Weather condition within the reporting period varied between sunny to rainy.
 Major construction works undertaken within the reporting period include Construction of pile cap superstructure of Viaduct B; Channel reconstruction at Area 1; Land Piling at Viaducts B, C & D; Pre-drilling works at Viaduct A; Construction of pile cap at Viaducts B, C, D & E; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.
 Marine works within the reporting period include Construction of Pile caps at Viaducts B, C, D & E; Marine piling platform installation & uninstallation; Marine Piling at Viaducts C & E; and Additional marine ground investigation (GI) and laboratory testing.
 TSP monitoring at ASR8 on 2 December was cancelled due to rejection of access to monitoring station.



Weather condition within the reporting period varied between sunny to rainy.

Major construction works undertaken within the reporting period include Construction of pile cap superstructure of Viaduct B; Channel reconstruction at Area 1; Land Piling at Viaducts B, C & D; Pre-drilling works at Viaduct A; Construction of pile cap at Viaducts B, C, D & E; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

Marine works within the reporting period include Construction of Pile caps at Viaducts B, C, D & E; Marine piling platform installation & uninstallation; Marine Piling at Viaducts C & E; and Additional marine ground investigation (GI) and laboratory testing.

TSP monitoring at ASR8 on 2 December was cancelled due to rejection of access to monitoring station.

Appendix H

Meteorological Data for the Reporting Month

Date	Time	Wind speed (m/s)	Wind direction (deg)
04-03-2015	7:00	0.07	86
04-03-2015	8:00	0.26	69
04-03-2015	9:00	1.41	159
04-03-2015	10:00	3.37	160
04-03-2015	11:00	2.14	155
04-03-2015	12:00	0.69	128
04-03-2015	13:00	0.73	150
04-03-2015	14:00	2.21	181
04-03-2015	15:00	2.96	163
04-03-2015	16:00	3.06	167
04-03-2015	17:00	2.52	161
04-03-2015	18:00	3.39	166
04-03-2015	19:00	4.46	173
04-03-2015	20:00	4.20	165
04-03-2015	21:00	4.55	168
04-03-2015	22:00	2.77	150
04-03-2015	23:00	2.50	161
05-03-2015	0:00	4.04	168
05-03-2015	1:00	4.36	168
05-03-2015	2:00	5.97	165
05-03-2015	3:00	7.13	164
05-03-2015	4:00	5.21	172
05-03-2015	5:00	7.83	166
05-03-2015	6:00	7.66	162
05-03-2015	7:00	7.98	173
05-03-2015	8:00	8.59	169
05-03-2015	9:00	8.13	172
05-03-2015	10:00	4.30	155
05-03-2015	11:00	5.91	161
05-03-2015	12:00	5.50	163
10-03-2015	7:00	5.63	161
10-03-2015	8:00	4.25	154
10-03-2015	9:00	3.61	165
10-03-2015	10:00	1.94	153
10-03-2015	11:00	1.35	139
10-03-2015	12:00	2.70	154
10-03-2015	13:00	1.48	140
10-03-2015	14:00	1.31	138
10-03-2015	15:00	1.48	146
10-03-2015	16:00	0.87	156
10-03-2015	17:00	0.88	177
10-03-2015	18:00	0.29	189
10-03-2015	19:00	0.26	178
10-03-2015	20:00	1.81	169
10-03-2015	21:00	2.52	183
10-03-2015	22:00	2.56	170
10-03-2015	23:00	1.85	181
11-03-2015	0:00	1.60	189
11-03-2015	1:00	1.02	206
11-03-2015	2:00	0.61	159

Date	Time	Wind speed (m/s)	Wind direction (deg)
11-03-2015	3:00	2.14	175
11-03-2015	4:00	1.64	185
11-03-2015	5:00	0.43	206
11-03-2015	6:00	1.06	168
11-03-2015	7:00	1.26	149
11-03-2015	8:00	0.75	124
11-03-2015	9:00	0.66	130
11-03-2015	10:00	0.14	89
11-03-2015	11:00	2.01	160
11-03-2015	12:00	0.73	174
16-03-2015	7:00	5.08	161
16-03-2015	8:00	5.11	167
16-03-2015	9:00	5.98	177
16-03-2015	10:00	5.59	185
16-03-2015	11:00	5.10	181
16-03-2015	12:00	2.91	182
16-03-2015	13:00	3.78	183
16-03-2015	14:00	4.13	178
16-03-2015	15:00	4.49	172
16-03-2015	16:00	4.61	160
16-03-2015	17:00	4.29	168
16-03-2015	18:00	4.65	170
16-03-2015	19:00	3.47	175
16-03-2015	20:00	2.13	173
16-03-2015	21:00	0.98	177
16-03-2015	22:00	0.56	206
16-03-2015	23:00	0.90	198
17-03-2015	0:00	0.83	181
17-03-2015	1:00	0.64	178
17-03-2015	2:00	0.19	189
17-03-2015	3:00	0.13	208
17-03-2015	4:00	0.74	174
17-03-2015	5:00	0.74	175
17-03-2015	6:00	0.19	198
17-03-2015	7:00	0.62	193
17-03-2015	8:00	1.50	162
17-03-2015	9:00	2.77	146
17-03-2015	10:00	3.07	126
17-03-2015	11:00	1.13	134
17-03-2015	12:00	0.79	165
19-03-2015	7:00	2.06	151
19-03-2015	8:00	2.40	156
19-03-2015	9:00	1.87	166
19-03-2015	10:00	1.73	165
19-03-2015	11:00	1.97	151
19-03-2015	12:00	2.45	146
19-03-2015	13:00	3.24	152
19-03-2015	14:00	3.62	157
19-03-2015	15:00	4.46	165
19-03-2015	16:00	3.26	167

Date	Time	Wind speed (m/s)	Wind direction (deg)
19-03-2015	17:00	2.67	176
19-03-2015	18:00	2.00	176
19-03-2015	19:00	0.52	169
19-03-2015	20:00	1.37	155
19-03-2015	21:00	1.99	163
19-03-2015	22:00	1.04	157
19-03-2015	23:00	1.43	168
20-03-2015	0:00	0.97	167
20-03-2015	1:00	0.21	153
20-03-2015	2:00	0.07	161
20-03-2015	3:00	0.05	156
20-03-2015	4:00	0.24	146
20-03-2015	5:00	0.13	120
20-03-2015	6:00	0.17	231
20-03-2015	7:00	0.78	151
20-03-2015	8:00	1.70	176
20-03-2015	9:00	1.59	179
20-03-2015	10:00	3.38	185
20-03-2015	11:00	3.37	184
20-03-2015	12:00	2.49	198
25-03-2015	7:00	1.00	150
25-03-2015	8:00	0.69	159
25-03-2015	9:00	0.62	156
25-03-2015	10:00	0.83	146
25-03-2015	11:00	1.46	162
25-03-2015	12:00	1.79	180
25-03-2015	13:00	0.92	182
25-03-2015	14:00	0.51	207
25-03-2015	15:00	0.64	167
25-03-2015	16:00	0.93	149
25-03-2015	17:00	1.82	163
25-03-2015	18:00	0.68	176
25-03-2015	19:00	2.06	169
25-03-2015	20:00	1.73	166
25-03-2015	21:00	0.53	145
25-03-2015	22:00	0.39	107
25-03-2015	23:00	0.27	127
26-03-2015	0:00	0.18	116
26-03-2015	1:00	0.43	170
26-03-2015	2:00	0.17	147
26-03-2015	3:00	0.04	123
26-03-2015	4:00	0.03	120
26-03-2015	5:00	0.09	134
26-03-2015	6:00	0.05	137
26-03-2015	7:00	0.05	138
26-03-2015	8:00	0.04	182
26-03-2015	9:00	0.06	169
26-03-2015	10:00	0.05	309
26-03-2015	11:00	0.03	143
26-03-2015	12:00	0.06	288

Date	Time	Wind speed (m/s)	Wind direction (deg)
31-03-2015	7:00	1.92	182
31-03-2015	8:00	1.02	174
31-03-2015	9:00	1.38	168
31-03-2015	10:00	2.10	176
31-03-2015	11:00	2.43	167
31-03-2015	12:00	3.04	175
31-03-2015	13:00	3.52	170
31-03-2015	14:00	3.28	162
31-03-2015	15:00	3.76	174
31-03-2015	16:00	1.74	153
31-03-2015	17:00	2.83	199
31-03-2015	18:00	3.32	197
31-03-2015	19:00	3.02	191
31-03-2015	20:00	1.50	205
31-03-2015	21:00	1.26	199
31-03-2015	22:00	0.48	211
31-03-2015	23:00	1.51	173
01-04-2015	0:00	2.03	178
01-04-2015	1:00	1.81	179
01-04-2015	2:00	1.20	159
01-04-2015	3:00	0.66	194
01-04-2015	4:00	0.76	169
01-04-2015	5:00	1.33	185
01-04-2015	6:00	0.62	216
01-04-2015	7:00	1.51	187
01-04-2015	8:00	2.72	175
01-04-2015	9:00	2.26	186
01-04-2015	10:00	1.06	164
01-04-2015	11:00	1.85	153
01-04-2015	12:00	1.83	161

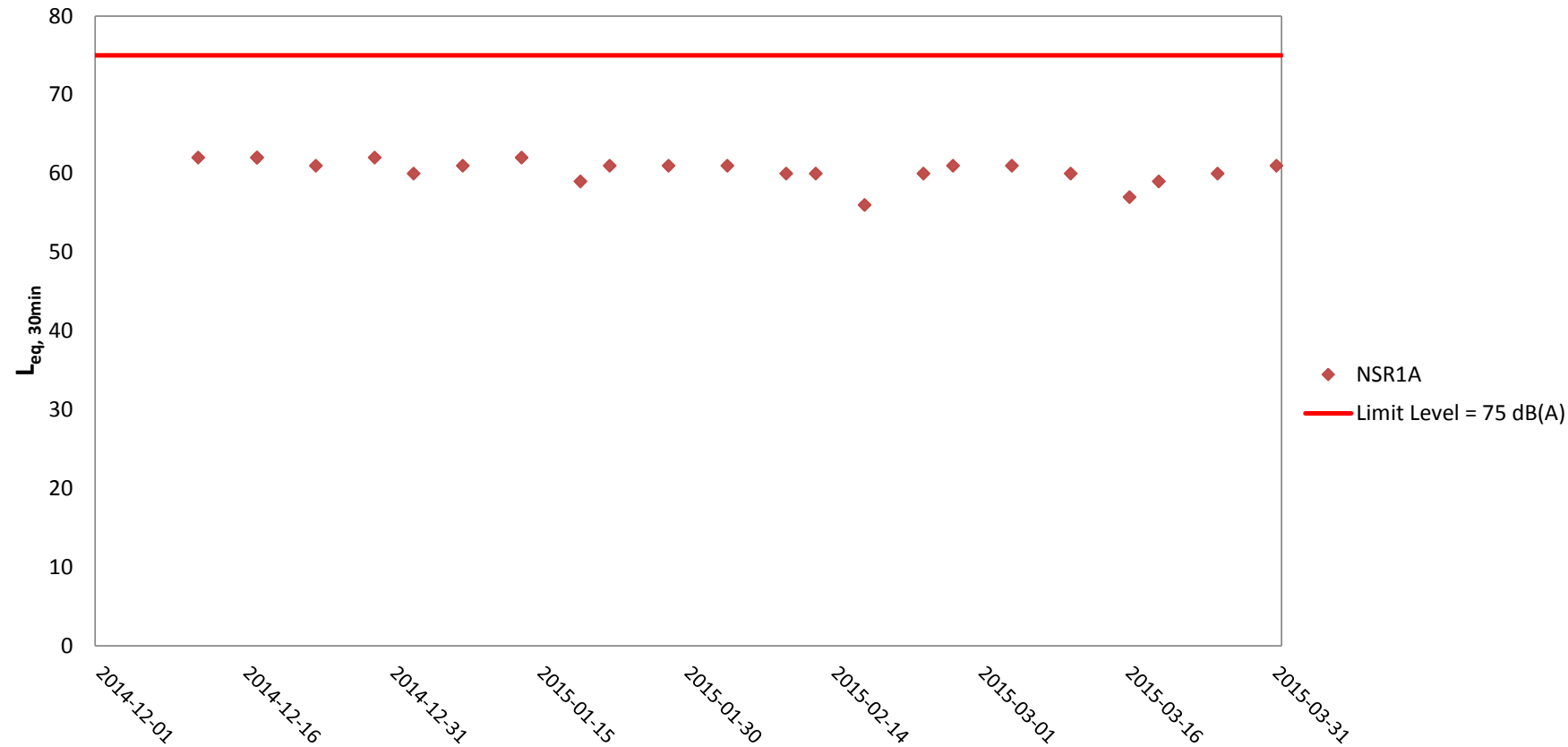
Appendix I

Impact Noise Monitoring Results and Graphical Presentation

Appendix II Noise Monitoring Results

Project	Works	Date (yyyy-mm-dd)	Station	Weather Condition	Time (hh:mm, 24hour)	Noise Level for 30-min, dB(A)			Limit Level dB(A)	Wind Speed (m/s)	Noise Meter Model/ID	Calibrator Model/ID
						Leq	L10	L90				
TMCLKL	HY/2012/07	2015-03-04	NSR1A	Cloudy	9:52	61	63	57	75	2.5	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2015-03-10	NSR1A	Cloudy	9:55	60	62	55	75	0.8	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2015-03-16	NSR1A	Cloudy	9:50	57	60	52	75	1.6	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2015-03-19	NSR1A	Sunny	9:47	59	62	53	75	0.7	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2015-03-25	NSR1A	Cloudy	10:36	60	64	54	75	0.8	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2015-03-31	NSR1A	Sunny	10:47	61	64	55	75	0.6	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
						Min.	57					
						Max.	61					
						Average	60					

Noise Monitoring Results at NSR 1A ($L_{eq, 30min}$)



Weather condition within the reporting period varied between sunny to rainy.

Major construction works undertaken within the reporting period include Construction of pile cap superstructure of Viaduct B; Channel re-construction at Area 1; Land Piling at Viaducts B, C & D; Pre-drilling works at Viaduct A; Construction of pile cap at Viaducts B, C, D & E; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slopes 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

Marine works within the reporting period include Construction of Pile caps at Viaducts B, C, D & E; Marine piling platform installation & uninstallation; Marine Piling at Viaducts C & E; and Additional marine ground investigation (GI) and laboratory testing.

Noise monitoring at NSR1 on 2 December 2014 was cancelled due to rejection of access to monitoring station.

Appendix J

Impact Water Quality Monitoring Results and Graphical Presentation

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)5	15:54	Surface	1	1	17	8.2	27.2	7.05	10.2	15.4
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)5	15:54	Surface	1	2	17.1	8.19	27.1	7.08	10.5	16.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)5	15:54	Middle	2	1	17.1	8.22	27.2	6.89	11.8	17.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)5	15:54	Middle	2	2	17.2	8.23	27.3	6.91	11.9	17.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)5	15:54	Bottom	3	1	17.2	8.2	27.3	6.79	12.7	19.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)5	15:54	Bottom	3	2	17.1	8.22	27.3	6.82	12.1	18.3
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4a	16:17	Surface	1	1	17.1	8.2	27.1	7.08	12.6	18.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4a	16:17	Surface	1	2	17	8.21	27	7.06	12.4	18
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4a	16:17	Middle	2	1						
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4a	16:17	Middle	2	2						
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4a	16:17	Bottom	3	1	17.3	8.22	27.2	6.91	13.1	19.1
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4a	16:17	Bottom	3	2	17.2	8.23	27.3	6.93	13	18.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4	16:33	Surface	1	1	17	8.18	27.1	6.99	12.1	17
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4	16:33	Surface	1	2	16.9	8.19	27	6.97	11.9	17.3
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4	16:33	Middle	2	1						
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4	16:33	Middle	2	2						
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4	16:33	Bottom	3	1	17.1	8.19	27	6.71	15.1	21.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	SR4	16:33	Bottom	3	2	17	8.2	27	6.68	14.6	20.9
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS8	16:52	Surface	1	1	17.1	8.12	27.1	6.91	11.1	16
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS8	16:52	Surface	1	2	17.1	8.13	27.2	6.94	11.4	16.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS8	16:52	Middle	2	1						
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS8	16:52	Middle	2	2						
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS8	16:52	Bottom	3	1	17.1	8.16	27.2	6.82	15.1	21.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS8	16:52	Bottom	3	2	17	8.17	27.3	6.86	15.3	22.3
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)16	17:11	Surface	1	1	16.9	8.18	26.8	6.82	10.6	15.4
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)16	17:11	Surface	1	2	17	8.17	26.9	6.87	10.5	14.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)16	17:11	Middle	2	1	17	8.2	27.1	6.62	12.4	17.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)16	17:11	Middle	2	2	17.1	8.19	27.2	6.64	12.7	18.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)16	17:11	Bottom	3	1	17.1	8.21	27.1	6.52	15.6	22.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)16	17:11	Bottom	3	2	17	8.22	27.2	6.58	15.1	21.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)9	17:34	Surface	1	1	17	8.18	27.1	7.08	11.8	16.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)9	17:34	Surface	1	2	16.9	8.19	27	7.11	11.6	16.4
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)9	17:34	Middle	2	1						
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)9	17:34	Middle	2	2						
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)9	17:34	Bottom	3	1	17.1	8.2	27.2	6.89	15.1	22.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	IS(Mf)9	17:34	Bottom	3	2	17	8.21	27.1	6.84	14.4	21.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)3	18:10	Surface	1	1	17.1	8.18	27	7.06	11.3	16.3

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)3	18:10	Surface	1	2	17	8.19	27.1	7.09	11.1	16.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)3	18:10	Middle	2	1	17.1	8.16	27.2	6.78	13.2	19.3
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)3	18:10	Middle	2	2	17.2	8.17	27.2	6.82	13.6	19.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)3	18:10	Bottom	3	1	17.2	8.2	27.3	6.72	15.1	22.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Flood	CS(Mf)3	18:10	Bottom	3	2	17.2	8.19	27.2	6.74	14.7	21.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)3	10:57	Surface	1	1	17.1	8.14	26.9	6.93	12.4	18.7
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)3	18:10	Surface	1	2	17.2	8.15	27	6.9	12.5	18.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)3	18:10	Middle	2	1	17.2	8.15	27	6.7	14.3	21
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)3	18:10	Middle	2	2	17.3	8.16	26.9	6.74	14.4	21.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)3	18:10	Bottom	3	1	17.3	8.15	27.1	6.65	15.8	24
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)3	18:10	Bottom	3	2	17.2	8.16	27.2	6.61	15.9	24.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4a	13:07	Surface	1	1	17.2	8.18	26.9	6.94	12.9	18.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4a	16:17	Surface	1	2	17.1	8.19	27	6.91	13	18.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4a	16:17	Middle	2	1						
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4a	16:17	Middle	2	2						
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4a	16:17	Bottom	3	1	17.2	8.2	27.1	6.83	14.9	21.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4a	16:17	Bottom	3	2	17.3	8.21	27.2	6.8	15.1	21.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4	12:41	Surface	1	1	17.1	8.17	26.9	6.84	13.3	19.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4	16:33	Surface	1	2	17	8.16	27	6.8	13.2	19
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4	16:33	Middle	2	1						
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4	16:33	Middle	2	2						
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4	16:33	Bottom	3	1	17.1	8.17	27.1	6.59	17.8	25.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	SR4	16:33	Bottom	3	2	17.2	8.18	27.2	6.56	17.7	24.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS8	12:15	Surface	1	1	17.1	8.18	26.9	6.86	12.1	16.9
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS8	16:52	Surface	1	2	17.1	8.17	27	6.84	12.2	17.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS8	16:52	Middle	2	1						
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS8	16:52	Middle	2	2						
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS8	16:52	Bottom	3	1	17.2	8.18	27.2	6.7	15.9	22.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS8	16:52	Bottom	3	2	17.2	8.19	27.1	6.73	16	22.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)16	11:49	Surface	1	1	17	8.17	26.9	6.77	11.7	16.9
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)16	17:11	Surface	1	2	17.1	8.18	27	6.74	11.6	16.4
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)16	17:11	Middle	2	1	17.1	8.18	27.1	6.53	13.5	19.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)16	17:11	Middle	2	2	17.2	8.19	27.2	6.5	13.6	19.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)16	17:11	Bottom	3	1	17.3	8.19	27.2	6.46	16.3	23.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)16	17:11	Bottom	3	2	17.2	8.2	27.3	6.5	16.5	24.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)9	11:23	Surface	1	1	17	8.16	26.9	6.98	12.5	17.5
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)9	17:34	Surface	1	2	17.1	8.15	27	7.01	12.6	18

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)9	17:34	Middle	2	1						
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)9	17:34	Middle	2	2						
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)9	17:34	Bottom	3	1	17.2	8.17	27	6.76	18.8	26.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	IS(Mf)9	17:34	Bottom	3	2	17.1	8.18	27.1	6.8	19	27.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)5	13:37	Surface	1	1	17.1	8.19	27.1	6.99	11.3	16.3
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)5	15:54	Surface	1	2	17.2	8.18	27	7.03	11.2	15.8
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)5	15:54	Middle	2	1	17.2	8.19	27.1	6.78	12.7	18.6
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)5	15:54	Middle	2	2	17.3	8.2	27.2	6.82	12.6	18.2
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)5	15:54	Bottom	3	1	17.3	8.2	27.3	6.71	13.9	21
TMCLKL	HY/2012/07	03-03-2015	Mid-Ebb	CS(Mf)5	15:54	Bottom	3	2	17.2	8.21	27.2	6.74	13.8	20.2
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)5	17:08	Surface	1	1	16.9	8.05	27.2	6.99	11.4	15.8
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)5	17:08	Surface	1	2	16.9	8.06	27.2	7.02	11.5	15.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)5	17:08	Middle	2	1	17.1	8.16	27.4	6.93	12.7	12.3
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)5	17:08	Middle	2	2	17.1	8.16	27.3	6.95	12.8	12.3
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)5	17:08	Bottom	3	1	17.3	8.21	27.4	6.8	13.5	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)5	17:08	Bottom	3	2	17.3	8.22	27.5	6.83	13.6	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4a	17:30	Surface	1	1	17	8.1	26.9	7.05	11.9	15.8
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4a	17:30	Surface	1	2	17.1	8.11	26.9	7.07	12	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4a	17:30	Middle	2	1						
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4a	17:30	Middle	2	2						
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4a	17:30	Bottom	3	1	17.1	8.25	27.1	6.83	13.8	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4a	17:30	Bottom	3	2	17.2	8.23	27.2	6.86	14	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4	17:52	Surface	1	1	17.1	8.02	26.9	7.03	14.4	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4	17:52	Surface	1	2	17.1	8.01	26.8	7	14.5	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4	17:52	Middle	2	1						
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4	17:52	Middle	2	2						
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4	17:52	Bottom	3	1	17.2	8.13	27.2	6.84	17.9	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	SR4	17:52	Bottom	3	2	17.3	8.13	27	6.82	18	11.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS8	18:14	Surface	1	1	16.9	7.92	27.2	7.14	13.1	14.2
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS8	18:14	Surface	1	2	16.9	7.93	27	7.17	13.2	14.6
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS8	18:14	Middle	2	1						
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS8	18:14	Middle	2	2						
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS8	18:14	Bottom	3	1	17.1	8.07	27.1	6.93	16.7	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS8	18:14	Bottom	3	2	17.1	8.05	27.2	6.95	16.9	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)16	18:36	Surface	1	1	16.9	8.12	27.1	7.22	12.1	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)16	18:36	Surface	1	2	17	8.13	27	7.19	12.2	11.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)16	18:36	Middle	2	1	17	7.99	27.1	7.06	15.5	11.9

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)16	18:36	Middle	2	2	17.1	7.98	27.3	7.08	15.6	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)16	18:36	Bottom	3	1	17.2	7.85	27.3	6.83	17.1	11.6
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)16	18:36	Bottom	3	2	17.2	7.84	27.3	6.87	16.9	12.5
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)9	18:58	Surface	1	1	17.1	8.05	26.9	7.15	11.8	12.3
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)9	18:58	Surface	1	2	17.1	8.06	27	7.18	11.9	12.3
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)9	18:58	Middle	2	1						
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)9	18:58	Middle	2	2						
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)9	18:58	Bottom	3	1	17.2	8.1	27.4	6.85	16.7	14.1
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	IS(Mf)9	18:58	Bottom	3	2	17.2	8.11	27.3	6.88	16.7	13.2
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)3	19:20	Surface	1	1	17.2	7.93	27	7.11	12.4	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)3	19:20	Surface	1	2	17	7.94	27	7.15	12.4	11.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)3	19:20	Middle	2	1	17.2	8	27.1	6.94	15.7	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)3	19:20	Middle	2	2	17.3	8.01	27.3	6.97	15.8	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)3	19:20	Bottom	3	1	17.3	8.08	27.3	6.84	17.2	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Flood	CS(Mf)3	19:20	Bottom	3	2	17.4	8.08	27.4	6.82	17.3	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)3	11:47	Surface	1	1	17.1	7.92	27.1	6.99	12.6	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)3	11:47	Surface	1	2	17.2	7.94	27.1	7.01	12.4	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)3	11:47	Middle	2	1	17.3	7.99	27.2	6.84	15.8	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)3	11:47	Middle	2	2	17.2	8.01	27.3	6.82	16	11.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)3	11:47	Bottom	3	1	17.4	8.06	27.4	6.73	17.3	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)3	11:47	Bottom	3	2	17.4	8.07	27.5	6.7	17.5	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4a	13:55	Surface	1	1	17.1	8.11	27	6.94	12	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4a	13:55	Surface	1	2	17.1	8.13	26.9	6.96	12.2	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4a	13:55	Middle	2	1						
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4a	13:55	Middle	2	2						
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4a	13:55	Bottom	3	1	17.2	8.24	27.2	6.73	13.9	14.6
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4a	13:55	Bottom	3	2	17.3	8.22	27.3	6.75	14.1	14.1
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4	13:31	Surface	1	1	17.1	8.03	27	6.92	14.5	12.3
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4	13:31	Surface	1	2	17.2	8.01	26.9	6.9	14.7	11.4
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4	13:31	Middle	2	1						
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4	13:31	Middle	2	2						
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4	13:31	Bottom	3	1	17.3	8.12	27.1	6.73	18	12.3
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	SR4	13:31	Bottom	3	2	17.3	8.14	27.2	6.71	18.2	11.4
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS8	13:05	Surface	1	1	16.9	7.93	27.1	7.03	13.2	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS8	13:05	Surface	1	2	17	7.95	27.2	7.05	13.4	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS8	13:05	Middle	2	1						
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS8	13:05	Middle	2	2						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS8	13:05	Bottom	3	1	17.1	8.06	27.3	6.82	16.8	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS8	13:05	Bottom	3	2	17.2	8.04	27.4	6.8	17	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)16	12:39	Surface	1	1	17	8.11	27.1	7.11	12.2	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)16	12:39	Surface	1	2	17	8.13	27.1	7.09	12.4	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)16	12:39	Middle	2	1	17.1	8	27.2	6.95	15.6	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)16	12:39	Middle	2	2	17.2	7.98	27.3	6.93	15.8	12.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)16	12:39	Bottom	3	1	17.3	7.86	27.4	6.72	17.2	13.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)16	12:39	Bottom	3	2	17.4	7.84	27.5	6.74	17	14.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)9	12:13	Surface	1	1	17	8.06	27	7.03	11.9	11.9
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)9	12:13	Surface	1	2	17.1	8.08	27.1	7.05	12.1	12.1
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)9	12:13	Middle	2	1						
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)9	12:13	Middle	2	2						
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)9	12:13	Bottom	3	1	17.2	8.11	27.3	6.73	16.8	11.4
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	IS(Mf)9	12:13	Bottom	3	2	17.3	8.13	27.4	6.75	17	13.2
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)5	14:24	Surface	1	1	17	8.06	27.1	6.89	11.5	12.3
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)5	14:24	Surface	1	2	17.1	8.08	27.2	6.91	11.7	11.4
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)5	14:24	Middle	2	1	17.2	8.15	27.3	6.82	12.8	14.1
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)5	14:24	Middle	2	2	17.3	8.17	27.4	6.84	13	14.1
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)5	14:24	Bottom	3	1	17.4	8.22	27.5	6.69	13.6	15.8
TMCLKL	HY/2012/07	05-03-2015	Mid-Ebb	CS(Mf)5	14:24	Bottom	3	2	17.4	8.24	27.6	6.71	13.7	12.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)5	7:35	Surface	1	1	17	8.12	27.1	7.13	10.7	12.8
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)5	7:35	Surface	1	2	17.1	8.14	27.2	7.15	10.9	13.1
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)5	7:35	Middle	2	1	17.2	8.17	27.3	6.92	11.3	17
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)5	7:35	Middle	2	2	17.3	8.15	27.3	6.94	11.5	16.1
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)5	7:35	Bottom	3	1	17.4	8.03	27.4	6.83	12.4	14.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)5	7:35	Bottom	3	2	17.4	8.01	27.5	6.85	12.6	16.4
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4a	7:55	Surface	1	1	17.1	7.94	27	7.26	12.4	14.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4a	7:55	Surface	1	2	17.2	7.96	27.1	7.28	12.2	15.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4a	7:55	Middle	2	1						
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4a	7:55	Middle	2	2						
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4a	7:55	Bottom	3	1	17.3	8.06	27.2	7.11	13.5	21.6
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4a	7:55	Bottom	3	2	17.3	8.08	27.3	7.09	13.7	20.6
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4	8:15	Surface	1	1	17.1	8.06	27	6.99	12.5	16.3
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4	8:15	Surface	1	2	17	8.08	27	7.01	12.7	19.1
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4	8:15	Middle	2	1						
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4	8:15	Middle	2	2						
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4	8:15	Bottom	3	1	17.3	7.94	27.1	6.86	13	18.2

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	SR4	8:15	Bottom	3	2	17.4	7.96	27.2	6.88	13.2	17.2
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS8	8:35	Surface	1	1	17	7.86	27.1	7.12	11.3	14.7
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS8	8:35	Surface	1	2	17	7.88	27.2	7.14	11.5	17.3
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS8	8:35	Middle	2	1						
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS8	8:35	Middle	2	2						
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS8	8:35	Bottom	3	1	17.1	7.94	27.3	7.02	12.3	16
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS8	8:35	Bottom	3	2	17.2	7.96	27.3	7.04	12.5	15
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)16	8:55	Surface	1	1	17.1	8.09	27	6.87	10.7	15
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)16	8:55	Surface	1	2	17.2	8.11	27.1	6.89	10.9	15.3
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)16	8:55	Middle	2	1	17.3	8.2	27.2	6.73	11.4	18.2
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)16	8:55	Middle	2	2	17.4	8.18	27.3	6.71	11.6	17.4
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)16	8:55	Bottom	3	1	17.5	7.94	27.4	6.64	12.7	15.2
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)16	8:55	Bottom	3	2	17.5	7.96	27.5	6.66	12.9	16.8
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)9	9:15	Surface	1	1	16.9	7.9	27.1	7.12	13.6	19
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)9	9:15	Surface	1	2	17	7.92	27	7.14	13.4	17.4
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)9	9:15	Middle	2	1						
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)9	9:15	Middle	2	2						
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)9	9:15	Bottom	3	1	17.1	8.03	27.2	7.02	11.7	16.4
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	IS(Mf)9	9:15	Bottom	3	2	17.2	8.05	27.3	7.04	11.9	17.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)3	9:35	Surface	1	1	17.1	8.03	27.1	7.26	12.9	18.1
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)3	9:35	Surface	1	2	17.2	8.05	27.2	7.28	13.1	19.7
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)3	9:35	Middle	2	1	17.3	8.11	27.3	7.13	14.7	20.6
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)3	9:35	Middle	2	2	17.4	8.13	27.4	7.11	14.9	19.4
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)3	9:35	Bottom	3	1	17.4	7.94	27.5	7	15.4	21.6
TMCLKL	HY/2012/07	07-03-2015	Mid-Flood	CS(Mf)3	9:35	Bottom	3	2	17.5	7.96	27.5	7.02	15.2	22.8
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)3	12:11	Surface	1	1	17.1	8.07	27.2	7.15	13.2	21.1
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)3	12:11	Surface	1	2	17.2	8.06	27.1	7.17	13.4	20.1
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)3	12:11	Middle	2	1	17.2	8.12	27.3	7.08	14.9	19.4
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)3	12:11	Middle	2	2	17.3	8.13	27.3	7.05	15.2	22.8
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)3	12:11	Bottom	3	1	17.4	8.02	27.4	7.01	15.8	23.7
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)3	12:11	Bottom	3	2	17.3	8.03	27.5	6.96	15.6	20.3
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4a	14:02	Surface	1	1	17.2	8.01	27.1	7.11	13.9	20.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4a	14:02	Surface	1	2	17.1	8.02	27.1	7.08	13.7	21.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4a	14:02	Middle	2	1						
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4a	14:02	Middle	2	2						
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4a	14:02	Bottom	3	1	17.3	8.07	27.3	7.03	14.1	21.2
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4a	14:02	Bottom	3	2	17.2	8.08	27.3	7.06	14.4	20.2

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4	13:39	Surface	1	1	17	8.09	27.1	6.93	13.1	19.7
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4	13:39	Surface	1	2	17.1	8.1	27	6.91	13.3	18.6
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4	13:39	Middle	2	1						
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4	13:39	Middle	2	2						
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4	13:39	Bottom	3	1	17.2	8.02	27.2	6.76	13.8	20.7
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	SR4	13:39	Bottom	3	2	17.3	8.03	27.3	6.71	14.1	18.3
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS8	13:19	Surface	1	1	17.1	7.91	27.2	7.02	11.9	17.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS8	13:19	Surface	1	2	17.2	7.92	27.3	7.04	12.3	16
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS8	13:19	Middle	2	1						
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS8	13:19	Middle	2	2						
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS8	13:19	Bottom	3	1	17.2	8.01	27.3	7.08	13.4	18.8
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS8	13:19	Bottom	3	2	17.3	8.02	27.2	7.09	13.7	16.4
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)16	12:57	Surface	1	1	17.2	8.12	27.1	6.81	11.8	14.2
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)16	12:57	Surface	1	2	17.3	8.13	27.2	6.85	11.7	17.6
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)16	12:57	Middle	2	1	17.2	8.17	27.2	6.69	12.1	16.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)16	12:57	Middle	2	2	17.3	8.18	27.3	6.66	12.3	18.5
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)16	12:57	Bottom	3	1	17.4	8.08	27.4	6.52	12.9	15.5
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)16	12:57	Bottom	3	2	17.3	8.09	27.5	6.54	13.2	19.8
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)9	12:36	Surface	1	1	17.1	7.98	27.1	7.01	13.8	22.1
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)9	12:36	Surface	1	2	17.2	7.97	27.2	7.03	13.9	18.1
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)9	12:36	Middle	2	1						
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)9	12:36	Middle	2	2						
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)9	12:36	Bottom	3	1	17.3	8.07	27.4	6.99	12.2	19.5
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	IS(Mf)9	12:36	Bottom	3	2	17.4	8.08	27.3	6.96	12.5	17.5
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)5	14:31	Surface	1	1	17.2	8.16	27.3	7.01	11.8	16.5
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)5	14:31	Surface	1	2	17.1	8.17	27.2	7.06	11.6	13.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)5	14:31	Middle	2	1	17.2	8.15	27.4	7.13	12.8	19.2
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)5	14:31	Middle	2	2	17.2	8.14	27.3	7.17	12.5	18.9
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)5	14:31	Bottom	3	1	17.2	8.07	27.4	7.08	14	21
TMCLKL	HY/2012/07	07-03-2015	Mid-Ebb	CS(Mf)5	14:31	Bottom	3	2	17.3	8.08	27.5	7.04	13.7	16.4
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)5	8:06	Surface	1	1	16.9	8.18	27.2	7.19	9.8	11.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)5	8:06	Surface	1	2	17	8.2	27.3	7.21	10	16
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)5	8:06	Middle	2	1	17.1	8.23	27.3	6.98	10.4	13.5
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)5	8:06	Middle	2	2	17.2	8.22	27.4	7	10.6	14.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)5	8:06	Bottom	3	1	17.2	8.09	27.6	6.89	11.5	17.3
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)5	8:06	Bottom	3	2	17.3	8.11	27.5	6.91	11.7	16.4
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4a	8:32	Surface	1	1	17	8	27.1	7.32	11.5	15

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4a	8:32	Surface	1	2	17.1	8.02	27.2	7.34	11.3	18.1
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4a	8:32	Middle	2	1						
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4a	8:32	Middle	2	2						
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4a	8:32	Bottom	3	1	17.3	8.12	27.3	7.17	12.6	17.6
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4a	8:32	Bottom	3	2	17.2	8.14	27.4	7.15	12.8	20.5
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4	8:58	Surface	1	1	17.1	8.12	27.1	7.05	11.6	17.4
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4	8:58	Surface	1	2	17.2	8.14	27	7.07	11.8	14.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4	8:58	Middle	2	1						
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4	8:58	Middle	2	2						
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4	8:58	Bottom	3	1	17.5	8	27.2	6.92	12.1	18.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	SR4	8:58	Bottom	3	2	17.4	8.02	27.3	6.94	12.3	18.5
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS8	9:24	Surface	1	1	17.1	7.92	27.2	7.18	10.4	15.6
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS8	9:24	Surface	1	2	17	7.94	27.3	7.2	10.6	14.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS8	9:24	Middle	2	1						
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS8	9:24	Middle	2	2						
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS8	9:24	Bottom	3	1	17.2	8	27.3	7.08	11.4	16
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS8	9:24	Bottom	3	2	17.3	8.01	27.4	7.1	11.6	17.4
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)16	9:50	Surface	1	1	17.2	8.15	27.1	6.93	9.8	13.7
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)16	9:50	Surface	1	2	17.3	8.17	27.2	6.95	10	15
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)16	9:50	Middle	2	1	17.5	8.26	27.4	6.79	10.5	14.7
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)16	9:50	Middle	2	2	17.4	8.24	27.3	6.77	10.7	16.1
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)16	9:50	Bottom	3	1	17.5	8.01	27.5	6.7	11.8	15.3
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)16	9:50	Bottom	3	2	17.6	8.03	27.6	6.72	12	16.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)9	10:16	Surface	1	1	17.1	7.96	27.1	7.18	12.7	20.3
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)9	10:16	Surface	1	2	17.1	7.98	27.2	7.2	12.5	17.5
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)9	10:16	Middle	2	1						
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)9	10:16	Middle	2	2						
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)9	10:16	Bottom	3	1	17.3	8.09	27.3	7.08	10.8	14
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	IS(Mf)9	10:16	Bottom	3	2	17.4	8.11	27.4	7.1	11	13.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)3	10:46	Surface	1	1	17.2	8.09	27.3	7.32	12	19.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)3	10:46	Surface	1	2	17.3	8.11	27.2	7.34	12.2	17.1
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)3	10:46	Middle	2	1	17.4	8.17	27.4	7.19	13.8	16.6
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)3	10:46	Middle	2	2	17.3	8.19	27.5	7.17	14	18.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)3	10:46	Bottom	3	1	17.5	8	27.6	7.06	14.5	23.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Flood	CS(Mf)3	10:46	Bottom	3	2	17.6	8.02	27.5	7.08	14.3	17.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)3	13:50	Surface	1	1	17.4	8.13	27.3	7.28	12.8	19.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)3	13:50	Surface	1	2	17.5	8.14	27.4	7.25	13.1	17

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)3	13:50	Middle	2	1	17.3	8.16	27.5	7.12	14.5	21.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)3	13:50	Middle	2	2	17.4	8.17	27.5	7.14	14.7	22.1
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)3	13:50	Bottom	3	1	17.2	8.09	27.6	7.01	14.8	19.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)3	13:50	Bottom	3	2	17.2	8.1	27.5	6.98	14.9	20.9
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4a	15:31	Surface	1	1	17.2	8.1	27.3	7.22	11.9	14.3
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4a	15:31	Surface	1	2	17.1	8.09	27.4	7.19	12.3	16
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4a	15:31	Middle	2	1						
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4a	15:31	Middle	2	2						
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4a	15:31	Bottom	3	1	17.2	8.16	27.5	7.09	13.8	19.3
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4a	15:31	Bottom	3	2	17.3	8.17	27.6	7.12	13.4	18.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4	15:11	Surface	1	1	17.2	8.16	27.2	6.92	11.9	19
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4	15:11	Surface	1	2	17.3	8.17	27.3	6.94	12.3	16
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4	15:11	Middle	2	1						
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4	15:11	Middle	2	2						
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4	15:11	Bottom	3	1	17.2	8.06	27.4	6.79	12.8	19.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	SR4	15:11	Bottom	3	2	17.1	8.07	27.4	6.82	13.1	15.7
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS8	14:52	Surface	1	1	17.2	7.96	27.3	7.12	12.4	17.4
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS8	14:52	Surface	1	2	17.1	7.95	27.4	7.1	12.1	18.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS8	14:52	Middle	2	1						
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS8	14:52	Middle	2	2						
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS8	14:52	Bottom	3	1	17.2	8.03	27.6	7.01	11.8	16.5
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS8	14:52	Bottom	3	2	17.3	8.04	27.7	7.02	12.1	18.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)16	14:33	Surface	1	1	17.3	8.19	27.3	6.86	10.8	15.1
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)16	14:33	Surface	1	2	17.4	8.2	27.4	6.81	10.6	13.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)16	14:33	Middle	2	1	17.2	8.27	27.5	6.62	11.2	14.6
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)16	14:33	Middle	2	2	17.3	8.28	27.5	6.65	11.3	13.6
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)16	14:33	Bottom	3	1	17.2	8.11	27.5	6.61	12.3	16
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)16	14:33	Bottom	3	2	17.1	8.1	27.6	6.59	12.6	16.4
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)9	14:26	Surface	1	1	17.2	7.99	27.2	7.11	13.1	21
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)9	14:26	Surface	1	2	17.2	7.98	27.1	7.07	13.7	19.2
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)9	14:26	Middle	2	1						
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)9	14:26	Middle	2	2						
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)9	14:26	Bottom	3	1	17.1	8.12	27.4	6.97	11.2	15.7
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	IS(Mf)9	14:26	Bottom	3	2	17	8.13	27.5	6.94	11.5	15
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)5	15:58	Surface	1	1	17.1	8.22	27.3	7.08	10.9	15.3
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)5	15:58	Surface	1	2	17	8.23	27.2	7.06	11.2	16.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)5	15:58	Middle	2	1	17.2	8.25	27.4	6.82	11.6	17.4

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)5	15:58	Middle	2	2	17.3	8.26	27.4	6.86	11.9	16.7
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)5	15:58	Bottom	3	1	17.4	8.16	27.6	6.71	12.3	14.8
TMCLKL	HY/2012/07	10-03-2015	Mid-Ebb	CS(Mf)5	15:58	Bottom	3	2	17.4	8.17	27.7	6.75	12.7	16.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)5	9:40	Surface	1	1	17	8.06	27	7.16	10.8	14.4
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)5	9:40	Surface	1	2	17	8.08	27.1	7.14	10.5	14
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)5	9:40	Middle	2	1	17.1	8.12	27.2	7.05	11.2	16.4
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)5	9:40	Middle	2	2	17.2	8.14	27.3	7.07	11	15.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)5	9:40	Bottom	3	1	17.3	8.22	27.4	6.94	12	16.9
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)5	9:40	Bottom	3	2	17.4	8.2	27.4	6.96	11.8	16.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4a	10:00	Surface	1	1	17.1	7.94	27	7.23	11.5	15.3
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4a	10:00	Surface	1	2	17.2	7.96	27.1	7.21	11.3	14.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4a	10:00	Middle	2	1						
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4a	10:00	Middle	2	2						
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4a	10:00	Bottom	3	1	17.3	8.03	27.2	7.11	12.6	17.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4a	10:00	Bottom	3	2	17.3	8.05	27.3	7.13	12.8	18.2
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4	10:17	Surface	1	1	17	8.06	27	6.99	10.4	15
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4	10:17	Surface	1	2	16.9	8.09	27.1	7.01	10.6	15.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4	10:17	Middle	2	1						
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4	10:17	Middle	2	2						
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4	10:17	Bottom	3	1	17.1	8.14	27.2	6.86	11.7	17.2
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	SR4	10:17	Bottom	3	2	17.2	8.16	27.3	6.88	11.9	17.4
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS8	10:35	Surface	1	1	17.1	8.13	27	7.17	11.8	16.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS8	10:35	Surface	1	2	17.2	8.15	27	7.15	12	17.3
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS8	10:35	Middle	2	1						
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS8	10:35	Middle	2	2						
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS8	10:35	Bottom	3	1	17.3	8.06	27.1	7.06	12.3	17.4
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS8	10:35	Bottom	3	2	17.3	8.04	27.2	7.04	12.1	17.7
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)16	10:50	Surface	1	1	17	8	27	7.11	10.5	14
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)16	10:50	Surface	1	2	17.1	8.02	27	7.09	10.7	14.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)16	10:50	Middle	2	1	17.1	8.14	27.1	7.03	11	16.1
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)16	10:50	Middle	2	2	17.2	8.12	27.2	7.05	11.2	16.4
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)16	10:50	Bottom	3	1	17.3	7.95	27.4	6.92	13.4	18.9
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)16	10:50	Bottom	3	2	17.4	7.97	27.3	6.94	13.2	18.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)9	11:15	Surface	1	1	17	8.13	26.9	7.13	13.2	18.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)9	11:15	Surface	1	2	17.1	8.15	27	7.15	13	18.2
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)9	11:15	Middle	2	1						
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)9	11:15	Middle	2	2						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)9	11:15	Bottom	3	1	17.2	8.2	27.1	6.92	14.2	20
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	IS(Mf)9	11:15	Bottom	3	2	17.3	8.18	27.2	6.9	14.4	20.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)3	11:40	Surface	1	1	17.2	8.09	27	7.21	12.4	17.1
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)3	11:40	Surface	1	2	17.1	8.11	27.1	7.23	12.6	18.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)3	11:40	Middle	2	1	17.3	8.13	27.2	7.12	13	18.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)3	11:40	Middle	2	2	17.3	8.15	27.3	7.1	12.8	18.1
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)3	11:40	Bottom	3	1	17.4	7.96	27.4	7.03	14	19.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Flood	CS(Mf)3	11:40	Bottom	3	2	17.5	7.98	27.4	7.05	13.8	19
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)3	15:20	Surface	1	1	17.4	8.1	27.2	7.14	13.7	18
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)3	15:20	Surface	1	2	17.4	8.12	27.3	7.11	14.2	18.9
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)3	15:20	Middle	2	1	17.4	8.14	27.3	7.09	14.9	20
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)3	15:20	Middle	2	2	17.4	8.12	27.3	7.06	15.2	20.4
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)3	15:20	Bottom	3	1	17.5	8.08	27.5	6.87	16.4	22.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)3	15:20	Bottom	3	2	17.4	8.09	27.5	6.84	15.8	22.2
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4a	17:06	Surface	1	1	17.4	8.01	27.1	7.12	12.4	16.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4a	17:06	Surface	1	2	17.5	8.03	27.2	7.08	13.2	17.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4a	17:06	Middle	2	1						
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4a	17:06	Middle	2	2						
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4a	17:06	Bottom	3	1	17.5	8.07	27.3	6.99	14.1	19.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4a	17:06	Bottom	3	2	17.5	8.05	27.4	6.95	14.9	20.7
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4	16:43	Surface	1	1	17.5	8.02	27.2	6.87	10.8	14.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4	16:43	Surface	1	2	17.4	8.04	27.2	6.91	11.5	15.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4	16:43	Middle	2	1						
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4	16:43	Middle	2	2						
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4	16:43	Bottom	3	1	17.5	8.07	27.3	6.8	12.2	16.9
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	SR4	16:43	Bottom	3	2	17.5	8.08	27.3	6.76	12.9	17.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS8	16:25	Surface	1	1	17.5	7.98	27.2	7.08	12.7	17
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS8	16:25	Surface	1	2	17.5	7.96	27.3	7.05	13.3	18.2
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS8	16:25	Middle	2	1						
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS8	16:25	Middle	2	2						
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS8	16:25	Bottom	3	1	17.5	7.99	27.4	6.97	13.9	18.1
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS8	16:25	Bottom	3	2	17.5	8.01	27.3	6.93	14.4	19.4
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)16	16:02	Surface	1	1	17.4	8.09	27.2	6.93	11.3	15.3
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)16	16:02	Surface	1	2	17.5	8.1	27.2	6.9	12.1	16.1
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)16	16:02	Middle	2	1	17.4	8.16	27.3	6.78	12	16.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)16	16:02	Middle	2	2	17.4	8.14	27.2	6.75	12.8	17.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)16	16:02	Bottom	3	1	17.5	8.03	27.4	6.7	13.6	19.2

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)16	16:02	Bottom	3	2	17.5	8.05	27.4	6.67	14.3	19.8
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)9	15:43	Surface	1	1	17.4	8.04	27	7.04	14.6	19.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)9	15:43	Surface	1	2	17.4	8.02	27.1	7	15.3	19.9
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)9	15:43	Middle	2	1						
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)9	15:43	Middle	2	2						
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)9	15:43	Bottom	3	1	17.4	8.08	27.2	6.81	12.9	17.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	IS(Mf)9	15:43	Bottom	3	2	17.4	8.09	27.2	6.78	13.3	18.6
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)5	17:32	Surface	1	1	17.5	8.14	27.2	6.98	11.6	15.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)5	17:32	Surface	1	2	17.5	8.17	27.2	7.01	12.2	16.5
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)5	17:32	Middle	2	1	17.5	8.09	27.3	6.9	12.9	17.2
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)5	17:32	Middle	2	2	17.5	8.1	27.4	6.87	13.3	18
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)5	17:32	Bottom	3	1	17.5	8.04	27.5	6.78	14.6	20.1
TMCLKL	HY/2012/07	12-03-2015	Mid-Ebb	CS(Mf)5	17:32	Bottom	3	2	17.6	8.06	27.6	6.75	15.2	20.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)5	10:41	Surface	1	1	17	8.12	27.1	7.22	9.9	11.9
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)5	10:41	Surface	1	2	17.1	8.14	27.2	7.2	9.6	11.5
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)5	10:41	Middle	2	1	17.3	8.18	27.3	7.11	10.3	15.5
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)5	10:41	Middle	2	2	17.2	8.2	27.4	7.13	10.1	15.2
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)5	10:41	Bottom	3	1	17.4	8.28	27.4	7	11.1	15.5
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)5	10:41	Bottom	3	2	17.5	8.26	27.5	7.02	10.9	13.1
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4a	11:07	Surface	1	1	17.3	8	27.1	7.29	10.6	17
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4a	11:07	Surface	1	2	17.2	8.02	27.2	7.27	10.4	15.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4a	11:07	Middle	2	1						
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4a	11:07	Middle	2	2						
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4a	11:07	Bottom	3	1	17.3	8.09	27.4	7.17	11.7	17.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4a	11:07	Bottom	3	2	17.4	8.11	27.3	7.19	11.9	14.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4	11:33	Surface	1	1	17	8.12	27.2	7.05	9.5	11.4
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4	11:33	Surface	1	2	17.1	8.15	27.1	7.07	9.7	12.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4	11:33	Middle	2	1						
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4	11:33	Middle	2	2						
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4	11:33	Bottom	3	1	17.3	8.2	27.4	6.92	10.8	14
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	SR4	11:33	Bottom	3	2	17.2	8.22	27.4	6.94	11	17.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS8	11:59	Surface	1	1	17.2	8.19	27	7.23	10.9	16.4
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS8	11:59	Surface	1	2	17.3	8.21	27.1	7.21	11.1	14.4
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS8	11:59	Middle	2	1						
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS8	11:59	Middle	2	2						
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS8	11:59	Bottom	3	1	17.3	8.12	27.2	7.12	11.4	14.8
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS8	11:59	Bottom	3	2	17.4	8.1	27.3	7.1	11.2	16.8

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)16	12:25	Surface	1	1	17.1	8.06	27.1	7.17	9.6	14.4
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)16	12:25	Surface	1	2	17.2	8.08	27	7.15	9.8	14.7
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)16	12:25	Middle	2	1	17.2	8.2	27.2	7.09	10.1	13.1
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)16	12:25	Middle	2	2	17.3	8.18	27.3	7.11	10.3	13.4
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)16	12:25	Bottom	3	1	17.5	8.01	27.4	6.98	12.5	18.8
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)16	12:25	Bottom	3	2	17.4	8.03	27.5	7	12.3	16
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)9	12:51	Surface	1	1	17.1	8.19	27.1	7.19	12.3	16
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)9	12:51	Surface	1	2	17.2	8.2	27	7.21	12.1	18.2
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)9	12:51	Middle	2	1						
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)9	12:51	Middle	2	2						
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)9	12:51	Bottom	3	1	17.3	8.26	27.2	6.98	13.3	17.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	IS(Mf)9	12:51	Bottom	3	2	17.4	8.24	27.3	6.96	13.5	20.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)3	13:21	Surface	1	1	17.3	8.15	27.1	7.27	11.5	18.4
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)3	13:21	Surface	1	2	17.2	8.17	27.2	7.29	11.7	17.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)3	13:21	Middle	2	1	17.5	8.19	27.3	7.18	12.1	18.2
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)3	13:21	Middle	2	2	17.4	8.2	27.4	7.16	11.9	17.9
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)3	13:21	Bottom	3	1	17.5	8.02	27.5	7.09	13.1	18.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Flood	CS(Mf)3	13:21	Bottom	3	2	17.6	8.04	27.4	7.11	12.9	20.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)3	17:42	Surface	1	1	17.3	8.14	27.2	7.34	10.8	14
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)3	17:42	Surface	1	2	17.3	8.14	27.2	7.3	10.9	15.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)3	17:42	Middle	2	1	17.4	8.19	27.4	7.2	11.2	15.7
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)3	17:42	Middle	2	2	17.5	8.18	27.4	7.17	11.4	17.1
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)3	17:42	Bottom	3	1	17.5	8.17	27.5	7.07	12.8	19.2
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)3	17:42	Bottom	3	2	17.5	8.18	27.4	7.09	12.9	20.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4a	19:45	Surface	1	1	17.2	8.18	27.2	7.14	11.9	19
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4a	19:45	Surface	1	2	17.1	8.17	27.3	7.1	11.9	16.7
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4a	19:45	Middle	2	1						
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4a	19:45	Middle	2	2						
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4a	19:45	Bottom	3	1	17.3	8.18	27.3	6.83	12.6	17.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4a	19:45	Bottom	3	2	17.2	8.18	27.3	6.86	12.5	16.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4	19:20	Surface	1	1	17.2	8.18	27.2	7.19	11.4	14.8
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4	19:20	Surface	1	2	17.2	8.18	27.2	7.15	11.5	15
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4	19:20	Middle	2	1						
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4	19:20	Middle	2	2						
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4	19:20	Bottom	3	1	17.3	8.17	27.3	7.01	12.8	16.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	SR4	19:20	Bottom	3	2	17.3	8.16	27.3	7.04	12.9	16.8
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS8	19:00	Surface	1	1	17.2	8.15	27.2	7.1	10.9	13.1

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS8	19:00	Surface	1	2	17.2	8.14	27.1	7.05	10.7	13.9
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS8	19:00	Middle	2	1						
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS8	19:00	Middle	2	2						
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS8	19:00	Bottom	3	1	17.3	8.17	27.3	6.94	11.6	18.6
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS8	19:00	Bottom	3	2	17.2	8.17	27.2	6.97	11.5	15
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)16	18:35	Surface	1	1	17.3	8.17	27.2	7.14	10.1	14.1
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)16	18:35	Surface	1	2	17.3	8.18	27.1	7.1	10.2	15.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)16	18:35	Middle	2	1	17.4	8.15	27.2	6.98	11.4	14.8
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)16	18:35	Middle	2	2	17.5	8.16	27.3	6.95	11.5	16.1
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)16	18:35	Bottom	3	1	17.5	8.19	27.3	6.86	11.9	17.9
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)16	18:35	Bottom	3	2	17.5	8.18	27.3	6.82	11.7	16.4
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)9	18:10	Surface	1	1	17.3	8.15	27.3	7.08	12.8	17.9
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)9	18:10	Surface	1	2	17.2	8.16	27.2	7.05	12.7	17.8
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)9	18:10	Middle	2	1						
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)9	18:10	Middle	2	2						
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)9	18:10	Bottom	3	1	17.3	8.18	27.3	6.94	13.7	19.2
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	IS(Mf)9	18:10	Bottom	3	2	17.4	8.15	27.3	6.9	13.5	20.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)5	20:00	Surface	1	1	17.2	8.16	27.3	7.2	10.1	12.1
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)5	20:00	Surface	1	2	17.2	8.17	27.2	7.24	10.2	14.3
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)5	20:00	Middle	2	1	17.3	8.19	27.4	7.03	11.8	18.9
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)5	20:00	Middle	2	2	17.4	8.2	27.3	6.98	11.7	18.7
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)5	20:00	Bottom	3	1	17.4	8.2	27.4	6.9	12.3	14.8
TMCLKL	HY/2012/07	15-03-2015	Mid-Ebb	CS(Mf)5	20:00	Bottom	3	2	17.4	8.19	27.4	6.94	12.2	19.5
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)5	14:31	Surface	1	1	18	8.19	27.5	7.26	10.7	14.1
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)5	14:31	Surface	1	2	18.2	8.18	27.4	7.3	10.6	12.4
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)5	14:31	Middle	2	1	18.1	8.2	27.5	7.11	10.5	12.6
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)5	14:31	Middle	2	2	18	8.22	27.5	7.14	10.3	14.6
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)5	14:31	Bottom	3	1	18	8.31	27.6	6.99	11	17.6
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)5	14:31	Bottom	3	2	17.9	8.33	27.4	7.04	11.3	15.5
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4a	15:01	Surface	1	1	17.9	8.07	27.2	7.41	11.2	13.4
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4a	15:01	Surface	1	2	18.1	8.05	27.4	7.38	11.4	14.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4a	15:01	Middle	2	1						
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4a	15:01	Middle	2	2						
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4a	15:01	Bottom	3	1	18.2	27.4	8.14	7.22	12.3	18
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4a	15:01	Bottom	3	2	18.1	27.4	8.13	7.23	12.4	19.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4	15:26	Surface	1	1	18.2	8.2	27.5	6.99	10.4	14.6
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4	15:26	Surface	1	2	18.3	8.21	27.4	7.04	10.2	13.3

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4	15:26	Middle	2	1						
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4	15:26	Middle	2	2						
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4	15:26	Bottom	3	1	18.3	8.23	27.4	6.97	11.5	16.1
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	SR4	15:26	Bottom	3	2	18.4	8.2	27.2	6.98	11.6	18.6
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS8	15:49	Surface	1	1	18.4	8.24	27.5	7.21	11.6	18.6
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS8	15:49	Surface	1	2	18.3	8.22	27.7	7.25	11.8	18.7
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS8	15:49	Middle	2	1						
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS8	15:49	Middle	2	2						
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS8	15:49	Bottom	3	1	18.5	8.2	27.2	7.13	11.9	17.9
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS8	15:49	Bottom	3	2	18.3	8.21	27.4	7.15	11.7	16.2
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)16	16:08	Surface	1	1	18.3	8.15	27.4	7.16	10.5	14.7
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)16	16:08	Surface	1	2	18.4	8.14	27.2	7.2	10.4	15.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)16	16:08	Middle	2	1	18.2	8.13	27.1	7.09	10.6	15.9
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)16	16:08	Middle	2	2	18.3	8.12	27.2	7.12	10.9	15
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)16	16:08	Bottom	3	1	18.1	8.1	27.4	6.94	12.9	19.4
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)16	16:08	Bottom	3	2	18.3	8.13	27.2	6.97	12.7	19.2
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)9	16:39	Surface	1	1	18.4	8.26	27.4	7.22	11.7	14
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)9	16:39	Surface	1	2	18.3	8.27	27.2	7.21	11.8	15.7
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)9	16:39	Middle	2	1						
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)9	16:39	Middle	2	2						
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)9	16:39	Bottom	3	1	18.2	8.3	27.4	7.03	12.4	17.4
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	IS(Mf)9	16:39	Bottom	3	2	18.4	8.31	27.3	7.05	12.6	16.4
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)3	17:03	Surface	1	1	18.4	8.24	27.3	7.26	12.3	17.2
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)3	17:03	Surface	1	2	18.4	8.22	27.4	7.27	12.4	17.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)3	17:03	Middle	2	1	18.3	8.24	27.5	7.17	12.6	18.3
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)3	17:03	Middle	2	2	18.4	8.26	27.3	7.19	12.7	17.2
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)3	17:03	Bottom	3	1	18.2	8.1	27.4	7.06	13.3	17.3
TMCLKL	HY/2012/07	17-03-2015	Mid-Flood	CS(Mf)3	17:03	Bottom	3	2	18.3	8.12	27.5	7.09	13.5	18.9
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)3	9:49	Surface	1	1	17.2	8.21	27.2	7.18	12.1	17.7
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)3	9:49	Surface	1	2	17.1	8.23	27.3	7.2	12.3	15.2
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)3	9:49	Middle	2	1	17.4	8.25	27.5	7.09	12.7	16.4
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)3	9:49	Middle	2	2	17.3	8.27	27.4	7.07	12.5	17.7
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)3	9:49	Bottom	3	1	17.5	8.08	27.5	7	13.7	18.6
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)3	9:49	Bottom	3	2	17.5	8.09	27.6	7.02	13.5	18.2
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4a	11:59	Surface	1	1	17.3	8.06	27.2	7.2	11.2	16.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4a	11:59	Surface	1	2	17.4	8.08	27.3	7.18	11	16.3
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4a	11:59	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4a	11:59	Middle	2	2						
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4a	11:59	Bottom	3	1	17.5	8.15	27.4	7.08	12.3	19.7
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4a	11:59	Bottom	3	2	17.4	8.17	27.5	7.1	12.5	18.5
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4	11:33	Surface	1	1	17.1	8.18	27.2	6.96	10.1	15.2
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4	11:33	Surface	1	2	17.2	8.21	27.3	6.98	10.3	15.3
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4	11:33	Middle	2	1						
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4	11:33	Middle	2	2						
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4	11:33	Bottom	3	1	17.3	8.26	27.5	6.83	11.4	14.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	SR4	11:33	Bottom	3	2	17.4	8.28	27.4	6.85	11.6	13.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS8	11:07	Surface	1	1	17.2	8.25	27.2	7.14	11.5	16.1
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS8	11:07	Surface	1	2	17.1	8.27	27.1	7.12	11.7	15.1
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS8	11:07	Middle	2	1						
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS8	11:07	Middle	2	2						
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS8	11:07	Bottom	3	1	17.2	8.17	27.4	7.03	12	16.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS8	11:07	Bottom	3	2	17.3	8.16	27.3	7.01	11.8	14.5
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)16	10:41	Surface	1	1	17.1	8.12	27.1	7.08	10.2	16.3
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)16	10:41	Surface	1	2	17.1	8.14	27.2	7.06	10.4	14.4
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)16	10:41	Middle	2	1	17.1	8.26	27.4	7	10.7	13.9
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)16	10:41	Middle	2	2	17.2	8.24	27.3	7.02	10.9	14
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)16	10:41	Bottom	3	1	17.4	8.07	27.5	6.89	13.1	16.9
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)16	10:41	Bottom	3	2	17.3	8.09	27.6	6.91	12.9	17
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)9	10:15	Surface	1	1	17.1	8.25	27.2	7.1	11.7	18
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)9	10:15	Surface	1	2	17	8.26	27.1	7.12	11.5	18.2
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)9	10:15	Middle	2	1						
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)9	10:15	Middle	2	2						
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)9	10:15	Bottom	3	1	17.2	8.32	27.3	6.89	12.7	13.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	IS(Mf)9	10:15	Bottom	3	2	17.3	8.3	27.4	6.87	12.9	13.8
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)5	12:29	Surface	1	1	17.1	8.18	27.3	7.13	10.5	14.7
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)5	12:29	Surface	1	2	17.2	8.2	27.4	7.11	10.2	13.5
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)5	12:29	Middle	2	1	17.4	8.24	27.5	7.02	10.9	13
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)5	12:29	Middle	2	2	17.3	8.26	27.4	7.04	10.7	15.3
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)5	12:29	Bottom	3	1	17.5	8.34	27.6	6.91	11.7	17.9
TMCLKL	HY/2012/07	17-03-2015	Mid-Ebb	CS(Mf)5	12:29	Bottom	3	2	17.6	8.32	27.5	6.93	11.5	17.3
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)5	16:23	Surface	1	1	19.1	8.15	27.4	7.38	11	13.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)5	16:23	Surface	1	2	19	8.17	27.4	7.37	11.8	16.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)5	16:23	Middle	2	1	19.1	8.24	27.4	7.29	12.5	15
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)5	16:23	Middle	2	2	19.1	8.25	27.5	7.27	13.1	19.7

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)5	16:23	Bottom	3	1	19.2	8.18	27.4	7.07	15.1	18.1
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)5	16:23	Bottom	3	2	19.1	8.18	27.5	7.02	14.5	18.9
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4a	16:55	Surface	1	1	19.1	8.22	27.1	7.33	12.4	19.8
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4a	16:55	Surface	1	2	19	8.23	27.2	7.29	11.5	15
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4a	16:55	Middle	2	1						
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4a	16:55	Middle	2	2						
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4a	16:55	Bottom	3	1	19.1	8.22	27.2	7.18	13.4	20.1
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4a	16:55	Bottom	3	2	19.1	8.23	27.2	7.14	14	21
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4	17:15	Surface	1	1	19	8.18	27.2	7.19	11.6	17.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4	17:15	Surface	1	2	19.1	8.2	27.2	7.16	11	17.6
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4	17:15	Middle	2	1						
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4	17:15	Middle	2	2						
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4	17:15	Bottom	3	1	19.1	8.23	27.4	6.96	12.5	17.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	SR4	17:15	Bottom	3	2	19.1	8.23	27.3	6.98	13.2	17.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS8	17:35	Surface	1	1	19	8.22	27.2	7.09	11	16.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS8	17:35	Surface	1	2	19.1	8.23	27.1	7.13	11.8	17.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS8	17:35	Middle	2	1						
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS8	17:35	Middle	2	2						
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS8	17:35	Bottom	3	1	19	8.15	27.2	7.04	13.4	18.8
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS8	17:35	Bottom	3	2	19	8.17	27.3	6.99	13.9	16.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)16	17:56	Surface	1	1	18.9	8.18	27.2	7.03	10.6	12.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)16	17:56	Surface	1	2	19	8.2	27.2	7.06	11.2	14.6
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)16	17:56	Middle	2	1	19	8.15	27.2	7.01	12.1	15.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)16	17:56	Middle	2	2	19	8.16	27.3	6.98	12.8	19.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)16	17:56	Bottom	3	1	19.1	8.22	27.4	6.88	15.2	22.8
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)16	17:56	Bottom	3	2	19	8.22	27.3	6.9	15.7	20.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)9	18:11	Surface	1	1	19	8.19	27	7.15	11.7	18.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)9	18:11	Surface	1	2	19.1	8.21	27.1	7.17	12.1	14.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)9	18:11	Middle	2	1						
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)9	18:11	Middle	2	2						
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)9	18:11	Bottom	3	1	19.1	8.19	27	6.99	13.1	19.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	IS(Mf)9	18:11	Bottom	3	2	19	8.2	27.1	7.05	13.6	17.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)3	18:34	Surface	1	1	19	8.17	27.3	7.24	12.5	20
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)3	18:34	Surface	1	2	19.1	8.17	27.2	7.26	13	18.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)3	18:34	Middle	2	1	19.1	8.14	27.4	7.19	13.7	19.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)3	18:34	Middle	2	2	19	8.13	27.3	7.15	14.3	20
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)3	18:34	Bottom	3	1	19	8.14	27.4	6.99	16.1	20.9

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	19-03-2015	Mid-Flood	CS(Mf)3	18:34	Bottom	3	2	19	8.16	27.3	7.03	16.7	23.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)3	11:15	Surface	1	1	18.8	8.16	27.2	7.13	12.7	15.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)3	11:15	Surface	1	2	18.9	8.18	27.2	7.11	13.2	17.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)3	11:15	Middle	2	1	18.9	8.13	27.3	7.08	13.9	22.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)3	11:15	Middle	2	2	18.9	8.14	27.4	7.05	14.4	21.6
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)3	11:15	Bottom	3	1	19	8.15	27.5	6.88	16.3	21.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)3	11:15	Bottom	3	2	19.1	8.16	27.5	6.91	16.9	25.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4a	13:08	Surface	1	1	18.9	8.21	27.2	7.22	12.6	18.9
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4a	13:08	Surface	1	2	18.9	8.23	27.2	7.18	12.7	16.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4a	13:08	Middle	2	1						
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4a	13:08	Middle	2	2						
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4a	13:08	Bottom	3	1	18.9	8.21	27.2	7.05	13.6	20.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4a	13:08	Bottom	3	2	18.9	8.22	27.3	7.01	14.3	21.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4	12:47	Surface	1	1	18.8	8.19	27.1	7.08	11.8	17.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4	12:47	Surface	1	2	18.9	8.2	27.2	7.04	11.1	17.8
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4	12:47	Middle	2	1						
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4	12:47	Middle	2	2						
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4	12:47	Bottom	3	1	18.9	8.24	27.3	6.85	12.7	17.8
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	SR4	12:47	Bottom	3	2	18.9	8.21	27.2	6.83	13.4	17.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS8	12:27	Surface	1	1	18.8	8.23	27.1	6.98	11.2	13.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS8	12:27	Surface	1	2	18.8	8.21	27.1	7.01	11	19.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS8	12:27	Middle	2	1						
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS8	12:27	Middle	2	2						
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS8	12:27	Bottom	3	1	18.9	8.14	27.2	6.92	13.6	21.8
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS8	12:27	Bottom	3	2	18.8	8.16	27.3	6.88	14.1	21.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)16	12:03	Surface	1	1	18.7	8.19	27.1	6.93	10.8	15.1
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)16	12:03	Surface	1	2	18.8	8.2	27.2	6.91	11.4	18.2
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)16	12:03	Middle	2	1	18.8	8.14	27.2	6.89	12.3	16
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)16	12:03	Middle	2	2	18.8	8.15	27.3	6.85	13	19.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)16	12:03	Bottom	3	1	18.9	8.21	27.3	6.77	15.4	18.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)16	12:03	Bottom	3	2	18.9	8.22	27.4	6.8	15.9	23.9
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)9	11:40	Surface	1	1	18.8	8.2	27.1	7.05	11.9	16.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)9	11:40	Surface	1	2	18.8	8.22	27	7.02	12.3	19.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)9	11:40	Middle	2	1						
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)9	11:40	Middle	2	2						
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)9	11:40	Bottom	3	1	18.8	8.18	27.1	6.89	13.3	18.6
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	IS(Mf)9	11:40	Bottom	3	2	18.9	8.19	27.2	6.94	13.8	16.6

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)5	13:35	Surface	1	1	18.9	8.16	27.2	7.28	11.2	15.7
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)5	13:35	Surface	1	2	18.8	8.18	27.3	7.26	12	15.6
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)5	13:35	Middle	2	1	18.9	8.23	27.3	7.17	12.7	16.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)5	13:35	Middle	2	2	18.9	8.25	27.4	7.13	13.4	17.4
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)5	13:35	Bottom	3	1	19	8.17	27.5	6.93	15.3	24.5
TMCLKL	HY/2012/07	19-03-2015	Mid-Ebb	CS(Mf)5	13:35	Bottom	3	2	19	8.19	27.5	6.89	14.6	20.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)5	7:25	Surface	1	1	19	8.22	27.3	7.34	10.3	14.5
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)5	7:25	Surface	1	2	18.9	8.24	27.4	7.32	11.1	15.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)5	7:25	Middle	2	1	19	8.29	27.5	7.23	11.8	16.5
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)5	7:25	Middle	2	2	19.1	8.31	27.4	7.19	12.5	16.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)5	7:25	Bottom	3	1	19.1	8.23	27.5	6.99	14.4	20
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)5	7:25	Bottom	3	2	19.1	8.25	27.6	6.95	13.7	18.9
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4a	7:43	Surface	1	1	18.9	8.27	27.2	7.28	11.7	16.1
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4a	7:43	Surface	1	2	19	8.29	27.3	7.24	10.8	15.2
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4a	7:43	Middle	2	1						
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4a	7:43	Middle	2	2						
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4a	7:43	Bottom	3	1	18.9	8.27	27.4	7.11	12.7	17.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4a	7:43	Bottom	3	2	18.8	8.28	27.3	7.07	13.4	18.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4	8:01	Surface	1	1	18.9	8.25	27.2	7.14	10.9	15.7
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4	8:01	Surface	1	2	19	8.26	27.3	7.1	10.2	15
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4	8:01	Middle	2	1						
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4	8:01	Middle	2	2						
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4	8:01	Bottom	3	1	18.8	8.3	27.4	6.91	11.8	16.9
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	SR4	8:01	Bottom	3	2	18.9	8.27	27.3	6.89	12.5	17.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS8	8:19	Surface	1	1	18.9	8.29	27.1	7.04	10.3	14.2
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS8	8:19	Surface	1	2	18.8	8.27	27.2	7.07	11.1	15.3
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS8	8:19	Middle	2	1						
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS8	8:19	Middle	2	2						
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS8	8:19	Bottom	3	1	19	8.2	27.3	6.98	12.7	17.9
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS8	8:19	Bottom	3	2	18.9	8.22	27.4	6.94	13.2	18.5
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)16	8:37	Surface	1	1	18.8	8.25	27.2	6.99	9.9	14
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)16	8:37	Surface	1	2	18.9	8.26	27.3	6.97	10.5	14.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)16	8:37	Middle	2	1	18.9	8.2	27.3	6.95	11.4	15.7
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)16	8:37	Middle	2	2	18.8	8.21	27.4	6.91	12.1	17
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)16	8:37	Bottom	3	1	18.9	8.27	27.5	6.83	14.5	20
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)16	8:37	Bottom	3	2	19	8.28	27.4	6.86	15	20.8
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)9	8:55	Surface	1	1	18.9	8.26	27.2	7.11	11	15.1

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)9	8:55	Surface	1	2	18.8	8.28	27.1	7.08	11.4	16
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)9	8:55	Middle	2	1						
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)9	8:55	Middle	2	2						
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)9	8:55	Bottom	3	1	19	8.24	27.2	6.95	12.4	17.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	IS(Mf)9	8:55	Bottom	3	2	18.9	8.25	27.3	7	12.9	17.9
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)3	9:13	Surface	1	1	19	8.22	27.2	7.19	11.8	17
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)3	9:13	Surface	1	2	18.9	8.24	27.3	7.17	12.3	17.2
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)3	9:13	Middle	2	1	19.1	8.19	27.4	7.14	13	18.3
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)3	9:13	Middle	2	2	19	8.2	27.5	7.11	13.5	18.9
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)3	9:13	Bottom	3	1	19.1	8.21	27.6	6.94	15.4	21.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Flood	CS(Mf)3	9:13	Bottom	3	2	19.2	8.22	27.5	6.97	16	22.2
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)3	12:00	Surface	1	1	19.2	8.23	27.3	7.08	11.9	16.7
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)3	12:00	Surface	1	2	19.2	8.24	27.4	7.05	12.4	17.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)3	12:00	Middle	2	1	19.2	8.18	27.5	7.04	13.2	18.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)3	12:00	Middle	2	2	19.1	8.2	27.4	7.01	13.6	18.1
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)3	12:00	Bottom	3	1	19.2	8.22	27.5	6.82	15.6	22
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)3	12:00	Bottom	3	2	19.2	8.23	27.5	6.85	16.1	22.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4a	14:14	Surface	1	1	19.1	8.28	27.3	7.15	11.9	16.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4a	14:14	Surface	1	2	19	8.28	27.4	7.13	11	15.8
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4a	14:14	Middle	2	1						
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4a	14:14	Middle	2	2						
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4a	14:14	Bottom	3	1	19.1	8.26	27.3	7	12.8	18.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4a	14:14	Bottom	3	2	19.1	8.27	27.4	6.96	13.5	18.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4	13:47	Surface	1	1	19.1	8.24	27.4	7.02	11	15.5
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4	13:47	Surface	1	2	19.1	8.26	27.3	7	10.4	14.8
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4	13:47	Middle	2	1						
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4	13:47	Middle	2	2						
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4	13:47	Bottom	3	1	19	8.29	27.5	6.8	11.9	16.8
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	SR4	13:47	Bottom	3	2	19.1	8.28	27.4	6.77	12.6	17.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS8	13:20	Surface	1	1	19.1	8.28	27	6.93	10.5	15.2
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS8	13:20	Surface	1	2	19.1	8.26	27.2	6.97	11.2	16.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS8	13:20	Middle	2	1						
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS8	13:20	Middle	2	2						
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS8	13:20	Bottom	3	1	19.2	8.19	27.3	6.87	12.8	18.8
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS8	13:20	Bottom	3	2	19.1	8.2	27.3	6.84	13.3	19.1
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)16	12:54	Surface	1	1	19	8.26	27.1	6.87	10	13.9
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)16	12:54	Surface	1	2	19.1	8.27	27.3	6.84	10.6	14.7

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)16	12:54	Middle	2	1	19.1	8.19	27.4	6.85	11.5	16.2
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)16	12:54	Middle	2	2	19	8.2	27.4	6.81	12.3	17.4
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)16	12:54	Bottom	3	1	19.1	8.26	27.6	6.7	14.6	21.2
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)16	12:54	Bottom	3	2	19.1	8.27	27.5	6.74	15.2	21
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)9	12:28	Surface	1	1	19.1	8.25	27.1	7.01	11.2	15.8
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)9	12:28	Surface	1	2	19.1	8.27	27.1	6.97	11.5	16.2
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)9	12:28	Middle	2	1						
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)9	12:28	Middle	2	2						
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)9	12:28	Bottom	3	1	19.2	8.23	27.3	6.83	12.5	17.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	IS(Mf)9	12:28	Bottom	3	2	19.1	8.24	27.1	6.86	13	18.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)5	14:41	Surface	1	1	19.2	8.21	27.4	7.23	10.4	14.8
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)5	14:41	Surface	1	2	19.1	8.22	27.2	7.21	11.2	15.7
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)5	14:41	Middle	2	1	19.1	8.28	27.4	7.12	12	16.9
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)5	14:41	Middle	2	2	19.2	8.3	27.4	7.09	12.6	17.8
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)5	14:41	Bottom	3	1	19.2	8.22	27.6	6.88	14.6	20.6
TMCLKL	HY/2012/07	21-03-2015	Mid-Ebb	CS(Mf)5	14:41	Bottom	3	2	19.2	8.24	27.5	6.85	13.8	19
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)5	8:20	Surface	1	1	20.5	8.12	29.5	7.87	20.4	26.5
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)5	8:20	Surface	1	2	20.4	8.13	29.4	7.84	21.1	27.4
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)5	8:20	Middle	2	1	20.5	8.15	29.6	7.79	22.9	34.4
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)5	8:20	Middle	2	2	20.5	8.16	29.6	7.76	23.5	32.9
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)5	8:20	Bottom	3	1	20.6	8.13	29.7	7.49	26.1	41.8
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)5	8:20	Bottom	3	2	20.5	8.15	29.8	7.44	25.5	38.3
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4a	8:47	Surface	1	1	20.4	8.08	29.4	7.81	19.8	25.7
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4a	8:47	Surface	1	2	20.4	8.07	29.3	7.79	18.8	26.3
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4a	8:47	Middle	2	1						
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4a	8:47	Middle	2	2						
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4a	8:47	Bottom	3	1	20.4	8.03	29.4	7.67	22.7	34.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4a	8:47	Bottom	3	2	20.5	8.05	29.5	7.64	23.4	35.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4	9:06	Surface	1	1	20.4	8.14	29.4	7.84	18.5	24.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4	9:06	Surface	1	2	20.5	8.09	29.4	7.82	23.8	33.3
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4	9:06	Middle	2	1						
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4	9:06	Middle	2	2						
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4	9:06	Bottom	3	1	20.5	8.06	29.4	7.73	23.7	28.4
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	SR4	9:06	Bottom	3	2	20.5	8.04	29.4	7.7	24.5	34.3
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS8	9:24	Surface	1	1	20.5	8.07	29.4	7.79	26.2	34.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS8	9:24	Surface	1	2	20.5	8.03	29.5	7.77	25.5	30.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS8	9:24	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS8	9:24	Middle	2	2						
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS8	9:24	Bottom	3	1	20.5	7.99	29.5	7.67	25.3	40.5
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS8	9:24	Bottom	3	2	20.4	8.03	29.4	7.64	24.3	36.5
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)16	9:45	Surface	1	1	20.5	8.04	29.5	7.86	23.7	35.6
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)16	9:45	Surface	1	2	20.4	8.01	29.5	7.79	24.2	29
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)16	9:45	Middle	2	1	20.5	8.03	29.5	7.71	25	37.5
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)16	9:45	Middle	2	2	20.5	8.01	29.6	7.68	25.9	33.7
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)16	9:45	Bottom	3	1	20.5	7.97	29.6	7.6	22.9	36.6
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)16	9:45	Bottom	3	2	20.6	7.99	29.7	7.57	23.3	35
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)9	10:08	Surface	1	1	20.5	8.03	29.5	7.68	24.8	37.2
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)9	10:08	Surface	1	2	20.5	8.06	29.6	7.7	25.4	33
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)9	10:08	Middle	2	1						
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)9	10:08	Middle	2	2						
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)9	10:08	Bottom	3	1	20.5	8.01	29.6	7.59	23	34.5
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	IS(Mf)9	10:08	Bottom	3	2	20.5	7.98	29.6	7.61	23.8	33.3
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)3	10:31	Surface	1	1	20.5	7.97	29.6	7.77	25.1	37.7
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)3	10:31	Surface	1	2	20.5	7.99	29.6	7.81	25.8	36.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)3	10:31	Middle	2	1	20.5	7.98	29.6	7.71	24.2	33.9
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)3	10:31	Middle	2	2	20.5	8.01	29.6	7.66	23.6	35.4
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)3	10:31	Bottom	3	1	20.5	8.04	29.7	7.5	21.4	27.8
TMCLKL	HY/2012/07	24-03-2015	Mid-Flood	CS(Mf)3	10:31	Bottom	3	2	20.6	8.07	29.7	7.47	22.2	31.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)3	14:08	Surface	1	1	20.6	8.03	29.6	7.68	25.7	33.4
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)3	14:08	Surface	1	2	20.5	8.05	29.7	7.72	26.4	31.7
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)3	14:08	Middle	2	1	20.6	8.04	29.7	7.62	24.8	37.2
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)3	14:08	Middle	2	2	20.6	8.07	29.6	7.57	24.2	31.5
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)3	14:08	Bottom	3	1	20.7	8.1	29.7	7.41	22.6	35.2
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)3	14:08	Bottom	3	2	20.6	8.13	29.8	7.38	22.8	36.5
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4a	16:03	Surface	1	1	20.5	8.14	29.4	7.72	20.4	32.6
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4a	16:03	Surface	1	2	20.4	8.13	29.5	7.7	19.4	25.2
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4a	16:03	Middle	2	1						
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4a	16:03	Middle	2	2						
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4a	16:03	Bottom	3	1	20.5	8.09	29.6	7.58	23.3	37.3
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4a	16:03	Bottom	3	2	20.6	8.11	29.5	7.55	24	33.6
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4	15:40	Surface	1	1	20.5	8.2	29.4	7.75	19.1	24.8
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4	15:40	Surface	1	2	20.4	8.15	29.3	7.73	24.4	36.6
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4	15:40	Middle	2	1						
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4	15:40	Middle	2	2						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4	15:40	Bottom	3	1	20.5	8.12	29.4	7.64	24.3	29.2
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	SR4	15:40	Bottom	3	2	20.6	8.1	29.5	7.61	25.1	35.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS8	15:17	Surface	1	1	20.6	8.13	29.5	7.7	26.8	34.8
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS8	15:17	Surface	1	2	20.5	8.09	29.4	7.68	26.1	36.5
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS8	15:17	Middle	2	1						
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS8	15:17	Middle	2	2						
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS8	15:17	Bottom	3	1	20.6	8.05	29.5	7.58	25.9	33.7
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS8	15:17	Bottom	3	2	20.6	8.09	29.6	7.55	24.9	34.9
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)16	14:54	Surface	1	1	20.6	8.1	29.5	7.77	24.3	29.2
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)16	14:54	Surface	1	2	20.5	8.07	29.6	7.7	24.8	34.7
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)16	14:54	Middle	2	1	20.6	8.09	29.7	7.62	25.6	35.8
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)16	14:54	Middle	2	2	20.7	8.07	29.6	7.59	26.5	37.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)16	14:54	Bottom	3	1	20.7	8.03	29.7	7.51	23.5	35.3
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)16	14:54	Bottom	3	2	20.6	8.05	29.8	7.48	23.9	38.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)9	14:31	Surface	1	1	20.5	8.09	29.6	7.59	25.4	38.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)9	14:31	Surface	1	2	20.6	8.12	29.5	7.61	26	41.6
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)9	14:31	Middle	2	1						
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)9	14:31	Middle	2	2						
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)9	14:31	Bottom	3	1	20.6	8.07	29.6	7.5	23.6	35.4
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	IS(Mf)9	14:31	Bottom	3	2	20.6	8.04	29.7	7.52	24.4	31.7
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)5	16:28	Surface	1	1	20.6	8.18	29.6	7.78	21	27.3
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)5	16:28	Surface	1	2	20.5	8.19	29.5	7.75	21.7	30.4
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)5	16:28	Middle	2	1	20.7	8.21	29.6	7.7	23.5	30.6
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)5	16:28	Middle	2	2	20.6	8.22	29.7	7.67	24.1	36.2
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)5	16:28	Bottom	3	1	20.7	8.19	29.9	7.4	26.7	40.1
TMCLKL	HY/2012/07	24-03-2015	Mid-Ebb	CS(Mf)5	16:28	Bottom	3	2	20.7	8.21	29.8	7.35	26.1	31.3
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)5	9:12	Surface	1	1	20.6	8.24	29.7	7.69	20.1	16.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)5	9:12	Surface	1	2	20.7	8.25	29.6	7.66	20.8	18
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)5	9:12	Middle	2	1	20.7	8.27	29.7	7.61	22.6	15.4
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)5	9:12	Middle	2	2	20.6	8.28	29.8	7.58	23.2	15.4
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)5	9:12	Bottom	3	1	20.7	8.25	29.8	7.31	25.8	18.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)5	9:12	Bottom	3	2	20.8	8.27	29.9	7.26	25.2	18.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4a	9:38	Surface	1	1	20.6	8.2	29.5	7.63	19.5	19.5
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4a	9:38	Surface	1	2	20.6	8.19	29.6	7.61	18.5	20.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4a	9:38	Middle	2	1						
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4a	9:38	Middle	2	2						
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4a	9:38	Bottom	3	1	20.6	8.15	29.6	7.49	22.4	18

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4a	9:38	Bottom	3	2	20.7	8.17	29.7	7.46	23.1	19.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4	10:04	Surface	1	1	20.6	8.26	29.5	7.66	18.2	16.5
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4	10:04	Surface	1	2	20.6	8.21	29.4	7.64	23.5	16.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4	10:04	Middle	2	1						
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4	10:04	Middle	2	2						
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4	10:04	Bottom	3	1	20.6	8.18	29.5	7.55	23.4	20.9
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	SR4	10:04	Bottom	3	2	20.5	8.16	29.6	7.52	24.2	20.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS8	10:30	Surface	1	1	20.6	8.19	29.5	7.61	25.9	15.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS8	10:30	Surface	1	2	20.5	8.15	29.6	7.59	25.2	16.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS8	10:30	Middle	2	1						
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS8	10:30	Middle	2	2						
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS8	10:30	Bottom	3	1	20.7	8.11	29.6	7.49	25	18.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS8	10:30	Bottom	3	2	20.6	8.15	29.7	7.46	24	18.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)16	10:56	Surface	1	1	20.5	8.16	29.6	7.68	23.4	15.4
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)16	10:56	Surface	1	2	20.6	8.13	29.7	7.61	23.9	15.4
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)16	10:56	Middle	2	1	20.6	8.15	29.7	7.53	24.7	19.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)16	10:56	Middle	2	2	20.5	8.13	29.8	7.5	25.6	19.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)16	10:56	Bottom	3	1	20.7	8.09	29.9	7.42	22.6	19.5
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)16	10:56	Bottom	3	2	20.7	8.11	29.8	7.39	23	19.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)9	11:22	Surface	1	1	20.6	8.15	29.7	7.5	24.5	17.3
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)9	11:22	Surface	1	2	20.5	8.18	29.6	7.52	25.1	17.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)9	11:22	Middle	2	1						
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)9	11:22	Middle	2	2						
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)9	11:22	Bottom	3	1	20.6	8.13	29.7	7.41	22.7	15.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	IS(Mf)9	11:22	Bottom	3	2	20.7	8.1	29.8	7.43	23.5	14.4
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)3	11:52	Surface	1	1	20.7	8.09	29.6	7.59	24.8	15
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)3	11:52	Surface	1	2	20.6	8.11	29.7	7.63	25.5	13
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)3	11:52	Middle	2	1	20.7	8.1	29.7	7.53	23.9	18
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)3	11:52	Middle	2	2	20.8	8.13	29.8	7.48	23.3	16.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)3	11:52	Bottom	3	1	20.8	8.16	29.8	7.32	21.1	17.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Flood	CS(Mf)3	11:52	Bottom	3	2	20.8	8.19	29.7	7.29	21.9	18.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)3	15:50	Surface	1	1	20.4	8.12	29.5	7.51	16.8	15.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)3	15:50	Surface	1	2	20.5	8.14	29.5	7.49	17	15.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)3	15:50	Middle	2	1	20.6	8.22	29.6	7.43	17.4	20.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)3	15:50	Middle	2	2	20.7	8.2	29.7	7.41	17.6	19.5
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)3	15:50	Bottom	3	1	20.8	7.98	29.7	7.27	18.3	19.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)3	15:50	Bottom	3	2	20.7	8	29.8	7.29	18.5	18.2

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4a	17:40	Surface	1	1	20.4	7.94	29.4	7.6	20.4	14.3
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4a	17:40	Surface	1	2	20.5	7.96	29.5	7.58	20.6	14.3
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4a	17:40	Middle	2	1						
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4a	17:40	Middle	2	2						
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4a	17:40	Bottom	3	1	20.6	8.07	29.6	7.43	21.8	16.9
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4a	17:40	Bottom	3	2	20.7	8.09	29.7	7.41	22	15.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4	17:18	Surface	1	1	20.5	8.09	29.5	7.53	20.3	19.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4	17:18	Surface	1	2	20.6	8.11	29.5	7.55	20.5	19.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4	17:18	Middle	2	1						
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4	17:18	Middle	2	2						
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4	17:18	Bottom	3	1	20.6	8.14	29.6	7.43	22.8	16.9
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	SR4	17:18	Bottom	3	2	20.7	8.12	29.6	7.41	23	15.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS8	16:56	Surface	1	1	20.5	7.98	29.6	7.47	20.2	16.5
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS8	16:56	Surface	1	2	20.5	7.96	29.6	7.45	20.4	16.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS8	16:56	Middle	2	1						
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS8	16:56	Middle	2	2						
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS8	16:56	Bottom	3	1	20.6	8.06	29.7	7.33	26.4	19.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS8	16:56	Bottom	3	2	20.7	8.08	29.8	7.35	26.2	19.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)16	16:34	Surface	1	1	20.5	8.12	29.5	7.57	24.5	16.5
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)16	16:34	Surface	1	2	20.6	8.1	29.6	7.59	24.7	15.4
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)16	16:34	Middle	2	1	20.7	8	29.7	7.46	25.2	15.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)16	16:34	Middle	2	2	20.7	8.02	29.7	7.48	25.4	16.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)16	16:34	Bottom	3	1	20.7	8.23	29.8	7.33	26	18.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)16	16:34	Bottom	3	2	20.8	8.21	29.7	7.31	26.2	16.9
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)9	16:21	Surface	1	1	20.5	7.98	29.4	7.42	17.8	14
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)9	16:21	Surface	1	2	20.5	8	29.5	7.4	18	14
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)9	16:21	Middle	2	1						
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)9	16:21	Middle	2	2						
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)9	16:21	Bottom	3	1	20.6	8.12	29.6	7.33	20.2	19.5
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	IS(Mf)9	16:21	Bottom	3	2	20.7	8.14	29.7	7.31	20.4	19.9
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)5	18:02	Surface	1	1	20.5	8.13	29.5	7.53	21.4	16
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)5	18:02	Surface	1	2	20.6	8.15	29.6	7.55	21.6	14
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)5	18:02	Middle	2	1	20.7	8.2	29.6	7.47	22.2	19.6
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)5	18:02	Middle	2	2	20.8	8.18	29.6	7.49	22	19.2
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)5	18:02	Bottom	3	1	20.7	8.03	29.7	7.22	23.8	16.8
TMCLKL	HY/2012/07	26-03-2015	Mid-Ebb	CS(Mf)5	18:02	Bottom	3	2	20.7	8.05	29.8	7.2	24	16.9
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)5	7:22	Surface	1	1	20.2	8.14	29.4	7.52	23.2	27.8

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)5	7:22	Surface	1	2	20.3	8.16	29.4	7.55	22.4	29.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)5	7:22	Middle	2	1	20.3	8.19	29.5	7.43	23.9	33.5
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)5	7:22	Middle	2	2	20.3	8.2	29.6	7.4	24.5	34.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)5	7:22	Bottom	3	1	20.4	8.21	29.7	7.33	26	41.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)5	7:22	Bottom	3	2	20.4	8.23	29.8	7.27	25.4	35.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4a	7:46	Surface	1	1	20.2	8.12	29.3	7.43	21.8	26.2
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4a	7:46	Surface	1	2	20.2	8.15	29.4	7.47	20.9	31.4
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4a	7:46	Middle	2	1						
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4a	7:46	Middle	2	2						
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4a	7:46	Bottom	3	1	20.2	8.13	29.5	7.4	22.4	29.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4a	7:46	Bottom	3	2	20.3	8.14	29.5	7.36	22.9	29.8
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4	8:00	Surface	1	1	20.2	8.19	29.3	7.4	17.9	28.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4	8:00	Surface	1	2	20.3	8.21	29.3	7.37	18.5	22.2
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4	8:00	Middle	2	1						
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4	8:00	Middle	2	2						
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4	8:00	Bottom	3	1	20.3	8.14	29.3	7.42	21.6	32.4
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	SR4	8:00	Bottom	3	2	20.3	8.15	29.4	7.44	22.4	33.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS8	8:15	Surface	1	1	20.3	8.12	29.3	7.52	19.6	30.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS8	8:15	Surface	1	2	20.3	8.15	29.4	7.47	20.3	32.5
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS8	8:15	Middle	2	1						
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS8	8:15	Middle	2	2						
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS8	8:15	Bottom	3	1	20.3	8.11	29.4	7.41	22.7	36.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS8	8:15	Bottom	3	2	20.4	8.13	29.5	7.39	23.6	30.7
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)16	8:28	Surface	1	1	20.3	8.1	29.4	7.63	20.8	31.2
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)16	8:28	Surface	1	2	20.3	8.11	29.4	7.58	21.5	32.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)16	8:28	Middle	2	1	20.3	8.13	29.4	7.4	22.7	36.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)16	8:28	Middle	2	2	20.4	8.14	29.5	7.36	23.1	34.7
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)16	8:28	Bottom	3	1	20.4	8.07	29.7	7.27	23.8	33.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)16	8:28	Bottom	3	2	20.4	8.09	29.8	7.24	24.4	36.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)9	8:50	Surface	1	1	20.3	8.09	29.5	7.51	22.6	39.4
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)9	8:50	Surface	1	2	20.4	8.11	29.5	7.49	23.2	37.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)9	8:50	Middle	2	1						
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)9	8:50	Middle	2	2						
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)9	8:50	Bottom	3	1	20.4	8.1	29.5	7.32	24.4	34.2
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	IS(Mf)9	8:50	Bottom	3	2	20.4	8.11	29.6	7.3	25	35
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)3	9:05	Surface	1	1	20.4	8.04	29.5	7.5	24.6	32
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)3	9:05	Surface	1	2	20.4	8.06	29.4	7.54	25.2	35.3

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)3	9:05	Middle	2	1	20.4	8.07	29.5	7.44	24	33.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)3	9:05	Middle	2	2	20.4	8.06	29.6	7.41	23.3	30.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)3	9:05	Bottom	3	1	20.5	8.1	29.7	7.27	21.4	32.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Flood	CS(Mf)3	9:05	Bottom	3	2	20.5	8.11	29.7	7.29	22.2	31.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)3	18:33	Surface	1	1	20.5	8.09	29.6	7.62	25.1	30.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)3	18:33	Surface	1	2	20.4	8.11	29.5	7.66	25.8	33.5
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)3	18:33	Middle	2	1	20.6	8.1	29.6	7.56	24.2	36.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)3	18:33	Middle	2	2	20.5	8.13	29.7	7.51	23.6	37.8
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)3	18:33	Bottom	3	1	20.6	8.16	29.8	7.35	21.4	34.2
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)3	18:33	Bottom	3	2	20.6	8.19	29.9	7.32	22.2	35.5
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4a	20:23	Surface	1	1	20.6	8.2	29.5	7.66	19.7	25.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4a	20:23	Surface	1	2	20.5	8.19	29.6	7.64	18.8	22.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4a	20:23	Middle	2	1						
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4a	20:23	Middle	2	2						
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4a	20:23	Bottom	3	1	20.6	8.15	29.7	7.52	22.7	29.5
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4a	20:23	Bottom	3	2	20.7	8.17	29.6	7.49	23.3	30.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4	20:01	Surface	1	1	20.6	8.26	29.5	7.69	18.5	29.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4	20:01	Surface	1	2	20.5	8.21	29.4	7.67	23.4	35.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4	20:01	Middle	2	1						
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4	20:01	Middle	2	2						
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4	20:01	Bottom	3	1	20.7	8.18	29.5	7.58	23.7	28.4
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	SR4	20:01	Bottom	3	2	20.7	8.16	29.6	7.55	24.5	36.8
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS8	19:39	Surface	1	1	20.7	8.19	29.5	7.64	26.2	39.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS8	19:39	Surface	1	2	20.6	8.15	29.6	7.62	25.5	35.7
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS8	19:39	Middle	2	1						
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS8	19:39	Middle	2	2						
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS8	19:39	Bottom	3	1	20.7	8.11	29.6	7.52	25.3	38
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS8	19:39	Bottom	3	2	20.8	8.15	29.7	7.49	24.4	34.2
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)16	19:17	Surface	1	1	20.7	8.16	29.6	7.71	23.6	33
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)16	19:17	Surface	1	2	20.6	8.13	29.7	7.64	24.3	34
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)16	19:17	Middle	2	1	20.7	8.15	29.8	7.56	24.9	29.9
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)16	19:17	Middle	2	2	20.7	8.13	29.7	7.53	25.7	33.4
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)16	19:17	Bottom	3	1	20.8	8.09	29.8	7.45	22.9	32.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)16	19:17	Bottom	3	2	20.7	8.11	29.9	7.42	23.2	34.8
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)9	18:55	Surface	1	1	20.6	8.15	29.7	7.53	24.8	36.8
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)9	18:55	Surface	1	2	20.5	8.18	29.6	7.55	25.4	38.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)9	18:55	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)9	18:55	Middle	2	2						
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)9	18:55	Bottom	3	1	20.7	8.13	29.7	7.44	22.9	34.4
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	IS(Mf)9	18:55	Bottom	3	2	20.6	8.1	29.8	7.46	23.7	33.2
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)5	20:47	Surface	1	1	20.6	8.24	29.7	7.72	20.4	28.6
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)5	20:47	Surface	1	2	20.5	8.25	29.6	7.69	21.1	27.4
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)5	20:47	Middle	2	1	20.7	8.27	29.7	7.64	22.9	32.1
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)5	20:47	Middle	2	2	20.6	8.28	29.8	7.61	23.5	35.3
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)5	20:47	Bottom	3	1	20.8	8.25	29.9	7.34	26.1	36.5
TMCLKL	HY/2012/07	28-03-2015	Mid-Ebb	CS(Mf)5	20:47	Bottom	3	2	20.7	8.27	29.9	7.29	25.5	38.3
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)5	15:01	Surface	1	1	20.9	8.15	29.6	7.72	18.4	24.5
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)5	15:01	Surface	1	2	20.8	8.15	29.7	7.68	18.5	25
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)5	15:01	Middle	2	1	20.6	8.14	29.8	7.64	20.1	27.2
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)5	15:01	Middle	2	2	20.6	8.15	29.9	7.61	20.3	27.8
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)5	15:01	Bottom	3	1	20.6	8.15	29.9	7.5	22.7	31
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)5	15:01	Bottom	3	2	20.5	8.16	30	7.54	22.5	30.8
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4a	15:31	Surface	1	1	20.9	8.16	29.7	7.6	19.6	26.1
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4a	15:31	Surface	1	2	20.9	8.16	29.8	7.57	19.7	26.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4a	15:31	Middle	2	1						
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4a	15:31	Middle	2	2						
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4a	15:31	Bottom	3	1	20.7	8.16	29.8	7.44	20.1	26.8
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4a	15:31	Bottom	3	2	20.7	8.15	29.9	7.47	20.2	27.1
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4	15:56	Surface	1	1	20.9	8.17	29.8	7.46	20.1	26.8
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4	15:56	Surface	1	2	20.8	8.17	29.7	7.43	20.1	27.2
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4	15:56	Middle	2	1						
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4	15:56	Middle	2	2						
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4	15:56	Bottom	3	1	20.7	8.18	30	7.29	23.4	31.2
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	SR4	15:56	Bottom	3	2	20.7	8.17	30	7.32	23.6	30.9
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS8	16:21	Surface	1	1	20.8	8.18	29.7	7.58	19.9	26
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS8	16:21	Surface	1	2	20.9	8.17	29.7	7.55	20.1	26.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS8	16:21	Middle	2	1						
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS8	16:21	Middle	2	2						
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS8	16:21	Bottom	3	1	20.6	8.18	29.9	7.36	21.7	28.9
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS8	16:21	Bottom	3	2	20.5	8.18	30	7.33	21.9	30
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)16	16:36	Surface	1	1	20.9	8.18	29.8	7.67	18.8	24.6
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)16	16:36	Surface	1	2	20.9	8.18	29.9	7.64	18.7	24
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)16	16:36	Middle	2	1	20.6	8.18	30	7.42	20.6	27.2
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)16	16:36	Middle	2	2	20.5	8.18	30.1	7.45	20.7	27.5

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)16	16:36	Bottom	3	1	20.5	8.18	30.1	7.21	22.9	30.5
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)16	16:36	Bottom	3	2	20.4	8.19	30.2	7.17	23	29.9
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)9	17:06	Surface	1	1	20.8	8.19	29.7	7.52	19.4	25.2
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)9	17:06	Surface	1	2	20.9	8.18	29.8	7.55	19.5	26
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)9	17:06	Middle	2	1						
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)9	17:06	Middle	2	2						
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)9	17:06	Bottom	3	1	20.5	8.2	30	7.29	22.8	30.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	IS(Mf)9	17:06	Bottom	3	2	20.6	8.19	30.1	7.25	22.7	29.5
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)3	17:39	Surface	1	1	20.9	8.19	29.9	7.61	17.6	23.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)3	17:39	Surface	1	2	20.9	8.19	29.9	7.57	17.5	22.8
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)3	17:39	Middle	2	1	20.5	8.2	30.2	7.54	19.2	25.6
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)3	17:39	Middle	2	2	20.4	8.21	30.2	7.57	19.4	26
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)3	17:39	Bottom	3	1	20.4	8.21	30.2	7.38	21.7	29.6
TMCLKL	HY/2012/07	31-03-2015	Mid-Flood	CS(Mf)3	17:39	Bottom	3	2	20.4	8.2	30.3	7.35	21.9	30
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)3	10:06	Surface	1	1	20.6	8	29.6	7.56	24.2	32.2
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)3	10:06	Surface	1	2	20.5	8.02	29.7	7.6	24.9	32.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)3	10:06	Middle	2	1	20.6	8.01	29.8	7.5	23.3	31.1
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)3	10:06	Middle	2	2	20.5	8.04	29.7	7.45	22.7	30.5
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)3	10:06	Bottom	3	1	20.6	8.07	29.9	7.29	20.5	27.6
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)3	10:06	Bottom	3	2	20.7	8.1	30	7.26	21.3	28.8
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4a	12:16	Surface	1	1	20.6	8.11	29.7	7.6	18.8	24.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4a	12:16	Surface	1	2	20.7	8.1	29.6	7.58	17.9	23.2
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4a	12:16	Middle	2	1						
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4a	12:16	Middle	2	2						
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4a	12:16	Bottom	3	1	20.8	8.06	29.7	7.46	21.8	29.1
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4a	12:16	Bottom	3	2	20.7	8.08	29.8	7.43	22.4	29.6
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4	11:50	Surface	1	1	20.6	8.17	29.5	7.63	17.6	22.9
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4	11:50	Surface	1	2	20.7	8.12	29.6	7.61	22.5	26.7
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4	11:50	Middle	2	1						
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4	11:50	Middle	2	2						
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4	11:50	Bottom	3	1	20.8	8.09	29.7	7.52	22.8	30.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	SR4	11:50	Bottom	3	2	20.7	8.07	29.6	7.49	23.6	31.5
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS8	11:24	Surface	1	1	20.8	8.1	29.6	7.58	25.3	33.7
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS8	11:24	Surface	1	2	20.7	8.06	29.7	7.56	24.6	32.5
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS8	11:24	Middle	2	1						
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS8	11:24	Middle	2	2						
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS8	11:24	Bottom	3	1	20.8	8.02	29.7	7.46	24.4	31.7

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS8	11:24	Bottom	3	2	20.9	8.06	29.8	7.43	23.5	30.3
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)16	10:58	Surface	1	1	20.8	8.07	29.7	7.65	22.7	29.5
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)16	10:58	Surface	1	2	20.7	8.04	29.8	7.58	23.4	30.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)16	10:58	Middle	2	1	20.8	8.06	29.8	7.5	24	31
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)16	10:58	Middle	2	2	20.9	8.04	29.9	7.47	24.8	31.9
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)16	10:58	Bottom	3	1	20.9	8	30	7.39	22	28.6
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)16	10:58	Bottom	3	2	20.8	8.02	29.9	7.36	22.3	29
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)9	10:32	Surface	1	1	20.7	8.06	29.7	7.47	23.9	31
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)9	10:32	Surface	1	2	20.6	8.09	29.8	7.49	24.5	32
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)9	10:32	Middle	2	1						
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)9	10:32	Middle	2	2						
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)9	10:32	Bottom	3	1	20.8	8.04	29.8	7.38	22	28.6
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	IS(Mf)9	10:32	Bottom	3	2	20.7	8.01	29.9	7.4	22.8	30
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)5	12:46	Surface	1	1	20.7	8.15	29.7	7.66	19.5	25.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)5	12:46	Surface	1	2	20.6	8.16	29.8	7.63	20.2	26.3
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)5	12:46	Middle	2	1	20.8	8.18	29.9	7.58	22	29.3
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)5	12:46	Middle	2	2	20.7	8.19	29.8	7.55	22.6	29.4
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)5	12:46	Bottom	3	1	20.9	8.16	29.9	7.28	25.2	33.6
TMCLKL	HY/2012/07	31-03-2015	Mid-Ebb	CS(Mf)5	12:46	Bottom	3	2	20.8	8.18	30	7.23	24.6	32.5

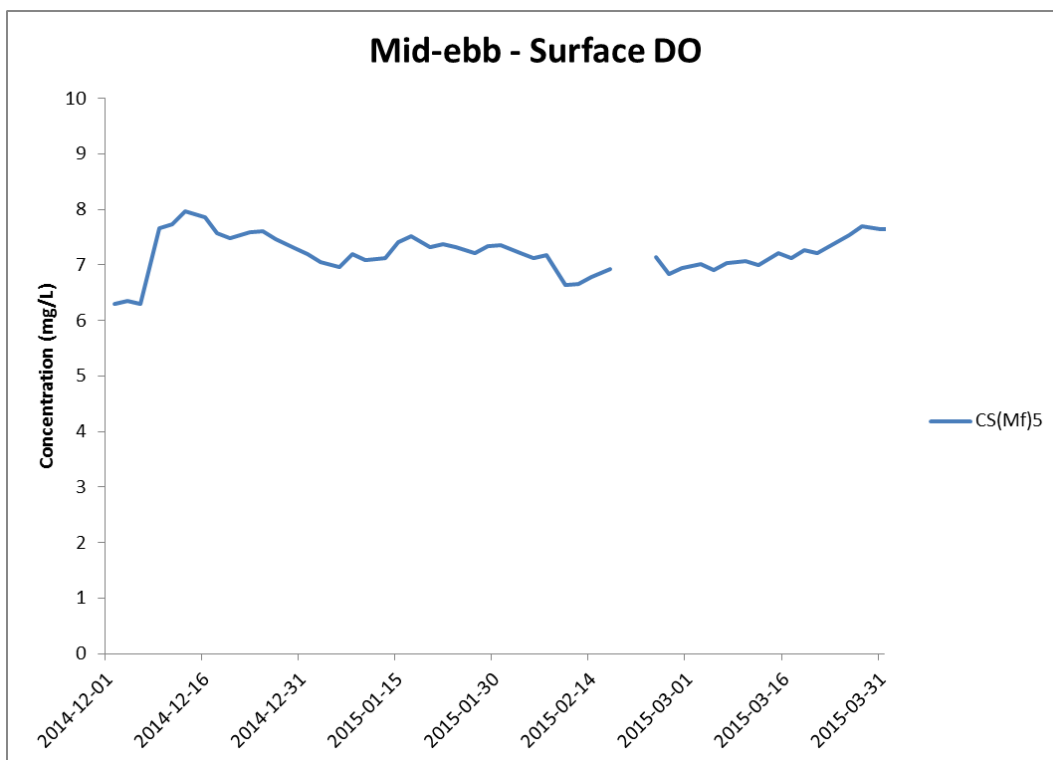
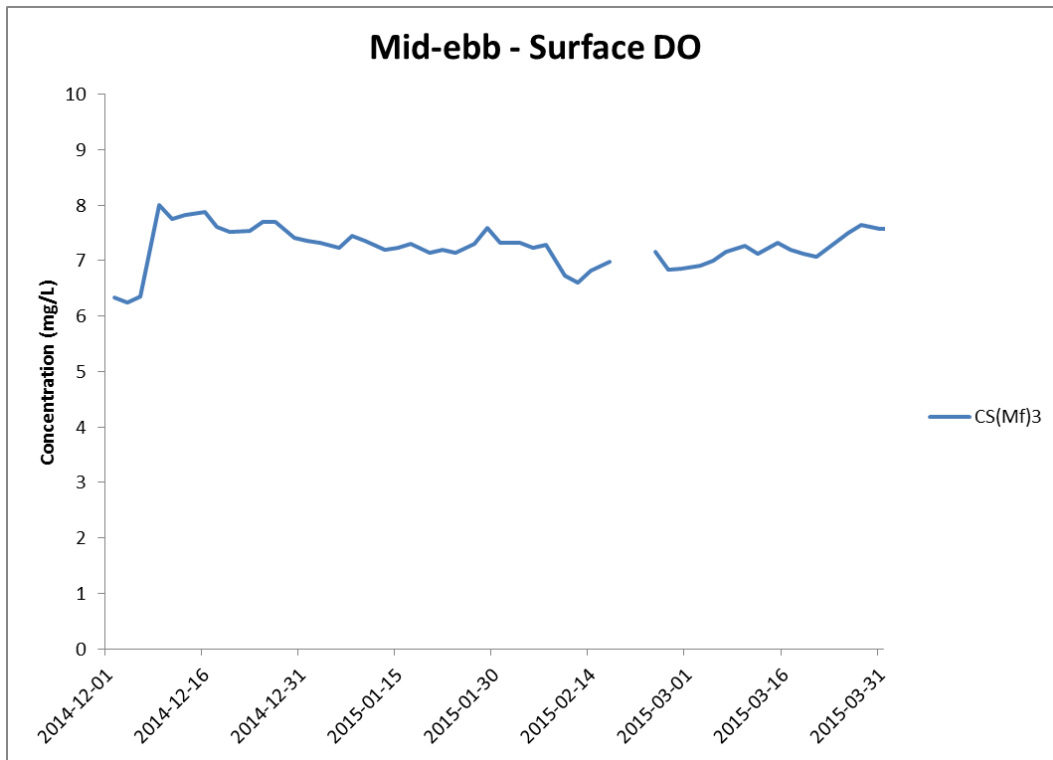


Figure J1 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



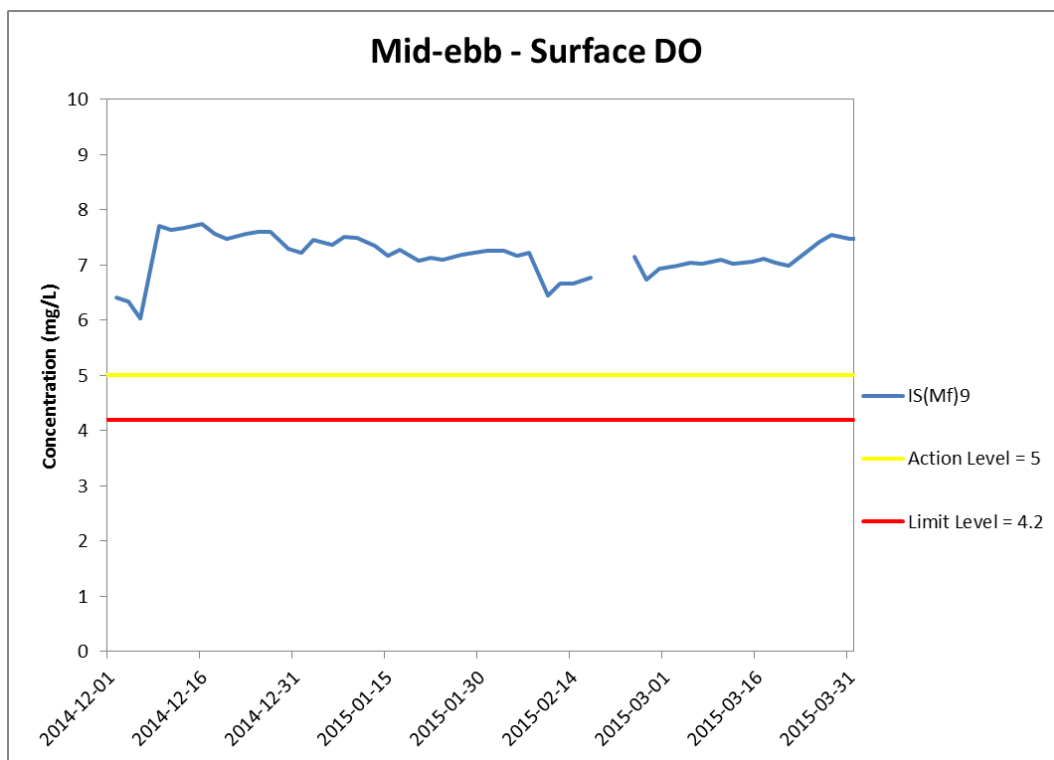
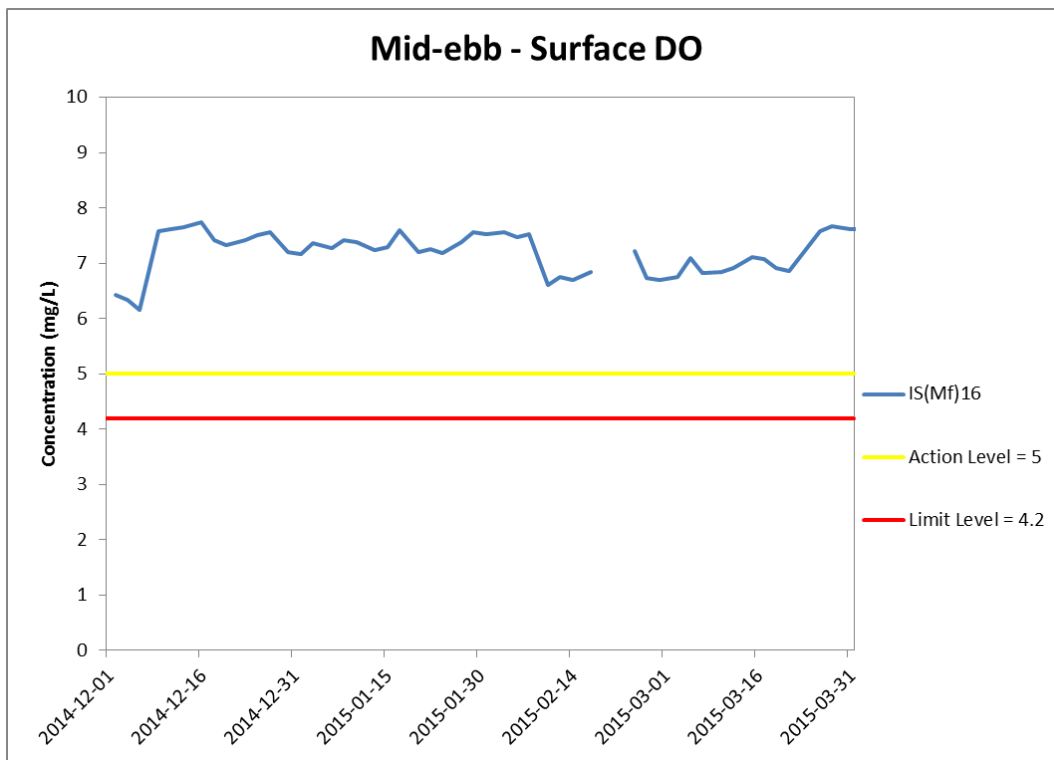


Figure J2 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



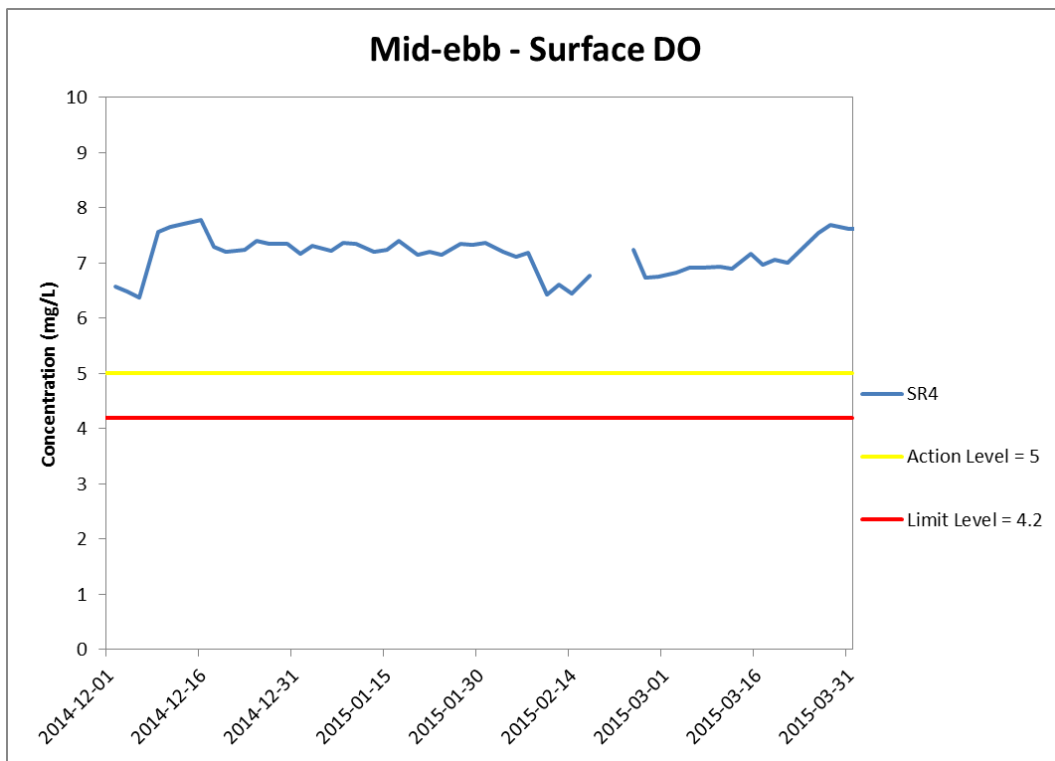
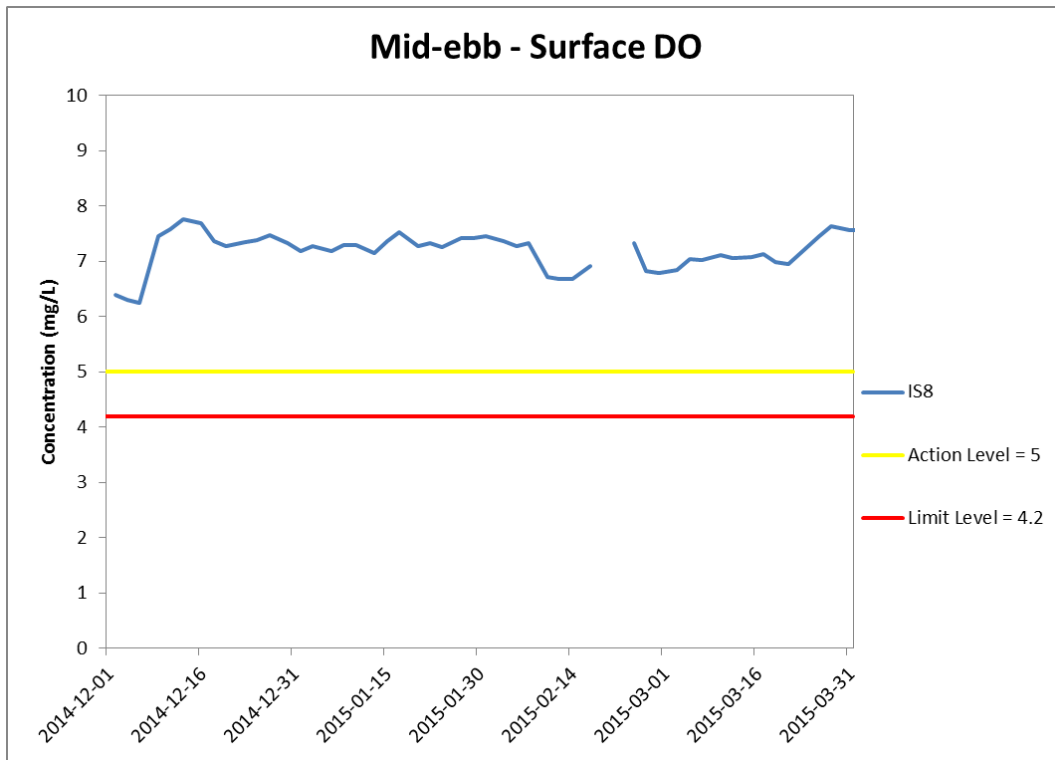


Figure J3 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



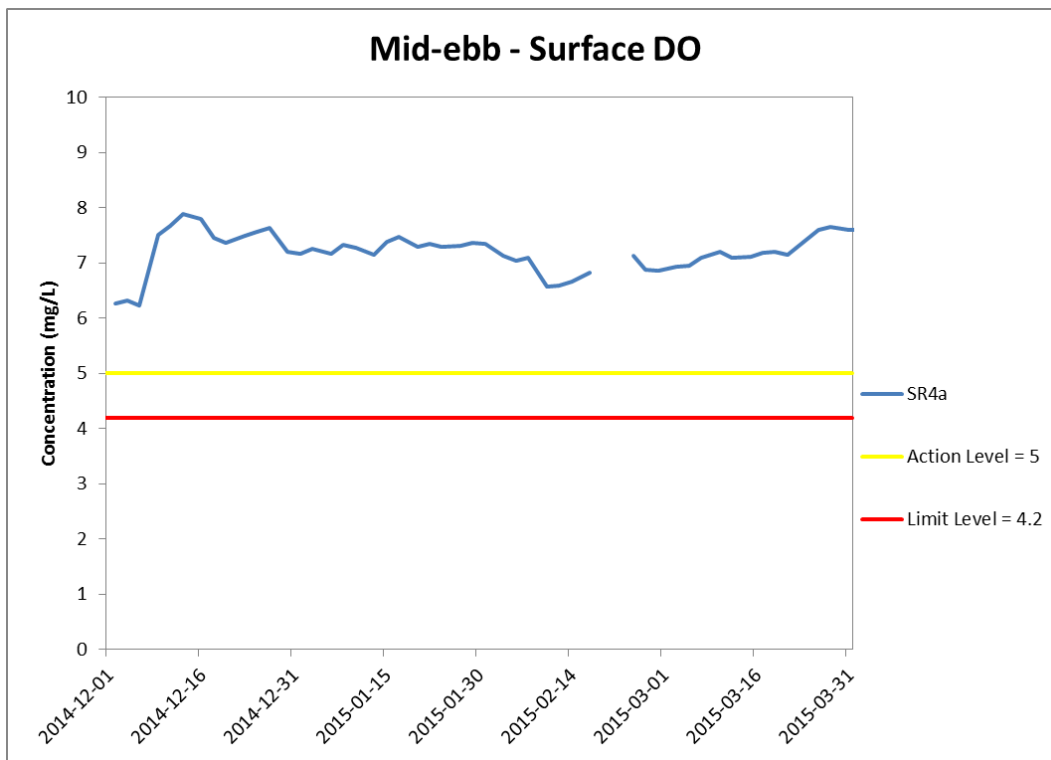


Figure J4 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



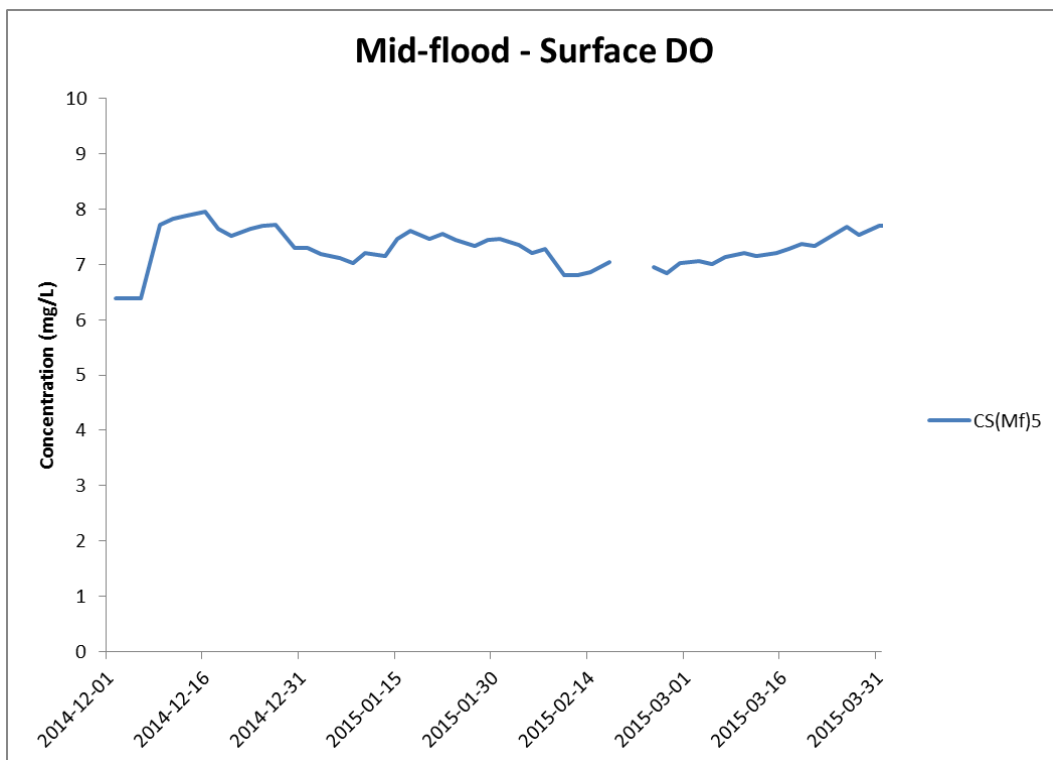
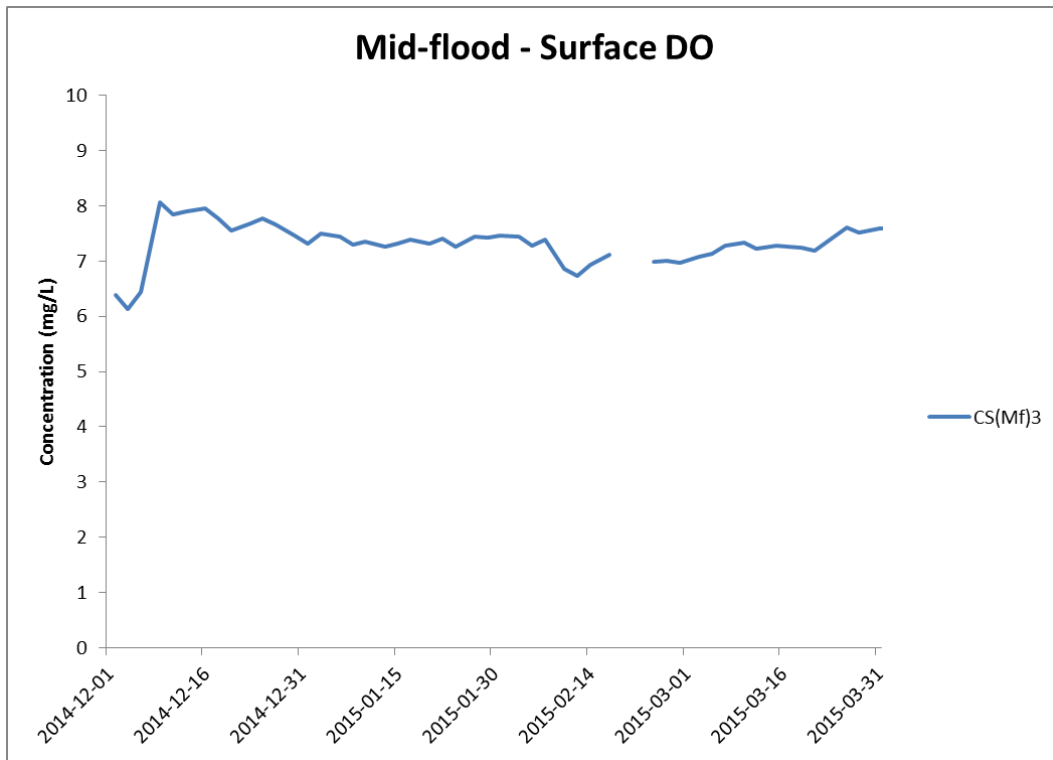
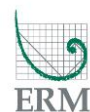


Figure J5 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



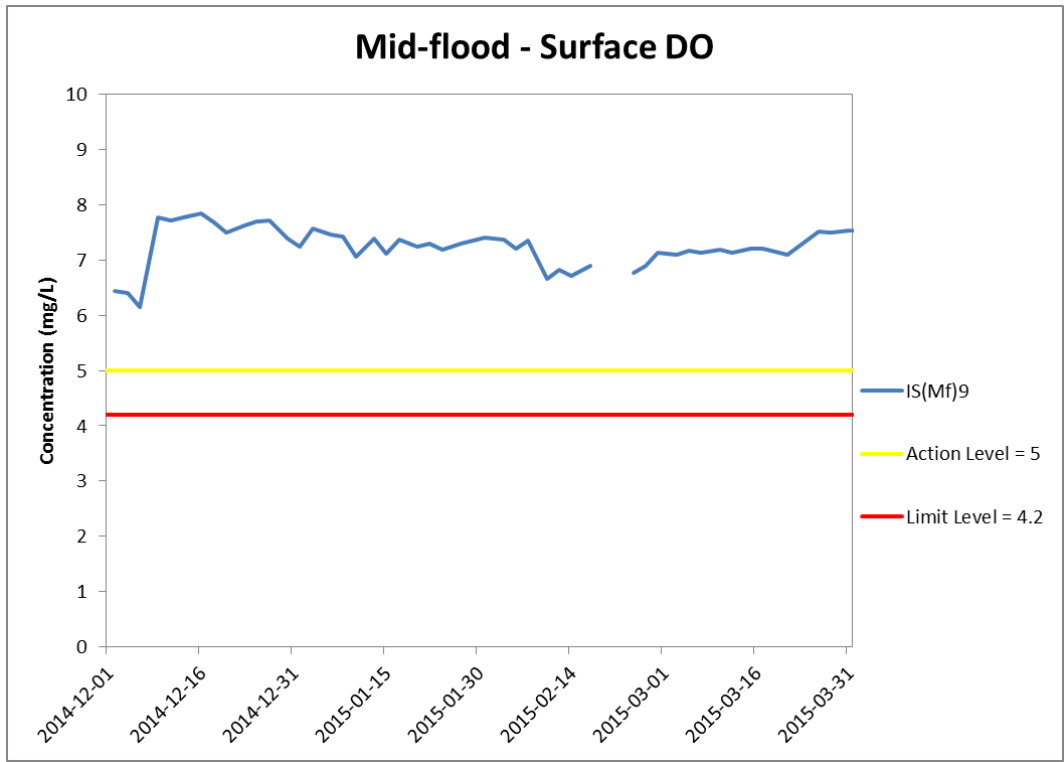
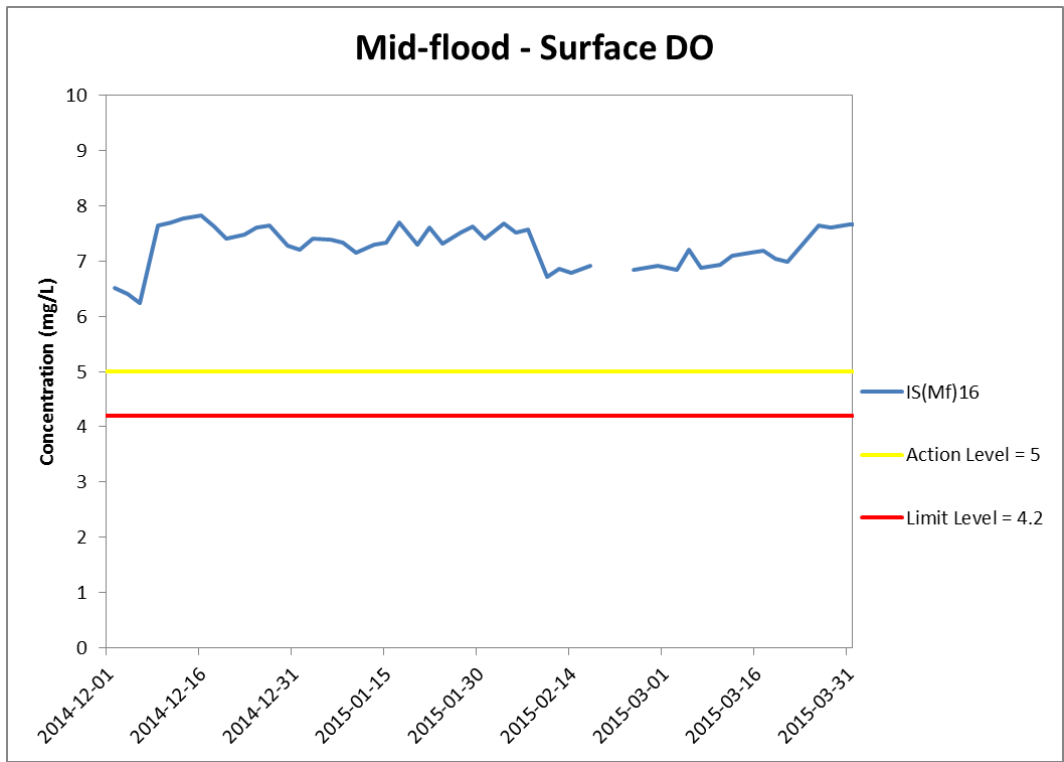


Figure J6 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 December 2014 and 31 March 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



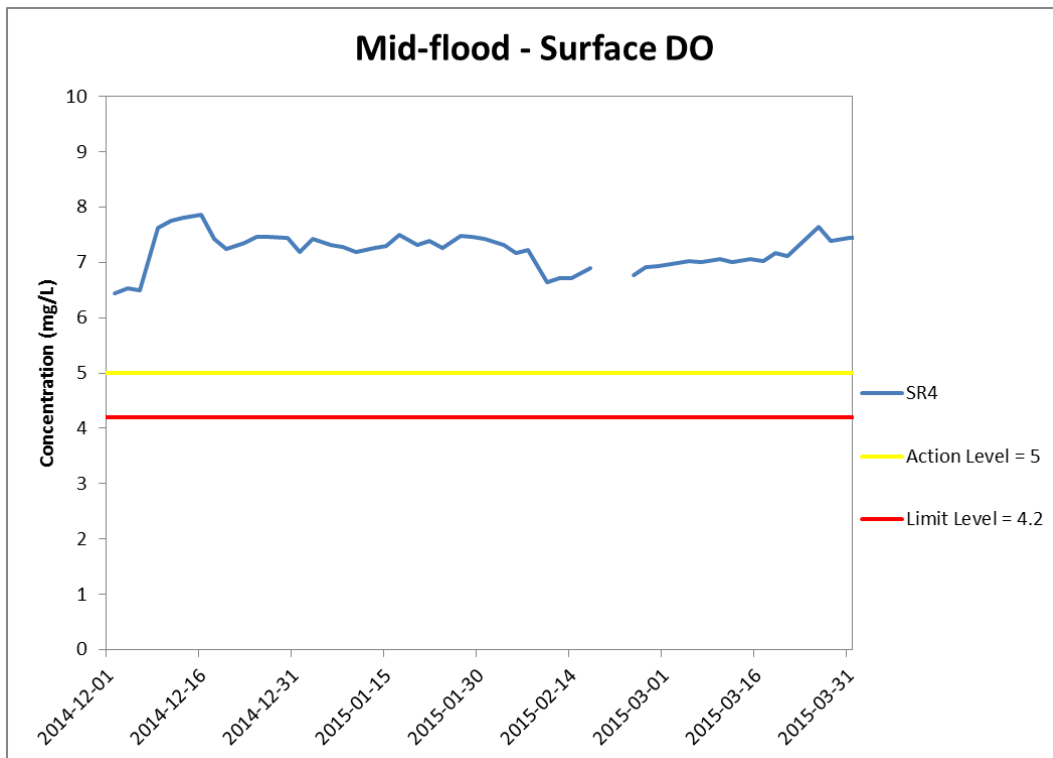
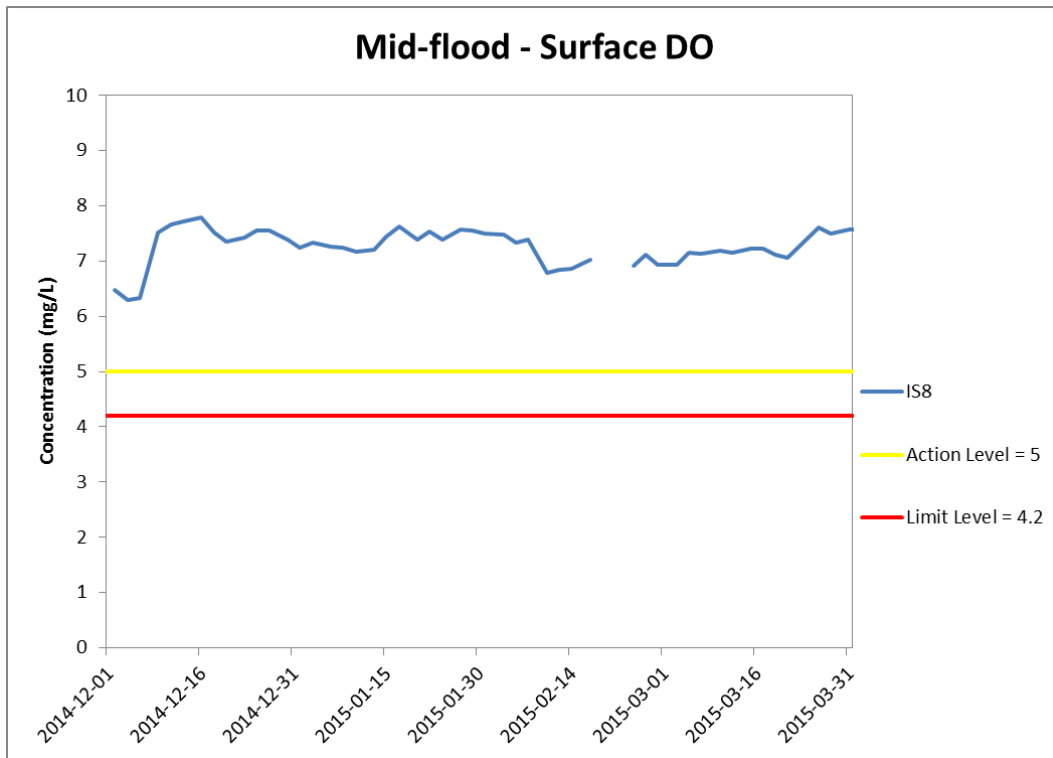


Figure J7 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 December 2014 and 31 March 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



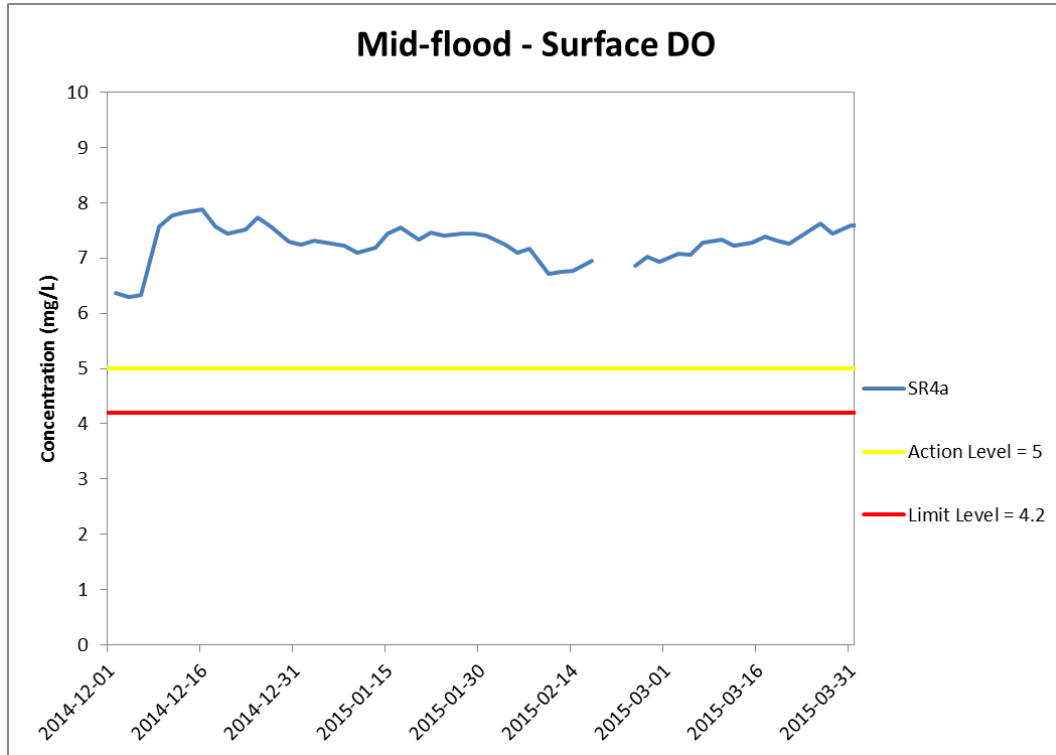


Figure J8 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 December 2014 and 31 March 2015 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



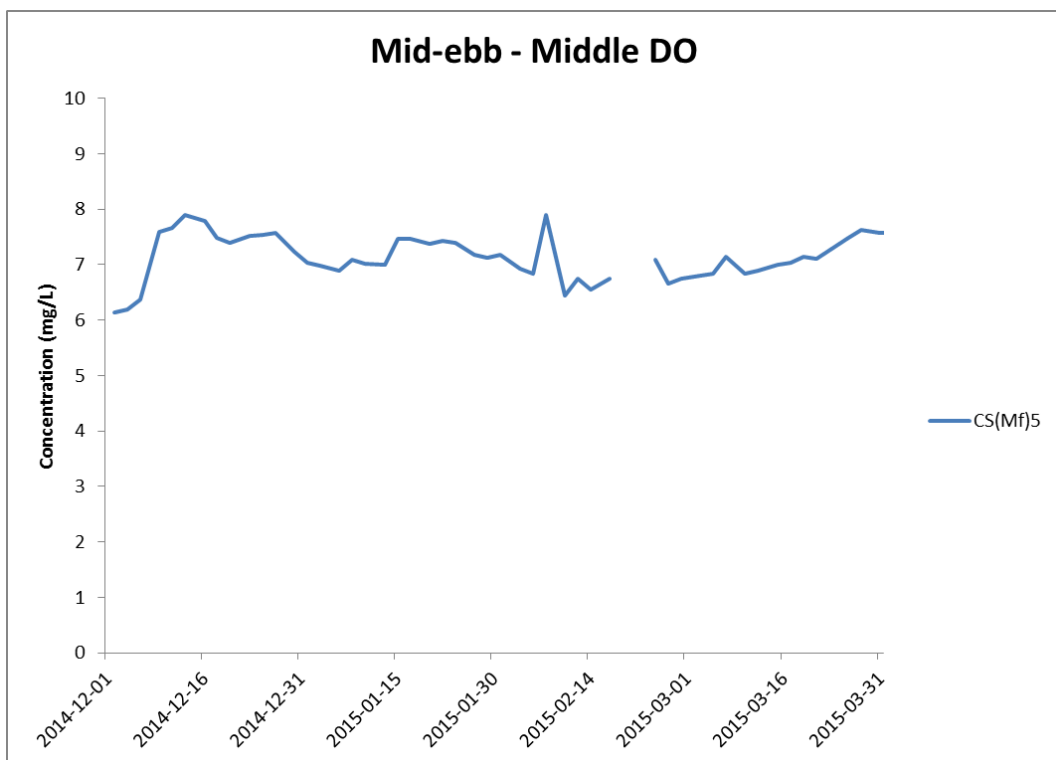
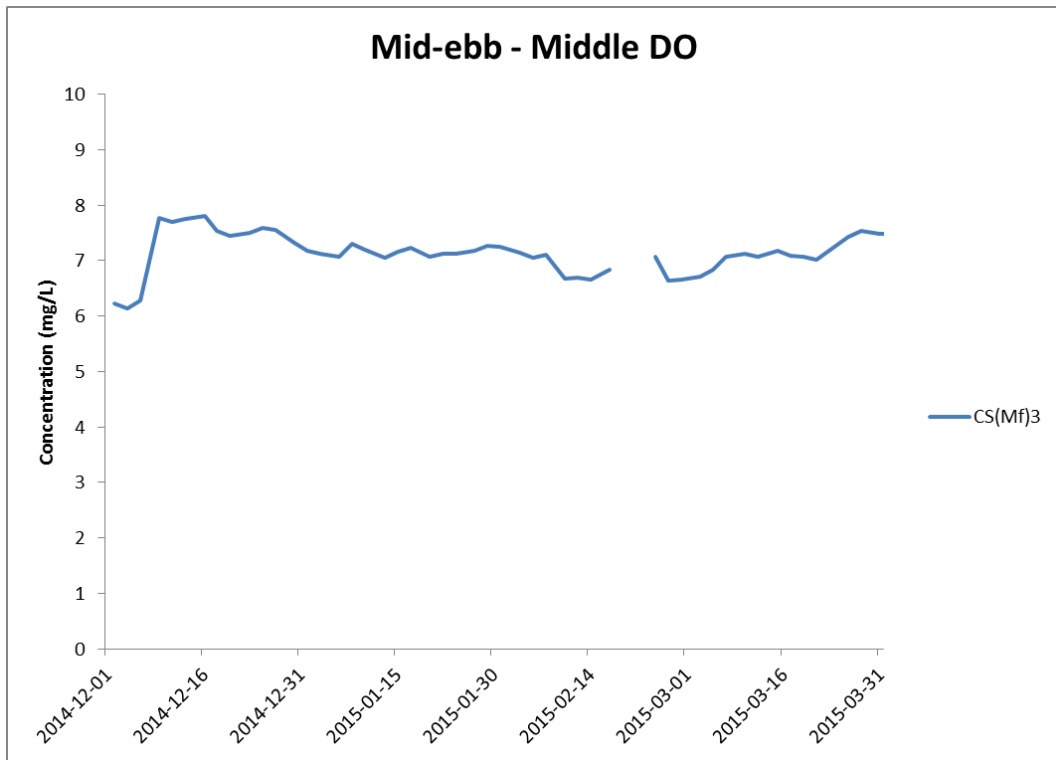


Figure J9 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



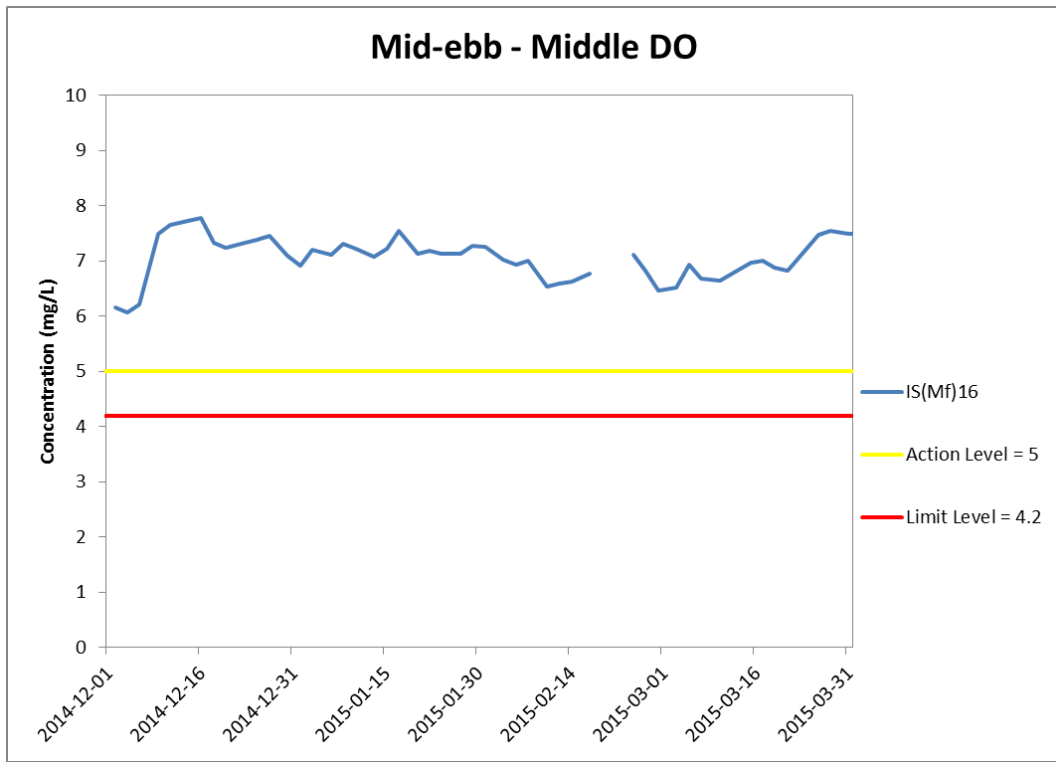


Figure J10 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS(Mf)16.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



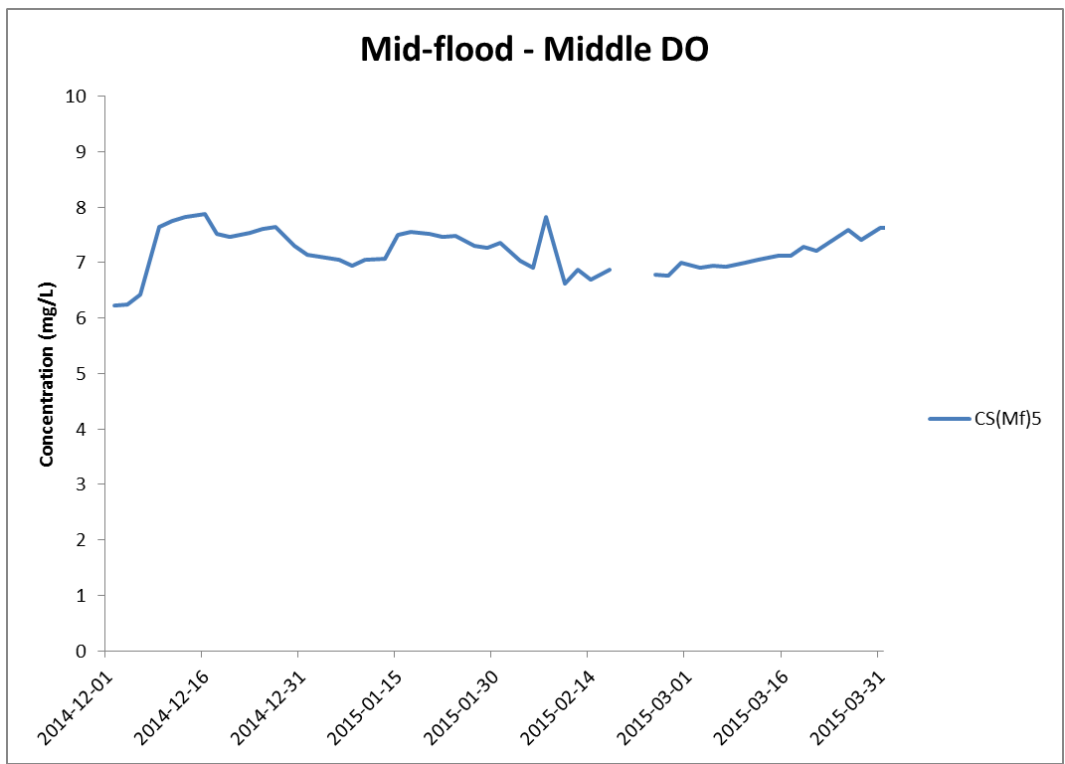
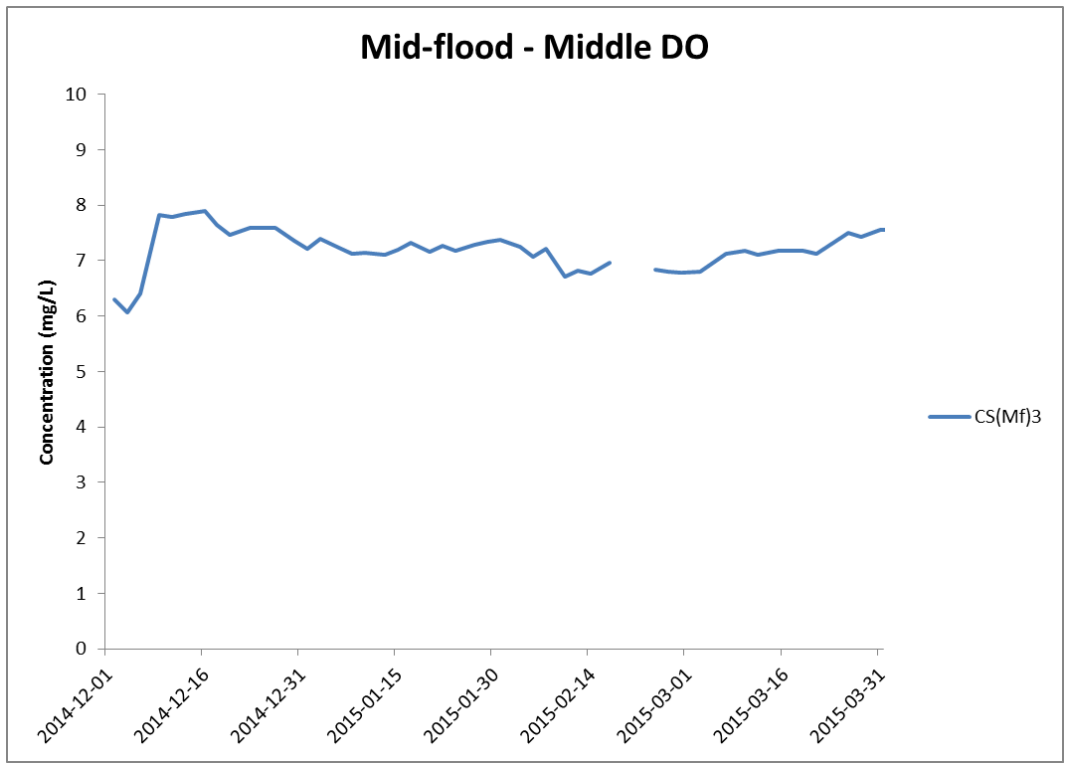


Figure J11 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



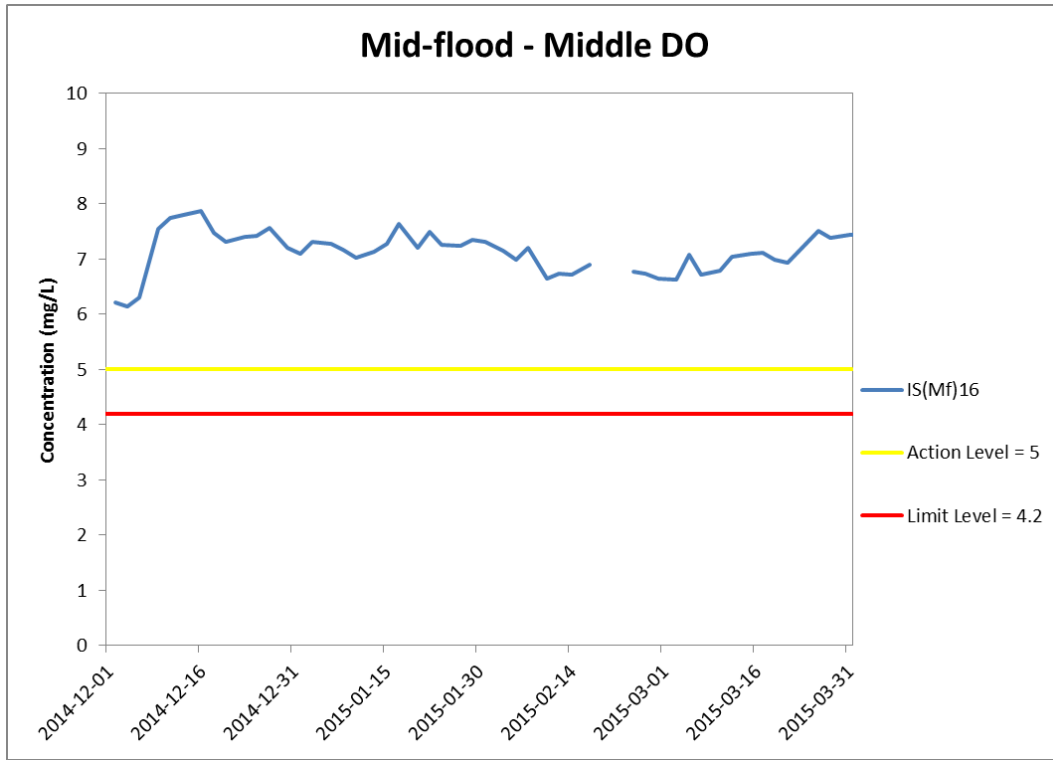
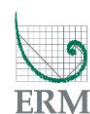


Figure J12 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 December 2014 and 31 March 2015 at IS(Mf)16.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



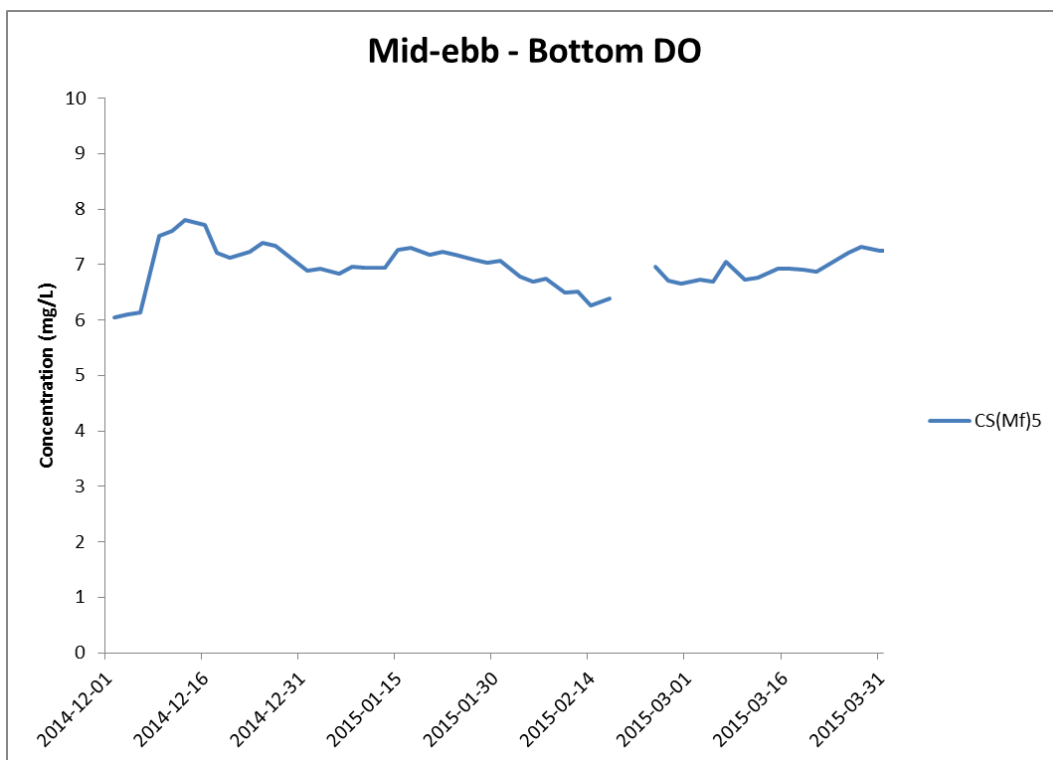
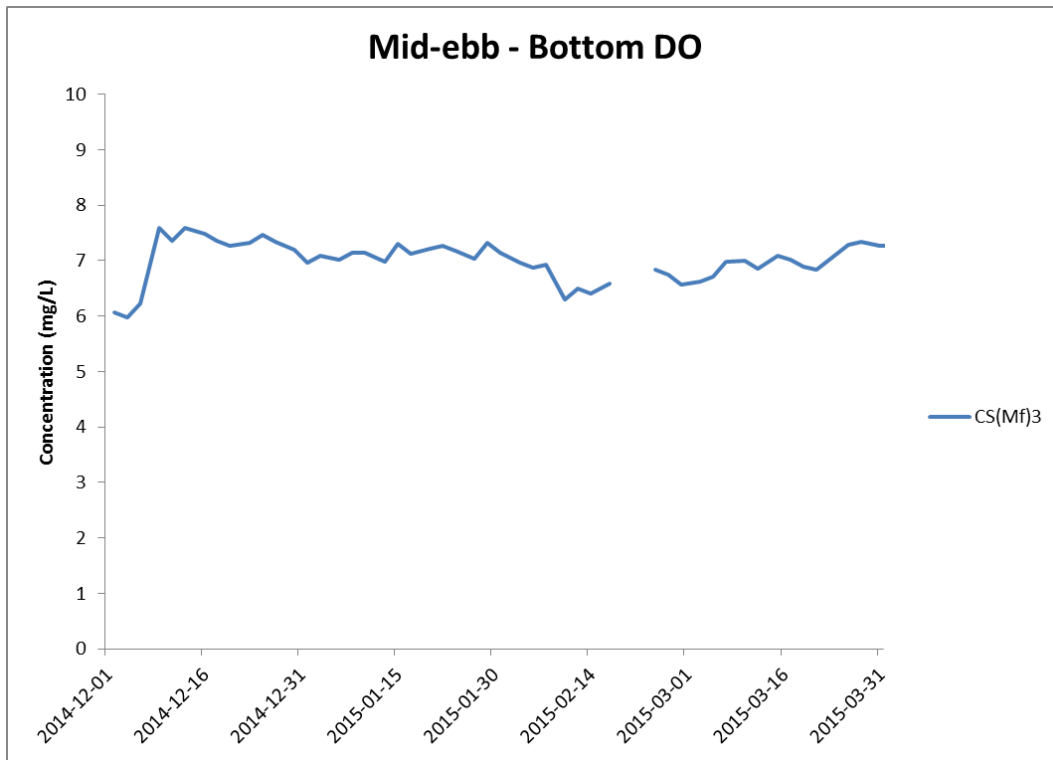


Figure J13 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



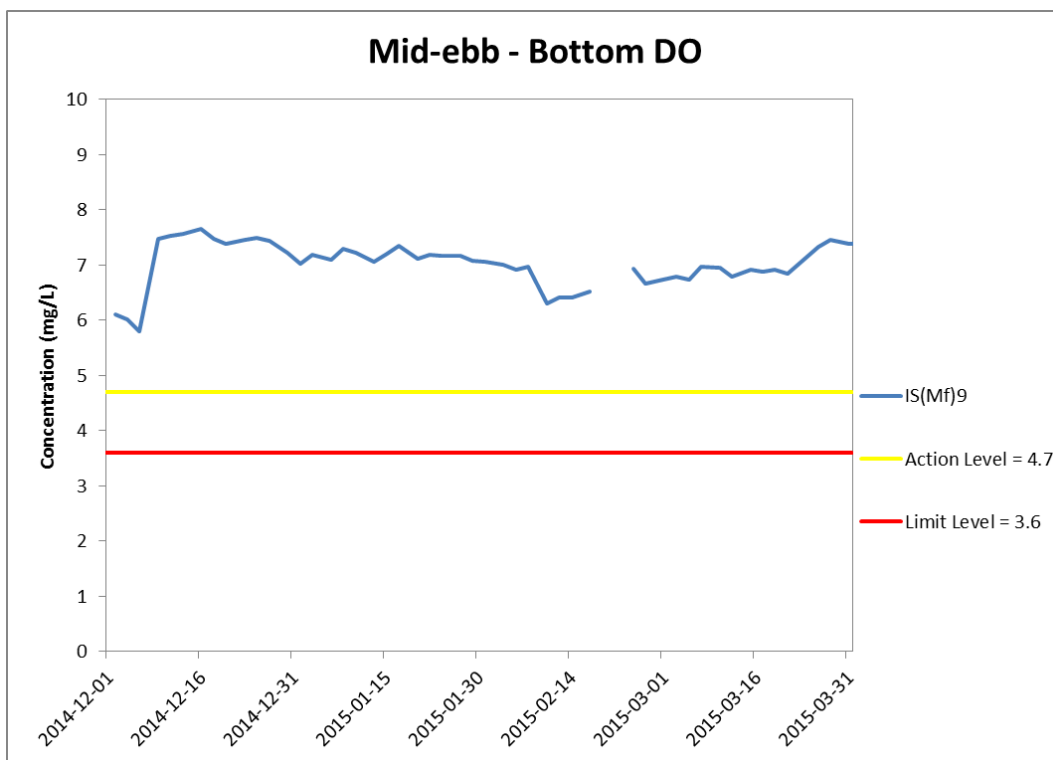
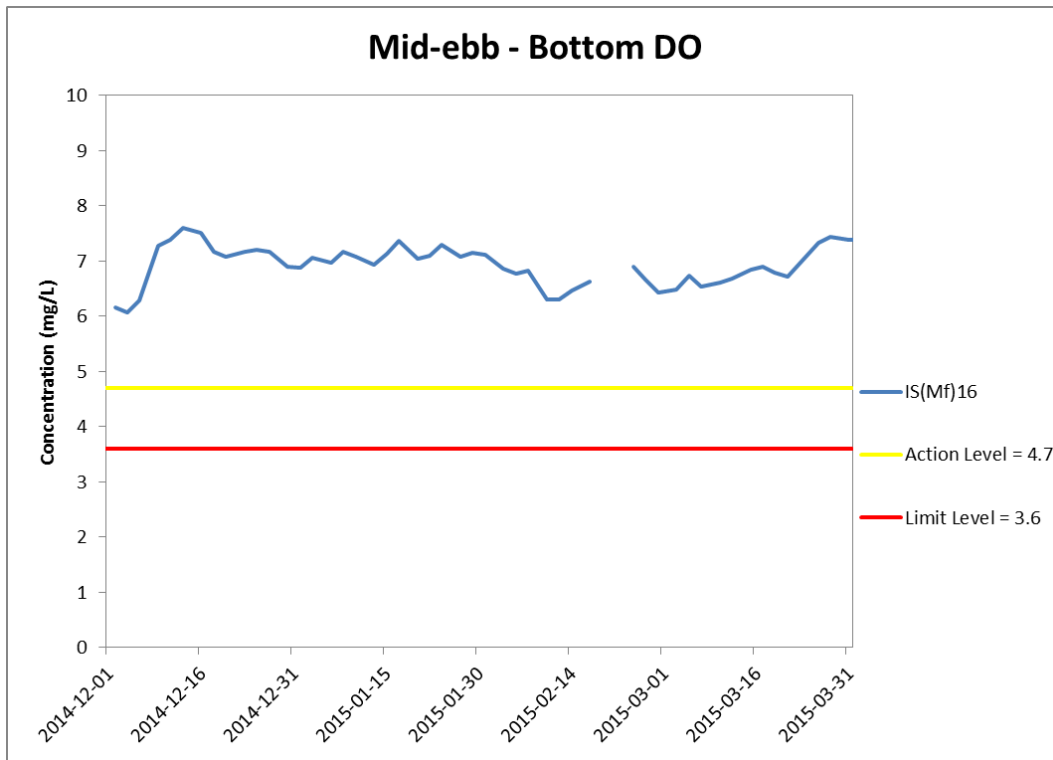


Figure J14 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



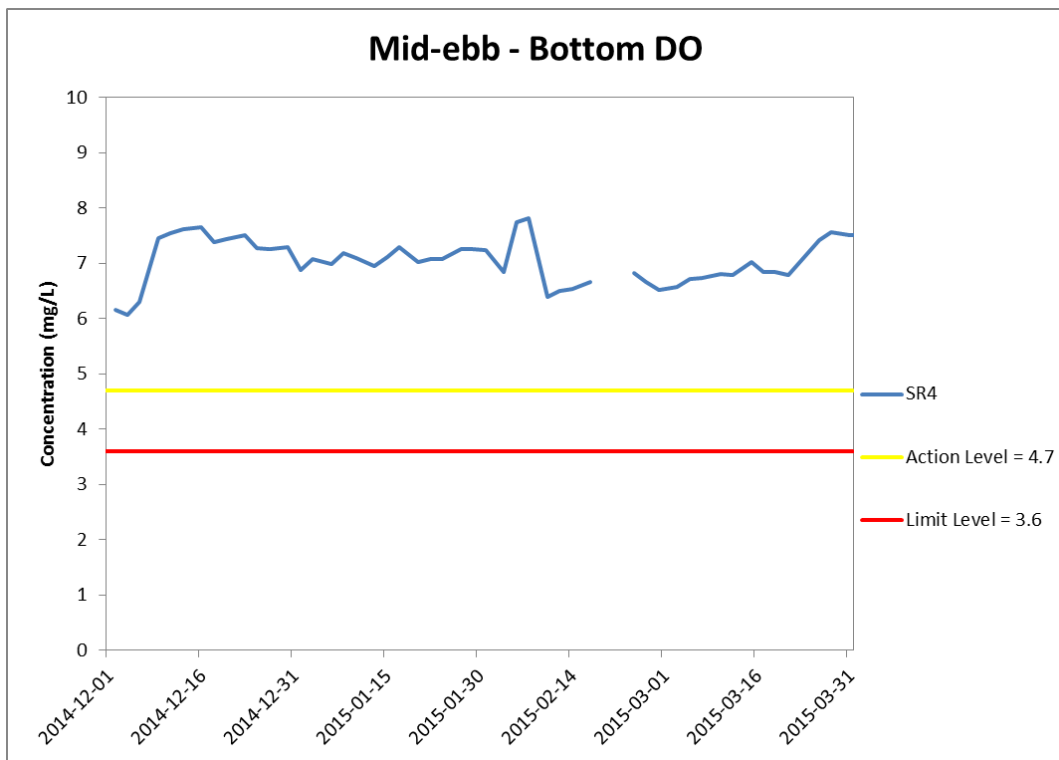
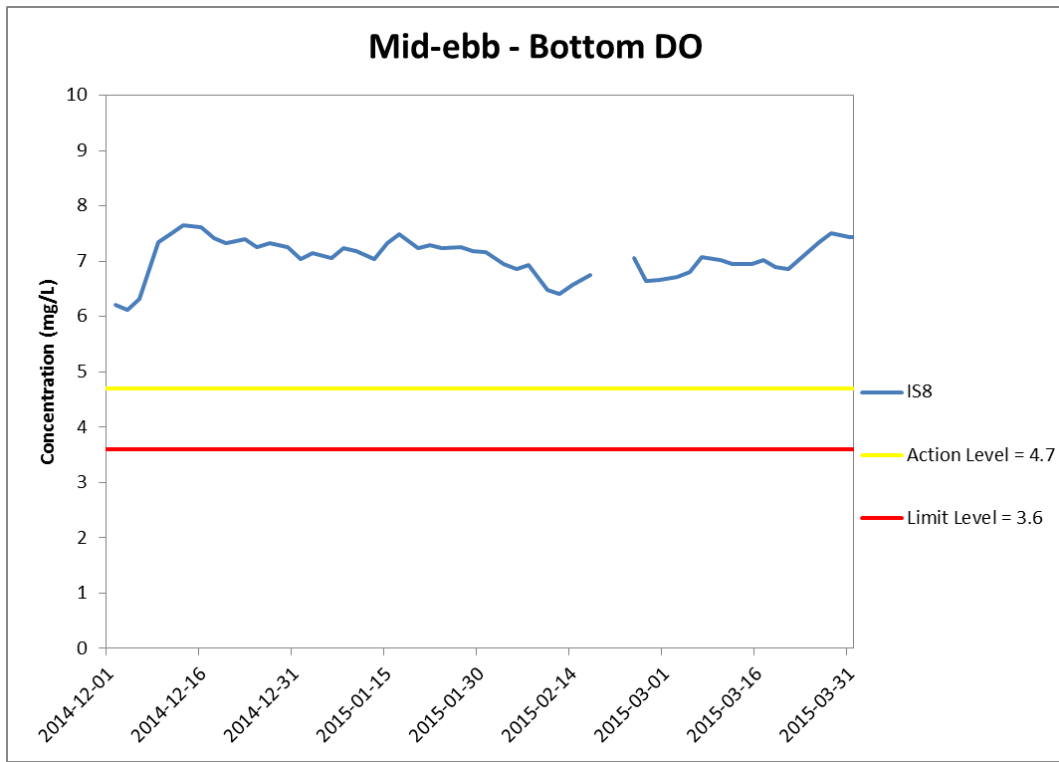


Figure J15 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



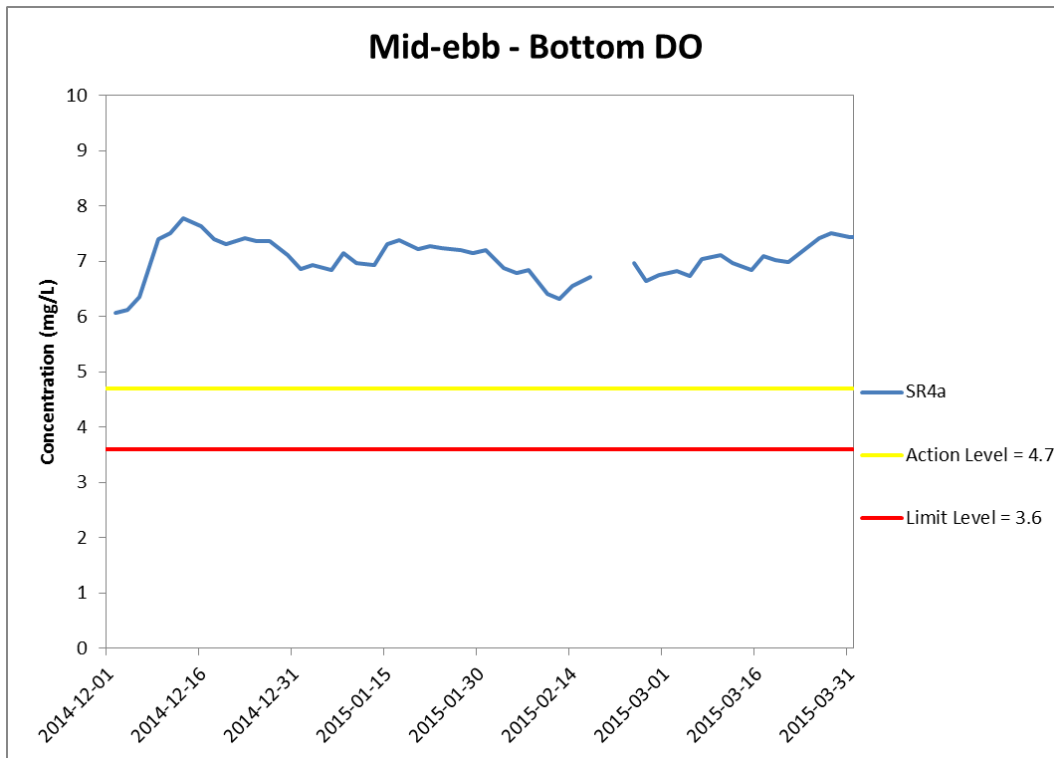


Figure J16 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 December 2014 and 31 March 2015 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



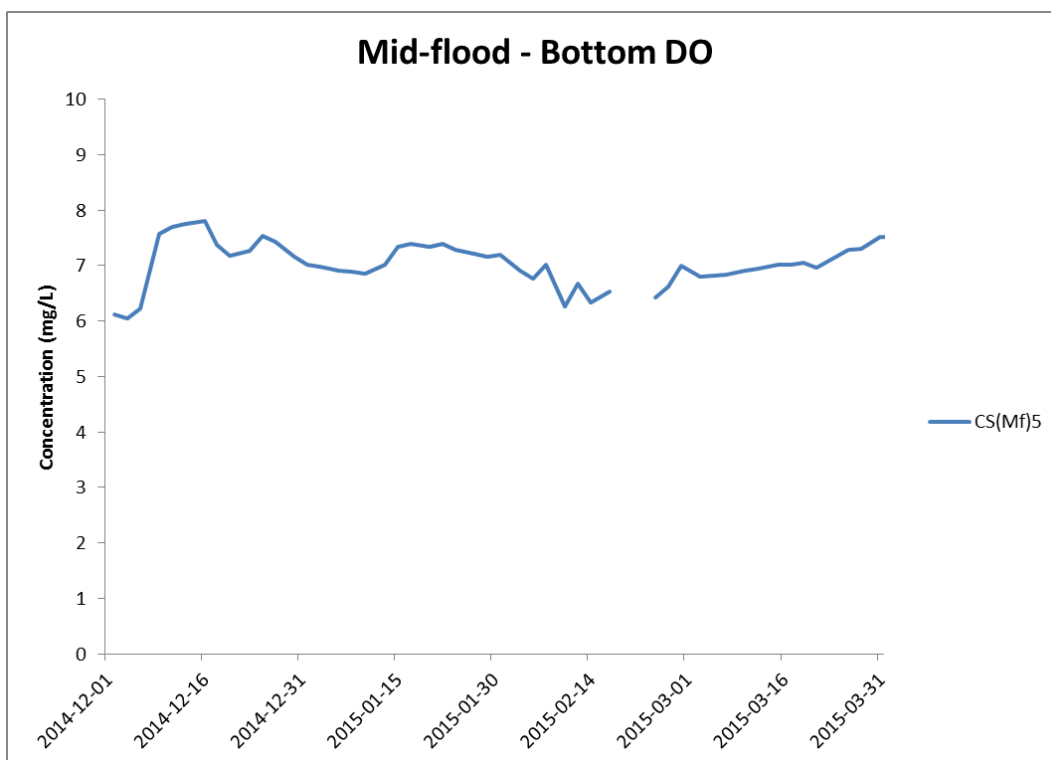
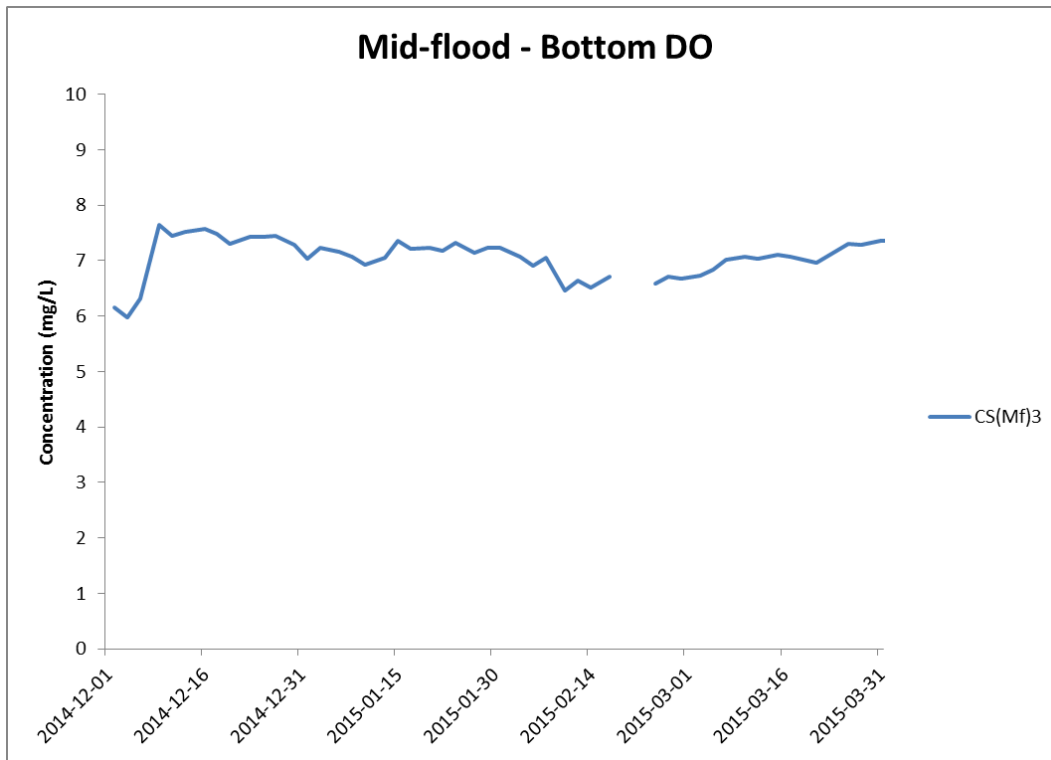


Figure J17 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



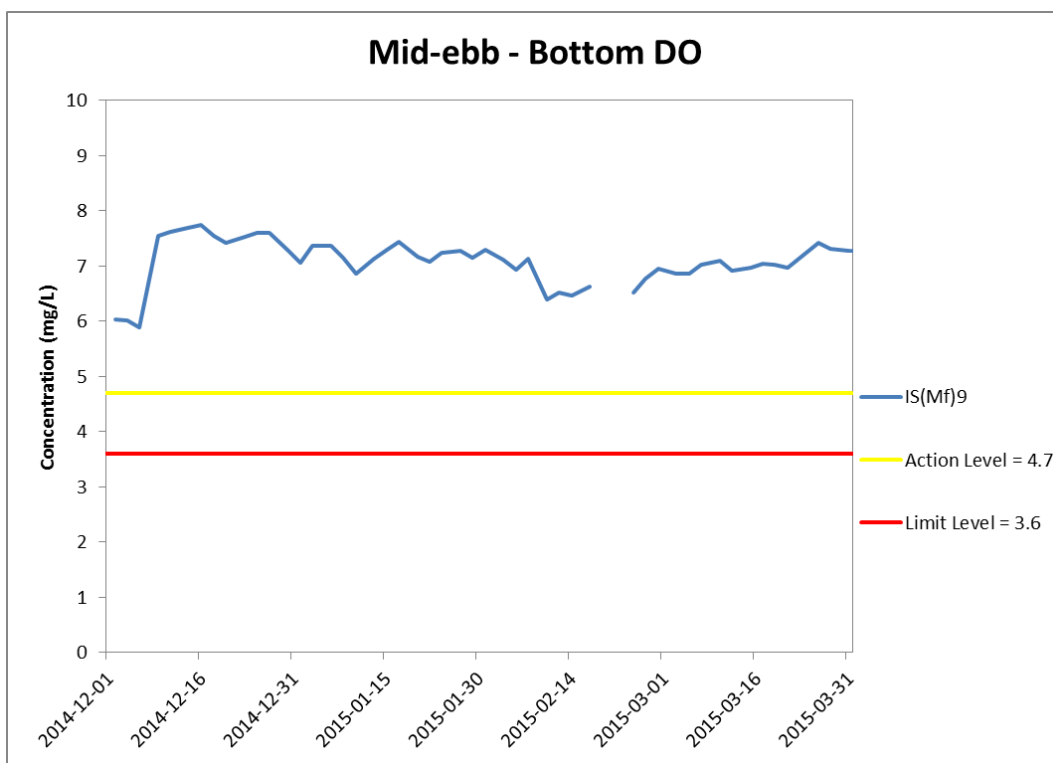
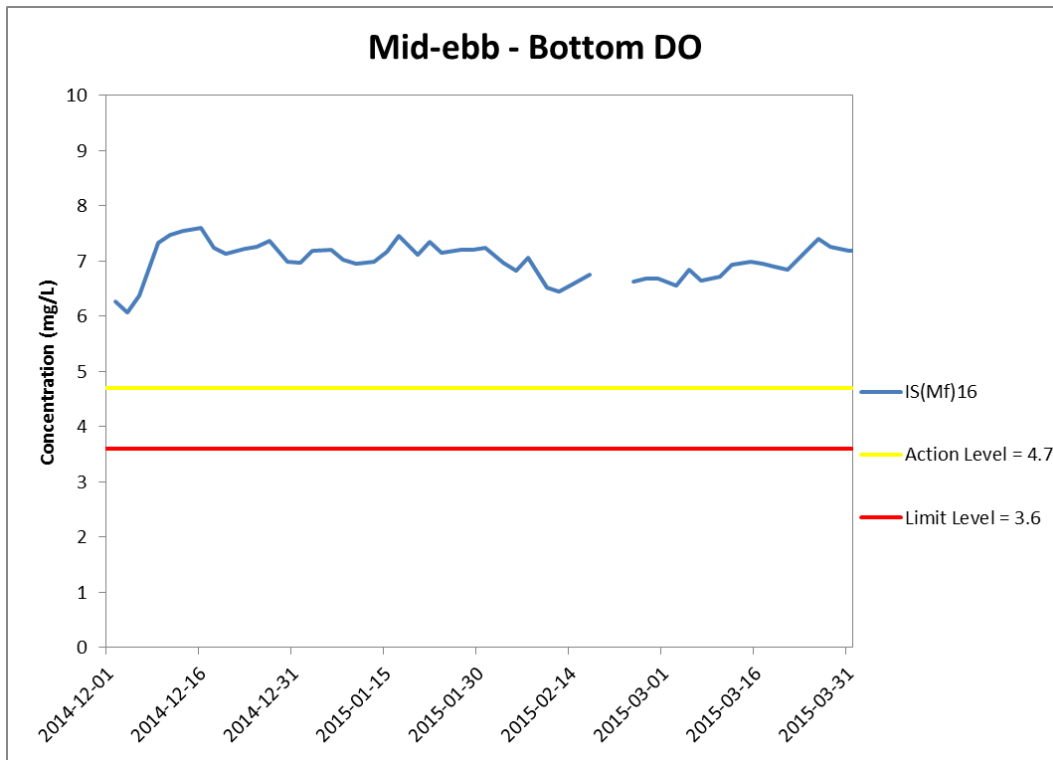


Figure J18 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 December 2014 and 31 March 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



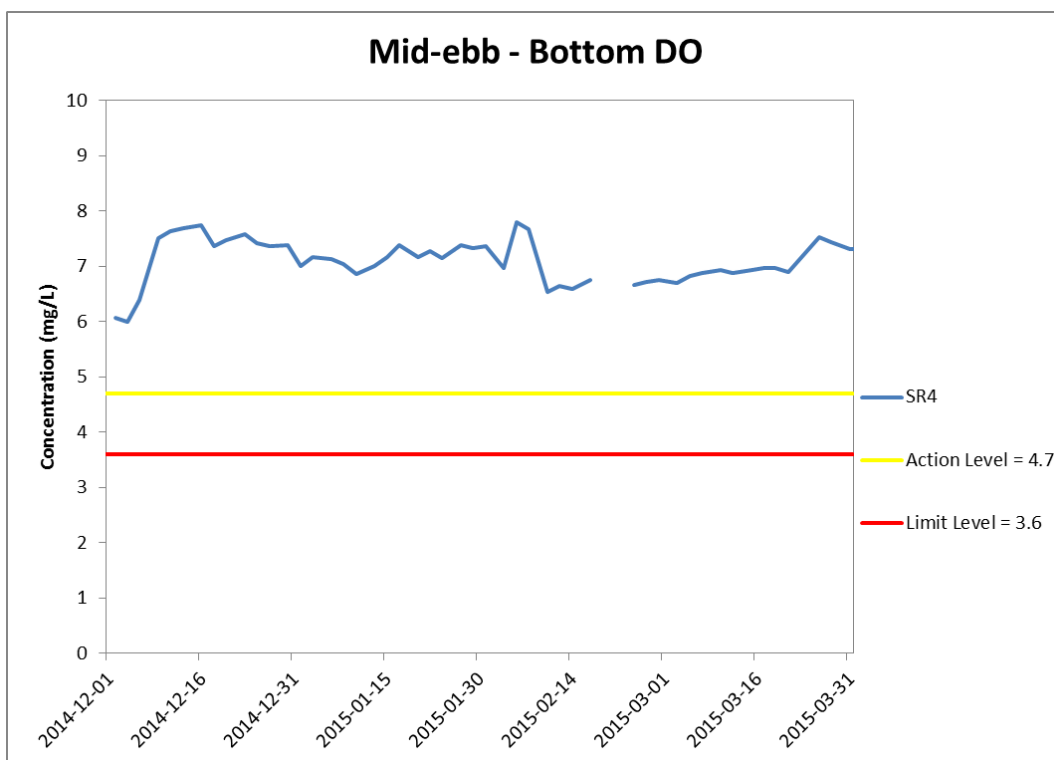
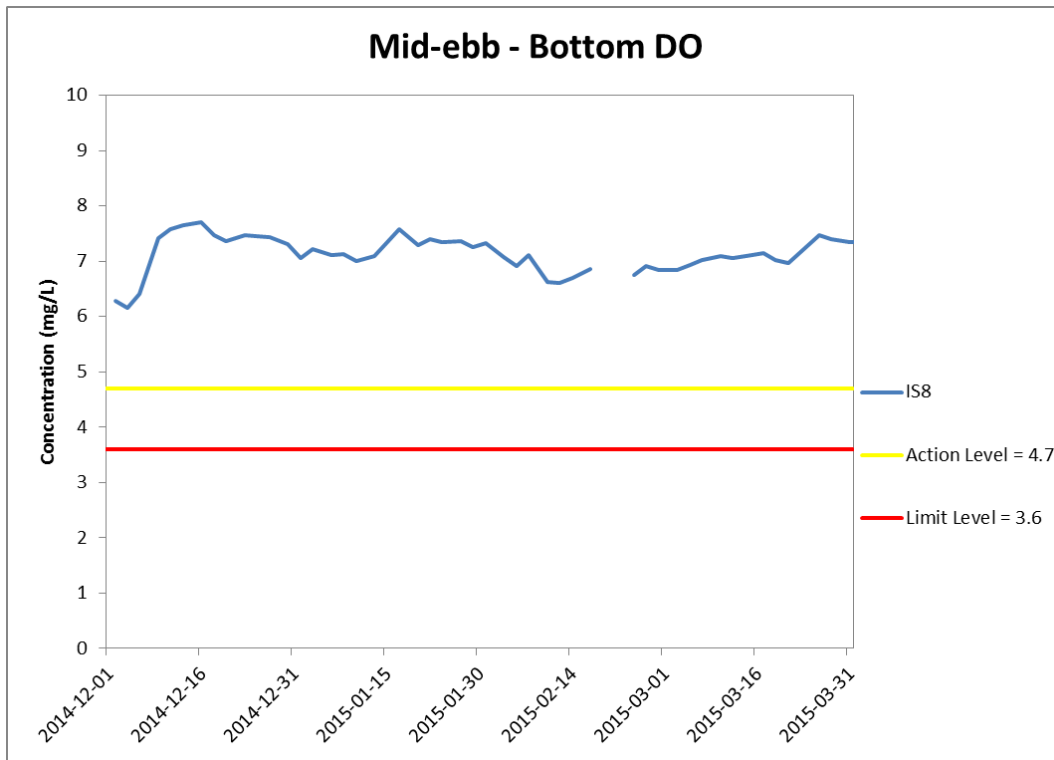


Figure J19 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 December 2014 and 31 March 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



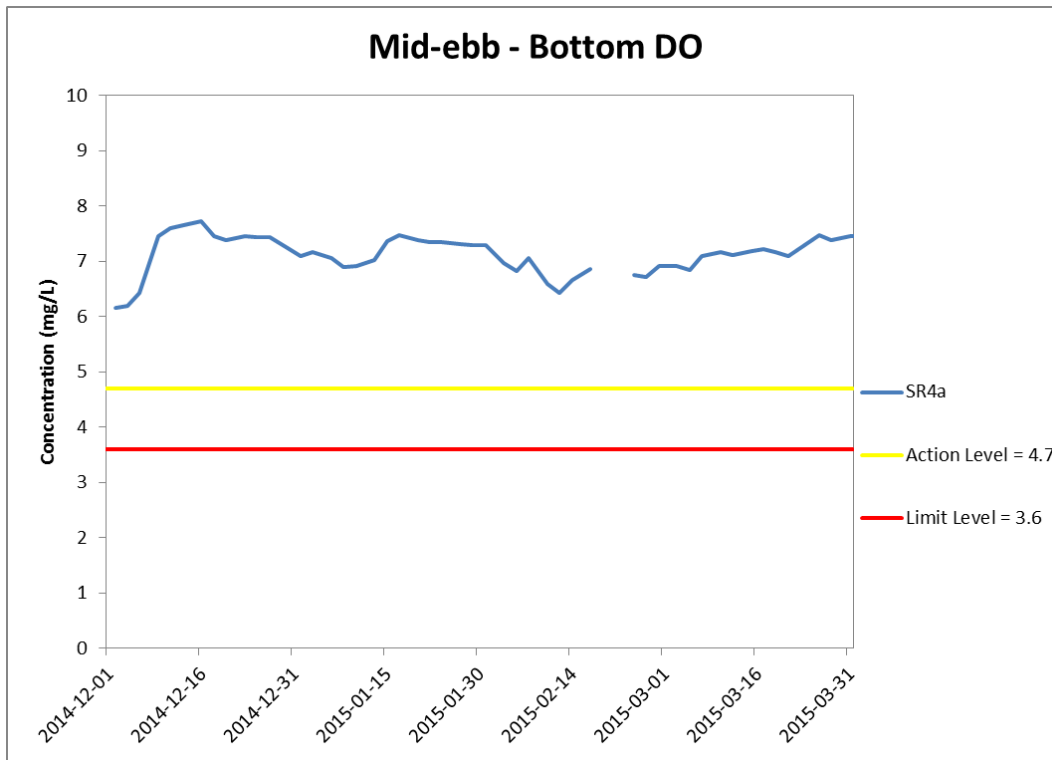


Figure J20 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 December 2014 and 31 March 2015 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



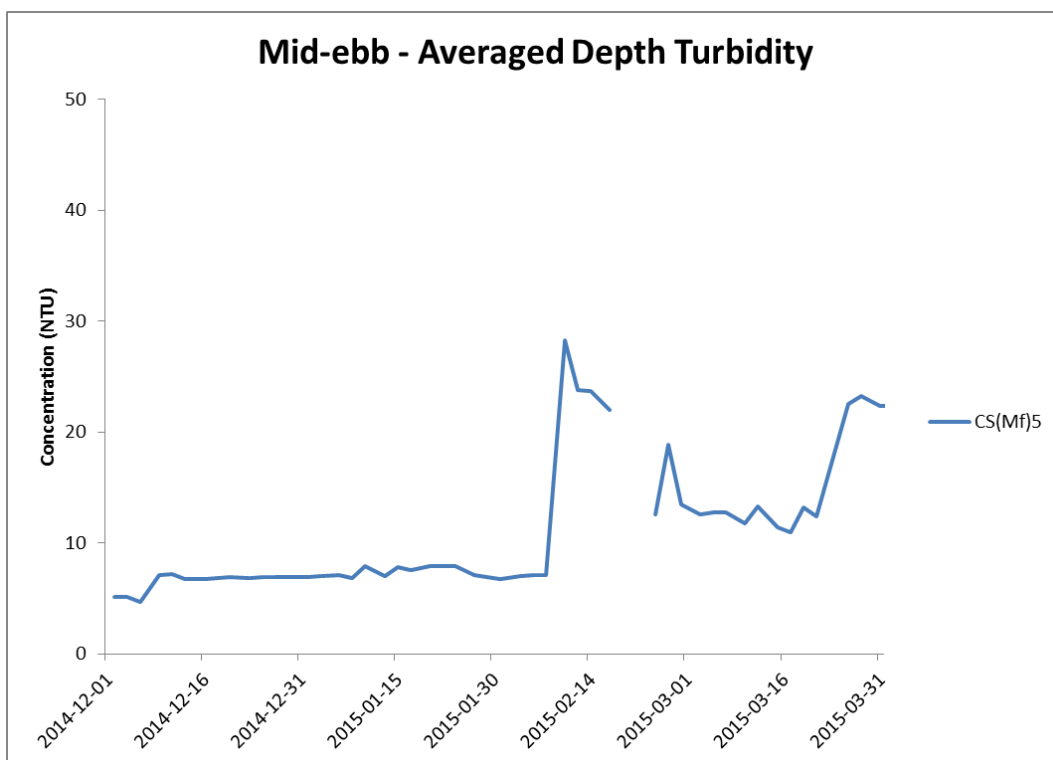
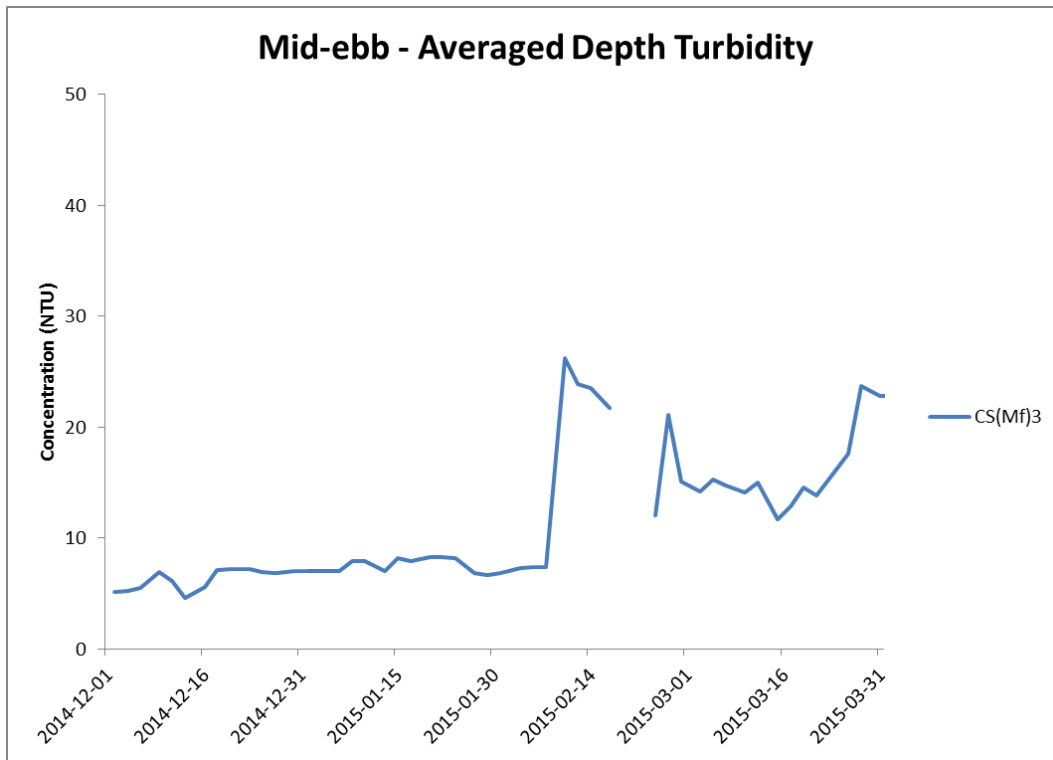


Figure J21 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



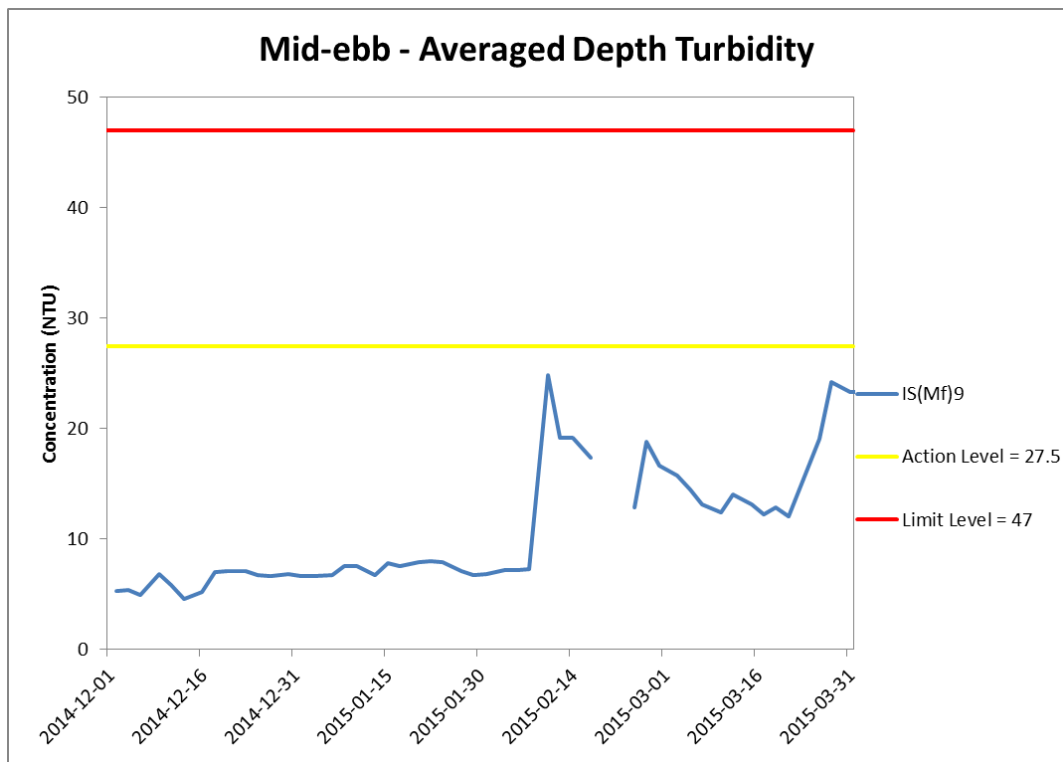
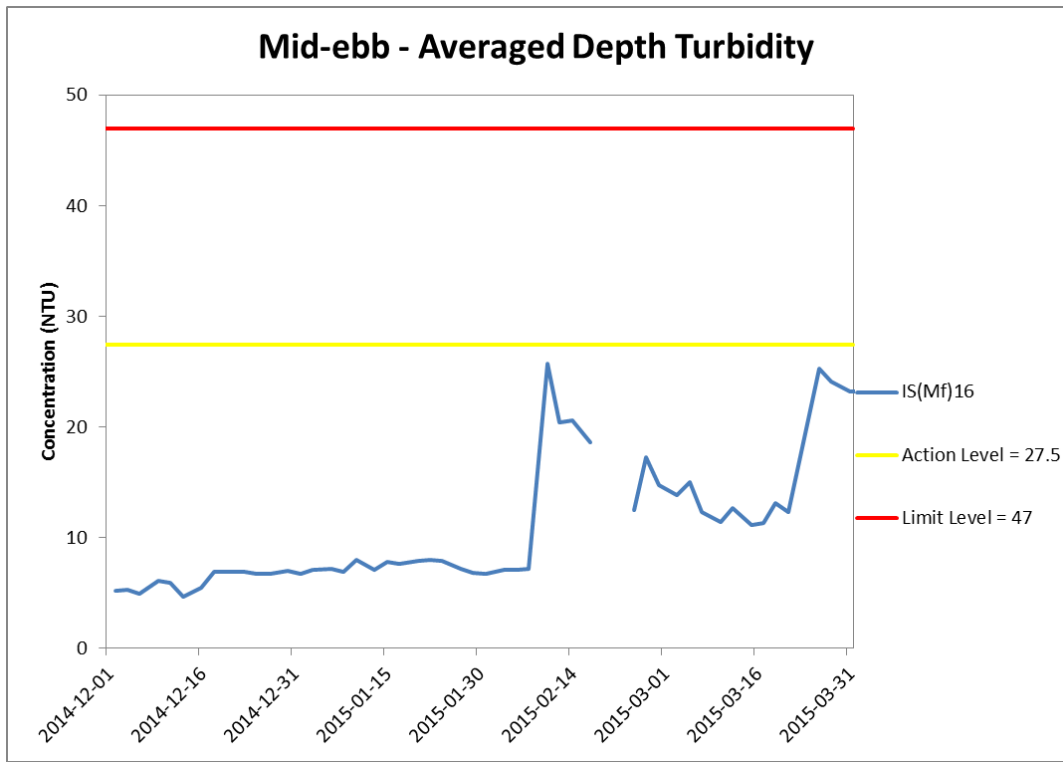


Figure J22 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



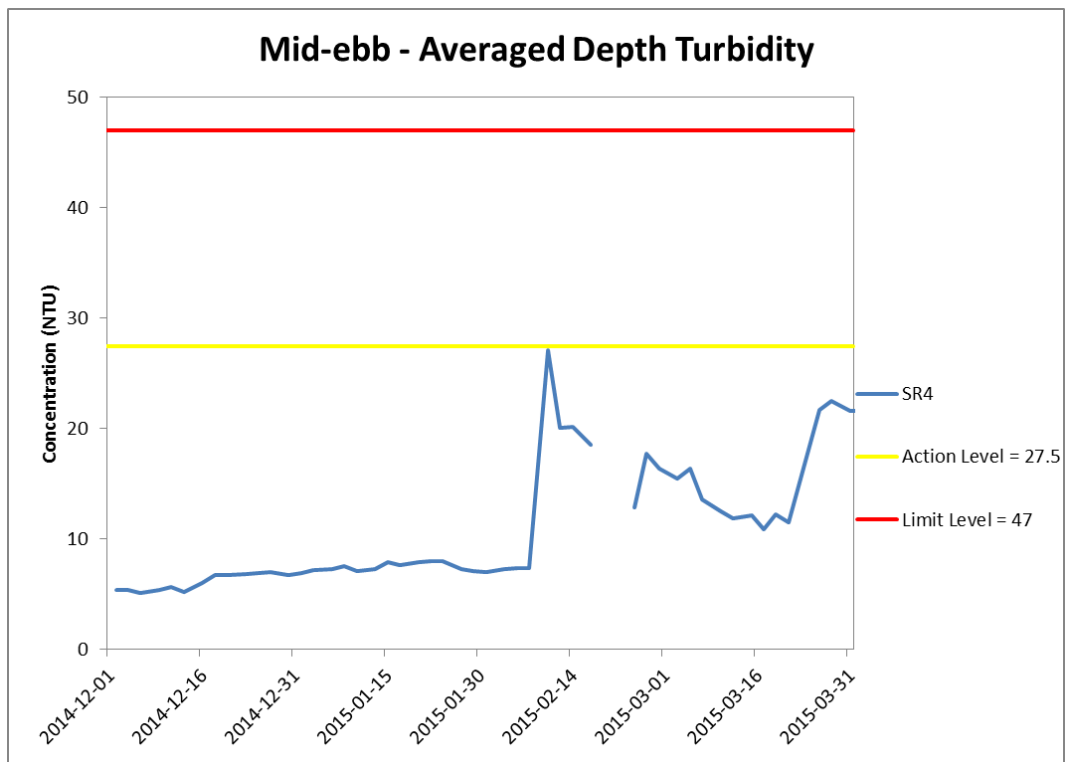
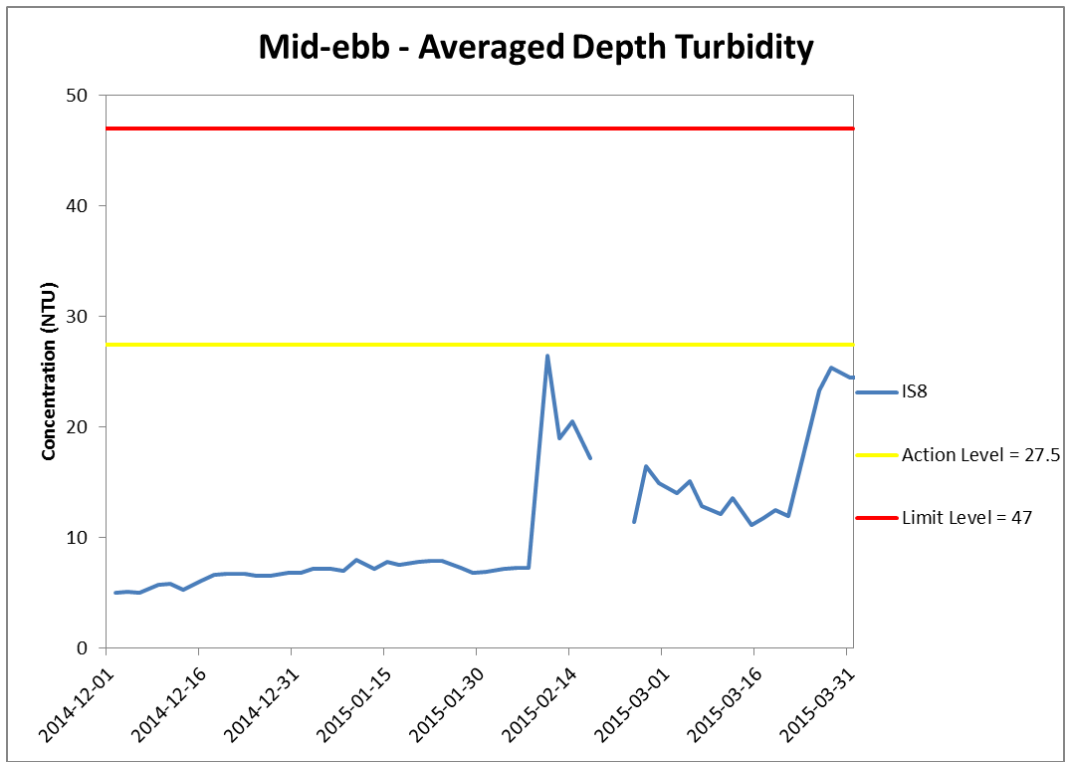


Figure J23 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



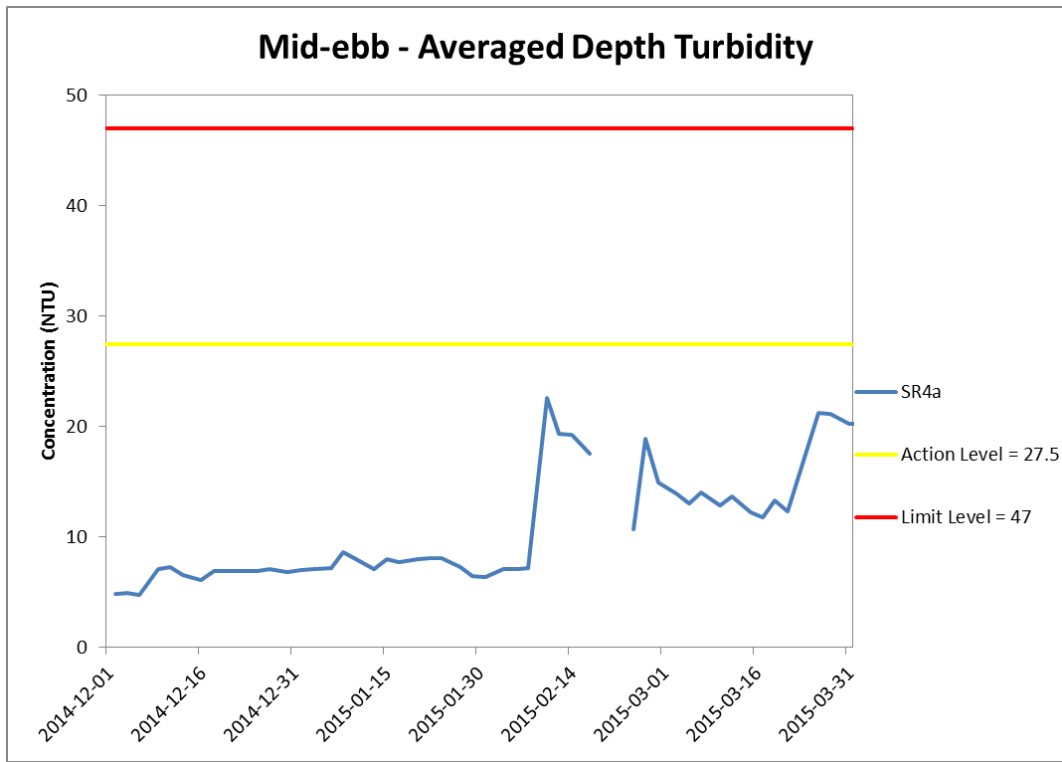


Figure J24 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 December 2014 and 31 March 2015 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



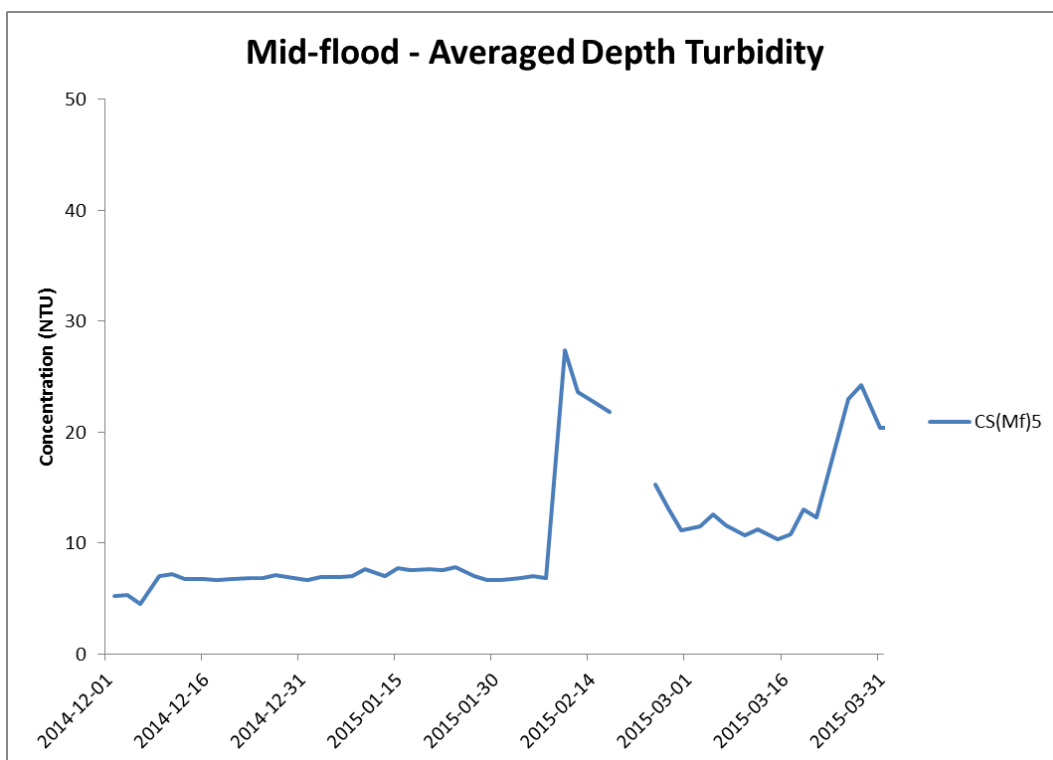
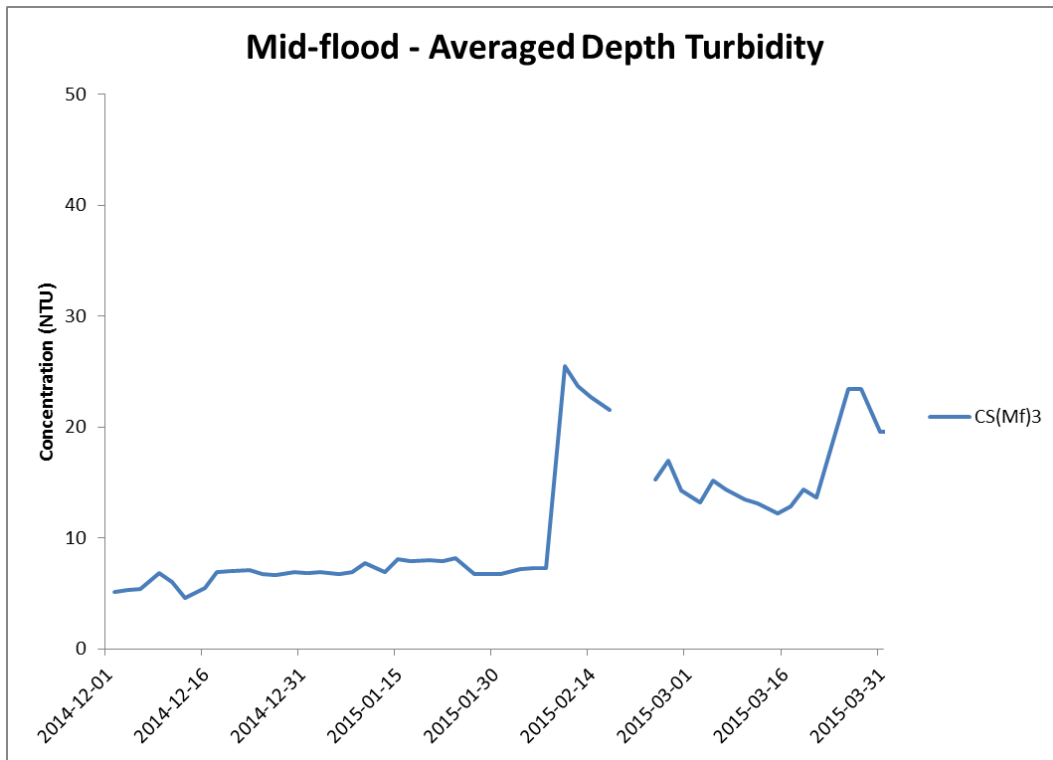


Figure J25 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(MF)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



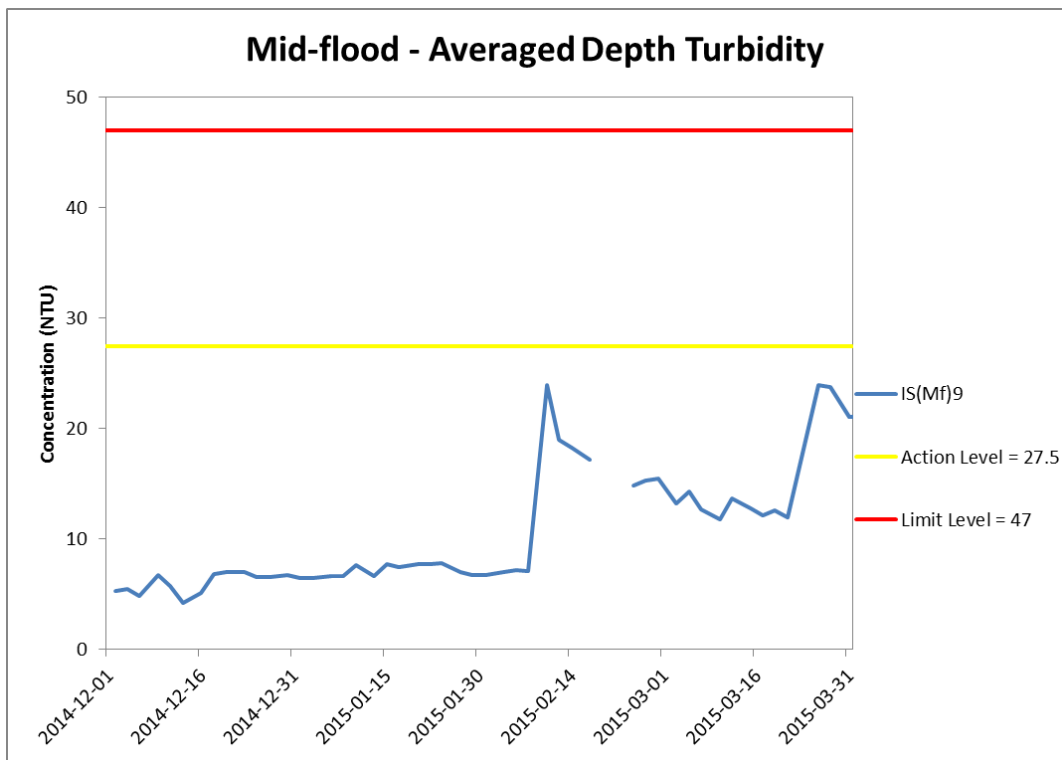
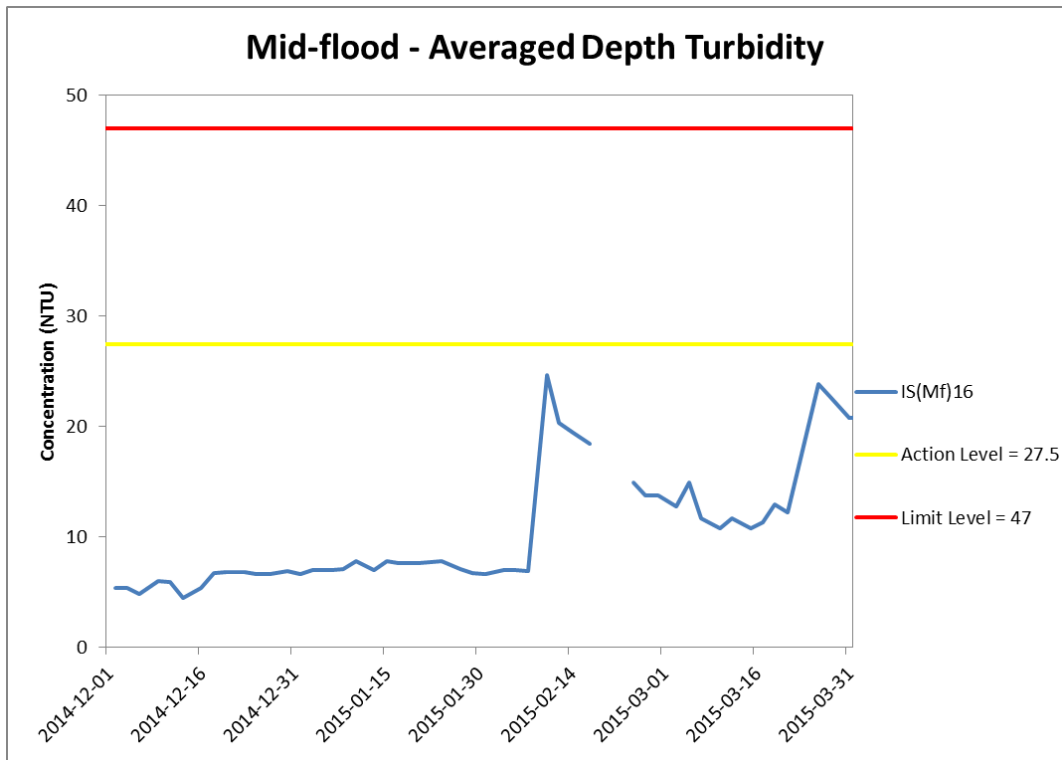


Figure J26 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 December 2014 and 31 March 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



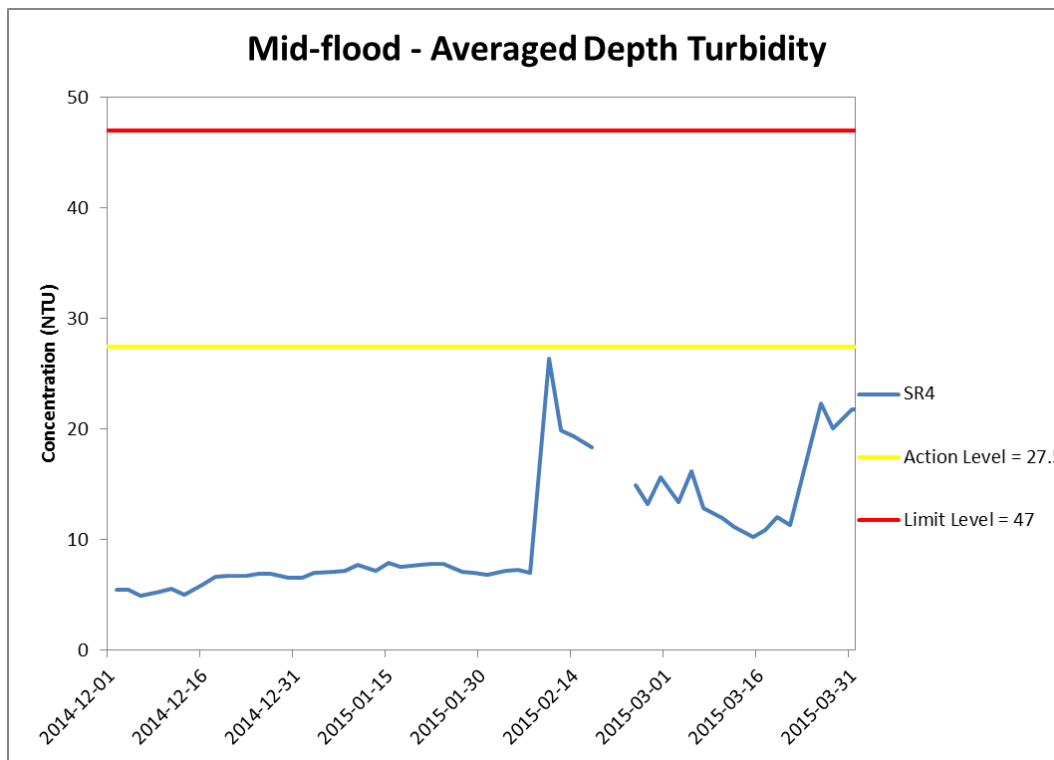
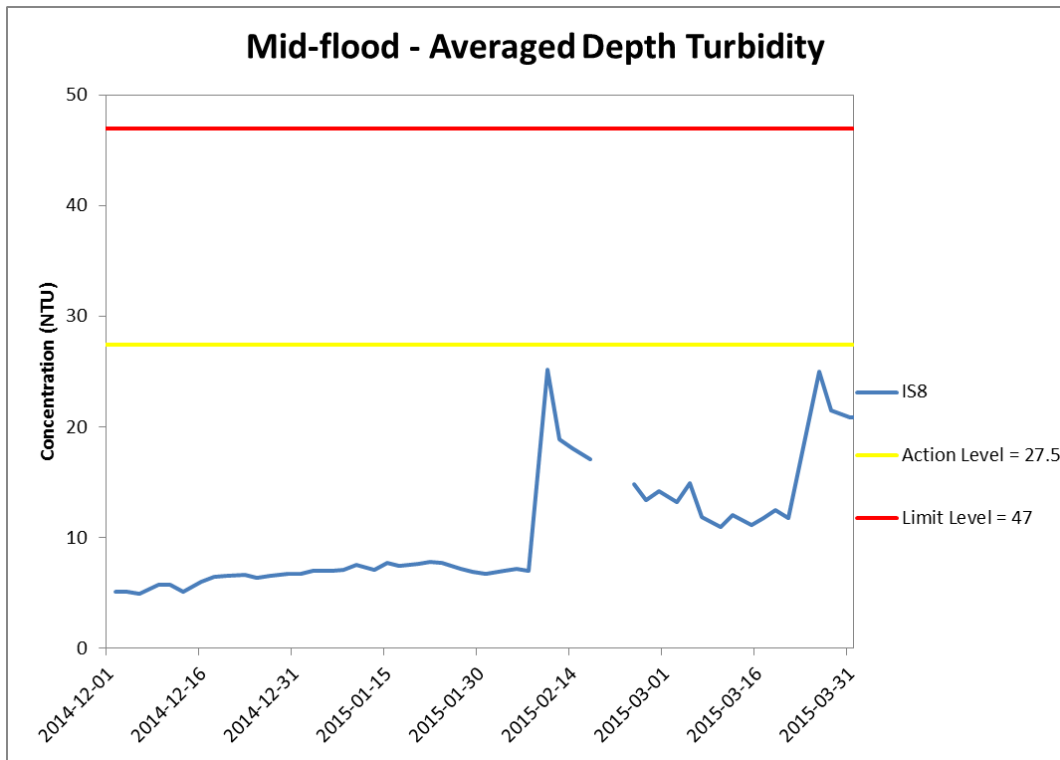


Figure J27 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 December 2014 and 31 March 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



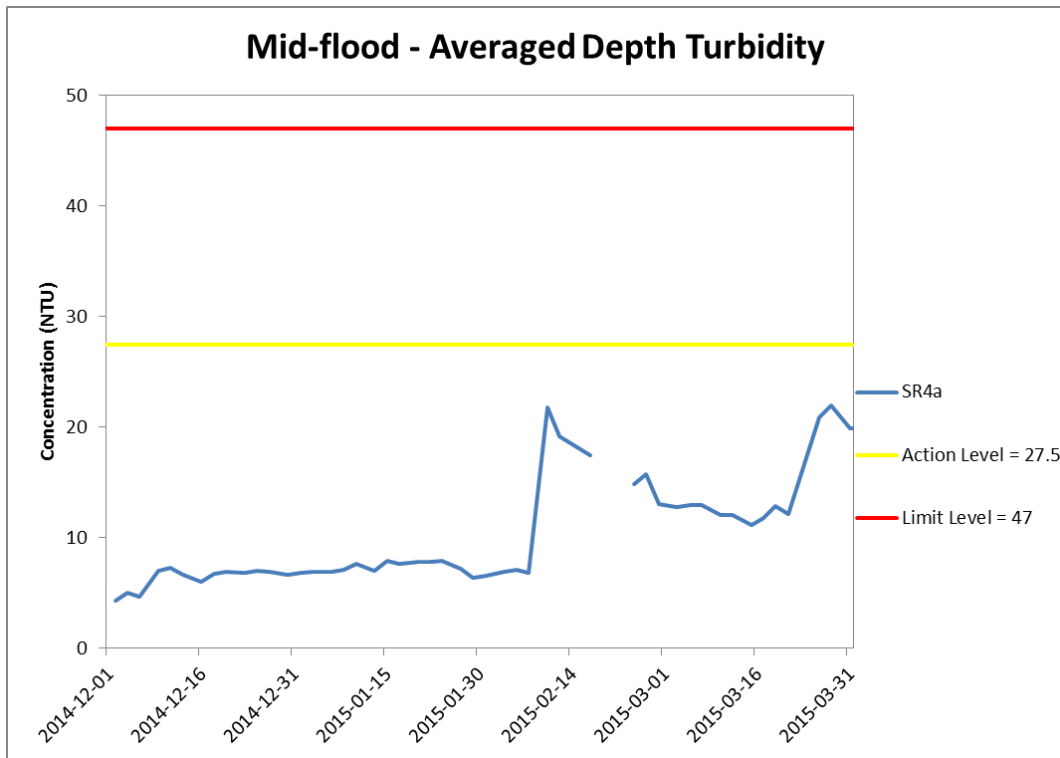


Figure J28 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 December 2014 and 31 March 2015 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



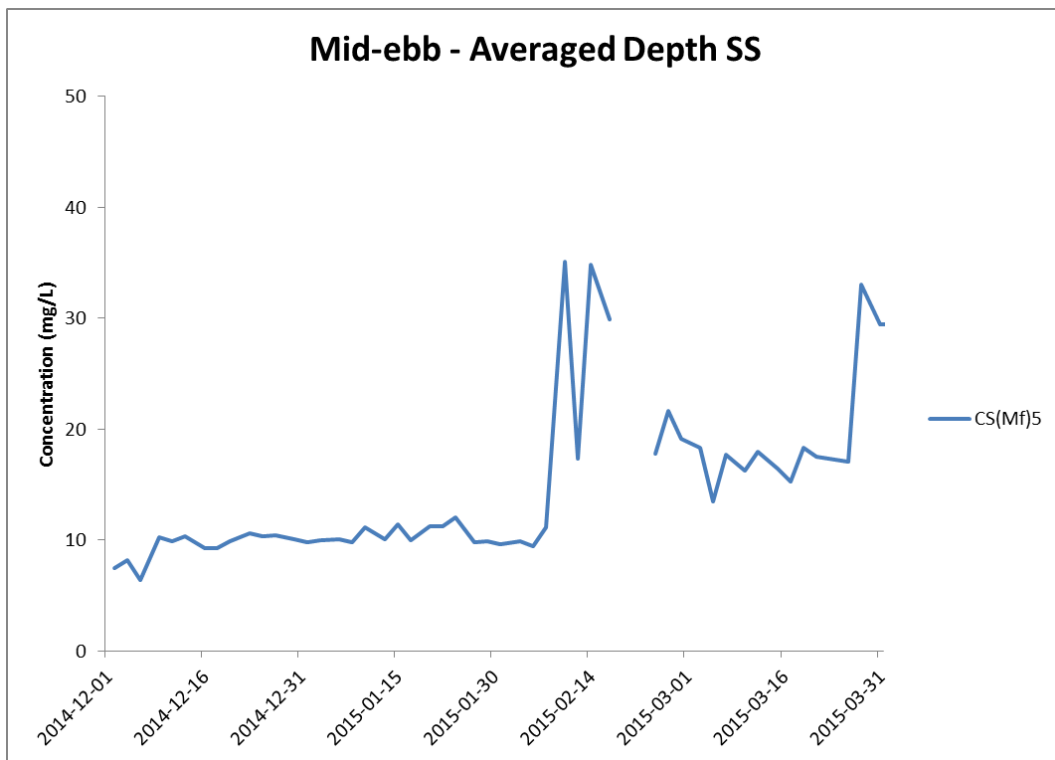
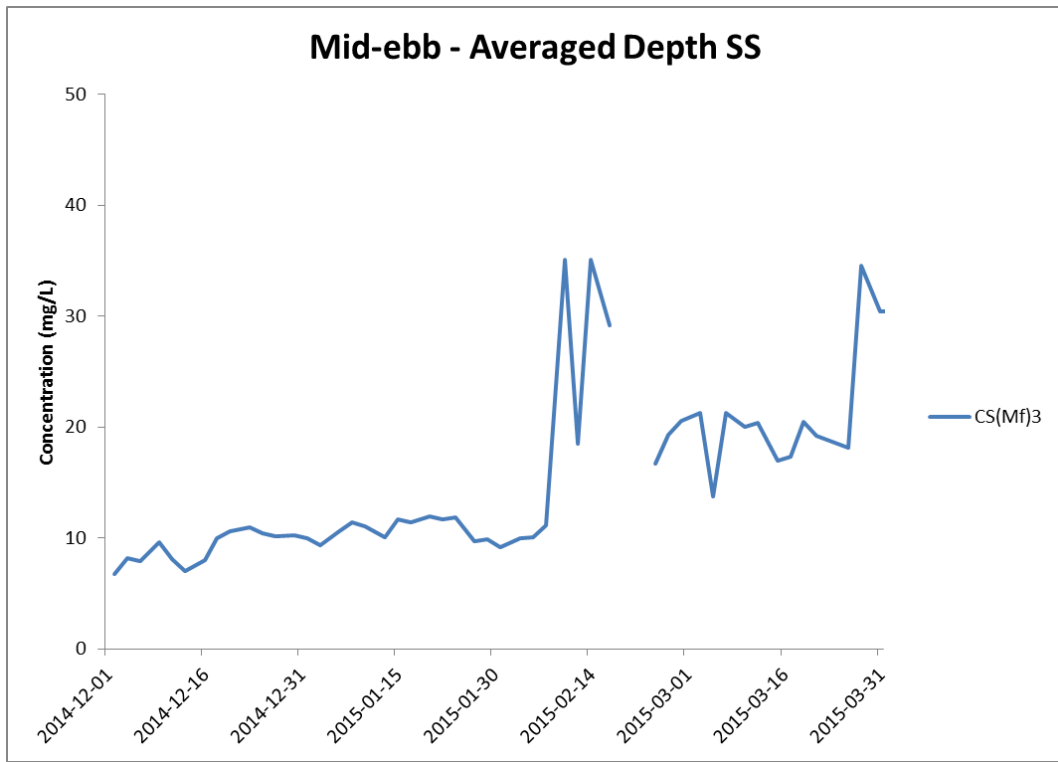


Figure J29 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



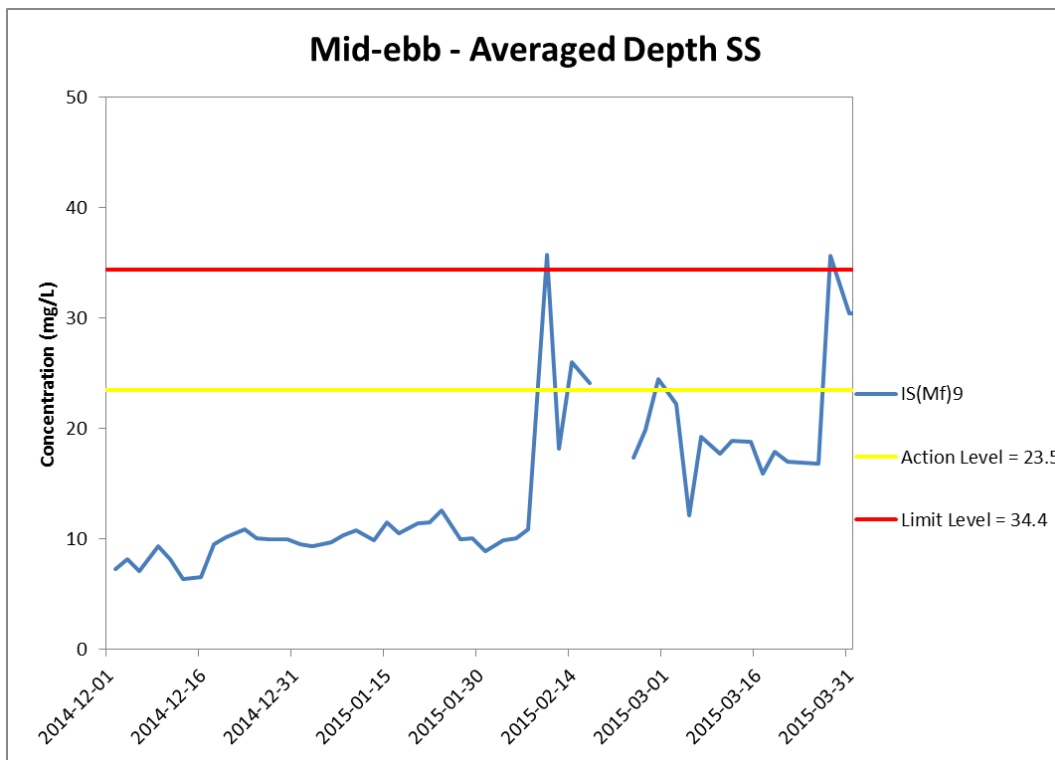
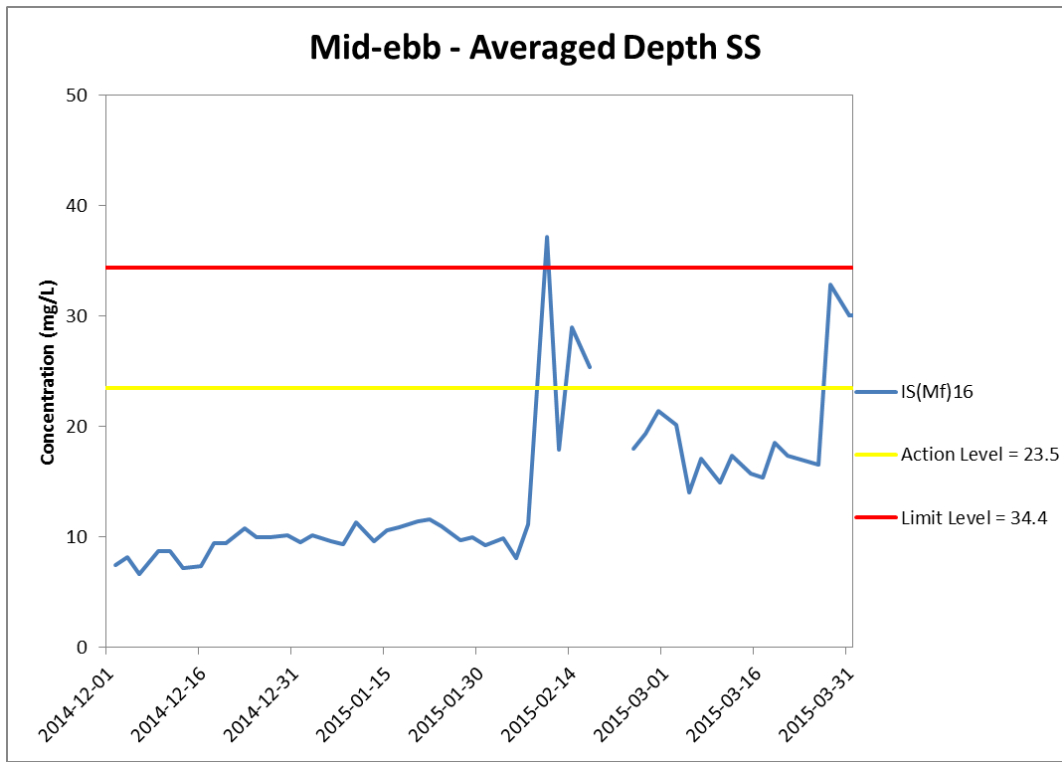


Figure J30 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015. The SS results in Feb and Mar 2015 higher than Action / Limit Levels were not considered as exceedances as the results were not higher than 120% of upstream control station.

**Environmental
Resources
Management**



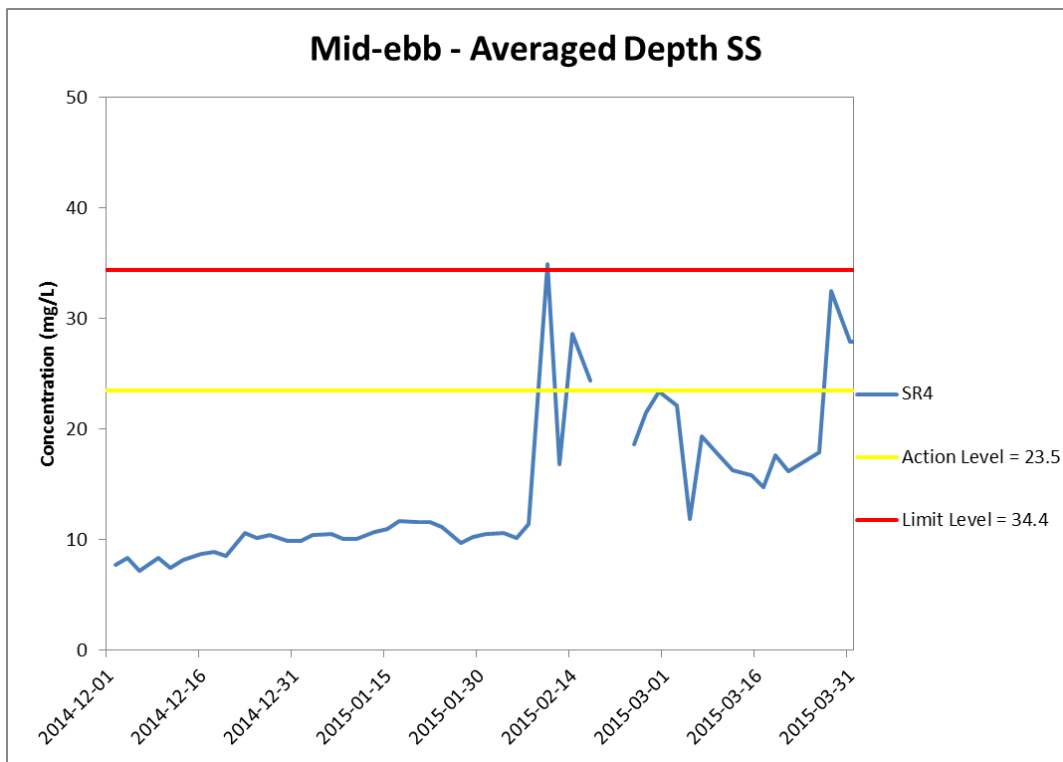
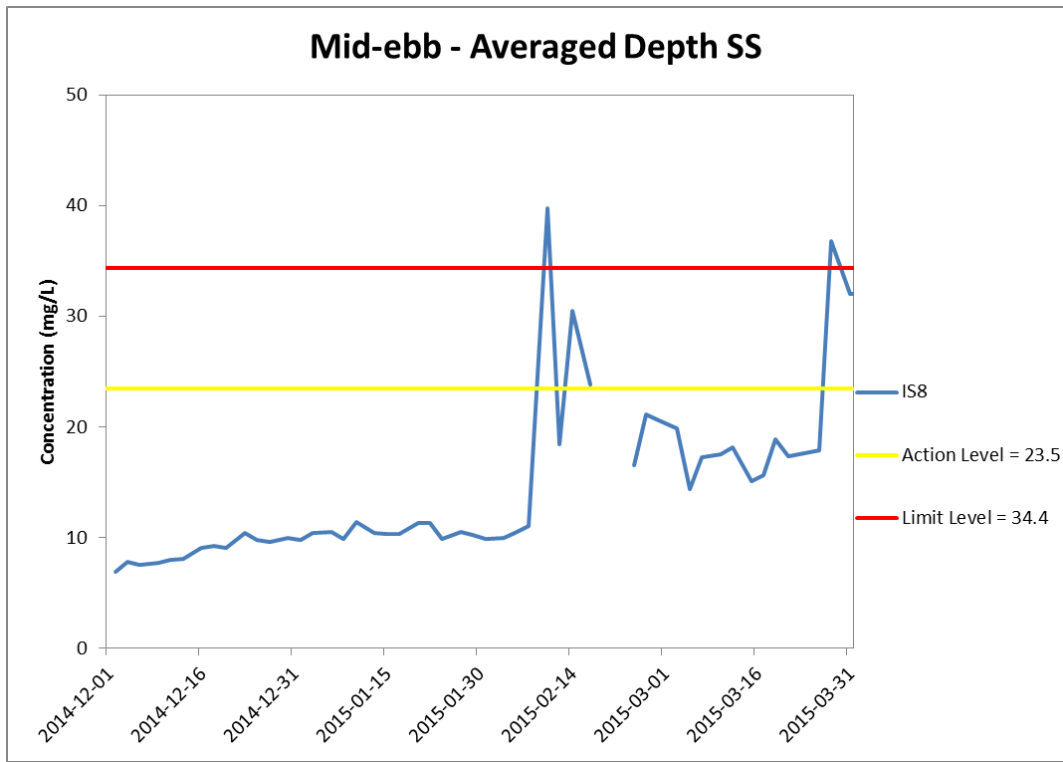


Figure J31 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 December 2014 and 31 March 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015. The SS results in Feb and Mar 2015 higher than Action / Limit Levels were not considered as exceedances as the results were not higher than 120% of upstream control station.

**Environmental
Resources
Management**



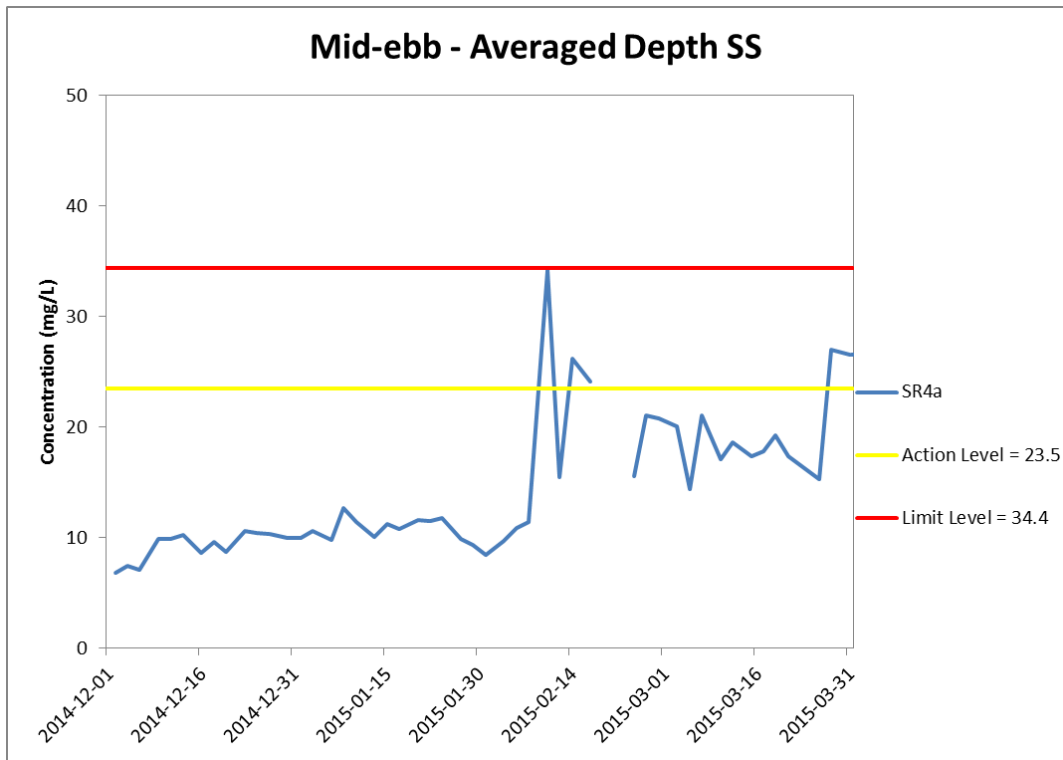


Figure J32 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 December 2014 and 31 March 2015 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015. The SS results in Feb and Mar 2015 higher than Action / Limit Levels were not considered as exceedances as the results were not higher than 120% of upstream control station.

**Environmental
Resources
Management**



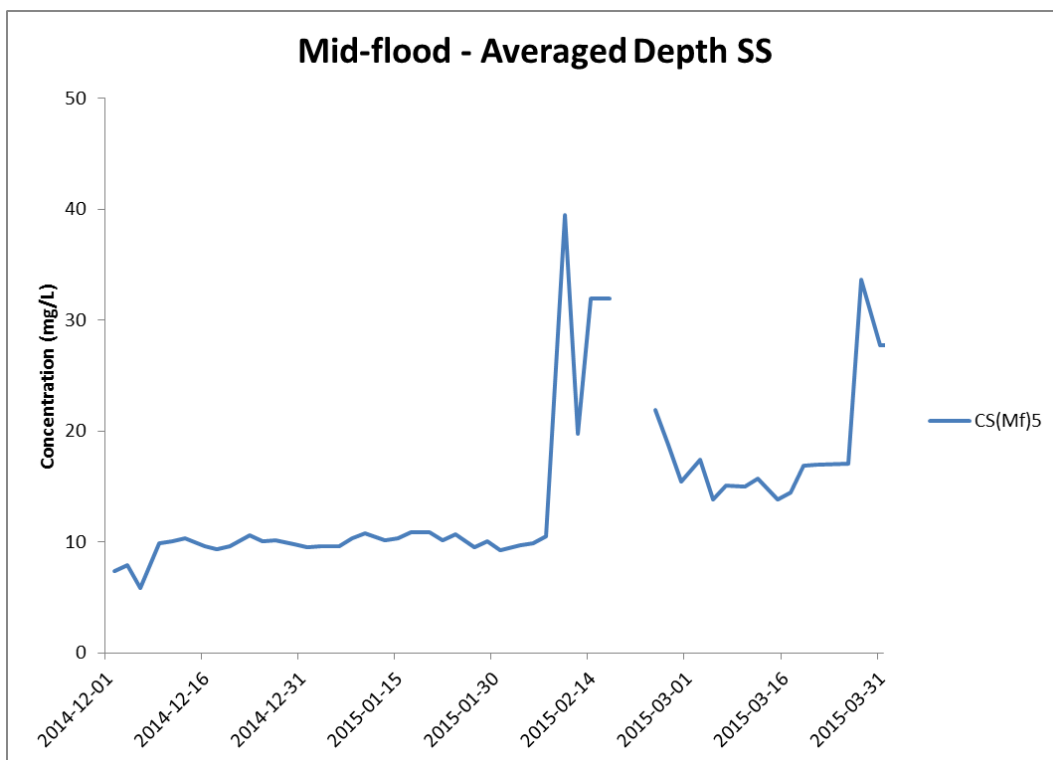
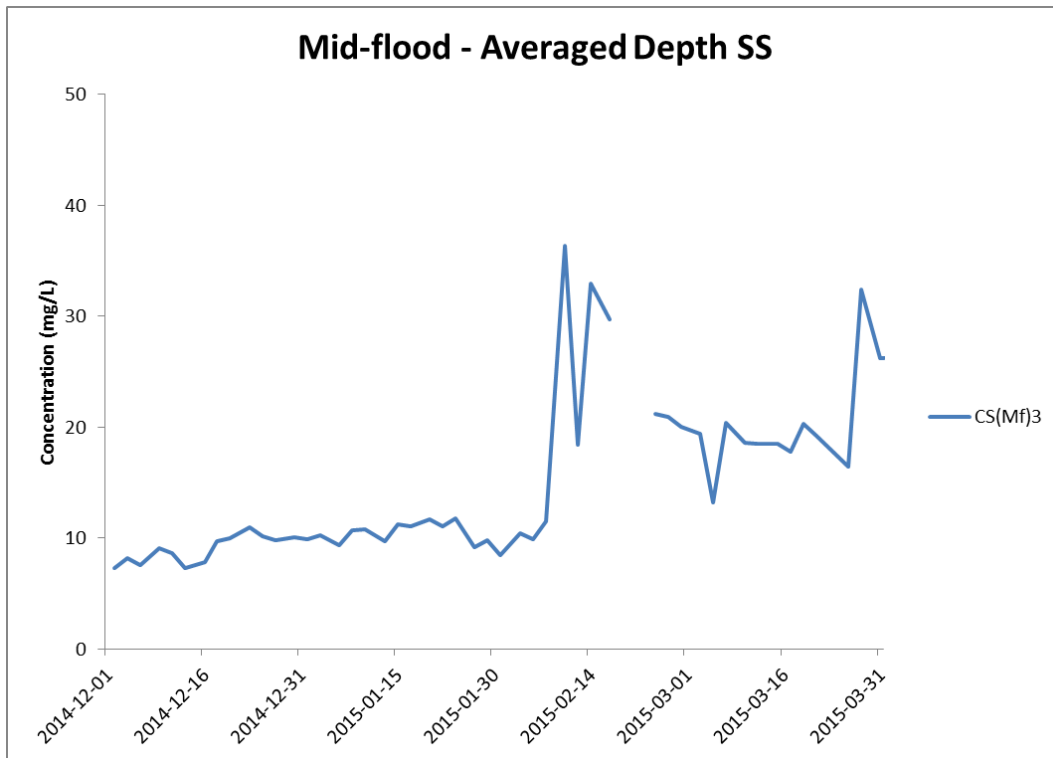


Figure J33 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 December 2014 and 31 March 2015 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015.

**Environmental
Resources
Management**



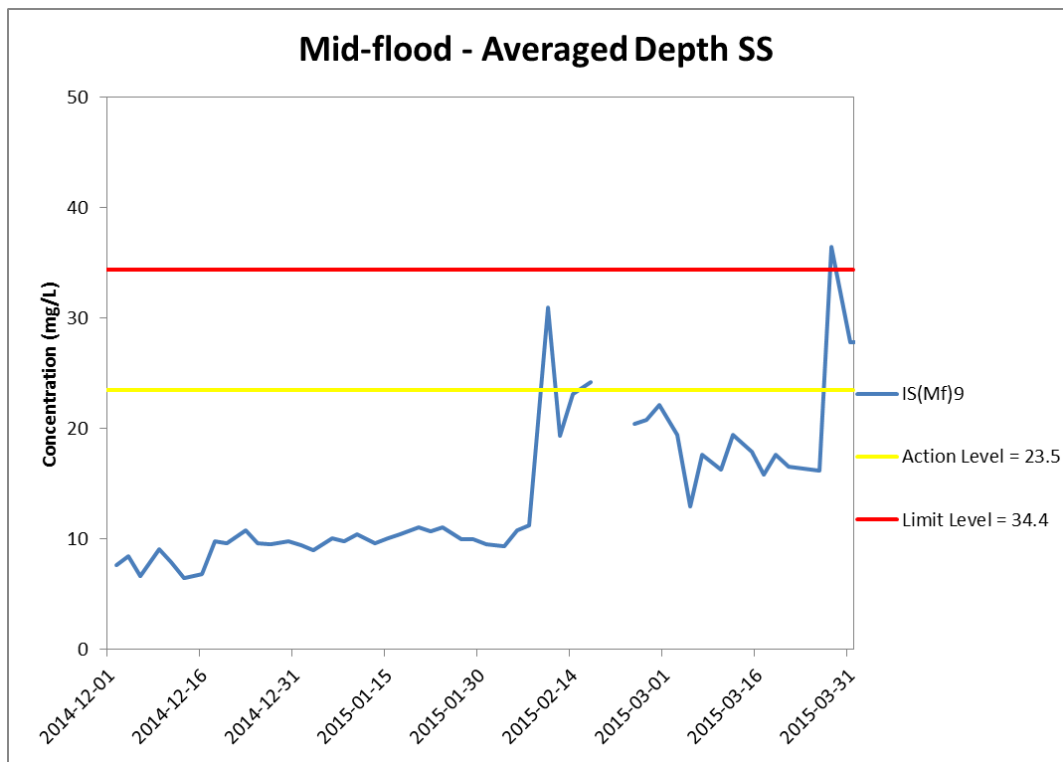
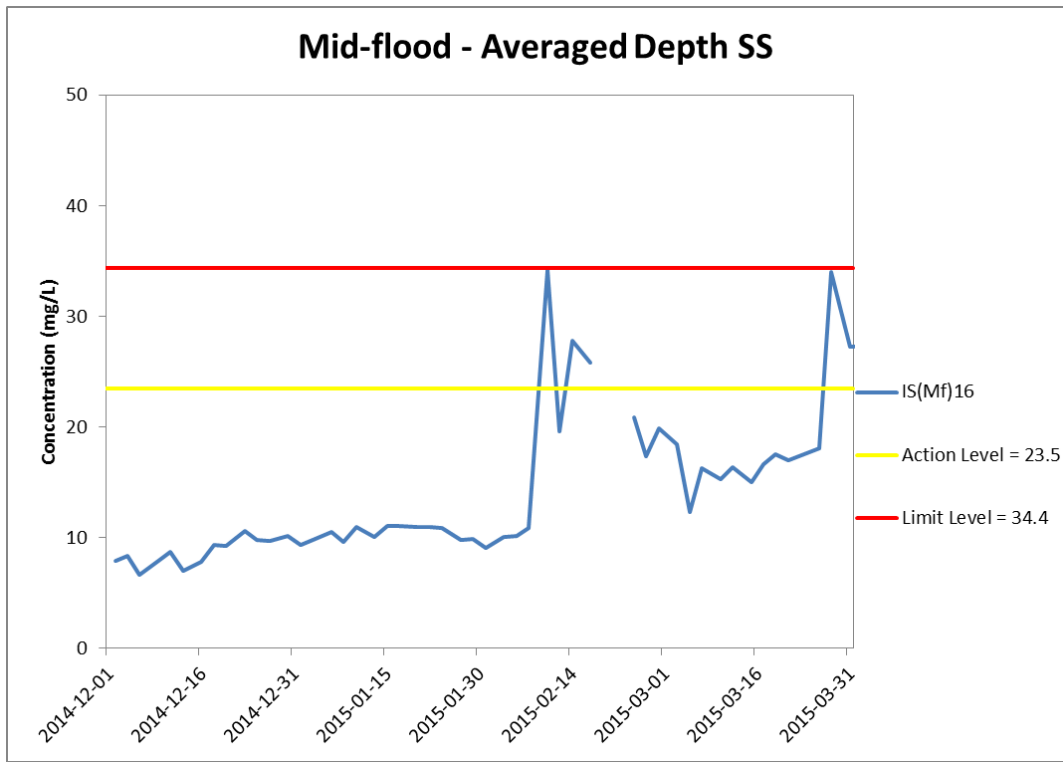


Figure J34 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 December 2014 and 31 March 2015 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015. The SS results in Feb and Mar 2015 higher than Action / Limit Levels were not considered as exceedances as the results were not higher than 120% of upstream control station.

Environmental Resources Management



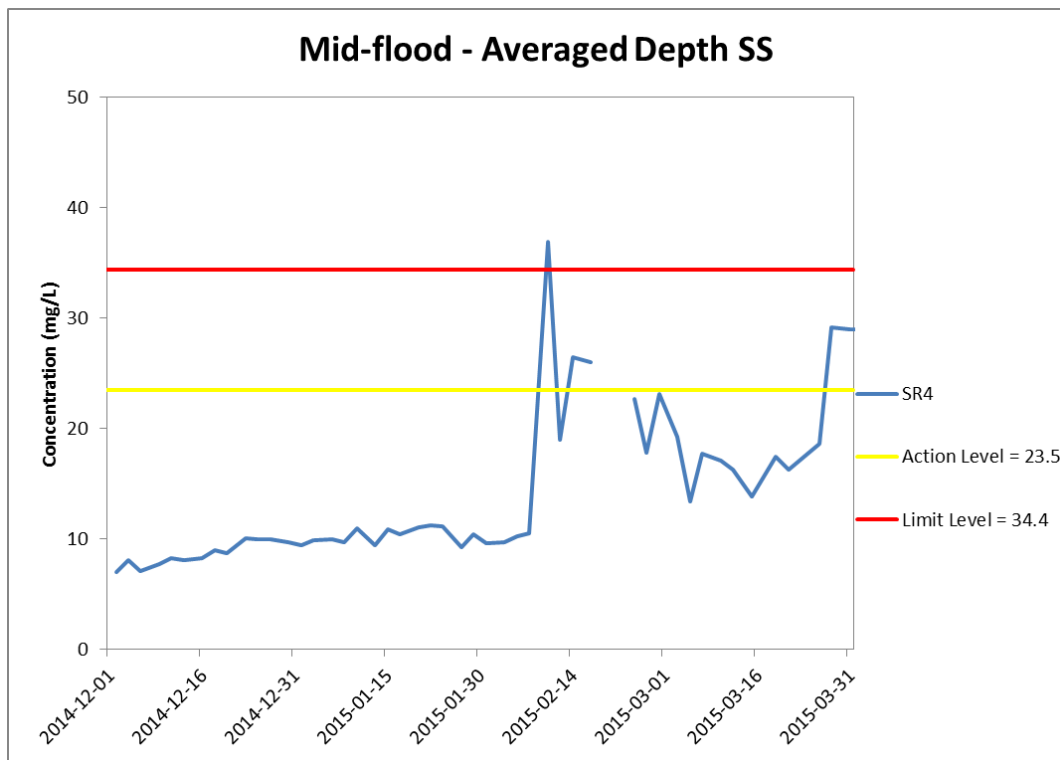
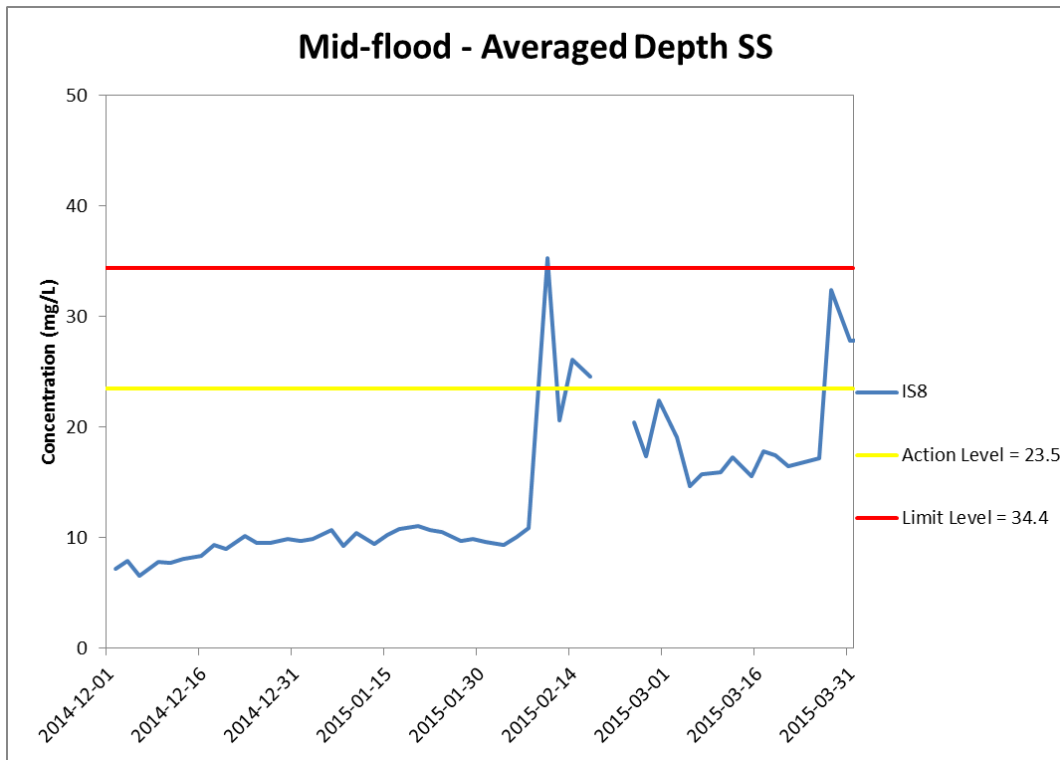


Figure J35 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 December 2014 and 31 March 2015 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015. The SS results in Feb and Mar 2015 higher than Action / Limit Levels were not considered as exceedances as the results were not higher than 120% of upstream control station.

**Environmental
Resources
Management**



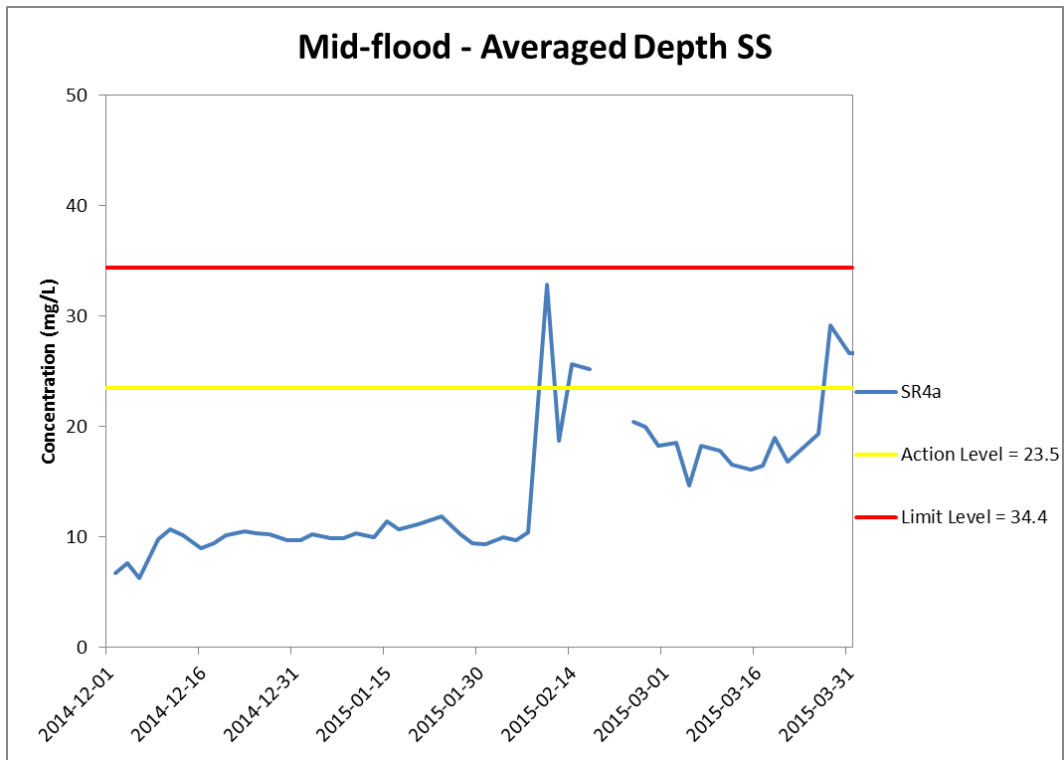


Figure J36 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 December 2014 and 31 March 2015 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period. Marine works within the reporting period include marine piling platform installation and marine piling.) No marine works was undertaken on 19 and 21 February 2015. The SS results in Feb and Mar 2015 higher than Action / Limit Levels were not considered as exceedances as the results were not higher than 120% of upstream control station.

**Environmental
Resources
Management**



Appendix K

Impact Dolphin Monitoring Survey Results

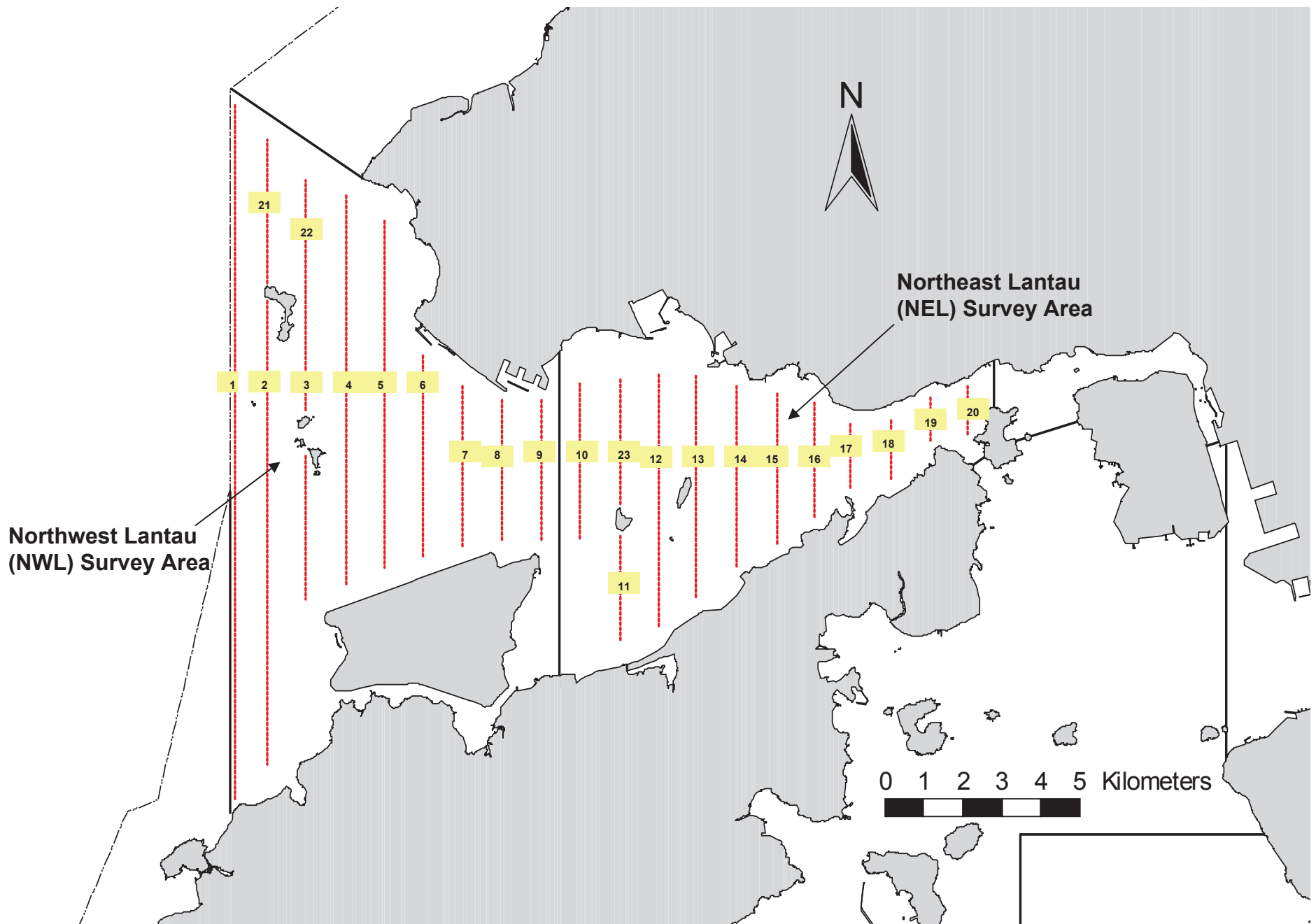


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

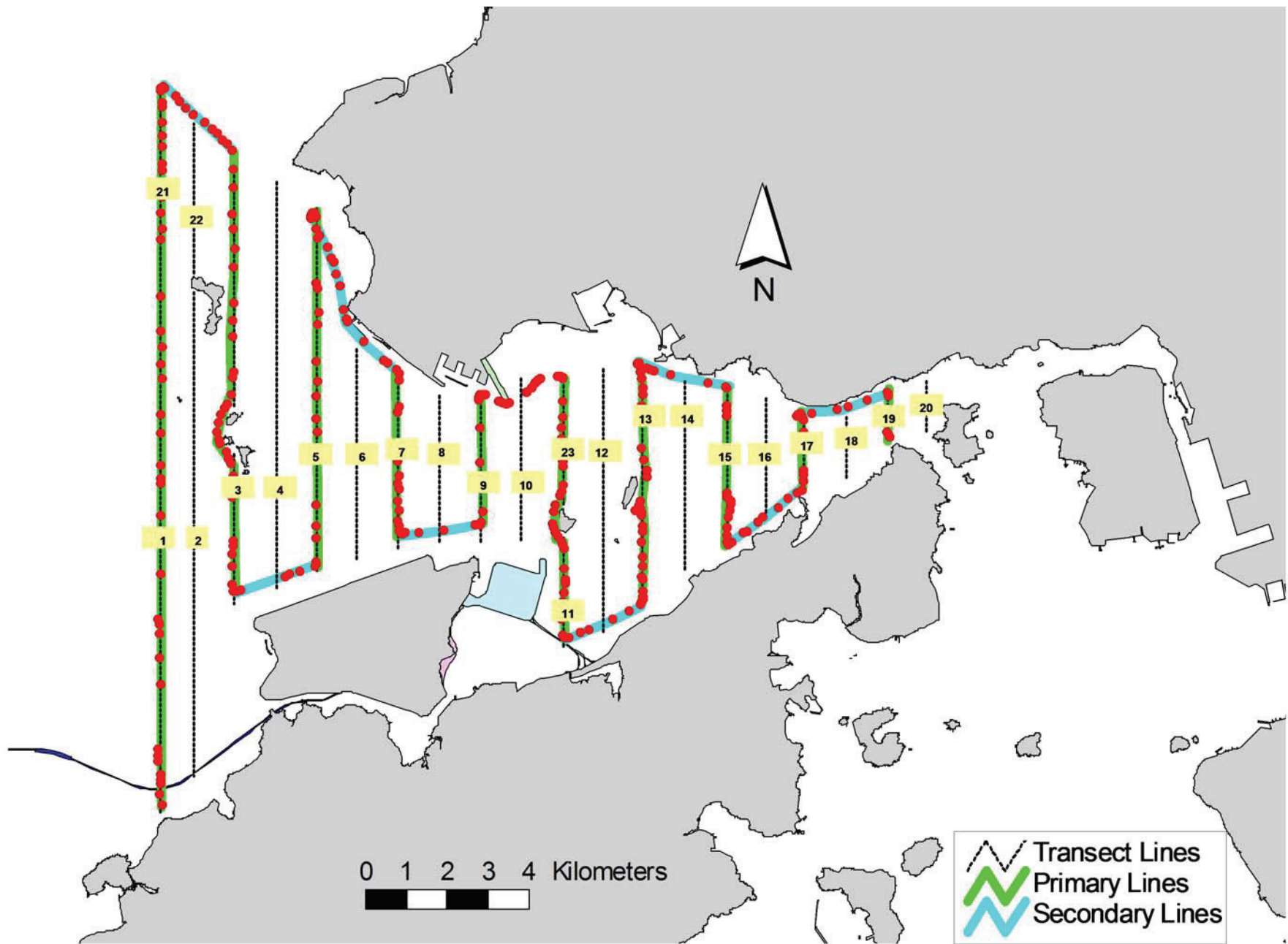


Figure 2. Survey Route on March 4th, 2015 (from HKLR03 project)

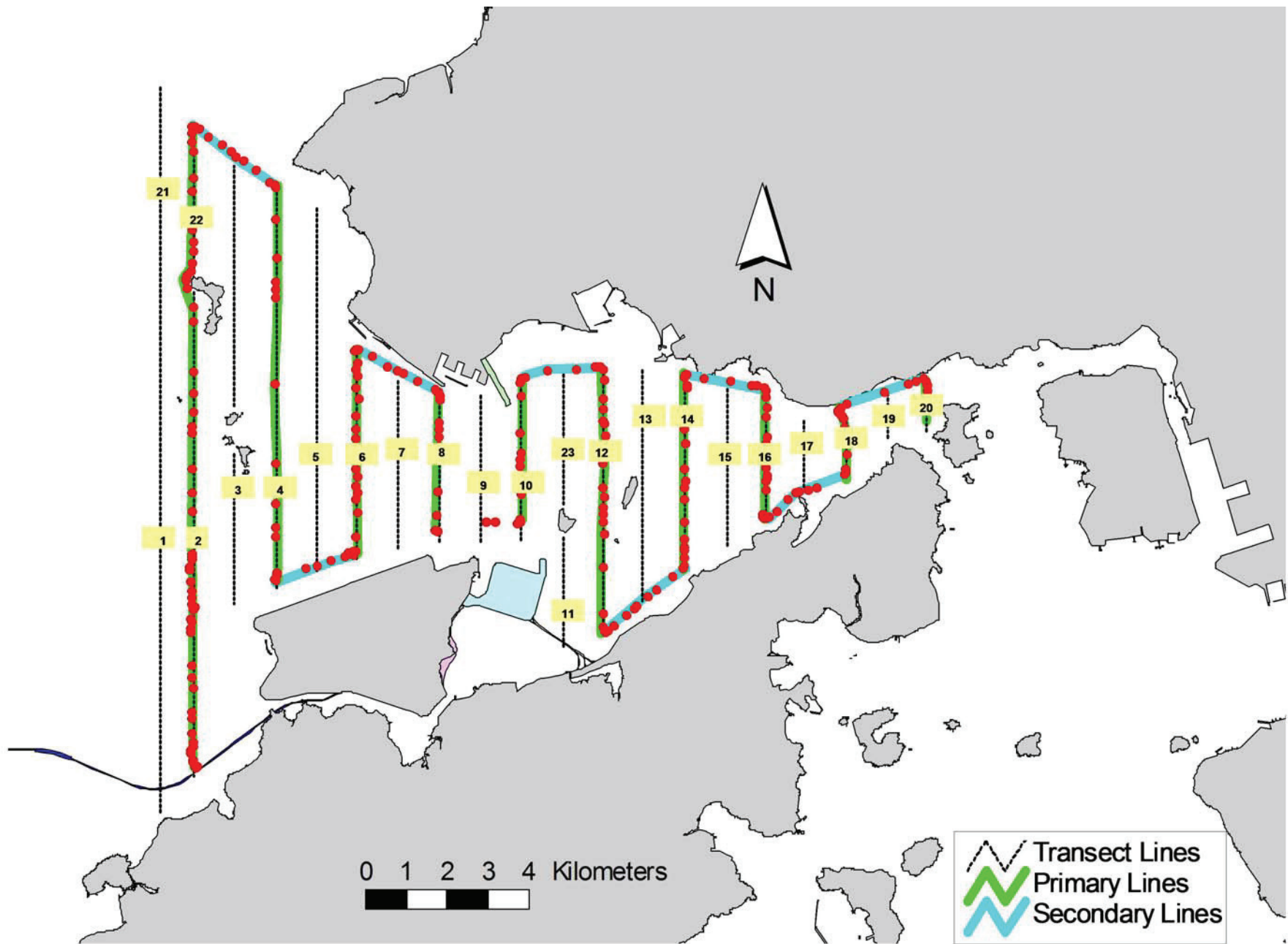


Figure 3. Survey Route on March 11th, 2015 (from HKLR03 project)

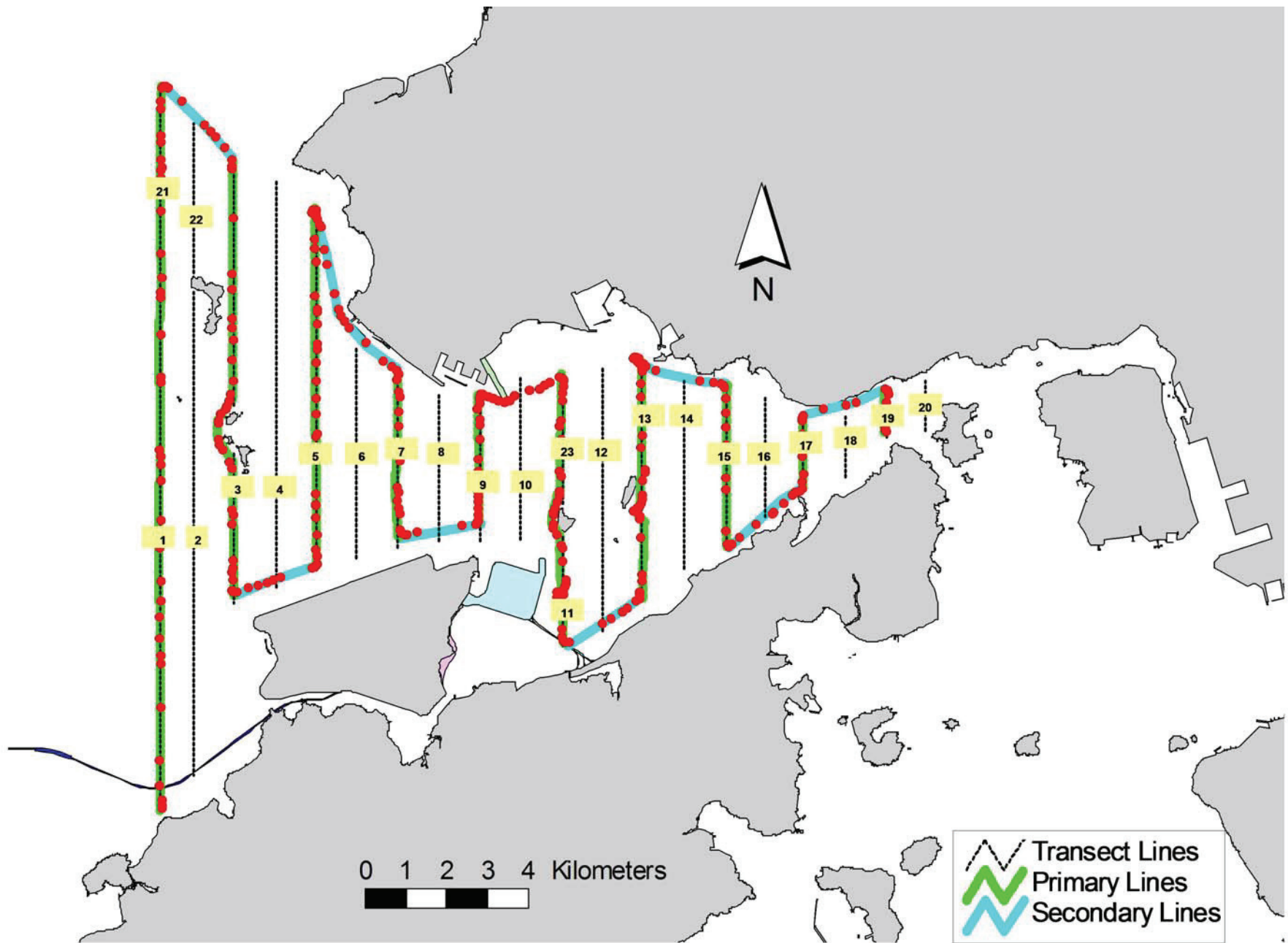


Figure 4. Survey Route on March 17th, 2015 (from HKLR03 project)

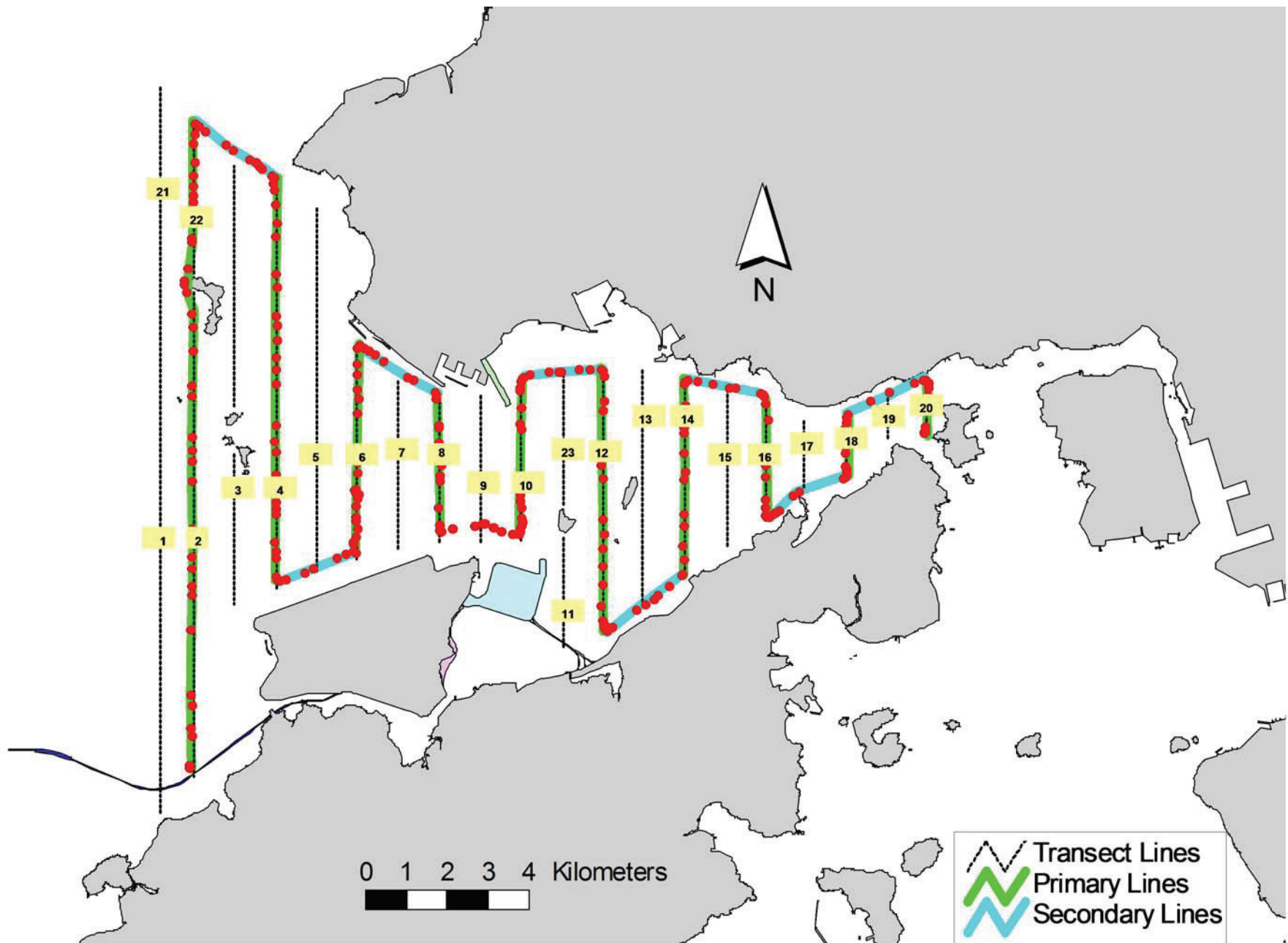


Figure 5. Survey Route on March 26th, 2015 (from HKLR03 project)

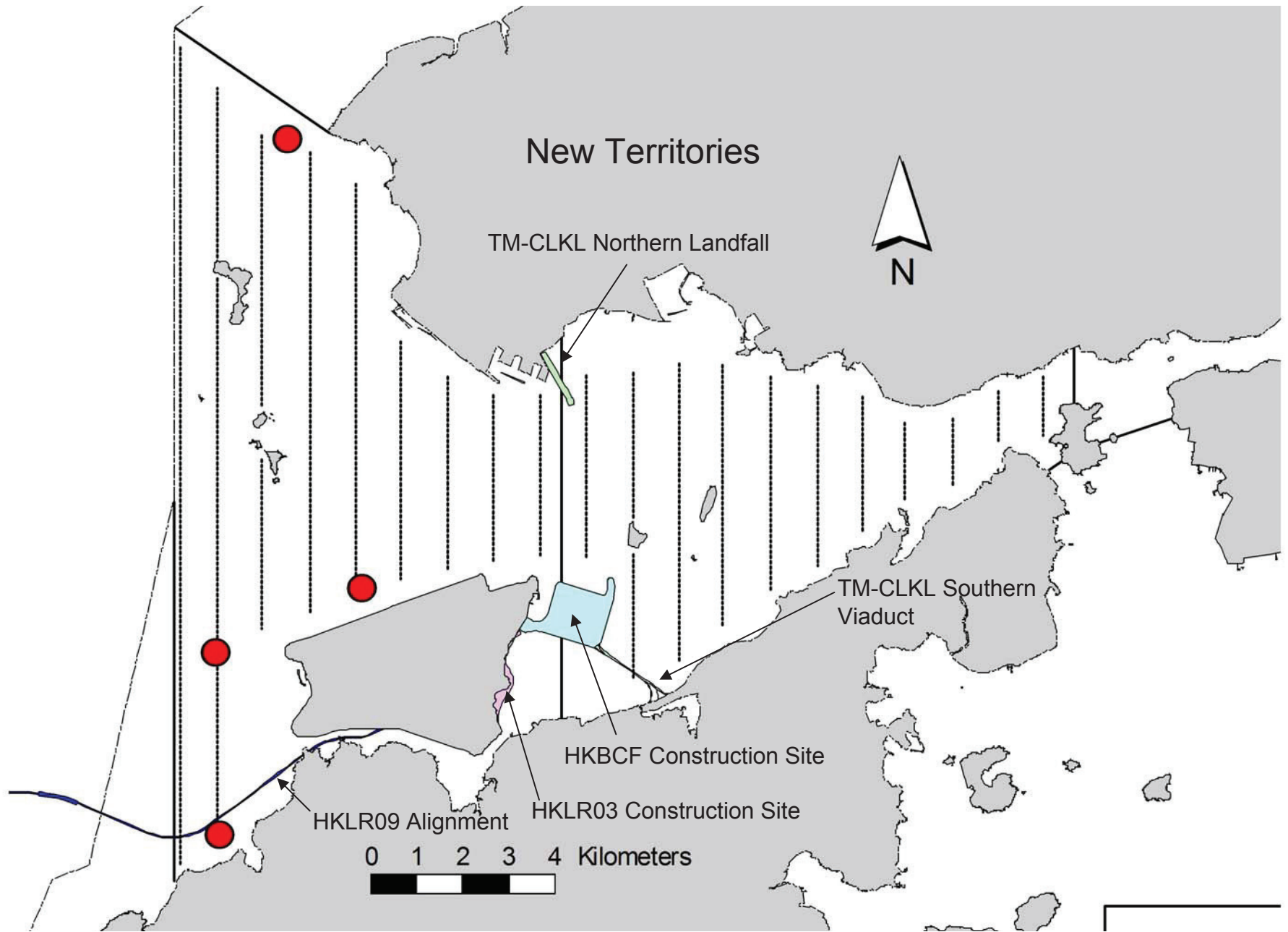


Figure 6. Distribution of Chinese White Dolphin Sightings During March 2015 HKLR03 Monitoring Surveys

Appendix I. HKLR03 Survey Effort Database (March 2015)

(Abbreviations: BEAU = Beaufort Sea State; P = Primary Line Effort; S = Secondary Line Effort)

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
4-Mar-15	NW LANTAU	1	1.07	SPRING	STANDARD31516	HKLR	P
4-Mar-15	NW LANTAU	2	12.71	SPRING	STANDARD31516	HKLR	P
4-Mar-15	NW LANTAU	3	25.62	SPRING	STANDARD31516	HKLR	P
4-Mar-15	NW LANTAU	4	1.40	SPRING	STANDARD31516	HKLR	P
4-Mar-15	NW LANTAU	2	8.00	SPRING	STANDARD31516	HKLR	S
4-Mar-15	NW LANTAU	3	3.30	SPRING	STANDARD31516	HKLR	S
4-Mar-15	NW LANTAU	4	1.00	SPRING	STANDARD31516	HKLR	S
4-Mar-15	NE LANTAU	2	5.38	SPRING	STANDARD31516	HKLR	P
4-Mar-15	NE LANTAU	3	12.87	SPRING	STANDARD31516	HKLR	P
4-Mar-15	NE LANTAU	2	3.40	SPRING	STANDARD31516	HKLR	S
4-Mar-15	NE LANTAU	3	5.39	SPRING	STANDARD31516	HKLR	S
11-Mar-15	NW LANTAU	2	25.99	SPRING	STANDARD31516	HKLR	P
11-Mar-15	NW LANTAU	3	5.09	SPRING	STANDARD31516	HKLR	P
11-Mar-15	NW LANTAU	2	7.53	SPRING	STANDARD31516	HKLR	S
11-Mar-15	NE LANTAU	2	20.05	SPRING	STANDARD31516	HKLR	P
11-Mar-15	NE LANTAU	2	10.95	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NW LANTAU	2	3.26	SPRING	STANDARD31516	HKLR	P
17-Mar-15	NW LANTAU	3	36.14	SPRING	STANDARD31516	HKLR	P
17-Mar-15	NW LANTAU	4	0.80	SPRING	STANDARD31516	HKLR	P
17-Mar-15	NW LANTAU	2	2.20	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NW LANTAU	3	10.40	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NE LANTAU	2	14.63	SPRING	STANDARD31516	HKLR	P
17-Mar-15	NE LANTAU	3	1.97	SPRING	STANDARD31516	HKLR	P
17-Mar-15	NE LANTAU	1	1.94	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NE LANTAU	2	7.69	SPRING	STANDARD31516	HKLR	S
17-Mar-15	NE LANTAU	3	0.68	SPRING	STANDARD31516	HKLR	S
26-Mar-15	NW LANTAU	1	20.26	SPRING	STANDARD31516	HKLR	P
26-Mar-15	NW LANTAU	2	10.63	SPRING	STANDARD31516	HKLR	P
26-Mar-15	NW LANTAU	2	6.76	SPRING	STANDARD31516	HKLR	S
26-Mar-15	NE LANTAU	1	11.38	SPRING	STANDARD31516	HKLR	P
26-Mar-15	NE LANTAU	2	8.40	SPRING	STANDARD31516	HKLR	P
26-Mar-15	NE LANTAU	1	4.32	SPRING	STANDARD31516	HKLR	S
26-Mar-15	NE LANTAU	2	6.20	SPRING	STANDARD31516	HKLR	S

Appendix II. HKLR03 Chinese White Dolphin Sighting Database (March 2015)

(Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; BOAT ASSOC. = Fishing Boat Association; P/S: Sighting Made on Primary/Secondary Line\$

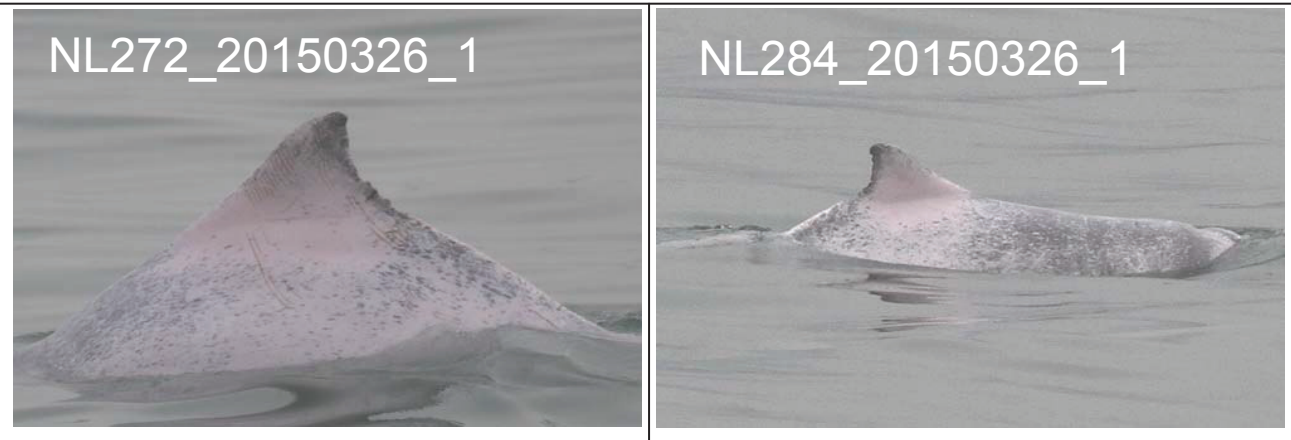
DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
04-Mar-15	1	1009	1	NW LANTAU	2	ND	OFF	HKLR	815213	805485	SPRING	NONE	N/A
11-Mar-15	1	1347	1	NW LANTAU	2	ND	OFF	HKLR	829495	806976	SPRING	NONE	N/A
11-Mar-15	2	1519	7	NW LANTAU	2	258	ON	HKLR	818956	805421	SPRING	NONE	P
26-Mar-15	1	1201	3	NW LANTAU	2	21	ON	HKLR	820290	808597	SPRING	NONE	S

Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in March 2015

ID#	DATE	STG#	AREA
CH34	11/03/15	1	NW LANTAU
NL49	11/03/15	2	NW LANTAU
NL123	11/03/15	2	NW LANTAU
NL136	11/03/15	2	NW LANTAU
NL165	11/03/15	2	NW LANTAU
NL261	26/03/15	1	NW LANTAU
NL272	26/03/15	1	NW LANTAU
NL284	11/03/15	2	NW LANTAU
	26/03/15	1	NW LANTAU
NL285	11/03/15	2	NW LANTAU
WL178	04/03/15	1	NW LANTAU



Appendix IV. Photographs of Identified Individual Dolphins in March 2015 (HKLR03)



Appendix IV. (cont'd)

Appendix L

Event Action Plan

Appendix L1 Event/ Action Plan for Air Quality

EVENT	ET ⁽¹⁾	ACTION		
		IEC ⁽¹⁾	SOR ⁽¹⁾	Contractor
Action Level				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify the source. 2. Inform the IEC and the SOR. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check Contractor's working method. 	<ol style="list-style-type: none"> 1. Notify Contractor. 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice 2. Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify the source. 2. Inform the IEC and the SOR. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Discuss with the IEC and the Contractor on remedial actions required. 6. If exceedance continues, arrange meeting with the IEC and the SOR. 7. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check the Contractor's working method. 3. Discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Submit proposals for remedial actions to IEC within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate

EVENT	ET ⁽¹⁾	ACTION		
		IEC ⁽¹⁾	SOR ⁽¹⁾	Contractor
Limit Level				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify the source. 2. Inform the SOR and the DEP. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. 5. Assess effectiveness of Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check Contractor's working method. 3. Discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Amend proposal if appropriate
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Notify the IEC, the SOR, the DEP and the Contractor. 2. Identify the source. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented. 6. Arrange meeting with the IEC and the SOR to discuss the remedial actions to be taken. 7. Assess effectiveness of the Contractor's remedial actions 	<ol style="list-style-type: none"> 1. Discuss amongst the SOR, ET and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly. 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated.

and keep the IEC, the DEP and
the SOR informed of the results.

8. If the exceedance stops, cease
additional monitoring.

Appendix L2 Event/ Action Plan for Construction Noise

ACTION					
EVENT	ET	IEC	SOR	Contractor	
Action Level	<ol style="list-style-type: none"> 1. Notify the IEC and the Contractor. 2. Carry out investigation. 3. Report the results of investigation to the IEC and the Contractor. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Review the analysed results submitted by the ET. 2. Review the proposed remedial measures by the Contractor and advise the SOR accordingly. 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC 2. Implement noise mitigation proposals 	
Limit Level	<ol style="list-style-type: none"> 1. Notify the IEC, the SOR, the DEP and the Contractor. 2. Identify the source. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. 6. Inform the IEC, the SOR and the DEP the causes & actions taken for the exceedances. 7. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results. 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss amongst the SOR, the ET and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly. 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated. 	

Appendix L3 *Event/ Action Plan for Water Quality*

Event	ET Leader	IEC	SOR	Contractor
Action level being exceeded by one sampling day	<ol style="list-style-type: none"> Repeat in situ measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor and SOR; Check monitoring data, all plant, equipment and Contractor's working methods. 	<ol style="list-style-type: none"> Check monitoring data submitted by ET and Contractor's working methods. 	<ol style="list-style-type: none"> Confirm receipt of notification of non-compliance in writing; Notify Contractor. 	<ol style="list-style-type: none"> Inform the SOR and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling days	<ol style="list-style-type: none"> Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor, SOR and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, SOR and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Action level; 	<ol style="list-style-type: none"> Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions; Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly; Supervise the implementation of mitigation measures. 	<ol style="list-style-type: none"> Discuss with IEC on the proposed mitigation measures; Ensure mitigation measures are properly implemented; Assess the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> Inform the Supervising Officer and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment and consider changes of working methods; Submit proposal of additional mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	<ol style="list-style-type: none"> Repeat measurement on next day of exceedance to confirm findings; 	<ol style="list-style-type: none"> Check monitoring data submitted by ET and Contractor's working method; 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing; 	<ol style="list-style-type: none"> Inform the SOR and confirm notification of the non-compliance in writing;

Event	ET Leader	IEC	SOR	Contractor
	2. Identify source(s) of impact;		2. Discuss with IEC, ET and Contractor on the proposed mitigation measures;	2. Rectify unacceptable practice;
	3. Inform IEC, contractor, SOR and EPD;	2. Discuss with ET and Contractor on possible remedial actions;		3. Check all plant and equipment and consider changes of working methods;
	4. Check monitoring data, all plant, equipment and Contractor's working methods;	3. Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly.	3. Request Contractor to review the working methods.	4. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR.
	5. Discuss mitigation measures with IEC, SOR and Contractor;			
Limit level being exceeded by two or more consecutive sampling days	1. Repeat measurement on next day of exceedance to confirm findings;	1. Check monitoring data submitted by ET and Contractor's working method;	1. Discuss with IEC, ET and Contractor on the proposed mitigation measures;	1. Take immediate action to avoid further exceedance;
	2. Identify source(s) of impact;			2. Submit proposal of mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR;
	3. Inform IEC, contractor, SOR and EPD;	2. Discuss with ET and Contractor on possible remedial actions;	2. Request Contractor to critically review the working methods;	3. Implement the agreed mitigation measures;
	4. Check monitoring data, all plant, equipment and Contractor's working methods;	3. Review the Contractor's mitigation measures whenever necessary to assure their effectiveness and advise the SOR accordingly;	3. Make agreement on the mitigation measures to be implemented;	4. Resubmit proposals of mitigation measures if problem still not under control;
	5. Discuss mitigation measures with IEC, SOR and Contractor;		4. Ensure mitigation measures are properly implemented;	
	6. Ensure mitigation measures are implemented;	4. Supervise the implementation of mitigation measures.	6. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until no exceedance of Limit level.	5. As directed by the Supervising Officer, to slow down or to stop all or part of the construction activities until no exceedance of Limit level.
	7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days;			

Appendix L4 Implementation of Event-Action Plan for Dolphin Monitoring

Event	ET Leader	IEC	SOR	Contractor
Action Level	<ol style="list-style-type: none"> 1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SOR and Contractor; 5. Check monitoring data. 6. Review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor. 	<ol style="list-style-type: none"> 1. Discuss monitoring with the IEC and any other measures proposed by the ET; 2. If SOR is satisfied with the proposal of any other measures, SOR to signify the agreement in writing on the measures to be implemented. 	<ol style="list-style-type: none"> 1. Inform the SOR and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SOR; 3. Implement the agreed measures.

Event	ET Leader	IEC	SOR	Contractor
Limit Level	<ol style="list-style-type: none"> 1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data, including raw data and statistical analysis results of other parameters covered in the EM&A, to ascertain if differences are as a result of natural variation or previously observed seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, ER/SOR and Contractor of findings; 5. Check monitoring data; 6. Repeat review to ensure all the dolphin protective measures are fully and properly implemented and advise on additional measures if necessary; 7. If ET proves that the source of impact is caused by any of the construction activity by the works contract, ET to arrange a meeting to discuss with IEC, ER/SOR and Contractor the necessity of additional dolphin monitoring and/or any other potential mitigation measures (e.g., consider to modify the perimeter silt curtain or consider to control/temporarily stop relevant construction activity etc.) and submit to IEC a proposal of additional dolphin monitoring and/or mitigation measures where necessary. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor; 3. Attend the meeting to discuss with ET, ER/SOR and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures; 4. Review proposals for additional monitoring and any other mitigation measures submitted by ET and Contractor and advise ER/SOR of the results and findings accordingly; 5. Supervise / Audit the implementation of additional monitoring and/or any other mitigation measures and advise ER/SOR the results and findings accordingly. 	<ol style="list-style-type: none"> 1. Attend the meeting to discuss with ET, IEC and Contractor the necessity of additional dolphin monitoring and any other potential mitigation measures; 2. If ER/SOR is satisfied with the proposals for additional dolphin monitoring and/or any other mitigation measures submitted by ET and Contractor and verified by IEC, ER/SOR to signify the agreement in writing on such proposals and any other mitigation measures; 3. Supervise the implementation of additional monitoring and/or any other mitigation measures. 	<ol style="list-style-type: none"> 1. Inform the ER/SOR and confirm notification of the non-compliance in writing; 2. Attend the meeting to discuss with ET, IEC and ER/SOR the necessity of additional dolphin monitoring and any other potential mitigation measures; 3. Jointly submit with ET to IEC a proposal of additional dolphin monitoring and/or any other mitigation measures when necessary; 4. Implement the agreed additional dolphin monitoring and/or any other mitigation measures.

Appendix L5 Event and Action Plan on Dolphin Acoustic Behaviour

EVENT	ACTION			
	ET Leader	IEC	SO	Contractor
<p><u>Action Level</u></p> <p>With the numerical values presented in <i>Table 5.7 of Baseline Monitoring Report</i>, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 20% lower or higher than that recorded in the baseline monitoring (see <i>Table 5.8 of Baseline Monitoring Report</i>), or when there is a difference of 20% in dolphin acoustic signal detection at nighttime period at Site C1 only, the action level should be triggered</p>	<ol style="list-style-type: none"> 1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SO and Contractor; 5. Check monitoring data; 6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor; 	<ol style="list-style-type: none"> 1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented. 	<ol style="list-style-type: none"> 1. Inform the SO and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.

EVENT	ACTION			
	ET Leader	IEC	SO	Contractor
<p><u>Limit Level</u></p> <p>With the numerical values presented in Table 5.7 of <i>Baseline Monitoring Report</i>, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 40% lower or higher than that recorded in the baseline monitoring (see Table 5.8 of <i>Baseline Monitoring Report</i>), or when there is a difference of 40% in dolphin acoustic signal detection at nighttime at Site C1 only, the limit level should be triggered</p>	<ol style="list-style-type: none"> 1. Repeat statistical data analysis to confirm findings; 2. Review all available and relevant data to ascertain if differences are as a result of natural variation or seasonal differences; 3. Identify source(s) of impact; 4. Inform the IEC, SO and Contractor; 5. Check monitoring data; 6. Carry out audit to ensure all dolphin protective measures are implemented fully and additional measures be proposed if necessary 7. Discuss additional dolphin monitoring and any other potential mitigation measures (eg consider to temporarily stop relevant portion of construction activity) with the IEC and Contractor. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor; 3. Review proposals for additional monitoring and any other measures submitted by the Contractor and advise ER accordingly. 	<ol style="list-style-type: none"> 1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented. 	<ol style="list-style-type: none"> 1. Inform the SO and confirm notification of the non-compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.

Abbreviations: ET – Environmental Team, IEC – Independent Environmental Checker, SO – Supervising Office, DEP – Director of Environmental Protection

Appendix M

Monthly Summary of Waste Flow Table

Contract No. : HY/2012/07

**Tuen Mun Chek Lap Kok Link – Southern Connection Viaduct Section
Monthly Summary Waste Flow Table for 2015 (Year)**

Month/Material	Actual Quantities of Inert C&D Materials Generation						Actual Quantities of C&D wastes Generation						Actual Quantities of Recyclables Generation			
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fills	Imported Fill	Marine Sediment, Cat. L	Marine Sediment, Cat. Mp	Marine Sediment, Cat. Mf	Marine Sediment, Cat. H	Chemical Waste	General Refuse	Metals	Felled trees	Paper/ cardboard packaging	Plastics
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	
Jan	13.578	0.081	0.990	-	12.474	0.115	0.178	0.229	0.258	-	-	132.170	-	-	0.091	-
Feb	6.233	0.148	0.461	-	5.759	0.014	0.801	0.110	0.223	-	0.400	141.020	-	-	0.112	-
Mar	10.149	0.220	0.473	-	9.600	0.077	0.618	0.073	0.149	-	-	120.940	-	-	0.203	-
Apr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jun	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SUB-TOTAL	29.961	0.449	1.923	-	27.832	0.206	1.597	0.412	0.630	-	0.400	394.130	-	0.000	0.406	-
Jul	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aug	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sep	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oct	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nov	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dec	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	29.961	0.449	1.923	-	27.832	0.206	1.597	0.412	0.630	-	0.400	394.130	-	-	0.406	-

Notes :

- 1 - The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- 2 - Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- 3 - Broken concrete for recycling into aggregates.
- 4 - Assumed 5 kg per damaged water-filled barrier.
- 5 - Disposed as Public Fills includes Hard Rock and Large Broken Concrete.

Appendix N

Cumulative Statistics on
Exceedances, Complaints,
Notifications of Summons
and Successful Prosecutions

Appendix N1 Cumulative Statistics on Exceedances

		Total No. recorded in this reporting month	Total No. recorded since project commencement
1-Hr TSP	Action	0	0
	Limit	0	0
24-Hr TSP	Action	0	2
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water Quality	Action	0	1
	Limit	0	0
Impact Dolphin Monitoring	Action	0	7
	Limit	0	1

Appendix N2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (March 2015)	0	0	0
Total No. received since project commencement	2	0	0